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2401 BROADWAY PROJECT

CEQA Analysis

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

Date:	September 5, 2017
Project Address:	2401 Broadway
Case Number:	PLN16-246
Zoning:	D-BV-1 Broadway Valdez District Retail Priority Sites Commercial Zone and CC-3 Community Commercial Zone
General Plan:	Central Business District and Community Commercial
APNs:	008-0674-00-301, 008-0674-00-400, 008-0674-00-500, 008-0674-00-600
Lot Size:	1.21 acres
Applicant:	Signature Development Group Attn: Jamie Choy, Senior Planner 2335 Broadway, Suite 200 Oakland, CA 94612
Staff Contact:	Peterson Vollmann, Planner IV Bureau of Planning, pvollmann@oaklandnet.com (510) 238-6167

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I. Executive Summary

The project applicant, Signature Development Group, is proposing to redevelop four parcels into a mixed-use development.[1] The majority of the project site is within the Broadway Valdez District Specific Plan (BVDSP, or Plan) area. The largest and primary parcel in the project site fronts Broadway and 25th Street and is located entirely within the BVDSP. The parcel to the south, fronting Broadway and 24th Street, straddles the boundary line of the BVDSP and thus is in both the BVDSP and Community Commercial Zone (CC-3). The other two parcels to the east, one fronting 24th and one fronting 25th, are entirely in the CC-3 Zone. The project site is currently occupied by two surface parking lots, a vacant building at 437 25th Street, and a Mitsubishi and Kia service and parts center at 2401-2417 Broadway. The 2401 Broadway project (proposed project) would include construction of a three- to six-story mixed-use hotel, residential, and commercial building including a parking garage, with an area of approximately 216,810 gross square feet. The proposed building would have a maximum height of 85 feet (not including roof parapet).

The proposed project would include up to 27,200 square feet of commercial space mostly along Broadway and 25th Streets, up to 93,610 square feet of hotel space (159 rooms, mezzanine meeting rooms and the hotel lobby), and up to 77,500 square feet of residential uses with 72 residential units. The proposed project would provide 129 vehicle parking spaces using stackers on the ground floor, 50 secure bicycle parking spaces located in the mezzanine area above the garage, and bicycle racks along the Broadway and 24th Street frontages to accommodate short-term visitors.[2]

This California Environmental Quality Act (CEQA) Analysis evaluates the 2401 Broadway Project using CEQA streamlining and/or tiering provisions under CEQA Guidelines Section 15164, Section 15183, and Section 15183.3. As a portion of the project site is located in the BVDSP area, this CEQA Analysis relies not only on previous CEQA documents, as defined below, but also on the BVDSP Environmental Impact Report (EIR).

BVDSP EIR

The BVDSP Environmental Impact Report (EIR) 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.[3] Project-level analysis allows the use of CEQA streamlining and/or tiering provisions for projects that are developed under the BVDSP.

While a portion of the project site is outside the area studied as part of the BVDSP EIR and not included in the Development Program, the entire project is conservatively considered in the analysis of consistency with the BVDSP EIR and Development Program. As shown in **Table 1**, the proposed

[1] Note the project site includes a total of four parcels, one of which is located within the BDVSP Plan Area and three in the CC-3, Community Commercial Zone.

[2] The cars will be stacked four high, with three above grade and one below grade.

[3] 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.)

project would provide more dwelling units and hotel rooms and less commercial uses than contemplated for Valdez Triangle Subdistrict 3, as indicated in Table 4.13-7 of the BVDSP EIR (72 residential units instead of 40 residential units, 159 hotel rooms instead of zero, and 27,200 square feet of commercial use instead of 251,398 square feet).[4] The Broadway Valdez Development Program 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.

TABLE 1
COMPARISON OF BVDSP DEVELOPMENT PROGRAM, SUBDISTRICT 3 DEVELOPMENT PROGRAM, AND PROPOSED PROJECT

Development Characteristics	Total BVDSP Development Program[a]	Development Program for Subdistrict[b]	Proposed Project
Hotel Rooms	180	0	159
Residential Units	1,800	40	72
Commercial Square Footage (net)	695,000 square feet of office space 1,114,000 square feet of restaurant/retail space	251,398 square feet	27,200 square feet

[a] Development Program Total, listed in Table 4.13-7 of the BVDSP EIR.
[b] Broadway Valdez Development Program Physical Height Model, Figure 3-11 of the Broadway Valdez District Specific Plan EIR.

SOURCE: City of Oakland. 2014. *Broadway Valdez District Specific Plan*. Adopted June.

The proposed project is in Subdistrict 3 of the Valdez Triangle subarea of the Plan. The proposed project would generate 63 AM and 99 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 48 percent of the AM and 50 percent of the PM peak-hour trips anticipated in the BVDSP EIR for the Plan Area, 81 percent of the AM and 72 percent of the PM peak-hour trips anticipated in the BVDSP EIR for the Valdez Triangle subarea, and 94 percent of the AM and 70 percent of the PM peak-hour trips anticipated in the BVDSP EIR for Subdistrict 3. While the total number of proposed project residential units combined with units proposed for projects under construction, approved, and proposed in the Plan Area would exceed the Development Program Buildout assumptions in the BVDSP EIR, their combined trip generation would be within the scope of the program analyzed under the BVDSP EIR for the Plan Area, the Valdez Triangle, and Subdistrict 3, and the proposed project would be consistent with the assumptions in the BVDSP EIR. In addition, the EIR traffic impact analysis, which the EIR determined was the key environmental factor constraining development, remains valid for the proposed project.[5] Therefore, the proposed project meets the requirements for preparation of an addendum, as evidenced in Attachment D to this document.

[4] Subdistrict 3 is defined in the BVDSP as the area north of 24th Street, west of Valdez Street, and south of 27th Street.
[5] As shown in Table 7 in Section 13, Transportation and Circulation, 2,802 net new residential units have been proposed or approved in the Plan Area compared to 1,800 residential units described in the BVDSP EIR.

Previous CEQA Documents

Qualified planning-level documents can be used as a basis to provide CEQA clearance of the proposed project under specific CEQA provisions. Those CEQA documents include Oakland's 1998 General Plan Land Use and Transportation Element EIR ("1998 LUTE EIR"), the 2010 General Plan Housing Element Update EIR and its 2014 Addendum, and the 2011 Central District Urban Renewal Plan Amendments EIR (or "Redevelopment Plan Amendments EIR"). These are referred to collectively throughout this document as "the Previous CEQA Documents" or "Prior EIRs."

CEQA Guidelines Section 15168 (Program EIRs) and Section 15180 (Redevelopment Projects) provide that the Previous CEQA Documents can be used as Program EIRs in support of streamlining and/or tiering provisions under CEQA. CEQA Section 15168 defines the "program EIR" as one prepared on a series of actions that can be characterized as one large project and are related geographically and by other shared characteristics. Section 15168 continues that "subsequent activities in the program EIR must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared." If the agency finds that pursuant to CEQA Guidelines Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR and no new environmental document would be required.

Further, CEQA Guidelines Section 15180 specifies that if a certified redevelopment plan EIR is prepared, no subsequent EIRs are required for individual components of the redevelopment plan unless a subsequent EIR or supplement to the EIR would be required by Section 15162 or 15163.

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.

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 or Prior EIRs 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 and Prior EIRs. Mitigation measures and Standard Conditions of Approval (SCAs) identified in the BVDSP EIR and Prior EIRs 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 and Prior EIRs 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).

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. In addition, as summarized in the CEQA Checklist below, the proposed project is within the scope of the Prior EIRS and no new environmental document would be required. 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 comprised of 1.21 acres at 2401 Broadway, which includes 2417 Broadway, 422 24th Street, and 437 25th Street. The site consists of four parcels with the following Assessor's Parcel Numbers: 008-067400301, 008-067400400, 008-067400500, and 008-067400600.

The site is bounded by two single-story commercial/industrial buildings to the west containing warehouse uses, 24th Street to the south, Broadway to the east, and a small surface parking lot and 25th Street to the north, as shown in **Figure 1**. The largest and primary parcel in the project site (2417 Broadway fronting Broadway and 25th Street) is located in the BVDSP Plan Area and specifically Subdistrict 3 of the Valdez Triangle Subarea, Retail Priority Site 2. The parcel fronting Broadway and 24th Street (2401 Broadway) straddles the boundary line of the BVDSP and thus is in both the BVDSP and Community Commercial Zone (CC-3). The remaining two parcels (422 24th Street and 437 25th Street) are entirely in the CC-3 Zone. The project site is northeast of Uptown Oakland and northwest of Lake Merritt. The project site is mostly located within the 25th Street Garage District, with the exception of the portion of 2417 Broadway that is currently occupied by a surface parking lot.

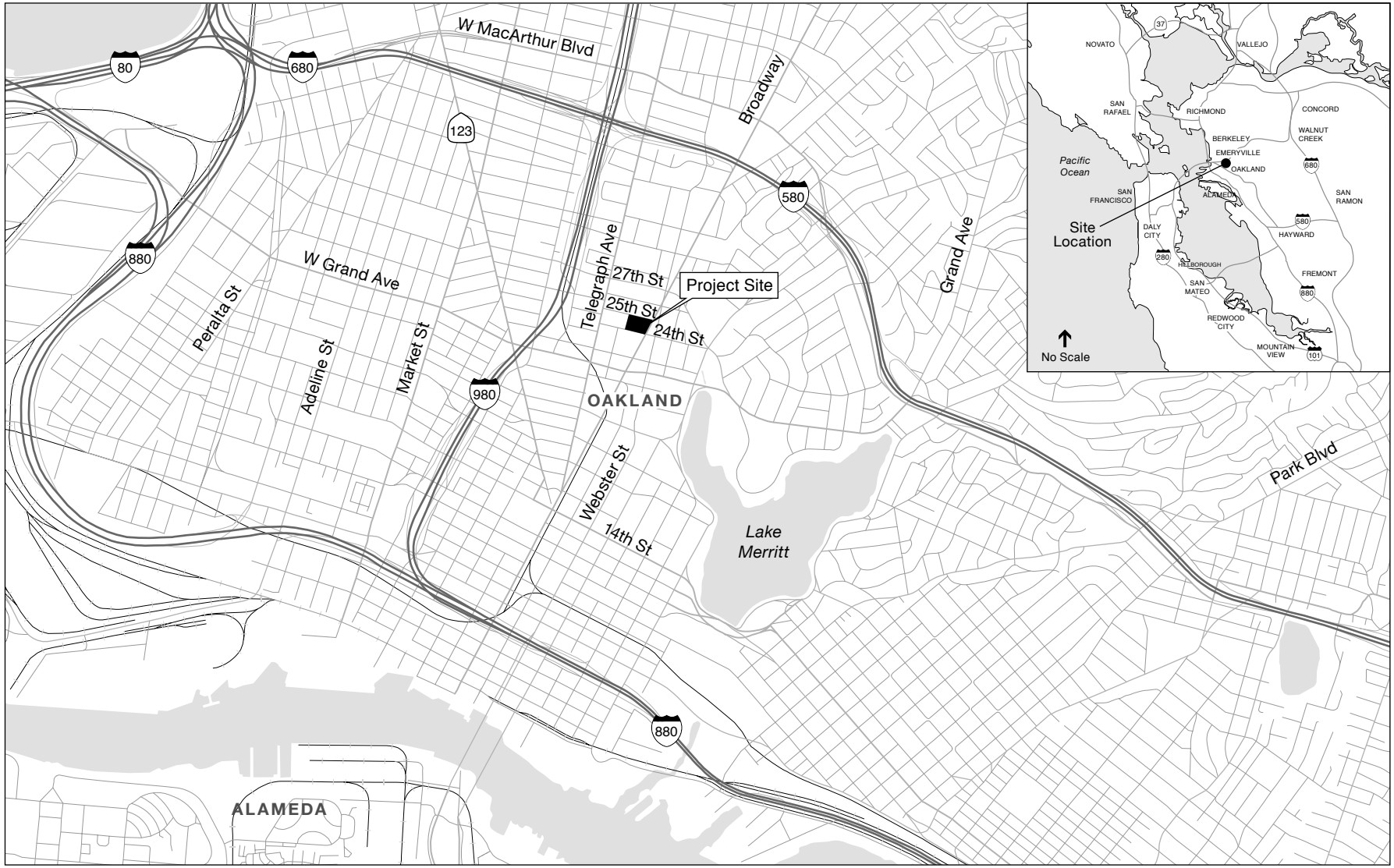
The project site is accessible from Interstate 580, approximately 0.7-mile to the north, and Interstate 980/State Route 24, approximately 0.5 mile to the west. Multiple transit routes serve the project site, including Alameda-Contra Costa County Transit District (AC Transit) Routes 6, 51A, 651, 800, 851, and the Broadway Shuttle. 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 1.3 miles northwest of the site.

Existing Conditions

The 1.21-acre site is predominantly flat and is currently occupied by two surface parking lots, a vacant building at 437 25th Street, and a Mitsubishi and Kia service and parts center at 2401-2417 Broadway. The project site, except for the portion of 2417 Broadway that is currently occupied by a surface parking lot, is located within the 25th Street Garage District, which is identified as a historic district (Areas of Primary Importance [API]). Nearby local historic resources include the Packard Lofts (across 24th street), the First Presbyterian Church (2 blocks north), and the Downtown Oakland YMCA (1 block south).

The building at 2417/2401 Broadway has an Oakland Cultural Heritage Survey (OCHS) rating of Eb-1*, and 437 25th Street has an OCHS rating of C1+. These OCHS ratings are further explained in Section 4, Cultural Resources, below.

The project site has a total of eight existing curb cuts: one along Broadway, three along 24th Street, and four along 25th Street. There is one existing street tree (elm) located on Broadway and one (crape myrtle) on 25th Street, as well as, nine trees (juniper) that are planted along the perimeter of the site along 25th Street.



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Feet

SOURCE: ESA

2401 Broadway . 160823

Figure 1
Project Location

The project site has frontages on Broadway, 24th Street, and 25th Street, as shown in Figure 1. Existing uses in the project vicinity are primarily commercial (e.g., auto dealerships/service centers, retail, restaurants, and entertainment) and multi-family residential. Existing uses to the north include God's Gym and auto services. Existing uses to the west include warehouses, art galleries/studios, surface parking, a residential apartment building, and the New Parkway Theater. Existing uses to the south include Packard Lofts (with ground floor retail and restaurants), and The Hive. Existing uses to the east include auto services, Bay Area Bikes, and AU Lounge. As evidenced by the surrounding land uses, the area is transitioning from its auto-oriented service centers to a vibrant mixed-use community consisting of residential, office, and commercial uses.

The General Plan land use designation for 2417 Broadway is Central Business District (CBD) and for 422 24th Street and 437 25th Street, is Community Commercial (CC). The parcel at 2401 Broadway straddles the boundary line of the BVDSP and thus is in both the CBD and CC. The CBD designation 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 intent of the Community Commercial zones is to create, maintain and enhance areas suitable for a wide variety of commercial and institutional operations along the City's major corridors and in shopping districts or centers.

The Zoning designation for 2417 Broadway is D-BV-1 (Retail Priority Sites Commercial Zone 1) and for 2401 Broadway, 422 24th Street and 437 25th Street, is Community Commercial (CC-3). 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. The CC-3 zoning designation is intended to create, maintain and enhance areas with heavy commercial and service activities.

Project Characteristics

The proposed project would demolish the existing buildings and surface parking lots on the project site, but would retain and restore existing façades at the southeast corner of the project site (Broadway and 24th Street). The building at 437 25th Street, at the northwest corner of the project site, would not be demolished. Rather, this building would be tied to the new building. The front and two internal walls would be retained as well as a portion of the roof truss. The proposed project would construct a three- to six-story building that would include hotel, residential, and commercial uses, including a parking garage, with an area of approximately 216,700 gross square feet. The proposed building would have a maximum height of 85 feet (not including roof parapet).

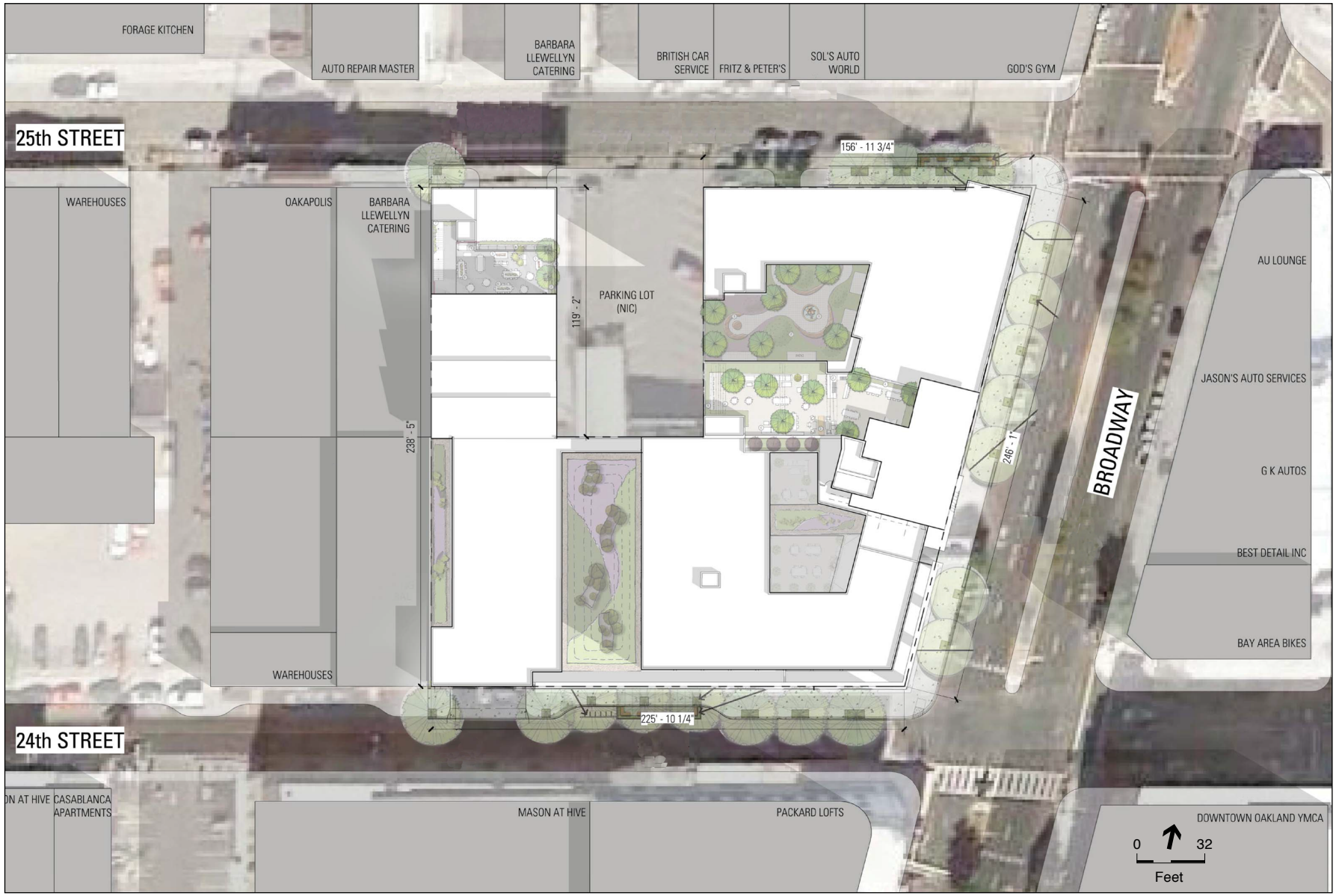
The proposed project would include up to 27,200 square feet of commercial space, up to 93,610 square feet of hotel space (159 rooms, mezzanine meeting space and the hotel lobby), and approximately 77,500 square feet of residential uses with 72 residential units. The proposed project would provide 129 vehicle parking spaces using stackers on the ground floor, 50 secure bicycle parking spaces located in the mezzanine area above the garage, and bicycle racks along the Broadway and 24th Street frontages to accommodate short-term visitors. The project characteristics

are shown below in **Table 2**. The project typical floor plans, typical building section, and building renderings are shown in **Figures 2 through 9**.

TABLE 2
PROJECT CHARACTERISTICS

Lot	**Dimensions**
Size	52,843 square feet (1.21 acres)
Proposed Uses	**Area (gsf)**
Hotel	93,610
Residential	77,500
Commercial (Retail)	27,200
Other (Amenities, Parking, Support, Circulation)	18,500
Total Uses	**216,810**
Proposed Hotel Rooms	**Amount (Percent)**
King	36(23%)
Standard	113 (71%)
Suite	10 (6%)
Total Keys	**159 (100%)**
Proposed Residential Units	**Amount (Percent)**
Studio	26 (36%)
1-bedroom	20 (28%)
2-bedroom	21 (29%)
3-bedroom	5 (7%)
Total Units	**72 (100%)**
Proposed Parking	**Number of Spaces**
Residential	36
Commercial and Hotel	93
Total Vehicle Parking Spaces	**129**
Bicycle Parking Spaces	50
Open Space	**Area (sf)**
Podium Amenity	3,071
Roof Deck Amenity	2,948
Total Open Space	**6,019**

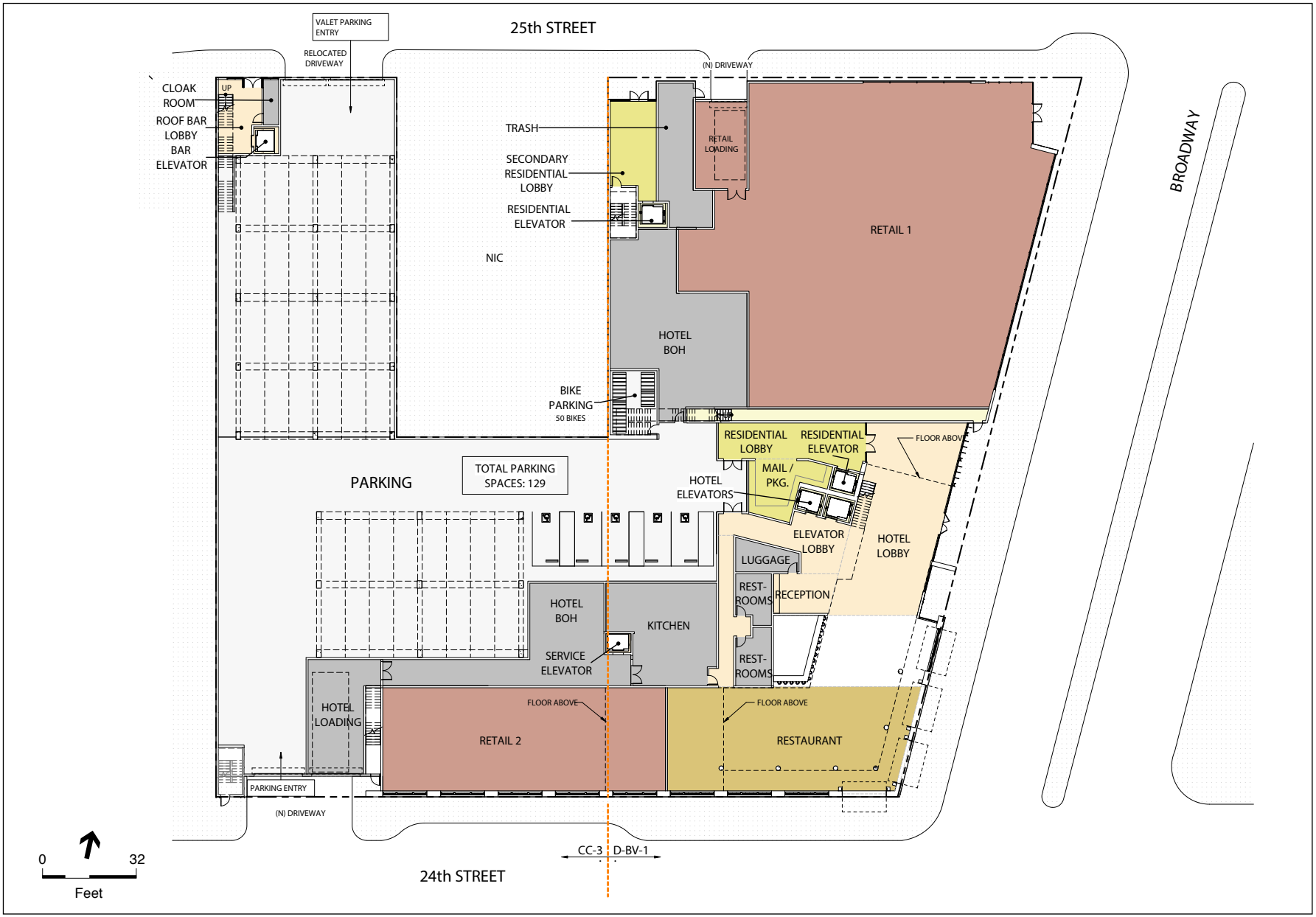
SOURCE: BAR Architects, 2017.



SOURCE: BAR Architects

2401 Broadway . 160823

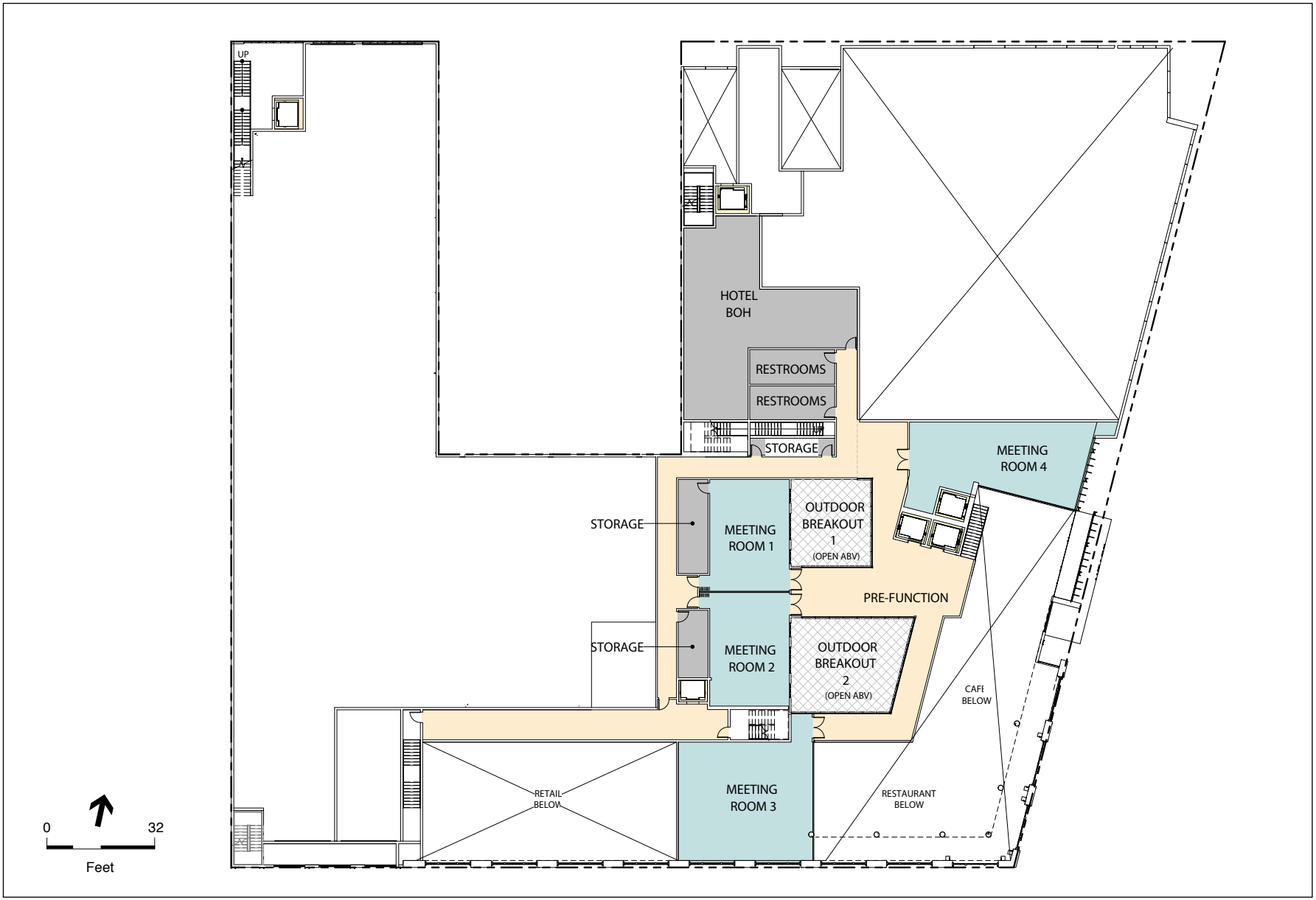
Figure 2
Site Plan



SOURCE: BAR Architects

2401 Broadway . 160823

Figure 3
Floor Plan Level 1



SOURCE: BAR Architects

2401 Broadway . 160823

Figure 4

Floor Plan Level 2

SOURCE: BAR Architects

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Figure 5

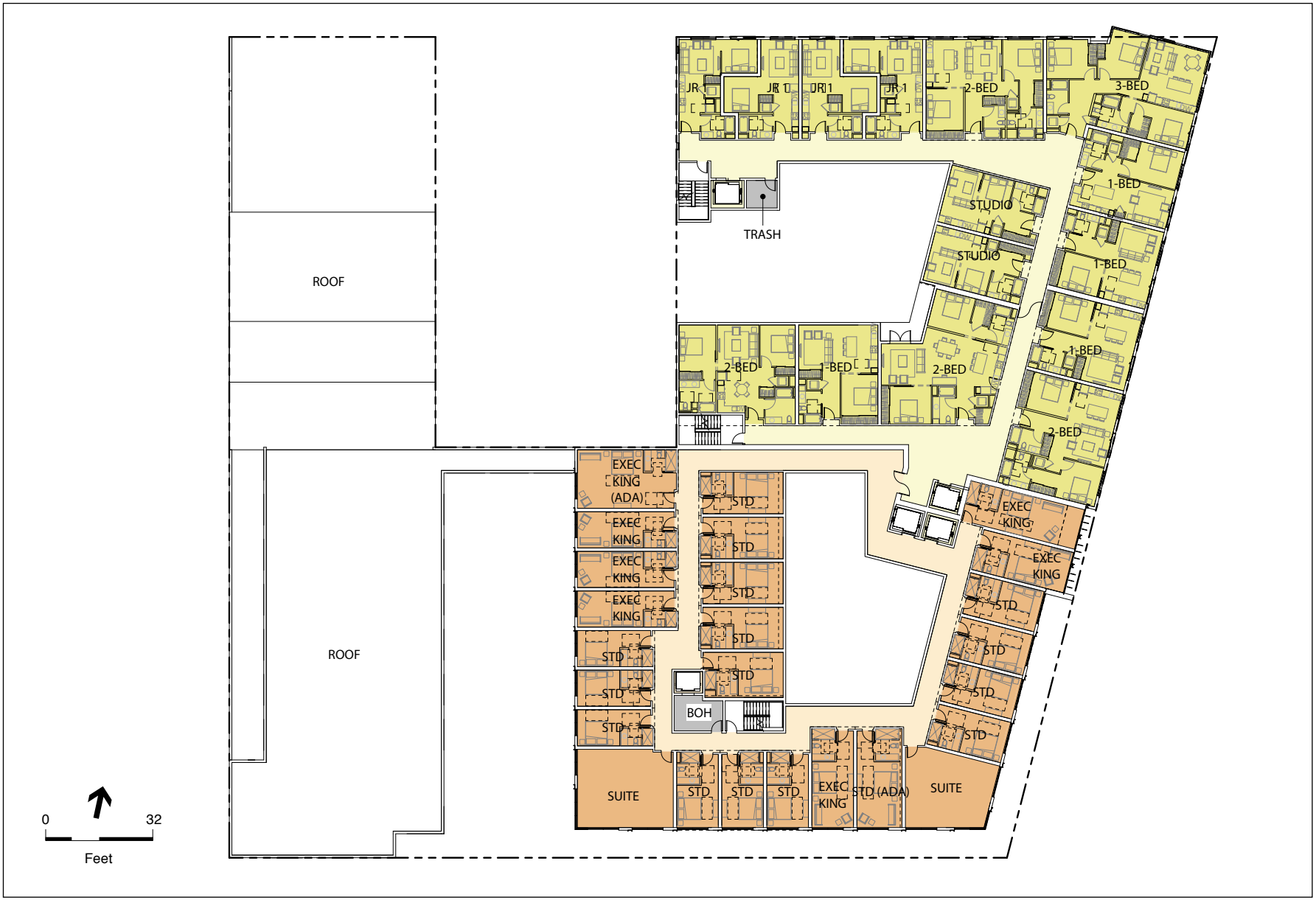
Floor Plan Level 3

SOURCE: BAR Architects

2401 Broadway . 160823

Figure 6

Floor Plan Level 4

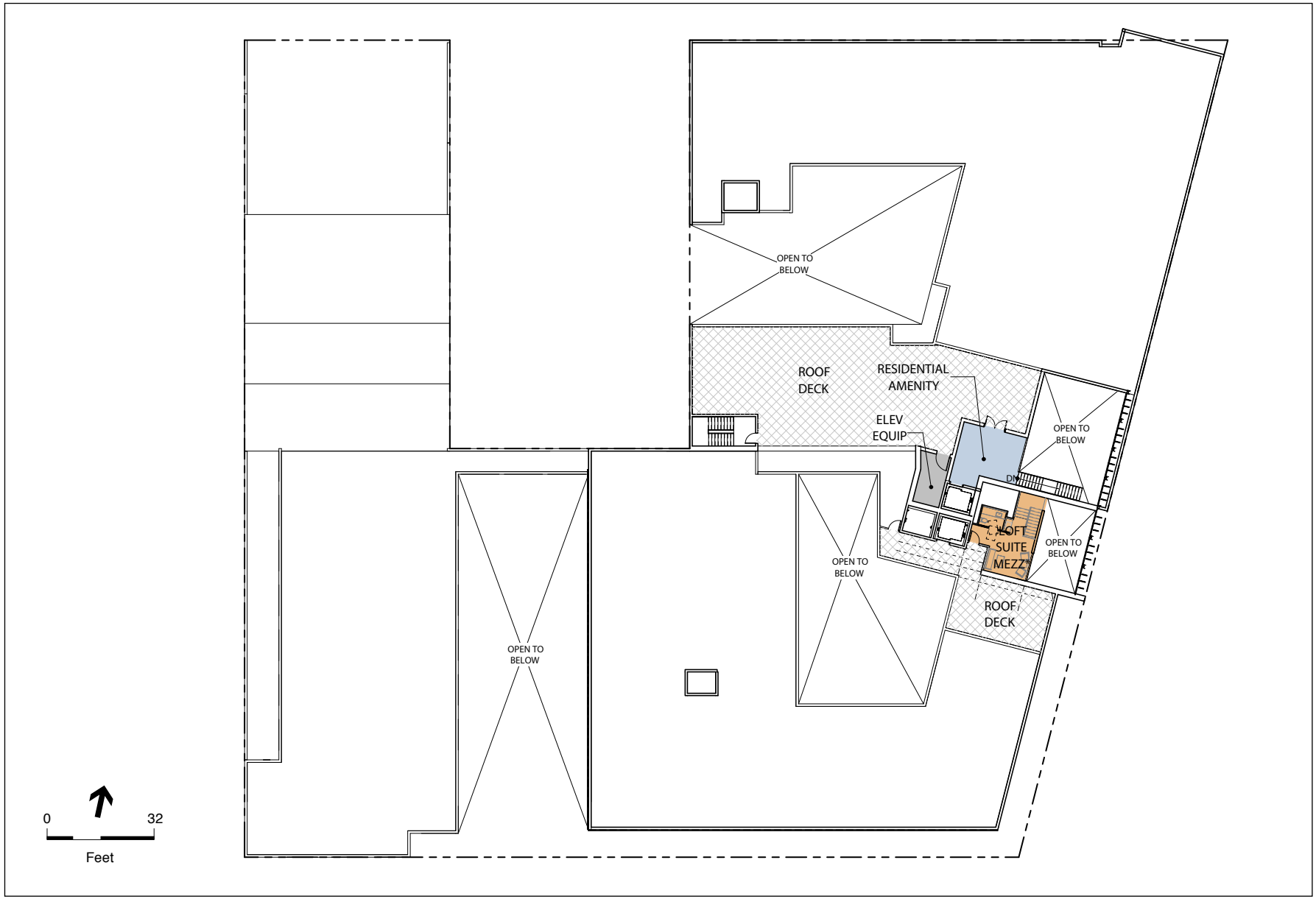


SOURCE: BAR Architects

2401 Broadway . 160823

Figure 7

Sample Floor Plan Levels 5 through 7



SOURCE: BAR Architects

2401 Broadway . 160823

Figure 8
Roof Plan

EXTERIOR ELEVATION - SOUTH (24TH STREET)

EXTERIOR ELEVATION - EAST (BROADWAY)

SOURCE: BAR Architects

2401 Broadway . 160823

Figure 9
Elevations South and Broadway

Hotel Uses

The hotel lobby would be located on the ground floor fronting Broadway and 24th Street. It would be approximately 8,233 square feet with an approximately 21-foot-high ceiling. The hotel would be located immediately above the lobby in the southern portion of the building, occupying floors two through six. The hotel would include a total of 159 hotel rooms composed of approximately 113 standard rooms, 36 king rooms, and 10 suites. In total, approximately 93,610 square feet of the building area would be dedicated to hotel uses.

Residential Uses

Residential uses would be located in the northern portion of the building fronting Broadway and 25th Street. They would total approximately 77,500 square constructed on levels two through six, above the parking garage and commercial uses, and would include up to 72 residential units. The residential units would be composed of approximately 6 studio units, 20 junior on-bedroom units, 20 one-bedroom units, 21 two-bedroom units, and five three-bedroom units. Although the residential units would share access via a combined hotel and residential core, a key-controlled doorway on each floor would restrict access to residents only.

Commercial Uses

Commercial or retail uses would be located at the ground floor along Broadway, 24th and 25th Streets. They would total approximately 20,000 square feet and would be divided into three distinct spaces, each with ground-level street access. In addition, a bar of approximately 6,000 square feet would be provided on the third and fourth levels along 25th Street.

Access, Circulation, and Parking

The hotel lobby would be located on Broadway; an additional pedestrian entrance/exit to the hotel would be located at the northwest corner of the project site. The main residential lobby would be located along the middle of the project site on Broadway; an additional pedestrian entrance/exit to the residential units would be provided at the middle of the project site on 25th Street. Access to commercial spaces would be provided along the respective street frontages. Access to the shared parking garage would be at both the southern frontage of the site on 24th Street and at the northwest corner of the project site, along 25th Street. Stairwells and elevators would connect the parking garage with the hotel, residential, and commercial spaces.

Approximately 18,500 square feet of parking space would be provided in the ground level. Approximately 129 vehicular parking spaces would be provided, including 5 ADA-accessible spaces. Secure bicycle parking spaces (approximately 50) would be provided in the mezzanine level above the garage, and bicycle racks on Broadway and 24th Street would provide short-term bicycle parking for visitors.

Two commercial loading docks would be accessed from designated loading driveways on 24th and 25th Streets.

Open Space

The proposed project would provide approximately 6,000 square feet of common open space on the top of the podium and on the roof, which would be accessible to building residents; amenities may include a courtyard and wood deck lounge area.

Streetscape Improvements

Sidewalk and streetscape improvements would be installed as part of the project, consistent with the BVDSP Public Realm Design Guidelines for Streetscape Design. Streetscape improvements would also include new street trees and lights along all street frontages, bulb outs, and bicycle racks for retail parking.

Building Design

The proposed building would consist of a podium structure wrapped with commercial uses along all three street frontages and five shared residential/hotel levels in an L-shape rising above the podium. The podium and commercial components of the building would extend up to approximately 21 feet above grade, and the five residential/hotel levels would extend up to approximately 85 feet above grade.

At the intersection of Broadway and 24th Streets, the two-story commercial space would be prominent and the residential levels above would be set back eight feet from the historic façade. As noted previously, the historic façade of 2401 Broadway would be retained and /or restored as part of the proposed project.

Activity/Employment

The proposed project would include a mix of residential and commercial or retail uses. Based on the generation rate established for the BVDSP area of 1.87 persons per household, the proposed project could generate approximately 135 new residents. The approximate 27,200 square feet of retail space and up to 159 hotel rooms could generate up to 198 jobs.[6]

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 26 months, with construction scheduled to commence in spring 2018, and be completed by spring 2020. Approximately 30 workers would be required in the early stages of construction and approximately 160 workers would be required at the peak of construction.

[6] Based on the generation rate established for the BVDSP area of 1 employee per 500 square feet of retail and 0.9055 employees per hotel room. While industry practice also accepts the retail generation rate for hotel use, the change in estimated employees for this proposed project would not make a meaningful difference in terms of the CEQA analysis and results. Therefore, for the purposes of consistency with the BVDSP EIR and conservative analysis related to Greenhouse Gases, this analysis assumes the lower, 0.9055 employees per hotel room generation rate.

The proposed project would excavate approximately 4,000 cubic yards of soil. The soil would be off-hauled from the site in compliance with the City's Standard Conditions of Approval ("SCA") HAZ-2 that includes required compliance with identified federal, state or local regulations or requirements and specific performance criteria (see Section V.8, *Hazards and Hazardous Materials*). No soils are anticipated to be imported to the site. Groundwater on the site has been encountered between approximately 19 to 22.5 feet below ground surface, with possible shallow perched saturated zone between approximately 13 to 14 feet below ground surface beneath the southwestern portion of the site.[7] Grading activities are anticipated to potentially reach a depth of up to four feet, which is well above the recorded depth of groundwater. However, in the unlikely event that groundwater is encountered during construction, dewatering would be required as further explained in Section 8, Hydrology and Water Quality, below. The proposed project anticipates foundations being a reinforced concrete mat slab approximately 24-36 inches deep.

Project Approvals

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

Actions by the City of Oakland

- **Planning Commission** – Regular Design Review, CEQA determination, Major Conditional Use Permits (CUP), and vesting tentative parcel map for lot merger and condominium purposes. The CUP would be for residential development and height increase on a Retail Priority Site, the use of shared parking to fulfill parking requirements, transient habitation (hotel use), alcoholic beverage sales and extension of the hotel use into the CC-3 Zone.
- **Public Works Tree Division** – Issuance of tree removal permit.
- **Building Department & Engineering Services** – 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 asbestos abatement activities, if any.[8]
- **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, approval of the Site Management and Contingency Plan.
- **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.

[7] PES Environmental, Inc., 2016. *Site Mitigation and Contingency Plan, 2401 Broadway, Oakland, California*, January 11.

[8] As noted in the Phase I Environmental Site Assessments conducted for proposed project (PES Environmental, Inc., 2015), an assessment of asbestos-containing materials (ACMs) was not conducted at the project site. However, the commercial structures on the project site were built prior to 1970, and therefore may contain ACMs.

III. Prior EIRs

BVDSP 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.

Other Applicable Previous CEQA Documents

Other Applicable Previous CEQA Documents

The analysis in the BVDSP EIR directly applies to the 2401 Broadway Project, providing the basis for use of an Addendum. The following describes EIRs that constitute the other applicable Previous CEQA Documents considered in this CEQA Analysis that also form the basis for the use of the Community Plan Exemption. Each of the following documents are hereby incorporated by reference and can be obtained from the City of Oakland Bureau of Planning at 250 Frank H. Ogawa Plaza, Suite 2114, Oakland, California 94612, and/or located at http://www2.oaklandnet.com/government/o/PBN/OurServices/Application/DOWD009158.

Land Use and Transportation Element EIR

The City certified the EIR for its General Plan Land Use and Transportation Element (LUTE) in 1998. The LUTE identifies policies for utilizing Oakland's land as change takes place and sets forth an action program to implement the land use policy through development controls and other strategies. The LUTE identifies five "Showcase Districts" targeted for continued growth; the project site is located within the "Downtown Showcase District" ("Downtown") intended to promote a mixture of vibrant

and unique districts with around-the-clock activity, continued expansion of job opportunities, and growing residential population. The 1998 LUTE EIR is designated a "Program EIR" under CEQA Guidelines Sections 15183 and 15183.3. As such, subsequent activities under the LUTE are subject to requirements under each of the aforementioned CEQA Sections, which are described further in Section V.

General Plan Housing Element Update EIR and Addendum

The City has twice amended its General Plan to adopt updates to its Housing Element. It certified a 2010 EIR for the 2007-2014 Housing Element, and a 2014 Addendum to the 2010 EIR for the 2015-2023 Housing Element. The General Plan identifies the City's current and projected housing needs, and sets goals, policies, and programs to address those needs, as specified by the state's *Regional Housing Needs Allocation* ("RHNA") process. The project site is specified as a "Housing Opportunity Site" in the 2015-2023 Housing Element, and thus the 2401 Broadway Project would contribute to the total number of housing units needed in the City of Oakland to meet its RHNA target. The 2010 General Plan Housing Element Update EIR was designated a "Program EIR" under CEQA Guidelines Sections 15183 and 15183.3. As such, subsequent activities under the Housing Element that involve housing, are subject to requirements under each of the aforementioned CEQA Sections, which are described further in Section V.

Central District Urban Renewal Plan Amendments EIR (Redevelopment Plan Amendments EIR)

The 2401 Broadway Project site is located within the Central District Urban Renewal Plan Area, which generally encompasses the entire Downtown: approximately 250 city blocks (828 acres) in an area generally bounded by Interstate 980 (I-980), Lake Merritt, 27th Street and the Embarcadero. The Oakland City Council adopted the Central District Urban Renewal Plan (the "Redevelopment Plan") for the Project Area in June 1969. The City prepared and certified an EIR for proposed amendments to the Urban Renewal Plan in 2011, and amended or supplemented the Plan up to April 3, 2012.[9] The 2011 Redevelopment Plan Amendments EIR was designated a "Program EIR" under CEQA Guidelines Section 15180; as such, subsequent activities are subject to requirements under CEQA Section 15168.

[9] The 2011 EIR addressed two amendments. A 17th Amendment to the Redevelopment Plan to (1) extend the duration of the Plan from 2012 to 2022 and extend the time period that the then-Redevelopment Agency could receive tax increment funds from 2022 to 2032, as allowed by Senate Bill (SB) 211 (codified as Health and Safety Code Section 33333.10 et seq.); (2) increase the cap on the receipt of tax increment revenue to account for the proposed time extensions; and (3) renew the then-Redevelopment Agency's authority to use eminent domain in the Project Area. An 18th Amendment further extended the then-Redevelopment Plan time limit from 2022 to 2023 and extended the time period that the then-Redevelopment Agency could receive tax increment funds from 2032 to 2033, as allowed by Health and Safety Code Section 33331.5.

IV. Summary of Findings

An evaluation of the proposed project is provided in the CEQA Checklist in Section V that follows. This evaluation concludes that the 2401 Broadway Project qualifies for an addendum as well as an exemption from additional environmental review. It is consistent with the development density and land use characteristics established by the City of Oakland General Plan, and any potential environmental impacts associated with its development were adequately analyzed and covered by the analysis in the BVDSP EIR, and/or in the applicable Prior EIRs: the 1998 LUTE EIR, the 2011 Redevelopment Plan Amendments EIR, and the 2010 General Plan Housing Element Update EIR and its 2014 Addendum.

The proposed project would be required to comply with the applicable mitigation measures and City of Oakland SCAs identified in the BVDSP EIR and presented in Attachment A to this document.[10] While the entire project site is not located in the area studied by the BVDSP EIR, for purposes of this analysis, and to be conservative, the entire project was considered within the BVDSP EIR for purposes of analyzing consistency with the BVDSP EIR. With implementation of the applicable mitigation measures and SCAs, the proposed project would not result in a substantial increase in the severity of previously identified significant impacts or in any new significant impacts that were not previously identified in the BVDSP EIR or the applicable Prior EIRs.

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 Previous CEQA Documents; 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 or Previous CEQA Documents were certified—would increase in severity above the level described in the EIRs. Therefore, the proposed project is exempt from further environmental review in accordance with Public Resources Code Section 21083.3 and State 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 Previous CEQA Documents or result in more significant impacts than those that were previously analyzed in the BVDSP EIR or Previous CEQA Documents. The effects of the proposed project have been addressed in the BVDSP EIR or Previous CEQA Documents, 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

[10] Throughout this document, except where necessary for clarity, "BVDSP EIR" encompasses the Initial Study, Draft EIR, and Final EIR for the Broadway Valdez District Specific Plan.

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.

- The analysis in the Previous CEQA Documents, and in this CEQA Analysis, demonstrates that the proposed project would not result in substantial changes or involve new information that would warrant preparation of a subsequent EIR, per State CEQA Guidelines Section 15162, because the level of development now proposed for the site is within the broader development assumptions analyzed in those EIRs. The effects of the proposed project have been addressed in those EIRs and no further environmental documents are required in accordance with State CEQA Guidelines Sections 15168 and 15180.

Overall, based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, as well as those of the 1998 LUTE EIR, the 2011 Redevelopment Plan Amendments EIR, and for the housing components of the proposed project, the 2010 General Plan Housing Element Update EIR and its 2014 Addendum—all of which are summarized in the CEQA Checklist in Section V of this document—the potential environmental impacts associated with the 2401 Broadway Project have been adequately analyzed and covered in the BVDSP EIR and other Previous CEQA Documents. Therefore, no further review or analysis under CEQA is required.

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

for

Darin Ranelletti
Environmental Review Officer

9/5/17
Date

V. CEQA Checklist

Overview

The analysis in this CEQA Checklist provides a summary of the potential environmental impacts that may result from the proposed project. The analysis in this CEQA Checklist also summarizes the impacts and findings of the certified BVDSP EIR, as well as the Prior EIRs that covered the environmental effects of various projects encompassing the project site and that are still applicable for the proposed project. As previously indicated, the Prior EIRs are referred to collectively throughout this CEQA Analysis as the "Previous CEQA Documents" and include the 1998 Land Use and Transportation Element EIR, the 2011 Central District Urban Renewal Plan (or Redevelopment Plan) Amendments EIR, and for the housing components of the proposed project, the 2010 General Plan Housing Element Update EIR and its 2014 Addendum. Given the timespan between the preparations of these EIRs, there are variations in the specific environmental topics addressed and significance criteria; however, as discussed above in Section III and throughout this Checklist, the overall environmental effects identified in each are largely the same; any significant differences are noted.

Several SCAs would apply to the 2401 Broadway Project because of the proposed project's characteristics; the SCAs are triggered because the City is considering discretionary actions for the proposed project.

Because the SCAs are mandatory City requirements, the impact analysis for the proposed project assumes that they will be imposed and implemented, which the project applicant has agreed to do or ensure as part of the proposed project. If this CEQA Checklist or its attachments 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 or City of Oakland SCAs shall control.

Most of the SCAs that are identified for the 2401 Broadway Project were also identified in the BVDSP EIR, the 2011 Redevelopment Plan Amendments EIR, and the 2010 General Plan Housing Element Update EIR and its 2014 Addendum; the 1998 LUTE EIR was developed prior to the City's application of SCAs. As discussed specifically in Attachment A to this document, since certification of the BVDSP EIR and Previous CEQA Documents, the City of Oakland has revised its SCAs, and the most current SCAs are identified in this CEQA Analysis. All mitigation measures identified in the BVDSP EIR that would apply to the proposed project are also identified in Attachment A to this document whereas mitigation measures identified in the Previous CEQA Documents are currently reflected in the SCAs.

This CEQA Checklist hereby incorporates by reference the discussion and analysis of all potential environmental impact topics as presented in the certified BVDSP EIR and the Previous CEQA Documents. 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 or Previous CEQA Documents;
- Substantial Increase in Severity of Previously Identified Significant Impact in BVDSP EIR or Previous CEQA Documents; 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 and the Previous CEQA Documents, the checkbox for "Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents" is checked. Where the checkbox for "Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents" 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);
- Not identified in the previous EIR (BVDSP EIR or Previous CEQA Documents) (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 or Previous CEQA Documents were certified (per CEQA Guidelines Sections 15162, 15183, or 15183.3).

None of the aforementioned conditions were found for the proposed project, as demonstrated throughout the following CEQA Checklist and in its supporting attachments (Attachments A through D) that specifically describe how the proposed project meets the criteria and standards specified in the CEQA Guidelines sections identified above.

Consistent with the requirements of CEQA, a determination of whether the proposed 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 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; and

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

The following technical reports are included as appendices at the end of this CEQA Checklist:

A. Health Risk Assessment;

B. Historic Resource Evaluation;

C. Greenhouse Gas Emissions Detail; and

D. Site Management Plan

E. Greenhouse Gas Reduction Plan

1. Aesthetics, Shadow, and Wind

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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 25980-25986); 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 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.	☒	☐	☐

Previous CEQA Documents Findings

Scenic vistas, scenic resources, visual character, light and glare, and shadow were analyzed in each of the Previous CEQA Documents, which found that the effects to these topics would be less than significant. The 2011 Redevelopment Plan Amendments EIR and the 2010 General Plan Housing Element Update EIR and its 2014 Addendum cited applicable SCAs that would ensure the less-than-significant visual quality effects. The 1998 LUTE EIR identified mitigation measures that are

functionally equivalent to the SCAs to reduce certain potential effects to less than significant. The 1998 LUTE EIR also identified significant and unavoidable impacts regarding wind hazards.

BVDSP Findings

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 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.[11] 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 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.

[11] 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.

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 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 Conclusions

Scenic Vistas, Scenic Resources, and Visual Character

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. The proposed project meets this guideline by widening sidewalks and adding amenities such as street trees on all three street frontages; mini plazas at all building entries; bulbouts, parklets, and a bike corral on 24th Street; and bike racks and waste receptacles on Broadway. The 2013 Commercial Corridor Design Guidelines provide guidelines in support of the General Plan goals to revitalize Oakland's major transit corridors, including Broadway and the proposed project's Broadway frontage. 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 proposed project will be reviewed by the City to ensure consistency with the applicable BVDSP Design Guidelines as well as the Commercial Corridor Design Guidelines. The proposed project would be contemporary in design, utilizing a variety of materials, including, but not limited to aluminum sunshades, aluminum veneer panels, ceramic tile, metal beams, steel canopies and awnings, lap siding, and glass windows/storefronts. The design review process will ensure the proposed project would be consistent with the applicable BVDSP and citywide 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.

The project's potential impacts to scenic vistas, scenic resources, visual character, and light and glare would be less than significant with implementation of applicable SCAs.

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. While the height of the proposed project (i.e., 85 feet) would be above the 65-foot height analyzed in the Physical Height Model for this site, a close review of the BVDSP EIR shadow diagrams (EIR figures 4.1-5 through 4.1-16) shows that the shadow modeled from the project site would not

approach public open spaces, solar collectors, or historic resources. An extension of this shadow either through an increase in height or extension of the building footprint 30 feet westward into the CC-3 parcels also would not approach public open space, solar collectors, or historic resources. Therefore, the proposed project would not result in a project-specific impact nor contribute to a potential cumulative shading impact.

Wind

The proposed project is located in the Central Business District and would be up to 85 feet in height, which is below the 100-foot threshold that triggers an analysis of wind. Therefore, BVDSP EIR Mitigation Measure AES-5: Wind Analysis would not apply.

Based on an examination of the analysis, findings, and conclusions in the BVDSP EIR and Previous CEQA Documents, implementation of the proposed project would not substantially increase the severity of previously identified significant impacts or result in new significant impacts related to aesthetics, shadows, or wind that were not identified in the BVDSP EIR or the Previous CEQA Documents. Mitigation Measures AES-4, AES-5, and AES-6 do 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 Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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.	☒	☐	☐

Previous CEQA Documents Findings

Construction and Operational Emissions (Criterion 2a)

The 1998 LUTE EIR identified mitigation measures that would address operational emissions effects to less than significant, and it found significant and unavoidable cumulative effects regarding increased criteria pollutants from increased traffic regionally. The 2011 Redevelopment Plan Amendments EIR and 2010 General Plan Housing Element Update EIR and its 2014 Addendum found that emissions associated with construction and operations resulting from increased criteria pollutants would result in less-than-significant effects with incorporation of SCAs. The 2011 Redevelopment Plan Amendments EIR and 2010 General Plan Housing Element Update EIR and its 2014 Addendum also identified effective SCAs to address potentially significant effects regarding dust/Particular Matter (PM_{10}), odors, and consistency with the applicable regional clean air plan.

Toxic Air Contaminants (Criterion 2b)

The 1998 LUTE EIR did not quantify or address cumulative health risks, as such analysis was not required when that EIR was prepared. The 2011 Redevelopment Plan Amendments EIR and 2010

General Plan Housing Element Update EIR and its 2014 Addendum identified significant and unavoidable impacts regarding cumulative health risks after the consideration of SCAs.

BVDSP Findings

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 BVDSP 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 BVDSP 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 (hereafter referred to as SCA TRA-4: *Transportation and Parking Demand Management Plan*) that requires the implementation of Parking and Transportation Demand Management (TDM) would reduce vehicular trips and operational emissions. Even with implementation of the SCA, 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*.[12] 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 preparation, or extensive soil transport. Even with implementation

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

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 BVDSP 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 Conclusions

Construction and Operational Emissions (Criterion 2a)

The proposed project would be up to 216,810 square feet in size, including up to 72 residential units, a 159-room hotel and up to 27,200 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. Although not required to mitigate a significant impact, the proposed project would be required to comply with applicable SCAs related to parking and transportation demand and construction, and operation source emissions.

Because the proposed project would include a demolition permit and the potential simultaneous occurrence of construction phases (e.g., building construction, architectural coating, and paving), 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. Although not required to mitigate a significant impact, the proposed project would also implement BVDSP Recommended Measure AIR-1 to further reduce construction emissions from architectural coatings. **Table 3**, below, presents the average daily criteria pollutant emissions that would be associated with construction of the proposed project and compares them to the significance thresholds published by BAAQMD in 2017. Overall, the proposed project's emissions of criteria air pollutants during construction would be less than the significance thresholds. Therefore, the proposed project's construction emissions would not result in new significant impacts, or substantially increase the severity of significant impacts identified in the BVDSP EIR or Previous CEQA Documents.

The project's operational emissions generated from mobile on-road sources and on-site area sources, such as natural gas combustion for space and water heating and landscape maintenance, would be less than the significance thresholds. Therefore, the proposed project's operational emissions would not result in new significant impacts, or substantially increase the severity of significant impacts identified in the BVDSP EIR or Previous CEQA Documents.

TABLE 3
AVERAGE DAILY CONSTRUCTION-RELATED POLLUTANT EMISSIONS
(pounds per day) WITHOUT MITIGATION

	ROG	NO_x	Exhaust PM_{10}	Exhaust $PM_{2.5}$
Project Construction Emissions	7.3	21.4	1.0	1.0
BAAQMD Considered Construction Threshold	54	54	82	54
Potential Significant Impact?	No	No	No	No

SOURCE: ESA

Toxic Air Contaminants (Criterion 2b)

Health Risks from Project Construction to Existing Receptors

Construction emissions associated with the proposed project would not result in a more severe impact than what was previously disclosed in the BVDSP EIR or Previous CEQA Documents. 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 is typical of other project sites in the BVDSP area and other urban areas. Therefore, there would be nothing unique or peculiar about the proposed project's proximity to sensitive receptors.

As stated above, the 1998 LUTE EIR did not quantify or address cumulative health risks from TACs, as such analysis was not required when that EIR was prepared. Similar to the BVDSP EIR, the 2011 Redevelopment Plan Amendments EIR and 2010 General Plan Housing Element Update EIR and its 2014 Addendum conservatively determined that impacts from TAC emissions during construction would remain significant and unavoidable. Consequently, the analysis and conclusions of the BVDSP EIR and Previous CEQA Documents are still valid for this proposed project.

Nevertheless, a project-level construction-related health risk assessment (HRA) was conducted to estimate risks to nearby receptors (see Appendix A). The analysis determined that health risk from project construction to nearby receptors would be less than project level significance thresholds with the implementation of subsection (w) of SCA AIR-1, which requires construction equipment to be equipped with Best Available Control Technology and meet the California Air Resources Board's most recent certification standard. In order to comply with subsection (w) of SCA AIR-1, the project applicant would be required to ensure that construction equipment meet Tier 4 Final emissions standards, which can reduce emissions of diesel particulate matter by at least 85 percent relative to equipment without emission control technologies installed.[13] Beyond SCA AIR-1, there are no additional feasible control measures available to further reduce construction-related diesel particulate matter emissions.

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

Health Risks to Project Receptors

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 10,000 vehicles per day) and other sources of TACs (backup generators). The proposed project would not include an emergency backup generator. Therefore, there would be no project-related operational sources of TACs that the project or existing receptors would be exposed to.

To assess the impacts of existing and proposed sources of TACs on the proposed project's new residential sensitive receptors, a screening level cumulative analysis was conducted (see SCA AIR-2 in Attachment A as well as Appendix A). Using conservative assumptions, the screening level analysis found that, without mitigation, the cumulative health risks to the project's sensitive receptors from existing and reasonably foreseeable future sources of TACs would not exceed the City's cumulative health risk thresholds for cancer risk, chronic hazard index (HI) and fine particulate matter ($PM_{2.5}$) concentration. Therefore, cumulative health risks to project receptors would be less than significant.

The project would not include any operational sources of TACs and would therefore not contribute to the cumulative health risks at existing receptors in the vicinity.

To address the possibility of asbestos materials in the existing structures on the site in accordance with SCA AIR-3: *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 proposed project.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR and Previous CEQA Documents, implementation of the proposed project would not substantially increase the severity of previously identified significant impacts or result in new significant impacts related to air quality that were not identified in the BVDSP EIR or Previous CEQA Documents. The proposed project would be required to implement SCAs related to construction-related emissions controls and development, and, although not required to mitigate a significant impact, a TDM Plan. Applicable SCAs are 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-2: *Exposure to Air Pollution (Toxic Air Contaminants)*, SCA AIR-3: *Asbestos in Structures*, and SCA TRA-4: *Transportation and Parking Demand Management [TDM] Plan Needed)*.

In addition, BVDSP Recommended Measure AIR-1, listed below, would also 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.

3. Biological Resources

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents identified less-than-significant impacts related to biological resources, with the 2011 Redevelopment Plan Amendments EIR and 2010 General Plan Housing Element Update EIR and its 2014 Addendum identifying applicable City of Oakland SCAs. No mitigation measures were necessary.

BVDSP Findings

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 1.21-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 includes small shrubs and juniper trees used for landscaping around the perimeter of the large surface parking lot located at the northeastern corner of the project site, as well as the existing street tree on Broadway and 25th Street. The project applicant would be required to adhere to the conditions of SCA BIO-1 and SCA BIO-2 should tree removal be required. The project site is not located adjacent to a creek. Implementation of the proposed project would decrease the amount of impervious surfaces by providing new street trees along all street frontages, landscaped bulbouts on 24th Street, and providing approximately 11,425 square feet of landscaped open space on the podium level.

Based on an examination of the analysis, findings, and conclusions in the BVDSP EIR and Previous CEQA Documents, 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 or the Previous CEQA Documents. 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: *Tree Removal During Bird Breeding Season* and SCA BIO-2: *Tree Permit*).

4. Cultural Resources

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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.	☒	☐	☐

Previous CEQA Documents Findings

The 1998 LUTE EIR identified potentially significant impacts to historic resources, and identified mitigation measures to reduce the impact to less than significant. The 2011 Redevelopment Plan Amendments EIR, which addresses much of the oldest part of Downtown Oakland, identified a significant and unavoidable impact to historic resources, even with the implementation of mitigation measures. The 2010 General Plan Housing Element Update EIR and its 2014 Addendum identified City of Oakland SCAs pertaining to historic resources, and found a less-than-significant impact. Each of the Prior EIRs identified less-than-significant effects to archaeological and paleontological resources and human remains, specifically with the incorporation of City of Oakland SCAs, except that the 1998 LUTE EIR identified mitigation measures to reduce the effects to archaeological resources to less than significant.

BVDSP Findings

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 (API), that are considered historical resources for CEQA purposes.[14] There are also many older buildings that possess architectural merit, either in Areas of Secondary Importance (ASIs) or standing alone, that contribute to the variety and texture of the Plan Area.[15]

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.

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

[14] 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.

[15] 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.

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 project site is located partially within the boundaries of the National Register-eligible 25th Street Garage District, an identified City of Oakland API. The buildings in this district are predominantly one-story brick and truss-roofed garages built between 1920 and 1929. The district is significant as a concentrated, intact, and homogeneous group of buildings of a distinctive type, dating from a specific period of Oakland's economic development.

There are two buildings on the project site. The Kia/Mitsubishi parts and service center at 2401 Broadway and 437 25th Street. The building at 2401 Broadway is located in the BVDSP and was evaluated in the 2009 BVDSP Historic Resources Inventory. The building at 437 25th Street, however, is located outside the boundary of the BVDSP and therefore was not evaluated as part of the BVDSP EIR analysis. Both buildings have been rated by the Oakland Cultural Heritage Survey (OCHS). Their ratings are as follows: 2401 Broadway (Eb-1*), built in 1913-1914 and 437 25th Street (C1+), built in 1920. The Eb-1* rating indicates that the building is a contingency contributor to the 25th Street Garage District with restoration potential. The C1+ rating indicates that the building is a contributor to the 25th Street Garage District. These ratings qualify the two buildings as historic resources and, as such, an Historic Resource Evaluation (HRE) was conducted. The HRE, conducted by Carey & Co. in August, 2017, is provided as Appendix B and is summarized below.

Under the HRE, 437 25th Street was determined to be a contributor to the 25th Street Garage District and, as such, qualifies as an historic resource under CEQA. As part of the proposed project, the 437 25th Street structure would be retained and a new two-story, 45-foot rooftop addition would be added. According to the findings in the HRE, the proposed façade work and two-story addition to 437 25th Street would not diminish its status as a contributor as the building's character-defining features, including the peaked parapet, large openings, and brick construction, would be preserved.

Under the HRE, 2401 Broadway was determined to be a noncontributor to the 25th Street Garage District. However, the 2401 Broadway building is conservatively considered a CEQA historic resource in the BVDSP EIR historic resources analysis. The BVDSP EIR evaluated development on the 2401 Broadway parcel along with other parcels containing CEQA historic resources, and determined the impact would be significant and unavoidable with implementation of BVDSP Mitigation Measure CUL-1 (see BVDSP Mitigation Measure CUL-1 in Attachment A).

Mitigation Measure CUL-1 includes multiple measures and approaches to reduce impacts to historic resources. Measure CUL-1a, *Avoidance, Adaptive Reuse, or Appropriate Relocation of Historically Significant Structures*, states, "If avoidance is not feasible, adaptive reuse and rehabilitation of historical resources shall occur in accordance with the *Secretary of Interior's Standards for the Treatment of Historic Properties*." To comply with CUL-1a (adaptive reuse), the project applicant proposes to retain and rehabilitate the east and south elevations of 2401 Broadway and incorporate these facades into the three- and six-story vertical addition that will be set back slightly from both elevations. The HRE concluded that the Broadway façade would respond to the scale and building forms of the 25th Street Garage District and the proposed project would not impair the ability of the historic district to continue to convey its historic significance. Further, the HRE confirms the proposed project design is in accordance with the *Secretary of Interior's Standards for the Treatment of Historic Properties.*

There are two buildings (444 24th Street and 443 25th Street) located immediately adjacent to the project site that are also contributing resources to the 25th Street Garage District. SCA NOI-7: *Vibration Impacts on Adjacent Historic Structures or Vibration-Sensitive Activities* (see Section 10: Noise) would be applicable to the proposed project to address potential direct impacts from construction activities such as excavation undermining existing foundations, construction equipment coming in contact with existing walls, demolition or other construction activities. As a part of implementing this SCA, the project applicant has proposed to prepare a Historic Property Protection Plan in conjunction with construction plans. Prior to the start of the proposed development, the project applicant will hire a historical architect and a structural engineer to undertake an existing condition study of 444 24th Street, 437 25th Street and 443 25th Street.[16] The purpose of the study would be to establish the baseline condition of the buildings prior to construction, including the location and extent of any visible cracks or spalls. The documentation would take the form of written descriptions and photographs, and would include those physical characteristics of the resources that convey their historic significance and that justify their inclusion on, or eligibility for inclusion on, the National Register, California Register, and local register. Implementation of the Historic Property Protection Plan would include:

a. The historical architect and structural engineer shall monitor the three buildings during construction and any changes to existing conditions would be reported, including, but not limited to, expansion of existing cracks, new spalls, or other exterior deterioration. Monitoring reports shall be submitted to the general contractor in charge of construction and a designated representative of the project applicant on a periodic basis. The structural engineer shall consult with the historical architect, especially if any problems with character-defining features of a historic resource are discovered. If, in the opinion of the structural engineer in consultation

[16] Although the building located at 437 25th Street is part of the proposed project, the building will be retained and, as such, will need to be protected from adjacent construction activities.

with the historical architect, substantial adverse effects to historic resources related to construction activities are found during construction, the monitoring team shall inform the general contractor in charge of construction and a designated representative of the project applicant. The project applicant shall adhere to the monitoring team's recommendations for corrective measures, including halting construction in situations where construction activities would imminently endanger historic resources. The project applicant shall establish the appropriate frequency of monitoring and reporting, which shall reflect the demolition and construction methods and schedule of the project. Site visit reports and documents associated with claims processing shall be provided to the general contractor in charge of construction and a designated representative of the project applicant.

b. The historical architect shall establish a training program for construction workers involved in the project that emphasizes the importance of protecting historic resources. This program shall include information on recognizing historic fabric and materials, and directions on how to exercise care when working around and operating equipment near the historic structures, including storage of materials away from historic buildings. It shall also include information on means to reduce vibrations from construction, and monitoring and reporting of any potential problems that could affect the historic resources in the area. A provision for establishing this training program shall be incorporated into the construction contract, and the construction contract provisions shall be reviewed and approved by the general contractor in charge of construction, by affidavit, and by a designated representative of the project applicant.

This documentation would be reviewed and approved by a designated representative of the project applicant. Compliance with SCA NOI-7: *Vibration Impacts on Adjacent Historic Structures or Vibration-Sensitive Activities* (see Section 10: Noise) would ensure that impacts to Historic Architectural Resources would remain equal to or less than those identified in the BVDSP EIR.

Archaeological and Paleontological Resources and Human Remains

The proposed project would result in minimal excavation--approximately 4,000 cubic yards of soil up to a depth of four feet. Based on the Site Mitigation and Contingency Plan prepared for the project site, which explored up to a depth of 24 feet below ground surface, the project site appears to be underlain by interbedded deposits of unconsolidated fine- to coarse-grained soil.[17] 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 (SCA CUL-1 and SCA CUL-2) would apply to the proposed project and, as outlined in the BVDSP EIR, would reduce any potential impacts to a less-than-significant level.

An examination of the analysis, findings, and conclusions of the BVDSP EIR and the Previous CEQA Documents considered in this analysis finds that implementation of the proposed project would not substantially increase the severity of previously identified significant impacts or result in new significant impacts related to cultural resources that were not identified in the BVDSP EIR or the Previous CEQA Documents. The proposed project would be required to implement SCAs related to the discovery of archaeological and paleontological resources during construction and the discovery

[17] PES Environmental, Inc. 2012. *Site Mitigation and Contingency Plan 2401 Broadway Oakland, California*. January 11.

of human remains during construction, as identified in Attachment A at the end of the CEQA Checklist, along with BVDSP Mitigation Measure and SCAs related to historic resources (BVDSP Mitigation Measure CUL-1: *Avoidance, Adaptive Reuse, or Appropriate Relocation of Historically Significant Structures*, SCA CUL-1: *Archaeological and Paleontological Resources – Discovery During Construction*, SCA CUL-2: *Human Remains – Discovery During Construction*, and SCA NOI-7: *Vibration Impacts on Adjacent Historic Structures or Vibration-Sensitive Activities*).

5. Geology, Soils, and Geohazards

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents identified that impacts to geology, soils, and geohazards would be less than significant, with the 2011 Redevelopment Plan Amendments EIR and 2010 General Plan Housing Element Update EIR and its 2014 Addendum identifying applicable City of Oakland SCAs. No mitigation measures were necessary.

BVDSP Findings

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 excavate of up to 4,000 cubic yards of soil for site grading and to accommodate parking pits required to accommodate stacked vehicle parking in the ground-level garage.[18] Projects within the City that propose to excavate more than 500 cubic yards of soil are required to obtain a grading permit (see SCA GEO-1 in Attachment A). 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, nor is it within a liquefaction hazard zone, as designated on a map prepared by the California Geological Survey.[19] According to the preliminary geotechnical investigation prepared for the proposed project, the main geotechnical concerns include the presence of non-engineered fill, liquefiable soil, shallow groundwater, and potentially compressible soil.[20] 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 and the Previous CEQA Documents considered in this analysis, implementation of the proposed project would not substantially increase the severity of previously identified significant impacts or result in new significant impacts related to geology, soils, and geohazards that were not identified in the BVDSP EIR or the Previous CEQA Documents. 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 of the CEQA Checklist (SCA GEO-1: *Construction-Related Permit[s]* and SCA GEO-2: *Soils Report*).

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[18] The cars will be stacked four high, with three above grade and one below grade.

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

[20] ENGEO Incorporated, 2015. *Preliminary Geotechnical Report, 24th Street and Broadway, Oakland, California*. July 28.

6. Greenhouse Gas and Climate Change

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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 land use development, produce total emissions of more than 1,100 metric tons of CO_2e annually AND more than 4.64 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.	☒	☐	☐

Previous CEQA Documents Findings

Climate change and greenhouse gas emissions ("GHG") were not expressly addressed in the 1998 LUTE EIR. The 2011 Redevelopment Plan Amendments EIR and 2010 General Plan Housing Element Update EIR and its 2014 Addendum identified less-than-significant GHG impacts with the incorporation of applicable City of Oakland SCAs. No mitigation measures were necessary.

BVDSP Findings

Greenhouse Gas Emissions (Criterion 6a)

The BVDSP EIR evaluated impacts related to GHG emissions from construction and operation anticipated under the Broadway Valdez Development Program. The EIR identified motor vehicle use, water, gas, electrical use, loss of vegetation, and construction activities as contributing to generation of GHG emissions. 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 Broadway Valdez Development Program 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

As discussed under the BVPSP EIR, the proposed project would generate GHG emissions from both construction and operation. While mitigation measures were not included in the BVDSP EIR that would apply to the proposed project, it would be required to comply with applicable SCAs that would reduce GHG emissions. Several other City SCAs that would contribute to minimizing potential GHG emissions from construction and operations of development projects would apply to the proposed project; they pertain to alternative transportation facilities (bicycles and BART), construction equipment emissions, transportation demand management, construction waste reduction and recycling, as well as California Green Building Standards. Specifically, these SCAs include, but are not limited to, preparation and implementation of a Transportation and Parking Demand Management Plan (SCA-TRA-4), a Construction and Demolition Waste Reduction and Recycling Plan (SCA-UTIL-1), and construction-related air pollution controls (SCA-AIR-1).

The BVDSP EIR included SCA 38 (referred to as SCA GHG-1 in this document), which 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 produces 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 Appendix C). The proposed project's GHG emissions from construction and operation were estimated using the most current version of the California Emissions Estimator Model (CalEEMod, version 2016.3.1) and are summarized in **Table 4**.

As shown, the screening analysis determined that the proposed project would exceed the City's thresholds of 1,100 metric tons of CO_2e per year and 4.6 metric tons of CO_2e per service population. The City's threshold requirements to prepare a GHG Reduction Plan to comply with SCA GHG-1 are triggered when **both** thresholds are exceeded. The goal of the GHG Reduction Plan shall be to increase energy efficiency and to reduce GHG emissions to below at least one of the BAAQMD's CEQA Thresholds of Significance (1,100 metric tons of CO_2e per year or 4.6 metric tons of CO_2e per year per service population). The GHG Reduction Plan shall include, at a minimum, (a) a detailed GHG emissions inventory for the proposed project under a "business-as-usual" scenario with no consideration of project design features, or other energy efficiencies, (b) an "adjusted" baseline GHG emissions inventory for the proposed project, taking into consideration energy efficiencies included as part of the proposed project (including the City's SCAs, proposed mitigation measures, project design features, and other City requirements), (c) a comprehensive set of quantified additional GHG reduction measures available to further reduce GHG emissions beyond the adjusted GHG emissions, and (d) requirements for ongoing monitoring and reporting to demonstrate that the additional GHG

TABLE 4
PROPOSED PROJECT GHG EMISSIONS[a]

Project Component	CO_2e[b] (metric tons per year)
Area Sources	3.8
Energy Emissions	411.1
Mobile Sources [c]	1436.4
Solid Waste	74.8
Water and Wastewater [d]	13.6
Annualized Construction Emissions (Over 40 Years)	21.5
Less Existing Emissions	- 438
Net Increase	**1,523**
City of Oakland Screening Threshold	1,100
Exceeds Threshold?	**Yes**
Service Population (135 residents and 198 employees less an estimated 45 existing employees) [f]	288
Net Project Emissions per Service Population	**5.29**
City Emissions per Service Population Threshold	4.6
Exceeds Threshold?	**Yes**

NOTES:
[a] Project operational emissions estimates were made using CalEEMod version 2016.3.1.
[b] CO_2e – Carbon dioxide equivalents
[c] GHG emissions from mobile sources relied on inputs from the Transportation Analysis by Fehr & Peers.
[d] 20 percent reduction in indoor water use assumed in compliance with CalGreen code.
[f] The service population is the net number of residents and employees of a project.

reduction measures are being implemented. Implementation of the GHG Reduction Plan during construction and operation of the proposed project would ensure consistency with the City of Oakland's Energy and Climate Action Plan, as well as the BVDSP. As such, a GHG Reduction Plan has been prepared for the proposed project (see Appendix E). Implementation of the project specific GHG Reduction Plan would reduce proposed project GHG emissions to below 1,325 CO_2e in order achieve the City's thresholds of 4.6 metric tons of CO_2e per service population.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR and Previous CEQA Documents, implementation of the proposed project would not substantially increase the severity of previously identified significant impacts or result in new significant impacts related to GHG and climate change that were not identified in the BVDSP EIR or Previous CEQA Documents. The BVDSP EIR did not identify any mitigation measures related to GHGs, and none are required for the proposed project. An SCA would apply to the proposed project, as identified in Attachment A at the end of the CEQA Checklist (SCA GHG-1).

7. Hazards and Hazardous Materials

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents found less-than-significant effects regarding hazards and hazardous materials including risk of upset in school proximity and emergency response/ evacuation plans, with the 2011 Redevelopment Plan Amendments EIR and 2010 General Plan Housing Element Update EIR and its 2014 Addendum identifying applicable City of Oakland SCAs. The 1998 LUTE EIR identified mitigation measures to reduce potentially significant effects regarding exposing workers and the public to hazardous substances to less than significant. These mitigation measures are now incorporated into the applicable City of Oakland SCAs.

BVDSP Findings

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

2417 Broadway is on the Cortese list as a Leaking Underground Storage Tank (LUST) cleanup site.[21] The Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) will be the responsible agency overseeing the necessary steps to obtain LUST case closure. The project applicant will begin that process upon acquisition of the project site. 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.

Two Phase I ESAs prepared for the project site indicated a history of land use including residential uses and commercial/light industrial uses, including auto related uses (i.e., auto service, repair, and sales).[22,23] These operations handled common hazardous materials such as petroleum hydrocarbons, including gasoline, oil, waste oil, and degreasers and solvents. The Phase I ESAs revealed the following recognized environmental conditions (RECs):

- A LUST case is currently open for documented release of hydrocarbons from two former USTs and two former hydraulic lifts removed in 1994 from 2401 Broadway and 2417 Broadway. The extent of contamination in soil and groundwater has not been defined; and
- Based on documented VOC impacts to groundwater in the vicinity of the project site and the groundwater flow direction, there is the potential for vapor intrusion.

The Phase I ESAs also noted that, based on the construction date of the building(s) on the project site, building materials may contain asbestos, lead-based paint, or PCBs.

A Phase II ESA prepared for the portions of the project site located at 2401 Broadway and 2417 Broadway further investigated subsurface conditions per the RECs revealed in the Phase I ESA.[24] Subsurface investigations included sub-slab vapor, soil vapor, soil, and grab groundwater sampling activities at 16 locations. The results of the investigations indicate that there does not appear to be a significant risk to human health or the environment due to the historical release of petroleum

[21] RWQCB Case #: 01-2416.
[22] PES Environmental, 2015. *Phase I Environmental Site Assessment, 2401 Broadway, Oakland, California*, June 11.
[23] PES Environmental, 2015. *Phase I Environmental Site Assessment, 422 24th Street and 437, 422 and 433 25th Street, Oakland California*, July 2.
[24] PES Environmental, 2015. *Subsurface Investigation Report and Request for Case Closure, 2401 Broadway, Oakland, California*, August 3.

hydrocarbons from the former USTs and former hydraulic lifts at the site, documented off-site VOC contamination in groundwater, or current and former vehicle repair and maintenance activities conducted at the site. Due to the presence of localized petroleum hydrocarbon impacted soil present on the site, the Phase II ESA recommended that a Site Mitigation and Contingency Plan be prepared to provide for the management and removal of these soils. A Site Management and Contingency Plan provides environmental consultants, construction contractors and workers, the RWQCB, and the project applicant with (see Appendix D):

- Information regarding known environmental conditions at the site, including known and/or suspected soil and groundwater contamination at and beneath the site;
- Protocols for managing soil during site redevelopment activities; and
- Protocols for implementing contingencies to manage contaminated soil or other environmental conditions in the event they are identified during site redevelopment construction.

A Site Mitigation and Contingency Plan was prepared for the proposed project and will be implemented in accordance with SCA HAZ-2.

The results of the supplemental sampling and analysis indicate that soil and soil vapor beneath and surrounding tetrachloroethene- (PCE) impacted sub-slab vapor samples do not appear to be impacted with PCE and the impact to sub-slab vapor appears to be localized or associated with off-site source(s). The Phase II ESA concluded that soil, soil vapor, and groundwater conditions at the project site meet the criteria for LUST case closure in accordance with the State Water Resources Control Board's (SWRCB) Low-Threat Underground Tank Case Closure Policy.

Developments 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 would be subject to the City of Oakland's SCA AIR-3: *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 would require the project applicant 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 would require 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.

SCA HAZ-2 would also 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 is identified in the Site Management Plan, which was prepared by the project applicant, consistent with the Phase II ESA recommendations

described above and requires compliance with identified federal, state or local regulations or requirements and specific performance criteria. Implementation of SCA HAZ-2 will be reviewed, approved, and overseen by the City, and any applicable regulatory agency, as required by law.

The proposed project is located within 0.25 mile of Westlake Middle School. 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 and the Previous CEQA Documents, implementation of the proposed project would not substantially increase the severity of previously identified significant impacts or result in new significant impacts related to hazards and hazardous materials that were not identified in the BVDSP EIR or the Previous CEQA Documents. 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-3: *Asbestos in Structures,* SCA HAZ-1: *Hazardous Materials Related to Construction*, and SCA HAZ-2: *Hazardous Building Materials and Site Contamination*).

8. Hydrology and Water Quality

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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	☒	☐	☐
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.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents found less-than-significant impacts related to hydrology or water quality, primarily given required adherence to existing regulatory requirements, many of which are incorporated in the City of Oakland's SCAs identified as applicable in the 2010 General Plan Housing Element Update EIR and its 2014 Addendum. The 2011 Redevelopment Plan Amendments EIR found less-than-significant effects regarding stormwater and 100-year flood with implementation of applicable City of Oakland SCAs. The 1998 LUTE EIR acknowledged that areas considered under that EIR could potentially occur within a 100-year flood boundary. Adherence to existing regulatory

requirements that are incorporated in the City of Oakland's SCAs would address potentially significant effects regarding flooding. No mitigation measures were warranted.

BVDSP Findings

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 entire site, totaling 52,843 square feet (approximately 1.21 acres). The proposed project would reduce the impervious surface area on the project site by adding street trees, and podium-level landscaped courtyard and deck, and by incorporating NPDES C.3 stormwater treatment features (see SCA HYD-3 in Attachment A). 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]

[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.

Construction activities for the proposed project are expected to occur over approximately 26 months on the 1.21-acre project site and would entail demolition, excavation and shoring, foundation and below-grade construction, construction of the building, finishing interiors and paving. The proposed project would be required to implement SCA related to stormwater, drainages, drainage patterns, and water quality (see SCA HYD-1 and SCA HYD-2 in Attachment A). The project site is underlain by interbedded deposits of unconsolidated fine- to course-grained soil to the maximum explored depth of 24 feet below ground surface (bgs). Groundwater was encountered between approximately 19 to 22.5 feet bgs, with a possible shallow perched saturated zone between approximately 13 to 14 feet bgs at the southwest portion of the project site.[26] Based on the depth of groundwater observed during subsurface investigations and the anticipated depth of grading and excavating activities, redevelopment activities may require construction dewatering. 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.

Any groundwater dewatering would be limited in duration and would be subject to permits from East Bay Municipal Utility District (EBMUD) or the Regional Water Quality Control Board (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 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 and Previous CEQA documents.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR and the Previous CEQA Documents, implementation of the proposed project would not substantially increase the severity of previously identified significant impacts or result in new significant impacts related to hydrology and water quality that were not identified in the BVDSP EIR or the Previous CEQA Documents. 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*).

[26] PES Environmental, 2016. *Site Mitigation and Contingency Plan, 2401 Broadway, Oakland, California*, January 11.

9. Land Use, Plans, and Policies

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents, including the 2011 Redevelopment Plan Amendments EIR and the 2010 General Plan Housing Element Update EIR and its 2014 Addendum, found less-than-significant impacts related to land use, plans, and policies, and no mitigation measures were warranted. The 1998 LUTE EIR, however, identified a significant and unavoidable effect associated with inconsistencies with policies in the Clean Air Plan (resulting from significant and unavoidable increases in criteria pollutants from increased traffic regionally). It identified mitigation measures, which largely align with current City of Oakland SCAs involving Transportation Demand Management ("TDM"), which apply to all projects within the City of Oakland.

BVDSP Findings

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 General Plan land use designation for 2417 Broadway is Central Business District (CBD) and for 422 24th Street and 437 25th Street, is Community Commercial (CC). The parcel at 2401 Broadway straddles the boundary line of the BVDSP and thus is in both the CBD and CC. The CBD designation 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 intent of the Community Commercial zones is to create, maintain and enhance areas suitable for a wide variety of commercial and institutional operations along the City's major corridors and in shopping districts or centers. The proposed project is consistent with the General Plan land use designations because it will provide a mixed-use development providing residential, hotel and retail uses.

The largest and primary parcel in the project site fronts Broadway and 25th Street and is located within the boundaries of the Plan Area, D-BV-1 (Retail Priority Sites Commercial Zone 1). The parcel to the south, fronting Broadway and 24th Street, straddles the boundary line of the BVDSP and thus is in both the D-BV-1 and Community Commercial (CC-3) Zone. The other two parcels to the east, one fronting 24th and one fronting 25th, are entirely in the CC-3 Zone. The regulatory framework of D-BV-1, which covers Retail Priority Sites under the BVDSP Plan Area, 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. Retail Priority Sites in the D-BV-1 zone conditionally permit residential uses with the inclusion of retail uses. The entire project site, including the portion located in the D-BV-1 zone, is also within the 45-foot height area, which limits height and density by the amount of retail square footage being provided. Specifically, to exceed 45 feet in height, and to allow residential uses, projects can receive D-BV-1 Bonuses by providing a minimum retail square footage of 50 percent of the lot area. Conditional Use permits also would be required for Transient Habitation (hotel use) and alcoholic beverage sales associated with the proposed bar at 437 25th Street.

The portion of the project site located in the D-BV-1 zone has a parcel area of approximately 30,265 square feet; based on the retail requirement described above, a minimum of approximately 15,133 square feet of retail would be required. The proposed project would provide 17,439 square feet of retail space on the D-BV-1 parcel, thereby exceeding the Retail Priority Site requirement, and qualifying for a conditionally permitted increase in building height up to 85 feet and development of residential uses.

The CC-3 zoning designation is intended to create, maintain and enhance areas suitable for a wide variety of commercial and institutional operations along the City's major corridors and in shopping districts or centers. 422 24th Street, the rear portion of 2401 Broadway, and 437 25th Street are located in the CC-3 zone and also in the 45-foot height area. Under Planning Code Sections 17.102.110 and 17.154.060, an extension of the density and land use controls that apply to an adjacent parcel can be extended to these parcels, which would allow the proposed hotel use and an increase in the allowable height. The project applicant is seeking approval of a Conditional use Permit to extend the allowable uses 130 horizontal feet into the CC-3 parcel to allow transient habitation (hotel) uses on the site and Design Review to extend for 30 horizontal feet the allowable height of 85 feet.

Based on the above, the proposed project would be consistent with the land use regulations in the General Plan and BVDSP. Based on an examination of the analysis, findings, and conclusions in the BVDSP EIR and the Previous CEQA Documents, implementation of the proposed project would not substantially increase the severity of previously identified significant impacts or result in new significant impacts related to land uses, plans, or policies that were not identified in the BVDSP EIR

or the Previous CEQA Documents. No SCAs or mitigation measures related to land use are identified or necessary for the proposed project.

10. Noise

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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 p.m. to 7 a.m. on weekdays and 8 p.m. to 9 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);	☒	☐	☐
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 groundborne vibration that exceeds the criteria established by the Federal Transit Administration.	☒	☐	☐

Previous CEQA Documents Findings

The 2011 Redevelopment Plan Amendments EIR identified less-than-significant effects related to roadway noise and found construction and operational noise impacts would be mitigated to a less-than-significant level with incorporation of SCAs.[27] The 2010 General Plan Housing Element Update EIR and its 2014 Addendum identified less-than-significant noise impacts with incorporation of SCAs. The 1998 LUTE EIR identified mitigation measures to address potential noise conflicts between different land uses. Regarding construction noise, the 1998 LUTE EIR identified a significant and unavoidable construction noise and vibration impact in Downtown, even after the incorporation of mitigation measures.

BVDSP Findings

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 of Broadway Valdez Development Program would be less than significant. Construction-related activities associated with the Broadway Valdez Development Program 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

[27] The 2011 Redevelopment Plan Amendments EIR also identified significant and avoidable noise effects specifically associated with the potential development of a new baseball stadium at Victory Court, and multimodal safety at at-grade rail crossings, both near the Oakland Estuary. These effects would not pertain to the proposed project given the distance and presumably minimal contribution of multimodal trips affecting these impacts.

in traffic noise from the Existing Plus Project traffic scenario as compared to traffic noise modeled from the Existing (2012) traffic scenario 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

Project Construction

Construction activities for the proposed project are expected to occur over approximately 26 months, and would entail demolition, excavation and shoring, foundation and below-grade construction, construction of the building, finishing interiors and paving. The foundation of the proposed project would be constructed using a mat slab and no pile driving is anticipated. The proposed project is in the vicinity (within 200 feet) of other proposed projects including 2424 Webster Street and 2500 Webster Street. Construction schedules of these projects are currently unknown and construction activities for the proposed project and these other projects may occur simultaneously. Regardless, construction of the proposed project along with other cumulative development is consistent with the type of development anticipated in the BVDSP EIR and the Previous CEQA Documents. The proposed project would not be anticipated to substantially increase the level of significance of the construction noise impact identified in the BVDSP EIR or Previous CEQA Documents, nor 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). In addition, as the proposed project would be adjacent to two structures designated historic, the SCA pertaining to effects of vibration during construction on adjacent historic structures (SCA NOI-7: *Vibration Impacts on Adjacent Historic Structures or Vibration-Sensitive Activities*) would also apply to the proposed project.

Project Operation

The amount of new residential development proposed currently in the Plan Are exceeds that assumed by the Broadway Valdez Development Program, but the trips generated by those new proposed developments is less than what was assumed because the amount of retail and office uses currently proposed are well below the BVDSP EIR assumptions. The amount of traffic generated by the proposed project is within 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 Broadway Valdez Development Program analyzed in the BVDSP EIR, and would be consistent with the BVDSP EIR.

A project would be considered to generate a significant impact if it were to result in a 5 dBA permanent increase in ambient noise levels in the project vicinity above levels existing without the project. The threshold for a considerable contribution to a significant cumulative impact is 3 dBA permanent increase in ambient noise levels. In the BVDSP EIR, modeled Existing Plus Project traffic noise levels and Cumulative Plus Project noise levels were compared with modeled Existing traffic noise levels (2012) as the baseline. Using this conservative methodology, the impact from increased traffic noise and cumulative traffic noise in the Plan Area along 24th Street *east* of Broadway was identified as significant and unavoidable in the BVDSP EIR. This method of analysis is conservative because the actual noise environment includes other, non-vehicle sources that may result in a higher ambient noise levels. Monitored noise levels capture noise from traffic as well as other sources of ambient noise and reveal a noisier existing noise environment / baseline and thus a smaller net increase when projected traffic noise is added to those baseline noise levels.[28] The proposed project would be located along 24th Street *west* of Broadway. Therefore, a more specific review considering monitored existing ambient noise levels in the project vicinity, as described below, reveal that the BVDSP EIR significant and unavoidable impact for roadway and cumulative noise would not apply to the project site.

The project site is located approximately 40 feet from the nearest sensitive receptors across 24th Street to the south of the project site. The City also considers cumulative noise from all sources—mobile and stationary. During operation, the proposed project would generate noise from heating, ventilating, and air conditioning (HVAC) mechanical equipment, increased traffic from additional trips associated with the residential, hotel and retail components of the proposed project, including truck deliveries. HVAC equipment would operate within the restrictions of the City's Noise Ordinance. Chapter 17.120.050 of the City of Oakland Planning Code specifies the maximum sound level received at residential, public open spaces and commercial land uses. This restriction can be used in combination with the predicted roadway noise level for these streets to estimate a worst-case prediction of cumulative noise increase from both stationary and roadway noise sources. Using year Cumulative Plus Project (2035) traffic data estimated for the BVDSP, future cumulative noise levels were estimated from increased traffic along 24th and 25th Streets. Using the Federal Highway Administration (FHWA) Traffic Noise Prediction Model future (2035) traffic noise during the PM peak traffic hour along 24th Street and 25th Street are estimated to be 61.0 and 58.8 dBA Leq, respectively. Adding the cumulative traffic noise levels for 24th and 25th Streets to a stationary noise source operating at the upper allowable limit of the City's noise ordinance (60 dBA), results in cumulative noise levels of 63.5 and 62.5 dBA at 24th Street and 25th Street, respectively.

These predicted cumulative noise levels may be compared to the existing monitored noise levels along these streets to estimate the cumulative increase in noise that would be experienced. Existing street-side noise levels were monitored by Charles Salter Associates in August of 2016 and found to be 61 dBA along both 24th Street and 25th Street. Therefore, the cumulative increase in noise levels are predicted

[28] The BVDSP EIR also compared modeled cumulative noise levels (traffic and stationary sources combined) with actual monitored noise levels as the baseline noise environment but only in specific areas with existing sensitive receptors and not in the immediate project vicinity.

to be 2.5 dBA (63.5 dBA-61 dBA) along 24th Street and 1.5 dBA (62.5 dBA – 61 dBA) along 25th Street. These increases are less than 5 dbA above existing monitored noise levels and would be considered less than significant as well as less than cumulatively considerable (less than a 3 dBA increase) if all of the increase were attributable to the proposed project, which it is not as cumulative traffic includes that generated by other projects.

Therefore, using the more accurate monitored ambient noise levels around the project site as the baseline for existing noise, and adding the BVDSP cumulative noise levels (stationary noise sources in combination with Cumulative Plus Project [2035] traffic noise), reveals that the net increase in noise levels in the project vicinity are below project-level and cumulative level thresholds of 5 dBA and 3 dBA respectively. Therefore, the significant impacts for roadway noise and cumulative noise identified in the BVDSP EIR would not apply to the project site or vicinity. In addition, the proposed project would be required to implement SCA NOI-5: *Exposure to Community Noise* to ensure acceptable indoor noise levels within project buildings and SCA NOI-6: *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. The proposed project is not located in the vicinity of any sources of vibration to which the residents of the new dwelling units would be exposed.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR and the Previous CEQA Documents, and since the proposed project is consistent with Broadway Valdez Development Program analyzed in the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of previously identified significant impacts or result in new significant impacts related to noise that were not identified in the BVDSP EIR or the Previous CEQA Documents. 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, reduce vibration impacts to adjacent historic structures, 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*, SCA NOI-5: *Exposure to Community Noise*, SCA NOI-6: *Operational Noise*, and SCA NOI-7: *Vibration Impacts on Adjacent Historic Structures or Vibration-Sensitive Activities*.)

11. Population and Housing

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents, including the 2011 Redevelopment Plan Amendments EIR and the 2010 General Plan Housing Element Update EIR and its 2014 Addendum, found less-than-significant impacts related to population and housing, as well as employment. The 1998 LUTE EIR identified mitigation measures to address unanticipated employment growth (compared to regional ABAG projections), and no other mitigation measures were warranted.

BVDSP Findings

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.[29] This would represent approximately two 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, 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.

[29] As shown in Table 7, there are 2,802 net new housing units, approximately 146,000 gross square feet of net new commercial uses, and 159 net new hotel rooms 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.

Project Analysis and Conclusion

The proposed project would demolish portions of the existing buildings and surface parking lots and construct a new mixed-use building with 159 hotel rooms, up to 72 residential units, and up to 27,200 square feet of commercial space. The proposed project would not demolish or displace any existing housing units.

The proposed project would result in a net increase of approximately 135 new residents and approximately 198 jobs.[30] This is within the envelope of the Development Program analyzed in the BVDSP EIR and within the development parameter envisioned by the Previous CEQA Documents.

Based on an examination of the analysis, findings, and conclusions in the BVDSP EIR and the Previous CEQA Documents, implementation of the proposed project would not substantially increase the severity of previously identified significant impacts or result in new significant impacts related to population and housing that were not identified in the BVDSP EIR or the Previous CEQA Documents. 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.

[30] The BVDSP EIR assumed approximately 1.87 residents per dwelling unit. Net jobs are calculated using a standard generation rate of 500 square feet per employee, and account for jobs eliminated due to the removal of existing uses.

12. Public Services, Parks and Recreation Facilities

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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.	☒	☐	☐

Previous CEQA Documents Findings

The 2011 Redevelopment Plan Amendments EIR found less-than-significant impacts related to public services and recreational facilities; no mitigation measures were warranted nor City of Oakland SCAs identified. The 2010 General Plan Housing Element Update EIR and its 2014 Addendum identified less-than-significant public services and recreation impacts with the exception of impacts related to police and fire protection, which were found to be less than significant with incorporation of SCAs and mitigation measures identified in the 1998 LUTE EIR. The 1998 LUTE EIR identified a significant and unavoidable impact for fire safety, with mitigation measures pertaining to the North Oakland Hills area; the 1998 LUTE EIR also identified a significant and unavoidable impact regarding increased student enrollment, particularly in Downtown (and the Waterfront), and identified mitigation measures that would not reduce the effect to less than significant. Thus the impact was significant and unavoidable.[31]

[31] The 1998 LUTE EIR addressed effects on solid waste demand and infrastructure facilities for water, sanitary sewer and stormwater drainage under *Public Services*. These topics are addressed in this document under *14. Utilities and Service Systems*, consistent with current City approach.

BVDSP Findings

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 a 159-room hotel, up to 72 residential units, and up to 27,200 square feet of retail space. The proposed project is within envelope of the Development Program, trip generation, and traffic capacity (see Section 13. Transportation and Circulation, below) analyzed in the BVDSP EIR and within the development parameter envisioned by the Previous CEQA Documents. Therefore, the proposed project's increase in demand for public services is consistent with the BVDSP EIR as well as the Previous CEQA Documents.

The proposed project would increase student enrollment at local schools. Pursuant to Senate Bill 50, the project applicant 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. In total, approximately 6,000 square feet of common open space would be included in the proposed project. 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 and the Previous CEQA Documents, implementation of the proposed project would not substantially increase the severity of previously identified significant impacts or 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 and the Previous CEQA Documents. 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 Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
c. Conflict with a plan, ordinance, or policy addressing the safety or performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths (except for automobile level of service or other measures of vehicle delay)	☒	☐	☐
d. Cause substantial additional vehicle miles traveled (VMT) per capita, per service population, or other appropriate efficiency measure	☒	☐	☐
e. Substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow lanes) or by adding new roadways to the network.	☒	☐	☐

On September 21, 2016, the City of Oakland's Planning Commission directed staff to update the City of Oakland's California Environmental Quality Act (CEQA) Thresholds of Significance Guidelines related to transportation impacts in order to implement the directive from Senate Bill 743 (Steinberg 2013) to modify local environmental review processes by removing automobile delay, as described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion, as a significant impact on the environment pursuant to CEQA. The Planning Commission direction aligns with draft proposed guidance from the Governor's Office of Planning and Research and the City's approach to transportation impact analysis with adopted plans and polices related to transportation, which promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.

Thus, this Section evaluates the impacts of the proposed project with respect to VMT. In addition, consistent with previous developments proposed under the BVDSP, this Section also evaluates the consistency of the proposed project with the approved BVDSP EIR and identifies the BVDSP EIR mitigation measures that the proposed project would trigger.

For the purposes of transportation analysis, the proposed project is assumed to include a 159-room hotel, 72 residential units, and up to 27,200 square feet of retail.

Vehicle Miles Travelled (VMT)

Many factors affect travel behavior, including density of development, diversity of land uses, design of the transportation network, access to regional destinations, distance to high-quality transit, development scale, demographics, and transportation demand management. Typically, low-density development that is located at a great distance from other land uses, in areas with poor access to non-single occupancy vehicle travel modes generate more automobile travel compared to development

located in urban areas, where a higher density of development, a mix of land uses, and travel options other than private vehicles are available.

Considering these travel behavior factors, most of Oakland has a lower VMT per capita and VMT per employee ratios than the nine-county San Francisco Bay Area region. In addition, some neighborhoods of the City have lower VMT ratios than other areas of the City.

Estimating VMT

Neighborhoods within Oakland are expressed geographically in transportation analysis zones, or TAZs. The Metropolitan Transportation Commission (MTC) Travel Model includes 116 TAZs within Oakland that vary in size from a few city blocks in the downtown core, to multiple blocks in outer neighborhoods, to even larger geographic areas in lower density areas in the hills. TAZs are used in transportation planning models for transportation analysis and other planning purposes.

The MTC Travel Model is a model that assigns all predicted trips within, across, or to or from the nine-county San Francisco Bay Area region onto the roadway network and the transit system, by mode(single-driver and carpool vehicle, biking, walking, or transit) and transit carrier (bus, rail) for a particular scenario.

The travel behavior from MTC Travel Model is modeled based on the following inputs:

- Socioeconomic data developed by the Association of Bay Area Governments (ABAG);
- Population data created using 2000 US Census and modified using the open source PopSyn software;
- Zonal accessibility measurements for destinations of interest;
- Travel characteristics and automobile ownership rates derived from the 2000 Bay Area Travel Survey; and
- Observed vehicle counts and transit boardings.

The daily VMT output from the MTC Travel Model for residential and office uses comes from a tour-based analysis. Based on guidance provided in the City of Oakland's interim guidelines, hotels are treated as residential land use for the purpose of VMT screening. The tour-based analysis examines the entire chain of trips over the course of a day, not just trips to and from the project site. In this way, all of the VMT for an individual resident or employee is included; not just trips into and out of the person's home or workplace. For example: a resident leaves her apartment in the morning, stops for coffee, and then goes to the office. In the afternoon she heads out to lunch, and then returns to the office, with a stop at the drycleaners on the way. After work she goes to the gym to work out, and then joins some friends at a restaurant for dinner before returning home. The tour-based approach would add up the total amount driven and assign the daily VMT to this resident for the total number of miles driven on the entire "tour".

Based on the MTC Travel Model, the regional average daily VMT per capita is 15.0 under 2020 conditions and 13.8 under 2040 conditions, and the regional average daily VMT per worker is 21.8 under 2020 conditions and 20.3 under 2040 conditions.

Thresholds of Significance

According to the interim *Update to CEQA Thresholds of Significance and Transportation Impact Study Guidelines* dated October 17, 2016, the following are thresholds of significance related to substantial additional VMT:

- For residential projects, a project would cause substantial additional VMT if it exceeds existing regional household VMT per capita minus 15 percent. This would include hotel projects, as hotels are treated as residential land uses for the purposes of VMT screening.
- For office projects, a project would cause substantial additional VMT if it exceeds the existing regional VMT per employee minus 15 percent.
- For retail projects, a project would cause a net increase in VMT.

VMT impacts would be less than significant for a project if any of the identified screening criteria are met:

1. **Small Projects:** The project generates fewer than 100 vehicle trips per day;
2. **Low-VMT Areas:** The project meets map-based screening criteria by being located in an area that exhibits below threshold VMT, or 15 percent or more below the regional average; or
3. **Near Transit Stations:** The project is located in a Transit Priority Area or within a one-half mile of a Major Transit Corridor or Stop and satisfies the following: [32]
    - Has a Floor Area Ratio (FAR) of more than 0.75;
    - Does not includes more parking for use by residents, customers, or employees of the project than other typical nearby uses, or more than required by the City (if parking minimums pertain to the site) or allowed without a conditional use permit (if minimums and/or maximums pertain to the site); and
    - Is consistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Transportation Commission).

VMT Screening Analysis

The proposed project satisfies the Low-VMT Area (number 2) and Near Transit Station (number 3) screening criteria, as detailed below.

[32] Major transit stop is defined in CEQA Section 21064.3 as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

Criterion Number 1: Small Projects

The project would generate more than 100 trips per day and therefore does not meet criterion number 1.

Criterion Number 2: Low-VMT Area

The proposed project is located in TAZ 979. As shown in **Table 5**, 2020 and 2040 VMT for TAZ 979 are more than 15 percent below the regional average. Based on the guidance provided in the City of Oakland's interim guidelines, hotels are treated as residential land use for the purpose of VMT screening. Thus, the hotel and residential components of the proposed project would not result in substantial additional VMT. In addition, because the proposed project would provide less than 80,000 square feet of retail space, the retail use is considered to be local-serving and is presumed not to generate substantial additional VMT.

TABLE 5
DAILY VEHICLE MILES TRAVELED SUMMARY

	Bay Area				TAZ 979	
	2020		2040			
Land Use	Regional Average	Regional Average minus 15%	Regional Average	Regional Average minus 15%	2020	2040
Residential (VMT per Capita)[1]	15.0	12.8	13.8	11.7	5.3	5.0
Commercial (VMT per Worker)[2]	21.8	18.5	20.3	17.3	17.0	14.9

[1] MTC Model results at analytics.mtc.ca.gov/foswiki/Main/PlanBayAreaVmtPerCapita and accessed in November 2016.
[2] MTC Model results at analytics.mtc.ca.gov/foswiki/Main/PlanBayAreaVmtPerWorker and accessed in November 2016.

SOURCE: Fehr & Peers, 2016

Criterion Number 3: Near Transit Stations

The proposed project would be located about 0.5 miles from the 19th Street BART Station and is served by several frequent bus routes. The proposed project is adjacent to frequent bus service along Broadway (Route 51A with 10 minute peak headways), about 0.2 miles from Telegraph Avenue (Route 6 with 10 minute peak headways), and about 0.5 miles from 20th Street (Routes 72, 72M, and 72R, with 10 to 12 minute peak headways). The proposed project would satisfy Criterion number 3 because it would also meet the following three conditions for this criterion:

- The proposed project has an FAR greater than 0.75
- According to the City of Oakland Municipal Code Sections 17.116.060 and 17.116.080, the proposed project is required to provide a minimum of 184 parking spaces.[33] The project

[33] Required parking was estimated assuming approximately 40,789 square feet of retail and hotel space on the ground floor (40,789/600 = 68 spaces), approximately 79,984 square feet of retail and hotel space (79,984/1000 = 80 spaces), and 72 residential units (72/2 = 36 spaces), for a total required 184 spaces.

applicant is seeking a Conditional Use Permit to use shared parking to satisfy the required parking minimum. Therefore, with a proposed 129 parking spaces, proposed project would provide fewer parking spaces than the minimum required by the City. Since the proposed project would provide fewer spaces than required by the Code, it would not provide more parking for use by residents, customers, or employees of the project than other typical nearby uses, or more parking than required by the City.

- The proposed project is located within the Downtown Priority Development Area (PDA) as defined by Plan Bay Area, and is therefore consistent with the region's Sustainable Communities Strategy

VMT Screening Conclusion

The proposed project would satisfy the Low-VMT Area (number 2) and the Near Transit Stations (number 3) Criteria and is therefore presumed to have a less–than-significant impact on VMT.

Consistency with BVDSP EIR

While the City now relies on VMT as their CEQA Thresholds of Significance, the threshold for determining consistency with the BVDSP EIR is based on conformity with transportation and circulation assumptions.[34] For this reason, this section of the CEQA Checklist summarizes the proposed project's consistency with the BVDSP EIR based on a 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, determines the need for additional analysis of project study intersections to supplement the EIR analysis, and identifies EIR impacts and mitigation measures that would be triggered by the proposed project combined with other planned developments. While only a portion of the project site is located in the BVDSP Plan Area and analyzed under the BVDSP EIR, for purposes of this analysis and to be conservative, the entire project is analyzed even though a portion of it is not covered by the BVDSP EIR.

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 Broadway Valdez 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).

[34] Due to the change in CEQA Thresholds from LOS to VMT, proposed project consistency with the transportation impacts identified in the Previous CEQA Documents is irrelevant. The proposed project's traffic impacts were evaluated using the VMT Screening and the impacts were determined to be less-than-significant. Proposed project consistency with the transportation impacts identified in BVDSP EIR is required because transportation and circulation assumptions for the basis for consistency with the BVDSP Development Program.

As noted in the EIR, the Broadway Valdez 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 thresholds of significance for the BVDSP EIR were based on vehicle level of service (LOS). The EIR identified 29 significant impacts related to LOS at intersections serving the Plan Area. The BVDSP EIR also identified 22 mitigation measures (Mitigation Measures TRAN-1 through TRAN-6, TRAN-9 through TRAN-12, TRAN-13 through TRAN-16, TRAN-21 through TRAN-26, TRAN-28, and TRAN-29). 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.

BVDSP EIR Consistency Analysis

For purposes of this analysis, it is assumed the that entire project site is located within the BVDSP Plan Area. The analysis below looks specifically at the proposed project's consistency with the BVDSP EIR. The trip generation for the proposed project is summarized below in **Table 6**. The trip generation accounts for the trips generated by the existing uses at the site that would be eliminated. The proposed project is estimated to generate approximately 63 net new vehicle trips during the weekday AM peak hour (27 inbound and 36 outbound) and approximately 99 net new vehicle trips during the weekday PM peak hour (55 inbound and 44 outbound).

Analysis of Proposed Project and Other Projects that are in Development under the Broadway Valdez Development Program Analyzed in the BVDSP EIR

The development projects within BVDSP Plan Area that have been constructed, are currently under construction, approved, and/or proposed, including the proposed project are included in **Table 7**. Table 7 also accounts for existing uses on each site that would be demolished.

TABLE 6
2401 BROADWAYAUTOMOBILE TRIP GENERATION

Land Use	Units[1]	ITE Code	Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Project									
Hotel	159 RM	310[2]	1,300	50	34	84	48	47	95
Residential	72 DU	220[3]	440	7	30	37	29	16	45
Retail	27.2 KSF	820[4]	1,160	16	10	26	48	53	101
Subtotal			2,900	73	74	147	125	116	241
Non-Auto Reduction (-43%)[5]			-1,250	-31	-32	-63	-54	-50	-104
Total New Project Trips			*1,650*	*42*	*42*	*84*	*71*	*66*	*137*
Existing Uses									
Auto Dealership	15.5 KSF	841[6]	500	23	7	30	16	25	41
Retail	7.1 KSF	820[4]	300	4	3	7	12	14	26
Subtotal			800	27	10	37	28	39	67
Non-Auto Reduction (-43%)[5]			-340	-12	-4	-16	-12	-17	-29
Total Existing Trips			*460*	*15*	*6*	*21*	*16*	*22*	*38*
Net New Project Trips			**1,190**	**27**	**36**	**63**	**55**	**44**	**99**

1 RM = Room, DU = Dwelling Units, KSF = 1,000 square feet.
2 ITE Trip *Generation (9th Edition)* land use category 310 (Hotel):
Daily: T = 8.17*(X)
AM Peak Hour: T = 0.53*(X) (59% in, 41% out)
PM Peak Hour: T = 0.60*(X) (51% in, 49% out)
3 ITE Trip *Generation (9th Edition)* land use category 220 (Apartments):
Daily: T = 6.65*(X)
AM Peak Hour: T = 0.51*(X) (20% in, 80% out)
PM Peak Hour: T = 0.62*(X) (65% in, 35% out)
4 ITE *Trip Generation (9th Edition)* land use category 820 (Shopping Center):
Daily: T = 42.7 * X
AM Peak Hour: T = 0.96* X (62% in, 38% out)
PM Peak Hour: T = 3.71* X (48% in, 52% out)
5 Reduction of 43.0% assumed. Based on City of Oakland *Transportation Impact Study Guidelines* using BATS 2000 data for development in an urban environment within 0.5 miles of a BART Station.
6 ITE *Trip Generation (9th Edition)* land use category 841 (Automobile Sales):
Daily: T = 32.30 * X
AM Peak Hour: T = 1.92* X (75% in, 25% out)
PM Peak Hour: T = 1.91 (X) + 23.74 (40% in, 60% out)

SOURCE: Fehr & Peers, 2016.

TABLE 7
DEVELOPMENTS IN THE BROADWAY VALDEZ DISTRICT SPECIFIC PLAN

Development	BVDSP Subdistrict	Status	Proposed Development[1]				Active Existing Uses[2]	Net Development[1,3]				
			Residential (DU)	Retail (KSF)	Office (KSF)	Hotel (Room)		Residential (DU)	Retail (KSF)	Office (KSF)	Hotel (Room)	Other (KSF)
3001 Broadway (Sprouts)	5	Constructed	0	36.0	0	0	Parking Lot	0	36.0	0	0	0
2345 Broadway (HIVE)	1	Constructed	105	30.3	64.0	0	11.4 KSF Auto Repair and 30.2 KSF Warehouse	105	94.3	30.3	64.0	-41.6
2425 Valdez St.	3	Constructed	71	1.5	0	0	Parking Lot	71	1.5	0	0	0
3093 Broadway	5	Under Construction	423	20.0	0	0	40.2 KSF Auto Dealership	423	-20.2	0	0	0
2302 Valdez St.	2	Under Construction	196	31.5	0	0	3.6 KSF Auto Repair	196	31.5	0	0	-3.6
2270 Broadway	1	Approved	223	5.0	0	0	Parking Lot	223	5.0	0	0	0
2315 Valdez/2330 Webster St.	1	Approved	235	16.0	0	0	Parking Lot	235	16.0	0	0	0
2630 Broadway	3	Under Construction	255	37.5	0	0	Parking Lot/ Vacant	255	37.5	0	0	0
3416 Piedmont Ave.	5	Approved	6	1.5	0	0	Vacant Lot	6	1.5	0	0	0
2400 Valdez St.	2	Under Construction	224	23.5	0	0	Parking Lot	224	23.5	0	0	0
3000 Broadway	5	Approved	127	8.0	0	0	3 Dwelling Units, 8.8 KSF Restaurant, and 10.2 KSF Auto Repair	124	-0.8	0	0	-10.2
2820 Broadway	4	Approved	218	18.0	0	0	42.2 KSF Auto Dealership	218	-24.2	0	0	0
24th and Harrison	2	Approved	437	65.0	0	0	55.2 KSF Auto Dealership, 5.3 KSF Auto Repair, and 3.25 KSF Fitness Center	437	6.6	0	0	-5.3
2305 Webster St	1	Proposed	130	3.0	0	0	Parking Lot	130	3.0	0	0	0
3300 Broadway	5	Proposed	45	3.0	0	0	5.5 KSF Retail	45	-2.5	0	0	0
2500 Webster	3	Proposed	30	6.4	0	0	6.3 KSF Auto Dealership	30	0.1	0	0	0
2424 Webster	3	Proposed	0	10.0	48.8	0	12.5 KSF Retail	0	-2.5	48.8	0	0
2401 Broadway	3	Proposed	72	27.2	0	159	15.5 KSF Auto Dealership, and 7.1 KSF Retail	72	4.5	0	159	0
Total			**2,797**	**343.2**	**112.8**	**159**		**2,794**	**146.6**	**112.8**	**159**	**-60.7**

1 DU = dwelling units, ksf = 1,000 square feet, RM = room
2 Consists of active uses at the time the BVDSP EIR was prepared.
3 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, November 2016.

The total amount of development constructed, currently under construction, approved, and/or proposed with the Development Program Buildout assumptions used in the BVDSP EIR for the Plan Area (Subdistricts 1 through 5), the Valdez Triangle subarea (Subdistricts 1 through 3) and Subdistrict 3 for the proposed project is then compared in **Table 8**.

TABLE 8
DEVELOPMENT COMPARISON WITHIN THE PLAN AREA, VALDEZ TRIANGLE, AND SUBDISTRICT 3

	Residential (DU)	Retail (KSF)	Office (KSF)	Hotel (Rooms)
Plan Area (Subdistricts 1 through 5)				
Constructed, Under Construction, Approved, and Proposed Development Projects[1]	2,794	146.6	112.8	159
Development Program Buildout[2]	1,797	1,114.1	694.9	180
Percent Completed	155%	13%	16%	88%
Valdez Triangle (Subdistricts 1 through 3)				
Constructed, Under Construction, Approved, and Proposed Development Projects[1]	1,978	156.8	112.8	159
Development Program Buildout[2]	965	793.5	116.1	180
Percent Completed	205%	19%	97%	88%
Subdistrict 3				
Constructed, Under Construction, Approved, and Proposed Development Projects[1]	428	41.1	48.8	159
Development Program Buildout[2]	40	251.4	116.1	0
Percent Completed	1,070%	16%	42%	NA

NOTES: DU = dwelling units, KSF = 1,000 square feet.

1 Information from City of Oakland, November 2016. Accounts for existing active uses that would be eliminated.
2 Based on Table 4.13-7 on page 4.13-37 of BVDSP Draft EIR.

SOURCE: Fehr & Peers, 2016.

Finally, 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 3 is compared in **Table 9**.

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 48 percent of the AM and 50 percent of the PM peak-hour trips anticipated in the BVDSP EIR for the Plan Area, 81 percent of the AM and 72 percent of the PM peak-hour trips anticipated in the BVDSP EIR for the Valdez Triangle subarea, and 94 percent of the AM and 70 percent of the PM peak-hour trips anticipated in the BVDSP EIR for Subdistrict 3.

TABLE 9
TRIP GENERATION COMPARISON

	AM Peak Hour			PM Peak Hour		
	In	**Out**	**Total**	**In**	**Out**	**Total**
Plan Area (Subdistricts 1 through 5)						
Constructed, Development Projects Approved, Proposed, or Under Construction[1]	266	692	952	1,051	813	1,864
Development Program Buildout[2]	1,152	829	1,981	1,702	2,007	3,709
Percent Completed	23%	83%	48%	62%	40%	50%
Proposed 2401 Broadway Project	27	36	63	55	44	99
Project compared to Development Program Buildout	2%	4%	3%	3%	2%	3%
Valdez Triangle (Subdistricts 1 through 3)						
Constructed, Development Projects Approved, Proposed, or Under Construction[1]	221	505	726	795	641	1,435
Development Program Buildout[2]	457	442	899	1,013	993	2,006
Percent Completed	48%	114%	81%	78%	65%	72%
Proposed 2401 Broadway Project	27	36	63	55	44	99
Project compared to Development Program Buildout	6%	8%	7%	5%	4%	5%
Subdistrict 3						
Constructed, Development Projects Under Construction, Approved, or Proposed	107	133	240	209	202	411
Development Program Buildout[2]	178	77	255	265	325	590
Percent Completed	60%	172%	94%	79%	62%	70%
Proposed 2401 Broadway Project	27	36	63	55	44	99
Project compared to Development Program Buildout	15%	47%	25%	21%	14%	17%

1 Based on application of the BVDSP trip generation model with the developments shown in Table 6, and accounting for the trips generated by existing uses that would be eliminated.
2 Based on Table 4.13-10 on page 4.13-43 of the BVDSP EIR.

SOURCE: Fehr & Peers, 2017.

The exceedance in the AM peak hour would not create new or more significant impacts to intersection operations beyond those identified as having a significant impact, as discussed in the following section. At signalized intersections in the immediate vicinity of the project site, the project would also 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 following are the traffic impacts identified in the BVDSP EIR, the reason the impacts are triggered, and the associated mitigation measures.

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 Broadway Valdez 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-5** under existing plus-project conditions (and also **Impact TRANS-11** under 2020 plus-project conditions and **Impact TRANS-25** under 2035 plus-project conditions) at the 23rd Street/Broadway intersection because these projects, when combined, would generate more than 65 percent of the total traffic generated by the Broadway Valdez Development Program in the Valdez Triangle (Subdistricts 1, 2, and 3).

   Mitigation Measure TRANS-5 in the BVDSP EIR includes the following improvements at this intersection:

   - Signalize the intersection providing actuated operations, with permitted left turns on all movements
   - Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group

   The BVDSP EIR determined that, if implemented, the mitigation measure would reduce the impact to a less-than-significant level.

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-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 Broadway Valdez 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.

4. 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 Broadway Valdez 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 applicant would fund the cost of preparing and funding these mitigation measures. However, because the City of Oakland adopted a citywide Transportation Impact Fee (TIF) program, the project applicant shall 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 analyzed the four intersections adjacent to the site (24th and 25th Streets at Broadway and Telegraph), and the proposed project would not 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.

BVDSP EIR Consistency Conclusion

The combined trip generation for projects that are currently approved, proposed, or under construction in the Plan Area, the Valdez Triangle, and Subdistrict 3 including the proposed project, remains lower than the estimated trip generation in the BVDSP EIR under the Broadway Valdez Development Program for those areas. Although the outbound trip generation during the weekday AM peak hour for the Valdez Triangle and Subdistrict 3 would exceed the estimate for the Broadway Valdez 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 intersections not analyzed in the BVDSP EIR. Therefore, the proposed project would not cause additional impacts beyond the locations analyzed in the EIR; nor would the proposed project increase the magnitude of the impacts identified in the EIR. In addition, based on an evaluation of the project site plan and the transportation network serving the project site, this transportation analysis determined that the proposed 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.

Although not required to address CEQA impacts, the proposed project would implement the following recommended improvement measures.

> **Recommendation TRA-1:** Although not required to address a CEQA impact, the following should be considered as part of the final design of the project:
>
> - Ensure that the project driveway on 24th and25th Streets would provide adequate sight distance between motorists exiting the driveway and pedestrians on the adjacent

sidewalk.[35] 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 driveway, prohibit on-street parking within 20 feet on either side of the garage driveways on Webster Street.

Project Analysis and Conclusion

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR and the Previous CEQA Documents, implementation of the proposed project would not substantially increase the severity of previously identified significant impacts or result in new significant impacts related to transportation and circulation that were not identified in the BVDSP EIR or the Previous CEQA Documents. 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 BVDSP Mitigation Measures through payment of the citywide TIF program, as described above. 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 TRA-1: *Construction Activity in the Public Right-of-Way*, SCA TRA-2: *Bicycle Parking*, SCA TRA-3: *Transportation Improvements*, and SCA TRA-4: *Transportation and Parking Demand Management*). Finally, as stated above, the proposed project would satisfy the Low-VMT Area (number 2) and the Near Transit Stations (number 3) Criteria and is therefore presumed to have a less–than-significant impact on VMT.

[35] 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 Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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;	☒	☐	☐
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.	☒	☐	☐

Previous CEQA Documents Findings

The 2011 Redevelopment Plan Amendments EIR and 2010 General Plan Housing Element Update EIR and its 2014 Addendum found less-than-significant impacts related to water, wastewater, or stormwater facilities, solid waste, and energy, finding no mitigation measures were warranted but requiring adherence to certain City of Oakland SCAs. The 1998 LUTE EIR identified significant

effects regarding these topics and identified mitigation measures that reduced the effects to less than significant.

BVDSP Findings

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 Broadway Valdez Development Program is not intended to be a cap that restricts development. As shown in Table 1, the proposed project would provide more dwelling units and hotel rooms than contemplated for Valdez Triangle Subdistrict 3 (72 residential units instead of 40 residential units, and 159hotel rooms instead of

zero).[36] The proposed project's 27,200 square feet of commercial use would be well below the 251,398 square feet identified in the Broadway Valdez Development Program. 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, above. As such, the proposed project is within the envelope of the Broadway Valdez Development Program analyzed in the BVDSP EIR. Therefore, water and sanitary sewer demand and stormwater facilities, as well as solid waste and energy associated with the proposed project, are consistent with the Broadway Valdez 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 and the Previous CEQA Documents, implementation of the proposed project would not substantially increase the severity of previously identified significant impacts or result in new significant impacts related to utilities and service systems that were not identified in the BVDSP EIR or the Previous CEQA Documents. 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*).

[36] Subdistrict 3 is defined in the BVDSP as the area north of 24th Street, west of Valdez Street, and south of 27th Street.

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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 2401 Broadway Project.

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 BVDSP EIR and identifies mitigation monitoring requirements. The SCAMMRP also lists other City's Standard Conditions of Approval ("SCA") that apply to the proposed project, most of which were identified in the BVDSP EIR and some of which have been subsequently updated or otherwise modified by the City. Specifically, on July 22, 2015, the City of Oakland released a revised set of all City of Oakland SCAs, which largely still include SCAs adopted by the City in 2008, along with supplemental, modified, and new SCAs. SCAs are measures that would minimize potential adverse effects that could result from implementation of the proposed project, to ensure the conditions are implemented and monitored. The revised set of the City of Oakland SCAs includes new, modified, and reorganized SCAs; however, none of the revisions diminish or negate the ability of the SCAs considered "environmental protection measures" to minimize potential adverse environmental effects. As such, the SCAs identified in the SCAMMRP reflect the current SCAs only. Although the SCA numbers listed below may not correspond to the SCA numbers in the BVDSP EIR, all of the environmental topics and potential effects addressed by the SCAs in the BVDSP EIR are included in this SCAMMRP (as applicable to the proposed project). This SCAMMRP also identifies the mitigation monitoring requirements for each mitigation measure and SCA.

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 applicant is responsible for compliance with any recommendations in approved technical reports, with 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 applicant 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	
	Schedule	**Responsibility**
Aesthetics, Shadow, and Wind		
SCA AES-1 (Standard Condition of Approval 16): *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). b. The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include the following: 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. iii. Replacing with new surfacing (with City permits if required).	Ongoing.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA AES-2 (Standard Condition of Approval 17): *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 $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.	a. Prior to approval of construction-related permit. b. Prior to building permit final. c. Ongoing	a. City of Oakland Bureau of Planning and Building b. City of Oakland Bureau of Building Services Division, Zoning Inspections c. City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Aesthetics, Shadow, and Wind (cont.)		
SCA AES-3 (Standard Condition of Approval 18): *Lighting* Proposed new exterior lighting fixtures shall be adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties.	Prior to building permit final.	City of Oakland Bureau of Building Services Division, Zoning Inspections
Air Quality		
SCA AIR-1 (Standard Condition of Approval 19): *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 (using reclaimed water if possible). 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 possible. 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., as soon as feasible. In addition, building pads should be laid as soon as possible after grading 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.). 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.	During construction.	City of Oakland Bureau of Planning and Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Air Quality (cont.)		
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 offsite. Their duties shall include holidays and weekend periods when work may not be in progress.		
p. Install appropriate wind breaks (e.g., trees, fences) 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.		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Air Quality (cont.)		
SCA AIR-2 (Standard Condition of Approval 20): *Exposure to Air Pollution (Toxic Air Contaminants)* ***a. Health Risk Reduction Measures*** Requirement: 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. The project applicant shall choose one of the following methods: i. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk of exposure of project residents/occupants/users to air pollutants. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes that the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City. - or - ii. The project applicant shall incorporate the following health risk reduction measures into the project. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City: • Installation of air filtration to reduce cancer risks and Particulate Matter (PM) exposure for residents and other sensitive populations in the project that are in close proximity to sources of air pollution. Air filter devices shall be rated MERV-13 or higher. As part of implementing this measure, an ongoing maintenance plan for the building's HVAC air filtration system shall be required. • Where appropriate, install passive electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph). • Phasing of residential developments when proposed within 500 feet of freeways such that homes nearest the freeway are built last, if feasible. • The project shall be designed to locate sensitive receptors as far away as feasible from the source(s) of air pollution. Operable windows, balconies, and building air intakes shall be located as far away from these sources as feasible. If near a distribution center, residents shall be located as far away as feasible from a loading dock or where trucks concentrate to deliver goods. • Sensitive receptors shall be located on the upper floors of buildings, if feasible. • Planting trees and/or vegetation between sensitive receptors and pollution source, if feasible. Trees that are best suited to trapping PM shall be planted, including one or more of the following: Pine (*Pinus nigra* var. *maritima*), Cypress (*X Cupressocyparis leylandii*), Hybrid popular (*Populus deltoids X trichocarpa*), and Redwood *(Sequoia sempervirens*).	a. Prior to approval of construction-related permit. b. ongoing	a. City of Oakland Bureau of Planning and Building; City of Oakland Bureau of Building Services Division, Zoning Inspections b. City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Air Quality (cont.)		
• Sensitive receptors shall be located as far away from truck activity areas, such as loading docks and delivery areas, as feasible. • Existing and new diesel generators shall meet CARB's Tier 4 emission standards, if feasible. • Emissions from diesel trucks shall be reduced through implementing the following measures, if feasible: – Installing electrical hook-ups for diesel trucks at loading docks. – Requiring trucks to use Transportation Refrigeration Units (TRU) that meet Tier 4 emission standards. – Requiring truck-intensive projects to use advanced exhaust technology (e.g., hybrid) or alternative fuels. – Prohibiting trucks from idling for more than two minutes. – Establishing truck routes to avoid sensitive receptors in the project. A truck route program, along with truck calming, parking, and delivery restrictions, shall be implemented. ***b. Maintenance of Health Risk Reduction Measures*** Requirement: 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: This measure has been implemented by the project applicant and no further action is required.**		
SCA AIR-3 (Standard Condition of Approval 23): *Asbestos in Structures* Requirement: 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; 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.	Prior to approval of construction-related permit	Applicable regulatory agency with jurisdiction
See **SCA TRA-4, Transportation and Parking Demand Management Plan**. See *Transportation and Circulation*, below.		
Biological Resources		
SCA BIO-1 (Standard Condition of Approval 26): *Tree Removal During Bird Nesting 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 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	Prior to removal of trees.	City of Oakland Public Works Department, Tree Division; Bureau of Buildings

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Biological Resources (cont.)		
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-2 (Standard Condition of Approval 27): *Tree Permit* ***a. Tree Permit Required*** Pursuant to the City's Tree Protection Ordinance (OMC chapter 12.36), the project applicant shall obtain a tree permit and abide by the conditions of that permit. ***b. Tree Protection During Construction*** <u>Requirement</u>: 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: i. 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. ii. 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. iii. 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 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. iv. 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.	a. Prior to approval of construction-related permit b. During construction. c. Prior to building permit final.	a. City of Oakland Public Works Department, Tree Division; Bureau of Buildings b. City of Oakland Public Works Department, Tree Division; Bureau of Buildings c. *Initial Approval*: Public Works Department, Tree Division *Monitoring/Inspection*: Bureau of Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Biological Resources (cont.)		
v. 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. vi. 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. ***c. Tree Replacement Plantings*** Requirement: Replacement plantings shall be required for tree removals for the purposes of erosion control, groundwater replenishment, visual screening, wildlife habitat, and preventing excessive loss of shade, in accordance with the following criteria: i. No tree replacement shall be required for the removal of nonnative species, for the removal of trees which is required for the benefit of remaining trees, or where insufficient planting area exists for a mature tree of the species being considered. ii. Replacement tree species shall consist of Sequoia sempervirens (Coast Redwood), Quercus agrifolia (Coast Live Oak), Arbutus menziesii (Madrone), Aesculus californica (California Buckeye), Umbellularia californica (California Bay Laurel), or other tree species acceptable to the Tree Division. iii. Replacement trees shall be at least twenty-four (24) inch box size, unless a smaller size is recommended by the arborist, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate. iv. Minimum planting areas must be available on site as follows: • For Sequoia sempervirens, three hundred fifteen (315) square feet per tree; • For other species listed, seven hundred (700) square feet per tree. v. In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee in accordance with the City's Master Fee Schedule may be substituted for required replacement plantings, with all such revenues applied toward tree planting in city parks, streets and medians. vi. The project applicant shall install the plantings and maintain the plantings until established. The Tree Reviewer of the Tree Division of the Public Works Department may require a landscape plan showing the replacement plantings and the method of irrigation. Any replacement plantings which fail to become established within one year of planting shall be replanted at the project applicant's expense.		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Cultural Resources		
SCA CUL-1 (Standard Condition of Approval 29): *Archaeological and Paleontological Resources – Discovery During Construction* Requirement: 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 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.	During construction.	City of Oakland Bureau of Building Services Division
SCA CUL-2 (Standard Condition of Approval SCA 31): *Human Remains – Discovery During Construction* Requirement: 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 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.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Cultural Resources (cont.)		
See **SCA NOI-7, Vibration Impacts on Adjacent Historic Structures or Vibration-Sensitive Activities**. See *Noise*, below.		
BVDSP Mitigation Measure CUL-1: ***a) Avoidance, Adaptive Reuse, or Appropriate Relocation of Historically Significant Structures.*** • *Avoidance***.** The City shall ensure, where feasible, that all future development activities allowable under the Specific Plan, including demolition, alteration, and new construction, would avoid historical resources (i.e., those listed on federal, state, and local registers). • *Adaptive Reuse***.** If avoidance is not feasible, adaptive reuse and rehabilitation of historical resources shall occur in accordance with the *Secretary of Interior's Standards for the Treatment of Historic Properties*. • *Appropriate Relocation.* If avoidance or adaptive reuse *in situ* is not feasible, SCA 56, *Compliance with Policy 3.7 of the Historic Preservation Element (Property Relocation Rather than Demolition)*, shall be implemented, as required. Projects that relocate the affected historical property to a location consistent with its historic or architectural character could reduce the impact less than significant (Historic Preservation Element Action 3.8.1), unless the property's location is an integral part of its significance, e.g., a contributor to a historic district. ***b) Future Site-specific Surveys and Evaluations.*** Although the Plan Area has been surveyed by the City of Oakland's OCHS and as part of the Broadway Valdez Specific Plan effort by ESA in 2009, evaluations and ratings may change with time and other conditions. There may be previously unidentified historical resources which would be affected by future development activities. For any future projects on or immediately adjacent to buildings 50 years old or older between 2013 and 2038, which is the build-out horizon for the Specific Plan (i.e., by the end of the Plan period, buildings constructed prior to 1988), the City shall require specific surveys and evaluations of such properties to determine their potential historical significance at the federal, state, and local levels. Intensive-level surveys and evaluations shall be completed by a qualified architectural historian who meets the *Secretary of the Interior's Standards*. For all historical resources identified as a result of site-specific surveys and evaluations, the City shall ensure that future development activities avoid, adaptively reuse and/or appropriately relocate such historical resources in accordance with measure "a" (Avoidance, Adaptive Reuse, or Appropriate Relocation of Historically Significant Structures), above. Site-specific surveys and evaluations that are more than 5 years old shall be updated to account for changes which may have occurred over time. ***c) Recordation and Public Interpretation.*** If measure "a" (Avoidance, Adaptive Reuse, or Appropriate Relocation of Historically Significant Structures) is determined infeasible as part of a future project, the City shall evaluate the feasibility and appropriateness of recordation and public interpretation of such resources prior to any construction activities which would directly affect them. Should City staff decide recordation and or public interpretation is required, the following activities would be performed:	Prior to issuance of a demolition permit	City of Oakland - Building Services Division, Zoning Inspection

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Cultural Resources (cont.)		
• *Recordation*. Recordation shall follow the standards provided in the National Park Service's Historic American Building Survey (HABS) program, which requires photo-documentation of historic structures, a written report, and/or measured drawings (or photo reproduction of original plans if available). The photographs and report would be archived at the Oakland Planning Department and local repositories, such as public libraries, historical societies, and/or the Northwest Information Center at Sonoma State University. The recordation efforts shall occur prior to demolition, alteration, or relocation of any historic resources identified in the Plan Area, including those that are relocated pursuant to measure "a" (Avoidance, Adaptive Reuse, or Appropriate Relocation of Historically Significant Structures). Additional recordation could include (as appropriate) oral history interviews or other documentation (e.g., video) of the resource. • *Public Interpretation*. A public interpretation or art program would be developed by a qualified historic consultant or local artist in consultation with the Landmarks Preservation Advisory Board and City staff, based on a City-approved scope of work and submitted to the City for review and approval. The program could take the form of plaques, commemorative markers, or artistic or interpretive displays which explain the historical significance of the properties to the general public. Such displays would be incorporated into project plans as they are being developed, and would typically be located in a publicly accessible location on or near the site of the former historical resource(s). Public interpretation displays shall be installed prior to completion of any construction projects in the Plan Area. Photographic recordation and public interpretation of historically significant properties does not typically mitigate the loss of resources to a less-than-significant level [CEQA Section 15126.4(b)(2)]. ***d) Financial Contributions.*** If measure "a" (Avoidance, Adaptive Reuse, or Appropriate Relocation of Historically Significant Structures) and measure "b" (Future Site-specific Surveys and Evaluations) are not satisfied, the project applicant shall make a financial contribution to the City of Oakland, which can be used to fund other historic preservation projects within the Plan Area or in the immediate vicinity. Such programs include, without limitation, a Façade Improvement Program or a Property Relocation Assistance Program. This mitigation would conform to Action 3.8.1(9) of the Historic Preservation Element of the City of Oakland General Plan. Contributions to the fund(s) shall be determined by staff at the time of approval of site-specific project plans based on a formula to be determined by the Landmarks Preservation Advisory Board. However, such financial contribution, even in conjunction with measure "c" (Recordation and Public Interpretation), would not reduce the impacts to less-than-significant levels.		
Geology, Soils, and Geohazards		
SCA GEO-1 (Standard Condition of Approval 33): *Construction-Related Permit(s)* Requirement: 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.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Geology, Soils, and Geohazards (cont.)		
SCA GEO-2 (Standard Condition of Approval 34): *Soils Report* Requirement: 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.	City of Oakland Bureau of Building Services Division, Zoning Inspections
Greenhouse Gases and Climate Change		
SCA GHG-1 (Standard Condition of Approval 38): *Greenhouse Gas (GHG) Reduction Plan* a. ***Greenhouse Gas (GHG) Reduction Plan Required*** Requirement: The project applicant shall retain a qualified air quality consultant to develop a Greenhouse Gas (GHG) Reduction Plan for City review and approval and shall implement the approved GHG Reduction Plan. The goal of the GHG Reduction Plan shall be to increase energy efficiency and reduce GHG emissions to below at least one of the Bay Area Quality Management District's (BAAQMD's) CEQA Thresholds of Significance (1,100 metric tons of CO_2e per year or 4.6 metric tons of CO_2e per year per service population). The GHG Reduction Plan shall include, at a minimum, (a) a detailed GHG emissions inventory for the project under a "business-as-usual" scenario with no consideration of project design features, or other energy efficiencies, (b) an "adjusted" baseline GHG emissions inventory for the project, taking into consideration energy efficiencies included as part of the project (including the City's Standard Conditions of Approval, proposed mitigation measures, project design features, and other City requirements), (c) a comprehensive set of quantified additional GHG reduction measures available to further reduce GHG emissions beyond the adjusted GHG emissions, and (d) requirements for ongoing monitoring and reporting to demonstrate that the additional GHG reduction measures are being implemented. If the project is to be constructed in phases, the GHG Reduction Plan shall provide GHG emission scenarios by phase. Potential GHG reduction measures to be considered include, but are not be limited to, measures recommended in BAAQMD's latest CEQA Air Quality Guidelines, the California Air Resources Board Scoping Plan (December 2008, as may be revised), the California Air Pollution Control Officers Association (CAPCOA) Quantifying Greenhouse Gas Mitigation Measures (August 2010, as may be revised), the California Attorney General's website, and Reference Guides on Leadership in Energy and Environmental Design (LEED) published by the U.S. Green Building Council. The types of allowable GHG reduction measures include the following (listed in order of City preference): (1) physical design features; (2) operational features; and (3) the payment of fees to fund GHG-reducing programs (i.e., the purchase of "carbon credits") as explained below. The allowable locations of the GHG reduction measures include the following (listed in order of City preference): (1) the project site; (2) off-site within the City of Oakland; (3) off-site within the San Francisco Bay Area Air Basin; (4) off-site within the State of California; then (5) elsewhere in the United States. As with preferred locations for the implementation of all GHG reductions measures, the preference for carbon credit purchases include those that can be achieved as follows (listed in order of City preference): (1) within the	a. Prior to approval of construction-related permit. b. During construction. c. Ongoing.	a. City of Oakland Bureau of Planning and Building b. City of Oakland Bureau of Planning and Building c. City of Oakland Bureau of Planning and Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Greenhouse Gases and Climate Change (cont.)		
City of Oakland; (2) within the San Francisco Bay Area Air Basin; (3) within the State of California; then (4) elsewhere in the United States. The cost of carbon credit purchases shall be based on current market value at the time purchased and shall be based on the project's operational emissions estimated in the GHG Reduction Plan or subsequent approved emissions inventory, which may result in emissions that are higher or lower than those estimated in the GHG Reduction Plan. For physical GHG reduction measures to be incorporated into the design of the project, the measures shall be included on the drawings submitted for construction-related permits. b. ***GHG Reduction Plan Implementation During Construction*** Requirement: The project applicant shall implement the GHG Reduction Plan during construction of the project. For physical GHG reduction measures to be incorporated into the design of the project, the measures shall be implemented during construction. For physical GHG reduction measures to be incorporated into off-site projects, the project applicant shall obtain all necessary permits/approvals and the measures shall be included on drawings and submitted to the City Planning Director or his/her designee for review and approval. These off-site improvements shall be installed prior to completion of the subject project (or prior to completion of the project phase for phased projects). For GHG reduction measures involving the purchase of carbon credits, evidence of the payment/purchase shall be submitted to the City for review and approval prior to completion of the project (or prior to completion of the project phase, for phased projects). c. ***GHG Reduction Plan Implementation After Construction*** Requirement: The project applicant shall implement the GHG Reduction Plan after construction of the project (or at the completion of the project phase for phased projects). For operational GHG reduction measures to be incorporated into the project or off-site projects, the measures shall be implemented on an indefinite and ongoing basis. The project applicant shall satisfy the following requirements for ongoing monitoring and reporting to demonstrate that the additional GHG reduction measures are being implemented. The GHG Reduction Plan requires regular periodic evaluation over the life of the project (generally estimated to be at least 40 years) to determine how the Plan is achieving required GHG emissions reductions over time, as well as the efficacy of the specific additional GHG reduction measures identified in the Plan. **Annual Report.** Implementation of the GHG reduction measures and related requirements shall be ensured through compliance with Conditions of Approval adopted for the project. Generally, starting two years after the City issues the first Certificate of Occupancy for the project, the project applicant shall prepare each year of the useful life of the project an Annual GHG Emissions Reduction Report ("Annual Report"), for review and approval by the City Planning Director or his/her designee. The Annual Report shall be submitted to an independent reviewer of the City's choosing, to be paid for by the project applicant. The Annual Report shall summarize the project's implementation of GHG reduction measures over the preceding year, intended upcoming changes, compliance with the conditions of the Plan, and include a brief summary of the previous year's Annual Report results (starting the second year). The Annual Report shall include a comparison of annual project emissions to the baseline emissions reported in the GHG Plan.		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Greenhouse Gases and Climate Change (cont.)		
The GHG Reduction Plan shall be considered fully attained when project emissions are less than either applicable numeric BAAQMD CEQA Thresholds, as confirmed by the City through an established monitoring program. Monitoring and reporting activities will continue at the City's discretion, as discussed below. **Corrective Procedure.** If the third Annual Report, or any report thereafter, indicates that, in spite of the implementation of the GHG Reduction Plan, the project is not achieving the GHG reduction goal, the project applicant shall prepare a report for City review and approval, which proposes additional or revised GHG measures to better achieve the GHG emissions reduction goals, including without limitation, a discussion on the feasibility and effectiveness of the menu of other additional measures ("Corrective GHG Action Plan"). The project applicant shall then implement the approved Corrective GHG Action Plan. If, one year after the Corrective GHG Action Plan is implemented, the required GHG emissions reduction target is still not being achieved, or if the project applicant fails to submit a report at the times described above, or if the reports do not meet City requirements outlined above, the City may, in addition to its other remedies, (a) assess the project applicant a financial penalty based upon actual percentage reduction in GHG emissions as compared to the percent reduction in GHG emissions established in the GHG Reduction Plan; or (b) refer the matter to the City Planning Commission for scheduling of a compliance hearing to determine whether the project's approvals should be revoked, altered or additional conditions of approval imposed. The penalty as described in (a) above shall be determined by the City Planning Director or his/her designee and be commensurate with the percentage GHG emissions reduction not achieved (compared to the applicable numeric significance thresholds) or required percentage reduction from the "adjusted" baseline. In determining whether a financial penalty or other remedy is appropriate, the City shall not impose a penalty if the project applicant has made a good faith effort to comply with the GHG Reduction Plan. The City would only have the ability to impose a monetary penalty after a reasonable cure period and in accordance with the enforcement process outlined in Planning Code Chapter 17.152. If a financial penalty is imposed, such penalty sums shall be used by the City solely toward the implementation of the GHG Reduction Plan. **Timeline Discretion and Summary.** The City shall have the discretion to reasonably modify the timing of reporting, with reasonable notice and opportunity to comment by the applicant, to coincide with other related monitoring and reporting required for the project.		
See **SCA AES-2, Landscape Plan**. See *Aesthetics, Wind, and Shadow*, above.		
See **SCA AIR-1, Construction-Related Air Pollution Controls (Dust and Equipment Emissions)**. See *Air Quality*, above.		
See **SCA UTIL-1, Construction and Demolition Waste Reduction and Recycling**. See *Utilities and Service Systems*, below.		
See **SCA UTIL-4, Green Building Requirements**. See *Utilities and Service Systems*, below.		
See **SCA TRA-4, Transportation and Parking Demand Management Plan**. See *Transportation and Circulation*, below.		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Hazards and Hazardous Materials		
SCA HAZ-1 (Standard Condition of Approval 39): *Hazards Materials Related to Construction* Requirement: 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 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.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA HAZ-2 (Standard Condition of Approval 40): *Hazardous Building Materials and Site Contamination* ***a. Hazardous Building Materials Assessment*** Requirement: The project applicant shall submit a comprehensive assessment report to the Bureau of Building, signed by a qualified environmental professional, documenting the presence or lack thereof of asbestos-containing materials (ACMs), lead-based paint, polychlorinated biphenyls (PCBs), and any other building materials or stored materials classified as hazardous materials by State or federal law. If lead-based paint, ACMs, PCBs, or any other building materials or stored materials classified as hazardous materials are present, the project applicant shall submit specifications prepared and signed by a qualified environmental professional, for the stabilization and/or removal of the identified hazardous materials in accordance with all applicable laws and regulations. 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.	a. Prior to approval of construction-related permit b. Prior to approval of construction-related permit c. Prior to approval of construction-related permit d. During Construction	a. City of Oakland Bureau of Building Services Division, Zoning Inspections b. Applicable regulatory agency with jurisdiction c. City of Oakland Bureau of Building Services Division, Zoning Inspections d. City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Hazards and Hazardous Materials (cont.)		
b. Environmental Site Assessment Required Requirement: 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. ***c. Health and Safety Plan Required*** Requirement: The project applicant shall submit a Health and Safety Plan for the review and approval by the City in order to protect project construction workers from risks associated with hazardous materials. The project applicant shall implement the approved Plan. ***d. Best Management Practices (BMPs) Required for Contaminated Sites*** Requirement: 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.		
See **SCA AIR-5, Asbestos in Structures**. See *Air Quality*, above.		
Hydrology and Water Quality		
SCA HYD-1 (Standard Condition of Approval 45): *Erosion and Sedimentation Control Plan for Construction* ***a. Erosion and Sedimentation Control Plan Required*** Requirement: 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,	a. Prior to approval of construction-related permit. b. During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Hydrology and Water Quality (cont.)		
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*** Requirement: 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.		
SCA HYD-2 (Standard Condition of Approval 46): *State Construction General Permit.* Requirement: 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.		
SCA HYD-3 (Standard Condition of Approval 50): *NPDES C.3 Stormwater Requirements for Regulated Projects* ***a. Post-Construction Stormwater Management Plan Required*** Requirement: 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.	a. Prior to approval of construction-related permit. b. Prior to building permit final.	a. City of Oakland Bureau of Building Services Division, Zoning Inspections; City of Oakland Bureau of Planning and Building b. City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Hydrology and Water Quality (cont.)		
b. Maintenance Agreement Required Requirement: 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, 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 (Standard Condition of Approval 58): *Construction Days/Hours* Requirement: 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 distribution of the public notice.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Noise (cont.)		
SCA NOI-2 (Standard Condition of Approval 59): *Construction Noise* Requirement: 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. 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. b. Applicant shall use temporary power poles instead of generators where feasible. c. 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. d. 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.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA NOI-3 (Standard Condition of Approval 60): *Extreme Construction Noise* ***a. Construction Noise Management Plan Required*** Requirement: 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 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;	a. Prior to approval of construction-related permit. b. During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Noise (cont.)		
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*** Requirement: 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 (Standard Condition of Approval 62):** *Construction Noise Complaints* Requirement: 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 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.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA NOI-5 (Standard Condition of Approval 63) *Exposure to Community Noise* Requirement: 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.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Noise (cont.)		
SCA NOI-6 (Standard Condition of Approval 64): *Operational Noise* Requirement: 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.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA NOI-7 (Standard Condition of Approval 66): *Vibration Impacts on Adjacent Historic Structures or Vibration-Sensitive Activities* Requirement: The project applicant shall submit a Vibration Analysis prepared by an acoustical and/or structural engineer or other appropriate qualified professional for City review and approval that establishes pre-construction baseline conditions and threshold levels of vibration that could damage the structure and/or substantially interfere with activities located at 444 24th Street and 443 25th Street. The Vibration Analysis shall identify design means and methods of construction that shall be utilized in order to not exceed the thresholds. The applicant shall implement the recommendations during construction.	Prior to construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections
Transportation and Circulation		
BVDSP TRA Mitigation Measures All the mitigation measures identified in the BVDSP EIR are included in the citywide Transportation Impact Fee (TIF). Therefore, the project applicant shall mitigate the project impacts by paying the required TIF.		
SCA TRA-1 (Standard Condition of Approval 68): *Construction Activity in the Public Right-of-Way* ***a. Obstruction Permit Required*** Requirement: 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*** Requirement: 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*** Requirement: 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.	a. Prior to approval of construction-related permit. b. Prior to approval of construction-related permit. c. Prior to building permit final.	a. City of Oakland Bureau of Building Services Division, Zoning Inspections b. Public Works Department, Transportation Services Division c. City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Transportation and Circulation (cont.)		
SCA TRA-2 (Standard Condition of Approval 69): *Bicycle Parking* Requirement: 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.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA TRA-3 (Standard Condition of Approval 70): *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 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)	Prior to building permit final or as otherwise specified	Bureau of Building; Public Works Department, Transportation Services Division

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Transportation and Circulation (cont.)		
o. Transit Signal Priority (TSP) equipment consistent with other signals along corridor p. Signal timing plans for the signals in the coordination group		
SCA TRA-4 (Standard Condition of Approval 71): *Transportation and Parking Demand Management* ***a. Transportation and Parking Demand Management (TDM) Plan Required*** Requirement: 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 project. • Achieve the following project vehicle trip reductions (VTR): – Projects generating 50-99 net new a.m. or p.m. peak hour vehicle trips: 10 percent VTR – Projects generating 100 or more net new a.m. or p.m. 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 applicant and subject to review by the City, if employees or residents use transit or commute by other alternative modes.	a. Prior to building permit final. b. Prior to building permit final c. Ongoing	a. City of Oakland Bureau of Planning and Building b. City of Oakland Bureau of Building Services Division, Zoning Inspections c. City of Oakland Bureau of Planning and Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
• 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. 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*** Requirement: 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*** Requirement: For projects that generate 100 or more net new a.m. or p.m. peak hour vehicle trips and contain ongoing operational VTR strategies, the project applicant shall submit an annual compliance report for the first		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Transportation and Circulation (cont.)		
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 (Standard Condition of Approval 74) *Construction and Demolition Waste Reduction and Recycling* Requirement: 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 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.	Prior to approval of construction-related permit	City of Oakland Public Works Department, Environmental Services Division
SCA UTIL-2 (Standard Condition of Approval 75) *Underground Utilities* Requirement: 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.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA UTIL-3 (Standard Condition of Approval 76) *Recycling Collection and Storage Space* Requirement: 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.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Utilities and Service Systems (cont.)		
SCA UTIL-4 (Standard Condition of Approval 77) *Green Building Requirements* ***a. Compliance with Green Building Requirements During Plan-Check*** Requirement: 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 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. • LEED Silver (minimum 50 points) (except the cool roof requirement) per the appropriate checklist approved during the Planning entitlement process. • CALGreen mandatory measures for non-residential construction • Green Building Certification (Green Building Certification Institution and City staff for CALGreen)	a. Prior to approval of construction-related permit. b. During construction. c. After project completion as specified.	a. City of Oakland Bureau of Building Services Division, Zoning Inspections b. City of Oakland Bureau of Building Services Division, Zoning Inspections c. City of Oakland Bureau of Planning and Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Utilities and Service Systems (cont.)		
• 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 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*** Requirement: 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*** Requirement: 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 or Green Building Certification Institute 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 (Standard Condition of Approval 79) *Sanitary Sewer System* Requirement: 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 for funding improvements to the sanitary sewer system.	Prior to approval of construction-related permit.	City of Oakland Public Works Department, Department of Engineering and Construction
SCA UTIL-6 (Standard Condition of Approval 80) *Storm Drain System* Requirement: 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.	City of Oakland Bureau of Building Services Division, Zoning Inspections

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."

As discussed in detail in Section III of this document, the analysis in the 2011 Redevelopment Plan Amendments EIR, the 1998 LUTE EIR and, for only the residential components of the proposed project, the 2010 Housing Element Update EIR and its 2014 Addendum, are considered the qualified planning level Previous CEQA Documents for this assessment, pursuant to CEQA Guidelines Section 15183.

Proposed Project

The majority of the project site (the primary parcels fronting Broadway) is within the Broadway Valdez District Specific Plan (BVDSP) area (Plan area).[37] A portion of the project site also falls within the Community Commercial Zone (CC-3). It would demolish the existing buildings and surface parking lots, but would retain and restore existing façades at the southeast corner of the project site (Broadway and 24th Street). The building at 437 25th Street, at the northwest corner of the project site, would not be demolished. Rather, this building would be tied to the new building. The front and two internal walls would be retained as well as a portion of the roof truss. The proposed project would construct a new mixed-use three- to six-story building of approximately 216,810 gross square feet with a maximum height of 85 feet (not including roof parapet). The mixed-use building would include hotel, residential, and commercial uses, including a parking garage.

Project Consistency

As determined by the City of Oakland Bureau of Planning, the proposed land uses are permitted in the zoning districts in which it is located, and is consistent with the bulk, density, and land uses envisioned in the Plan area and the Community Commercial area, as outlined below.

- The General Plan land use designation for 2417 Broadway is Central Business District (CBD) and for 422 24th Street and 437 25th Street, is Community Commercial (CC). The parcel at

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

2401 Broadway straddles the boundary line of the BVDSP and thus is in both the CBD and CC. The CBD designation 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 intent of the Community Commercial zones is to create, maintain and enhance areas suitable for a wide variety of commercial and institutional operations along the City's major corridors and in shopping districts or centers. The proposed mixed-use project would be consistent with these designations.

- The project site has one and one half parcels located within the boundaries of the Plan Area, D-BV-1 (Retail Priority Sites Commercial Zone 1) and two and one half parcels located outside the Plan Area and in the Community Commercial (CC-3) Zone. 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 floor along Broadway, 24th Street, and 25th Street. The proposed project would include approximately 27,200 square feet of commercial uses.

- The project site is also within the 45-foot 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 1.21 acres (52,843 square feet). When calculating uses proposed for the parcel within the D-BV-1 zone, (17,439 square feet of retail equals approximately 58 percent of the 30,265 square foot lot), the proposed project exceeds the Retail Priority Site requirements and thus is conditionally permitted a building height increase up to 85 feet and development of residential uses. Therefore, in accordance with Section 15183.3 of the CEQA Guidelines, the proposed project is consistent with the BVDSP EIR.

- The CC-3 zoning designation is intended to create, maintain and enhance areas suitable for a wide variety of commercial and institutional operations along the City's major corridors and in shopping districts or centers. The project applicant is seeking an adjacency extension into the CC-3 parcel at 422 24th Street by 130 feet for residential uses and by 30 feet for permitted 85-foot height limit.

- 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 portion of the project site designated as a Retail Priority Site is approximately 30,265 square feet, and therefore the maximum non-residential FAR allowed would be 242,120 square feet. The proposed project would provide up to 120,810 square feet of retail and hotel 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 three- to six-stories tall and would not exceed 200 feet (i.e., at the top of the roof structure), as measured by the Planning Code. Consequently, in accordance with Section 15183.3 of the CEQA Guidelines, the proposed project is consistent with the BVDSP EIR.

- With respect to residential density, the 45 foot height area allows for 1 dwelling unit per 125 square feet of retail use with a conditional use permit.[38] As noted above, the proposed project would provide up to 27,200 square feet of retail space. As such, the maximum residential density on the project site would be 213 dwelling units. The proposed project would construct up to 72 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.
- Transient Habitation (hotel uses), are conditionally permitted and would require a Conditional Use Permit.[39]

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.

[38] Per Table 17.101C.05 and Table 17.101C.06 of the Oakland Planning Code.
[39] Per Table 17.102.370 of the Oakland Planning Code.

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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 seventy-five 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 onsite 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.	Yes 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." The project site would be developed as a hotel (non-residential). The project applicant shall prepare, for City review and approval, a feasibility assessment of onsite renewable power generation options. If determined feasible by the City, the project applicant shall implement onsite 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 Kia/Mitsubishi service and parts center (site address 2401 and 2417 Broadway) is on the Cortese list as an open Leaking Underground Storage Tank (LUST) cleanup site. The project applicant is currently in communication with the Regional Water Quality Control

TABLE C-1
PROJECT INFILL ELIGIBILITY

	CEQA Eligibility Criteria	Eligible?/Notes for Proposed Project
2. cont.		Board, San Francisco Bay Region (RWQCB) on required steps to obtain LUST case closure at 2417 Broadway. However, the process cannot begin until the project applicant has acquired the property. The Phase I ESA, Phase II ESA, and Site Mitigation and Contingency Plan prepared for the project site included recommendations for the site, and consistent with SCA 40, the project applicant shall implement the [City] approved [Phase I/II] 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 An air quality screening was prepared for the proposed project. 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 2a above, the project must meet eligibility requirements provided below by project type.	
	Residential. A residential project must meet **<u>one</u>** of the following: A. *Projects achieving below average regional per capita vehicle miles traveled (VMT).* A residential project is eligible if it is located in a "low vehicle travel area" within the 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; **<u>or</u>** 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	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 commercial/hotel, the proposed project is not eligible under Section (A). 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 north of the 19th Street Oakland Bay Area Rapid Transit (BART) station. Broadway qualifies as a "High Quality Transit Corridor," as defined

TABLE C-1
PROJECT INFILL ELIGIBILITY

	CEQA Eligibility Criteria	Eligible?/Notes for Proposed Project
2. cont.	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.	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.	Yes The proposed project is eligible under Section (A). As stated in the Checklist, the average daily VMT per capita and VMT per worker in the project TAZ is more than 15 percent below the regional averages. It is presumed that the proposed project would not result in substantial additional VMT.
	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 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.	Not Applicable
	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 (f)(5), that implement the project features in 2a above are eligible.	Not Applicable

TABLE C-1
PROJECT INFILL ELIGIBILITY

	CEQA Eligibility Criteria	Eligible?/Notes for Proposed Project
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)

NOTE:

[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) serves as the sustainable communities strategy for the Bay Area, per Senate Bill 375.[40] 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 2417 Broadway is Central Business District (CBD) and for 422 24th Street and 437 25th Street, is Community Commercial (CC). The parcel at 2401 Broadway straddles the boundary line of the BVDSP and thus is in both the CBD and CC. The CBD designation 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 intent of the Community Commercial zones is to create, maintain and enhance areas suitable for a wide variety of commercial and institutional operations along the City's major corridors and in shopping districts or centers. The proposed mixed-use project would be consistent with these designations.

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

Under the adopted BVDSP, the project site is zoned Broadway Valdez District Retail Priority Sites Commercial Zone 1 (D-BV-1), Retail Priority Site 2. 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-foot 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. As stated in Section 9, Land Use, the square footage of proposed retail uses in the D-BV-1 portion of the project site would exceed 50 percent of the Retail Priority Site area; therefore, the project can be up to 200 feet in height, in conformance with the height limit on the site. The proposed building would be three- to six- stories tall and would not exceed 200 feet (i.e., at the top of the roof structure). The proposed project would be up to 85 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-foot height area allows for one dwelling unit per 125 square feet of retail use with a conditional use permit when the minimum square footage of retail use is provided. The proposed project would provide up to 27,200 square feet of retail space. As such, the maximum residential density on the project site would be 213 dwelling units. The proposed project would construct up to 72 dwelling units.

For the portion of the site outside of the BVDSP, the CC-3 zoning designation is intended to create, maintain and enhance areas suitable for a wide variety of commercial and institutional operations along the City's major corridors and in shopping districts or centers. 422 24th Street, the rear portion of 2401 Broadway, and 437 25th Street are located in the CC-3 zone and also in the 45-foot height area. Under Planning Code Sections 17.102.110 and 17.154.060, an extension of the density and land use controls that apply to an adjacent parcel can be extended to these parcels, which would allow the proposed hotel use and an increase in allowable height. The project applicant is seeking approval of a Conditional Use Permit to extend the allowable uses 130 feet into the CC-3 parcel to allow transient habitation (hotel) uses on the site and Design Review to extend for 30 horizontal feet the allowable height of 85 feet.

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 portion of the project site designated as a Retail Priority Site is approximately 30,265 square feet, and therefore the maximum non-residential floor area allowed would be 242,120 square feet. The proposed project would provide up to 120,810 square feet of retail and hotel 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.

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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.[41] The proposed project would provide more dwelling units and hotel rooms than contemplated for Valdez Triangle Subdistrict 3, as indicated in Table 4.13-7 of the BVDSP EIR (72 residential units instead of 40 residential units, and 159 hotel rooms instead of zero).[42] The proposed project's 27,200 square feet of commercial use would be well below the 251,398 square feet identified in the Broadway Valdez Development Program.

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.

[41] 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.

[42] Subdistrict 3 is defined in the BVDSP as the area north of 24th Street, west of Valdez Street, and south of 27th Street.

As described in Section 13, Transportation and Circulation, of this CEQA Checklist, the proposed project would generate 68 AM and 104 PM net new 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 44 percent of the AM peak-hour trips and 47 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 exceeding 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 75 percent of the AM peak-hour trips and 68 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 3 would represent approximately 72 percent of the AM peak-hour trips and 52 percent of the PM peak-hour trips anticipated in the BVDSP EIR for Subdistrict 3. 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 3.

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 proposed 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.

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APPENDIX A
Health Risk Assessment

Project Construction Health Risk Assessment

The discussion below presents a detailed health risk assessment (HRA) of impacts from the construction of the 2401 Broadway project (proposed project) in Oakland to existing receptors in the vicinity of the project site. The proposed project would not include any operational sources of TACs.

This construction HRA consists of three principal components:

1. Estimation of TAC emissions from project construction,
2. Estimation of TAC concentrations at existing sensitive receptors from the project's construction emissions using refined air dispersion modeling, and
3. Estimation of health risks from construction using the modeled concentrations at receptors and exposure parameters and comparison to significance thresholds developed by the BAAQMD and adopted by the City of Oakland.

The HRA was conducted in accordance with technical guidelines developed by federal, state, and regional agencies, including U.S. Environmental Protection Agency (USEPA), California Environmental Protection Agency (CalEPA), California Office of Environmental Health Hazard Assessment (OEHHA) *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*[1] and the Bay Area Air Quality Management District (BAAQMD) *Air Toxics New Source Review (NSR) Program Health Risk Assessment Guidelines*.[2]

1. Estimation of TAC Emissions from Project Construction

The primary TAC of concern emitted during project construction is Diesel Particulate Matter (DPM), a primary component of diesel exhaust from construction equipment and heavy duty trucks transporting materials to and from the project site. In August 1998, the CARB identified DPM as a TAC. DPM is a complex mixture of numerous individual gaseous and particulate compounds emitted from diesel-fueled combustion engines and contains at least 40 different TACs. DPM is formed primarily through the incomplete combustion of diesel fuel. DPM is removed from the atmosphere through physical processes including atmospheric fall-out and washout by rain. Humans can be exposed to airborne DPM by deposition on water, soil, and vegetation; although

[1] Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, February 2015, http://oehha.ca.gov/air/hot_spots/hotspots2015.html

[2] BAAQMD, *BAAQMD Air Toxics New Source Review (NSR) Program Health Risk Assessment Guidelines*, January 2016.

the main pathway of exposure is inhalation. Studies indicate that DPM poses the greatest health risk among airborne TACs.

For purposes of this assessment, consistent with OEHHA guidelines, exhaust emissions of PM_{10} are represented as DPM. Exhaust PM_{10} emissions from project construction were derived from CalEEMod (Version 2016.3.1) using the following assumptions:

- Construction of 80 units of residential apartments, a 167-room hotel, 26,600 square feet of retail use and 22,425 square feet of area for parking and circulation;
- Construction was assumed to begin in March 2018 and last for a period of 24 months;
- The length of the various construction phases (e.g., demolition, grading, building construction, etc.) were provided by the project applicant (shown in **Table A-1**);
- The number and types of construction equipment used for each phase[3], their size and activity level as well as the number of construction related worker, vendor and hauling trips during each phase were based on CalEEMod defaults for a 1.21 acre site (shown in **Tables A-2 and A-3**);
- Demolition of 15,500 square feet of existing structures; and
- Off-haul of 4,000 cubic yards of material during the grading phase.

TABLE A-1
PROJECT CONSTRUCTION SCHEDULE[a]

Construction Phase	Duration	Number of Workdays[b]
Demolition	3/5/2018 – 4/27/2018	40
Site Preparation	4/28/2018 – 5/11/2018	10
Grading	5/12/2018 – 7/20/2018	50
Building Construction	7/21/2018 – 2/28/2020	420
Architectural Coating	8/5/2019 – 10/25/2019	60
Paving	2/3/2020 – 2/28/2020	20
Total number of workdays over the construction duration[c]		520

[a] Provided by applicant.
[b] Number of workdays are calculated assuming Monday – Friday construction. No construction on weekends is assumed.
[c] Accounts for overlapping phases of construction.

[3] Cement and mortar mixers were removed from the default CalEEMod equipment list for paving as all cement and mortar used onsite was assumed to be brought in pre-mixed.

TABLE A-2
CONSTRUCTION EQUIPMENT USED BY PHASE[a]

Equipment	Number	No. of days Used	No. of Hours/Day Used
Demolition			
Concrete/Industrial Saw	1	40	8
Rubber Tired Dozer	1	40	8
Tractors/Loaders/Backhoes	3	40	8
Site Preparation			
Grader	1	10	8
Rubber Tired Dozer	1	10	7
Tractors/Loaders/Backhoes	1	10	8
Grading			
Grader	1	50	6
Rubber Tired Dozer	1	50	6
Tractors/Loaders/Backhoes	1	50	7
Building Construction			
Cranes	1	420	6
Forklifts	1	420	6
Generator Sets	1	420	8
Tractors/Loaders/Backhoes	1	420	6
Welders	3	420	8
Architectural Coating			
Air Compressor	1	60	6
Paving			
Pavers	1	20	6
Paving Equipment	1	20	8
Rollers	1	20	7
Tractors/Loaders/Backhoes	1	20	8

[a] CalEEMod defaults for a 1.21 acre construction site. Cement and mortar mixers were not included in the inventory as all cement and mortar used on site would be brought in pre-mixed.

TABLE A-3
VEHICLE TRIPS BY CONSTRUCTION PHASE[a]

Construction Phase	Worker Commute Trips/Day	Vendor Trips/Day	Total Number of Hauling Trips
Demolition	13	0	71
Site Preparation	8	0	0
Grading	8	0	500
Building Construction	116	32	0
Architectural Coating	23	0	0
Paving	10	0	0

[a] CalEEMod default one-way vehicle trips.

Exhaust PM_{10} emissions from on-site construction equipment and off-site vendor and hauling trips during the different phases were extracted from the CalEEMod output and are presented in **Table A-4** for both the uncontrolled and the mitigated scenarios. The mitigated scenario assumes use of Tier 4 engines as the best available control technology for all construction equipment as required by the SCA AIR-1(w) [City SCA-19(w)] for larger projects. As required by the BAAQMD Guidelines, fugitive emissions are not included in this assessment and are addressed separately through dust control measures implemented as part of SCA AIR-1.

TABLE A-4
TOTAL PM_{10} EXHAUST EMISSIONS FROM PROJECT CONSTRUCTION

	Uncontrolled Scenario	With SCA Scenario
On-Site DPM (as PM_{10} Exhaust) (tons)	0.26	0.008
Off-Site DPM (as PM_{10} Exhaust) (tons)	0.006	0.006
Total DPM (as PM_{10} Exhaust) (tons)	0.266	0.014
Number of construction workdays	520	520
Emission Rate (grams/second) [a, b]	0.0158	0.0005

[a] Emission rate calculated assuming 8 hours of construction per day, Monday to Friday.
[b] Emission rate calculated assuming only 10 percent of off-site emissions as contributing to concentrations in the project vicinity.

2. Estimation of Ambient Concentrations at Existing Sensitive Receptors

Dispersion is the process by which atmospheric pollutants disseminate due to wind and vertical stability. The results of a dispersion analysis are used to assess pollutant concentrations at or near an emission source. The results of such an analysis allow predicted concentrations of pollutants to be compared directly to air quality standards and other criteria such as health risks based on modeled concentrations.

An air dispersion model is a mathematical formulation that is used to estimate the air quality concentrations at specific locations (receptors) surrounding a source of emissions given the rate of emissions, topography and prevailing meteorological conditions. The air dispersion model used in this assessment was the United States Environmental Protection Agency (EPA) AERMOD air dispersion model that is approved by the BAAQMD for air pollutant dispersion assessments. Specifically, the AERMOD model was used to estimate concentrations of DPM emissions at sensitive receptor locations using the proposed project's emission rate shown in **Table A-5**.

Both on-site emissions from construction and off-site emissions from heavy duty trucks were modeled together as an area source extending over the entire project site (see **Figure A-1**). Only 10 percent of off-site emissions were considered in the modeling effort as contributing to concentrations in the project vicinity. The release height for the source was specified as 5 meters above ground to account for the top of the equipment exhaust stack where the emissions are released to the atmosphere and the increase in the height of the emissions due to its heated exhaust. A variable emissions rate was used to represent project construction activity that is expected to take

TABLE A-5
EXPOSURE PARAMETERS USED

Receptor Age	Exposure Duration (ED) [a] (years)	Age Sensitivity Factors (ASF)	Fraction of time at Home (TAH) (%)	Daily Breathing Rate (DBR) [b] (L/kg-day)
Residential Receptor - Infant				
3rd trimester	0.25	10	0.85	361
0 – 2 years	2	10	0.85	1090
2 – 16 years	1	3	0.72	572
Residential Receptor - Child				
2 – 16 years	3	3	0.72	572
Residential Receptor - Adult				
>16 years	3	1	0.73	261

[a] Per BAAQMD guidance, a minimum 3 year exposure duration is assumed to estimate risks from project construction.
[b] BAAQMD Air Toxics New Source Review Program HRA Guidelines recommend using the 95th percentile rate for age groups less than 2 years old and the 80th percentile rate for age groups that are greater than or equal to 2 years old.

place only on weekdays for 8 hours per day between 8 a.m. and 4 p.m. Five years of meteorological data from the Metropolitan Oakland International Airport was used to represent wind conditions at the project site.

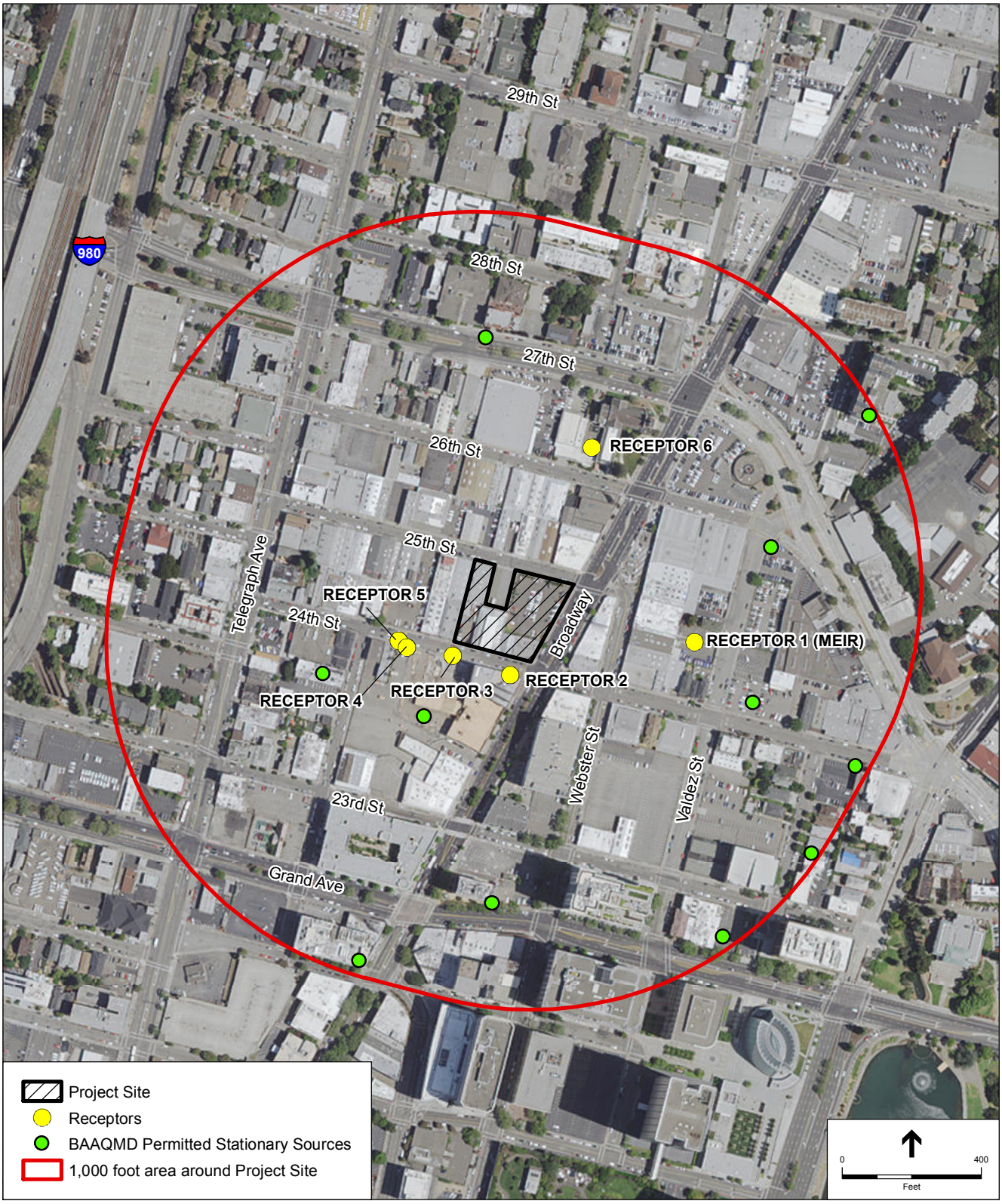
Sensitive receptors in the form of existing residential uses are generally located to the south and east of the project site. The closest sensitive receptors are located approximately 70 feet south of the project site across 24th Street. Receptors to the east are located farther away at approximately 350 feet from the project site across Broadway. Six discrete receptors around the project site were included in the modeling effort and are shown in Figure A-1.

The results of the dispersion modeling showed that the maximum annual concentration of 0.12 micrograms per cubic meter ($\mu g/m^{3)}$ for the uncontrolled (unmitigated) scenario would occur at Receptor 1 to the east of the project site. This would be considered the Maximum Exposed Individual Receptor (MEIR). With the use of Tier 4 construction equipment required to comply with SCA AIR-1(w), annual concentration at the MEIR would reduce to 0.033 $\mu g/m^3$.

3. Assessment of Health Risks from Project Construction to Existing Receptors

Assessment of health risks from project construction was conducted following methodologies and exposure parameters recommended in OEHHA's Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments.[4] OEHHA's 2015 revisions to its Guidance Manual are primarily designed to ensure that the greater sensitivity of children to cancer and other health risks is reflected in HRAs. For example, OEHHA now recommends that risks be analyzed separately for

[4] Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, February 2015, http://oehha.ca.gov/air/hot_spots/hotspots2015.html



SOURCE: ESRI; ESA

2401 Broadway . 160823

Figure A-1

Location of Sensitive Receptors, Cumulative Sources and Boundary of Influence

multiple age groups, focusing especially on young children and teenagers, rather than the past practice of analyzing risks to the general population, without distinction by age. OEHHA also now recommends that statistical "age sensitivity factors" be incorporated into a HRA, and that children's relatively high breathing rates be accounted for. On the other hand, the Guidance Manual revisions also include some changes that would reduce calculated health risks. For example, under the former guidance, OEHHA recommended that residential cancer risks be assessed by assuming 70 years of exposure at a residential receptor; under the revised Guidance Manual, this assumption is lessened to 30 years. This is based on studies showing that 30 years is a reasonable estimate of the 90th to 95th percentile of residency duration in the population. For short term projects such as construction activities, OEHHA recommends using the actual project duration. To ensure that short-term projects do not result in unanticipated higher cancer impacts due to short duration high-exposure rates, the BAAQMD recommends that the cancer risk be evaluated assuming that the average daily dose for short-term exposure lasts a minimum of three years for projects lasting three years or less.

Based on OEHHA recommendations, the cancer risk to residential receptors assumes that exposure occurs 24 hours per day for 350 days per year while accounting for a percentage of time at home. OEHHA evaluated information from activity pattern databases to estimate the fraction of time at home (FAH) during the day. This information was used to adjust exposure duration and cancer risk based on the assumption that a person is not present at home continuously for 24 hours and therefore exposure to emissions is not occurring when a person is away from their home.

Cancer risk at the MEIR was estimated using the OEHHA recommended method shown in the following equations and the cancer risk exposure parameters shown in Table A-5. Estimates were made using the mandatory minimum pathways, which for DPM is only through inhalation.

$$Risk_{inh\text{-}res} = DOSE_{air} \times CPF \times ASF \times ED/AT \times FAH$$

$Risk_{inh\text{-}res}$ = Residential inhalation cancer risk
$DOSE_{air}$ = Daily Inhalation Dose
CPF = Cancer Potency Factor for DPM = 1.1
ASF = Age Sensitivity Factors
ED = Exposure Duration in each age group (years)
AT = Averaging Time over lifetime cancer risk (years) = 70 years
FAH = Fraction of Time at Home (%)

$$DOSE_{air} = C_{air} \times DBR \times A \times EF \times 10^{-6}$$

C_{air} = Concentration of TAC in air ($\mu g/m^3$)
DBR = Daily Breathing Rate
A = Inhalation Absorption factor = 1.0 for DPM
EF = Exposure Frequency = 350/365 = 0.96

Chronic (long-term) adverse health impacts unrelated to cancer are measured against a hazard index (HI), which is defined as the ratio of the predicted incremental DPM exposure concentration

from the proposed project to a reference exposure level (REL) that could cause adverse health effects. The RELs are published by OEHHA based on epidemiological research. The chronic reference exposure level for DPM was established by the California OEHHA as 5 μg/m^3.[5]

Estimated health risks and maximum $PM_{2.5}$ concentration to receptors of different age groups at the MEIR are shown in **Table A-6** below and compared to the BAAQMD project-level thresholds that have been adopted by the City of Oakland.

TABLE A-6
MAXIMUM HEALTH RISKS FROM PROJECT CONSTRUCTION

Health Risk at MEIR	Maximum Cancer Risk (in a million)	Chronic Risk (Hazard Index)	Maximum $PM_{2.5}$ concentration
Uncontrolled Scenario			
Residential Receptor - Infant	37	0.024	0.115
Residential Receptor - Child	7	0.024	0.115
Residential Receptor - Adult	1	0.024	0.115
With Tier 4 Equipment			
Residential Receptor - Infant	1	0.008	0.004
Residential Receptor - Child	0.2	0.008	0.004
Residential Receptor - Adult	<0.1	0.008	0.004
Project-level Threshold	10	1.0	0.3
Significant?	**No**	**No**	**No**

As shown in the table, health risks (cancer and chronic) to receptors of all age groups and $PM_{2.5}$ concentrations resulting from project construction would be less than the applicable significance thresholds with the use of Tier 4 equipment for construction. Therefore the TAC impact of project construction on existing receptors would be less than significant.

Cumulative Health Risks to New Project Receptors

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 (SCA) 20 (referred to as SCA AIR-2 in this document), the proposed project is required to undergo a health risk analysis to determine the potential cumulative health risks to new sensitive receptors at the project site from project, existing and reasonably foreseeable future sources of toxic air contaminants (TACs).

SCA AIR-2: Exposure to Air Pollution (Toxic Air Contaminants), requires projects that propose to build sensitive uses (such as residences, schools, daycare centers, parks, nursing homes or medical facilities) and are located within 1,000 feet of major sources of air pollution (permitted

[5] California Office of Environmental Health Hazards Assessment - Acute, 8-hour, and Chronic Reference Exposure Levels, June 2014, http://www.oehha.ca.gov/air/allrels.html

stationary sources, freeways, roadways with traffic greater than 10,000 vehicle per day, rail lines, etc.) to conduct a screening analysis in accordance with the BAAQMD Guidelines to assess risk to proposed receptors. If the risk to proposed receptors exceeds the health screening criteria, projects shall be required to incorporate appropriate measures into the project design in order to reduce the potential health risk.

The proposed project includes residential uses and is located within 1,000 feet of several BAAQMD permitted stationary sources and roadways with traffic volumes greater than 10,000 vehicles per day. Therefore, the analysis presented below includes a screening level assessment of the cumulative risk to new receptors from existing and proposed sources of TACs within 1,000 feet of the project site.

The BAAQMD's CEQA Air Quality Guidelines include standards and methods for determining the significance of cumulative health risk impacts. The method for determining cumulative health risk requires the tallying of health risk from permitted stationary sources, major roadways and any other identified substantial air toxic sources in the vicinity of a project site (i.e., within a 1,000-foot radius) and then adding the individual sources to determine whether the BAAQMD's cumulative health risk thresholds are exceeded. The cumulative screening analysis for the proposed new receptors is shown in **Table A-7**.

1. Existing Stationary Sources within 1,000 feet of the Project Site

BAAQMD has developed a geo-referenced database of permitted stationary emissions sources throughout the San Francisco Bay Area and the Stationary Source Screening Analysis Tool[6] for estimating cumulative health risks from the permitted stationary sources. Based on this, eleven permitted stationary sources of TAC emissions were identified within 1,000 feet of the project site. Preliminary health risk screening values for three of these sources that operate diesel engines were refined using the BAAQMD's Diesel Internal Combustion Engine Distance Multiplier Tool[7] to represent the attenuated health risks at the MEIR. 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.

2. Existing Mobile Sources within 1,000 feet

BAAQMD has also developed a geo-referenced database of highways and roadways throughout the San Francisco Bay Area to be used in conjunction with the Highway Screening Analysis Tool and the Roadway Screening Analysis Calculator[8] for estimating risks from highways and major roadways. There are no highways within 1,000 feet of the project site. BAAQMD *CEQA Air Quality Guidelines* also require the inclusion of surface streets within 1,000 feet of the proposed project with annual average daily traffic of 10,000 or greater. Upon review of nearby roadways, Broadway, Telegraph Avenue, 27th Street and Grand Avenue meet the criteria. The health risk

6 Bay Area Air Quality Management District, *Stationary Source Screening Analysis Tool,* May 30, 2012.
7 Bay Area Air Quality Management District, *Diesel Internal Combustion (IC) Engine Distance Multiplier,* June 13, 2012.
8 Bay Area Air Quality Management District, *Roadway Screening Analysis Calculator,* April 16, 2015.

TABLE A-7
CUMULATIVE HEALTH IMPACTS TO NEW RECEPTORS

Source	Source Type	Distance from Project (feet)	Cancer Risk (persons per million)	Chronic Hazard Impact	$PM_{2.5}$ Concentration (µg/m3)
Existing Stationary Sources (BAAQMD Plant Number) within 1,000 feet					
Westlake Christian Terrace (19269)	Diesel Engine	975	12.9	0.005	0.013
CalStears (16640)	Diesel Engine	980	1.01	0.009	0.002
Essex Portfolio LLC (19971)	Diesel Engine	675	1.14	0.006	0.0003
State of California Department of Transportation (14195)	Diesel Engine	725	3.84	0.019	0.007
Johnson Plating Works Inc. (3490)	Not Specified	355	0.05	0.0	0.0
Oakland Fleet Fueling Facility (G9464)	Not Specified	650	NA	NA	NA
Oakland Acura (12498)	Not Specified	600	0.0	0.0	0.0
Autotrends (15482)	Not Specified	625	0.0	0.0	0.0
VIP Auto Collision Repair (19344)	Not Specified	960	0.0	0.0	0.0
Hanzel Auto Body Works (3927)	Not Specified	940	0.0	0.0	0.0
Q & S Automotive (12434)	Not Specified	230	0.0	0.0	0.0
Major Roadways (with more than 10,000 AADT) within 1,000 feet					
Broadway	Roadway	20	9.2	--	0.17
27th Street	Roadway	575	1.3	--	0.02
Telegraph Avenue	Roadway	570	1.6	--	0.03
Grand Avenue	Roadway	750	2.6	--	0.05
Backup Generators at Proposed Projects within 1,000 feet					
24th and Harrison	Diesel Engine	650	0.8	0.04	0.015
2315 Valdez/2330 Webster	Diesel Engine	600	0.9	0.04	0.016
2302 Valdez	Diesel Engine	760	0.6	0.04	0.011
2270 Broadway	Diesel Engine	575	0.9	0.04	0.016
2400 Valdez	Diesel Engine	600	0.9	0.04	0.016
2345 Broadway (HIVE)	Diesel Engine	190	4.1	0.04	0.075
2425 Valdez	Diesel Engine	400	1.6	0.04	0.029
2630 Broadway	Diesel Engine	560	0.9	0.04	0.016
2305 Webster	Diesel Engine	525	1.0	0.04	0.018
Cumulative Impacts			46	0.4	0.5
Cumulative Impacts using BAAQMD multiplier to existing and proposed stationary sources and roadways to account for 2015 OEHHA revisions[a]			62	0.36	0.5
City of Oakland Cumulative Significance Criteria (new receptors)			100	10	0.8
Potentially Significant Impact?			No	No	No

NOTE: NA = Not Available

[a] Cumulative totals may not add up due to rounding

SOURCE: BAAQMD, 2012; BAAQMD, 2015; ESA, 2017.

screening values at the MEIR and the new receptors from nearby major roadways were estimated using the BAAQMD's county-specific Roadway Screening Analysis Calculator[7] and are also presented in Table A-7.

3. Other Project Developments Proposed within 1,000 feet

In addition to existing TAC sources, there are nine proposed developments within 1,000 feet of the project site that are either under construction or could be constructed in the near future, and future operations would include maintenance and testing of 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. 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) was used to estimate the equivalent screening-level health risk values for chronic HI and annual average $PM_{2.5}$ concentrations. The health risk screening values were then refined based on the distance from each source to the receptors using the BAAQMD's Diesel Internal Combustion Engine Distance Multiplier Tool and are shown in Table G-7.

Note that the cancer risks estimated from the BAAQMD assessment tools (roadways and permitted stationary sources) and shown in Table A-7 are based on an older set of exposure parameters that do not reflect the revised OEHHA cancer risk parameters dealing with daily breathing rates, time at home factors, and exposure duration. The cancer risks estimated from the BAAQMD's assessment tools for these emission sources, therefore, were increased using a BAAQMD provided multiplier of 1.3744 to account for the revised exposure parameters.[9]

Conclusion

As shown in Table A-7, the screening analysis, which is based on conservative assumptions, indicates that the cumulative excess cancer, chronic risk (HI) and $PM_{2.5}$ concentration at the project receptors would be less than the City's cumulative. Therefore, this would constitute a less than significant cumulative impact to the new receptors.

[9] Kirk, Alison, Email Communication with ESA, December 20, 2016.

2401 Broadway - Existing Uses

Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Automobile Care Center	15.50	1000sqft	1.21	15,500.00	0
Regional Shopping Center	7.10	1000sqft	0.00	7,100.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	63
Climate Zone	5			**Operational Year**	
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Existing use data

Vehicle Trips - Trip rate adjusted based on data from F&P

Energy Use -

Water And Wastewater - 100 percent aerobic treatmet assumed

2401 Broadway - Existing Uses - Alameda County, Annual

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	0.36	1.21
tblLandUse	LotAcreage	0.16	0.00
tblVehicleTrips	ST_TR	23.72	19.80
tblVehicleTrips	ST_TR	49.97	29.18
tblVehicleTrips	SU_TR	11.88	9.92
tblVehicleTrips	SU_TR	25.24	14.74
tblVehicleTrips	WD_TR	23.72	19.80
tblVehicleTrips	WD_TR	42.70	24.93
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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					
2016	0.0151	0.1419	0.0816	1.3000e-004	5.1000e-004	8.9400e-003	9.4600e-003	1.4000e-004	8.3700e-003	8.5000e-003	0.0000	11.6311	11.6311	2.8200e-003	0.0000	11.7016
2017	0.4473	2.2491	1.6369	2.6400e-003	0.0251	0.1393	0.1643	0.0106	0.1338	0.1444	0.0000	225.4577	225.4577	0.0460	0.0000	226.6085
Maximum	**0.4473**	**2.2491**	**1.6369**	**2.6400e-003**	**0.0251**	**0.1393**	**0.1643**	**0.0106**	**0.1338**	**0.1444**	**0.0000**	**225.4577**	**225.4577**	**0.0460**	**0.0000**	**226.6085**

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					
2016	0.0151	0.1419	0.0816	1.3000e-004	5.1000e-004	8.9400e-003	9.4600e-003	1.4000e-004	8.3700e-003	8.5000e-003	0.0000	11.6310	11.6310	2.8200e-003	0.0000	11.7016
2017	0.4473	2.2491	1.6369	2.6400e-003	0.0251	0.1393	0.1643	0.0106	0.1338	0.1444	0.0000	225.4575	225.4575	0.0460	0.0000	226.6082
Maximum	**0.4473**	**2.2491**	**1.6369**	**2.6400e-003**	**0.0251**	**0.1393**	**0.1643**	**0.0106**	**0.1338**	**0.1444**	**0.0000**	**225.4575**	**225.4575**	**0.0460**	**0.0000**	**226.6082**

	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	12-18-2016	3-17-2017	0.8048	0.8048
2	3-18-2017	6-17-2017	0.7508	0.7508
3	6-18-2017	9-17-2017	0.7507	0.7507
4	9-18-2017	9-30-2017	0.1061	0.1061
		Highest	0.8048	0.8048

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	0.1001					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	2.4600e-003	0.0224	0.0188	1.3000e-004		1.7000e-003	1.7000e-003		1.7000e-003	1.7000e-003	0.0000	88.4168	88.4168	3.3600e-003	1.0500e-003	88.8126
Mobile	0.1786	0.8731	1.6388	3.4200e-003	0.2186	7.1400e-003	0.2258	0.0588	6.7800e-003	0.0656	0.0000	313.5966	313.5966	0.0230	0.0000	314.1706
Waste						0.0000	0.0000		0.0000	0.0000	12.0191	0.0000	12.0191	0.7103	0.0000	29.7768
Water						0.0000	0.0000		0.0000	0.0000	0.7020	4.3616	5.0636	2.6100e-003	1.5700e-003	5.5960
Total	**0.2811**	**0.8954**	**1.6575**	**3.5500e-003**	**0.2186**	**8.8400e-003**	**0.2275**	**0.0588**	**8.4800e-003**	**0.0673**	**12.7211**	**406.3750**	**419.0960**	**0.7392**	**2.6200e-003**	**438.3559**

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	0.1001					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	2.4600e-003	0.0224	0.0188	1.3000e-004		1.7000e-003	1.7000e-003		1.7000e-003	1.7000e-003	0.0000	88.4168	88.4168	3.3600e-003	1.0500e-003	88.8126
Mobile	0.1786	0.8731	1.6388	3.4200e-003	0.2186	7.1400e-003	0.2258	0.0588	6.7800e-003	0.0656	0.0000	313.5966	313.5966	0.0230	0.0000	314.1706
Waste						0.0000	0.0000		0.0000	0.0000	12.0191	0.0000	12.0191	0.7103	0.0000	29.7768
Water						0.0000	0.0000		0.0000	0.0000	0.7020	4.3616	5.0636	2.6100e-003	1.5700e-003	5.5960
Total	**0.2811**	**0.8954**	**1.6575**	**3.5500e-003**	**0.2186**	**8.8400e-003**	**0.2275**	**0.0588**	**8.4800e-003**	**0.0673**	**12.7211**	**406.3750**	**419.0960**	**0.7392**	**2.6200e-003**	**438.3559**

	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**

3.0 Construction Detail

Construction Phase

2401 Broadway - Existing Uses - Alameda County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	11/14/2017	11/27/2017	5	10	
2	Building Construction	Building Construction	1/24/2017	10/30/2017	5	200	
3	Demolition	Demolition	12/18/2016	1/13/2017	5	20	
4	Grading	Grading	1/18/2017	1/23/2017	5	4	
5	Paving	Paving	10/31/2017	11/13/2017	5	10	
6	Site Preparation	Site Preparation	1/14/2017	1/17/2017	5	2	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 33,900; Non-Residential Outdoor: 11,300; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

2401 Broadway - Existing Uses - Alameda County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	8.00	46	0.45

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
Architectural Coating	1	1.00	0.00		10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	7.00	4.00		10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00		10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00		10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00		10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00		10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 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	0.1178					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6600e-003	0.0109	9.3400e-003	1.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	1.2766	1.2766	1.3000e-004	0.0000	1.2800
Total	**0.1195**	**0.0109**	**9.3400e-003**	**1.0000e-005**		**8.7000e-004**	**8.7000e-004**		**8.7000e-004**	**8.7000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.3000e-004**	**0.0000**	**1.2800**

3.2 Architectural Coating - 2017

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	2.0000e-005	2.0000e-005	1.9000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0384	0.0384	0.0000	0.0000	0.0384
Total	**2.0000e-005**	**2.0000e-005**	**1.9000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0384**	**0.0384**	**0.0000**	**0.0000**	**0.0384**

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	0.1178					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6600e-003	0.0109	9.3400e-003	1.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	1.2766	1.2766	1.3000e-004	0.0000	1.2800
Total	**0.1195**	**0.0109**	**9.3400e-003**	**1.0000e-005**		**8.7000e-004**	**8.7000e-004**		**8.7000e-004**	**8.7000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.3000e-004**	**0.0000**	**1.2800**

3.2 Architectural Coating - 2017

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	2.0000e-005	2.0000e-005	1.9000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0384	0.0384	0.0000	0.0000	0.0384
Total	**2.0000e-005**	**2.0000e-005**	**1.9000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0384**	**0.0384**	**0.0000**	**0.0000**	**0.0384**

3.3 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	0.2965	1.9237	1.4357	2.2000e-003		0.1231	0.1231		0.1188	0.1188	0.0000	185.4162	185.4162	0.0390	0.0000	186.3909
Total	**0.2965**	**1.9237**	**1.4357**	**2.2000e-003**		**0.1231**	**0.1231**		**0.1188**	**0.1188**	**0.0000**	**185.4162**	**185.4162**	**0.0390**	**0.0000**	**186.3909**

3.3 Building Construction - 2017

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	2.2700e-003	0.0574	0.0137	1.1000e-004	2.6300e-003	4.9000e-004	3.1100e-003	7.6000e-004	4.7000e-004	1.2300e-003	0.0000	10.7595	10.7595	7.4000e-004	0.0000	10.7779
Worker	3.3000e-003	2.6500e-003	0.0263	6.0000e-005	5.5300e-003	4.0000e-005	5.5800e-003	1.4700e-003	4.0000e-005	1.5100e-003	0.0000	5.3748	5.3748	1.9000e-004	0.0000	5.3794
Total	**5.5700e-003**	**0.0600**	**0.0399**	**1.7000e-004**	**8.1600e-003**	**5.3000e-004**	**8.6900e-003**	**2.2300e-003**	**5.1000e-004**	**2.7400e-003**	**0.0000**	**16.1342**	**16.1342**	**9.3000e-004**	**0.0000**	**16.1574**

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	0.2965	1.9237	1.4357	2.2000e-003		0.1231	0.1231		0.1188	0.1188	0.0000	185.4160	185.4160	0.0390	0.0000	186.3907
Total	**0.2965**	**1.9237**	**1.4357**	**2.2000e-003**		**0.1231**	**0.1231**		**0.1188**	**0.1188**	**0.0000**	**185.4160**	**185.4160**	**0.0390**	**0.0000**	**186.3907**

3.3 Building Construction - 2017

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	2.2700e-003	0.0574	0.0137	1.1000e-004	2.6300e-003	4.9000e-004	3.1100e-003	7.6000e-004	4.7000e-004	1.2300e-003	0.0000	10.7595	10.7595	7.4000e-004	0.0000	10.7779
Worker	3.3000e-003	2.6500e-003	0.0263	6.0000e-005	5.5300e-003	4.0000e-005	5.5800e-003	1.4700e-003	4.0000e-005	1.5100e-003	0.0000	5.3748	5.3748	1.9000e-004	0.0000	5.3794
Total	**5.5700e-003**	**0.0600**	**0.0399**	**1.7000e-004**	**8.1600e-003**	**5.3000e-004**	**8.6900e-003**	**2.2300e-003**	**5.1000e-004**	**2.7400e-003**	**0.0000**	**16.1342**	**16.1342**	**9.3000e-004**	**0.0000**	**16.1574**

3.4 Demolition - 2016

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	0.0148	0.1416	0.0789	1.2000e-004		8.9400e-003	8.9400e-003		8.3600e-003	8.3600e-003	0.0000	11.1196	11.1196	2.8000e-003	0.0000	11.1897
Total	**0.0148**	**0.1416**	**0.0789**	**1.2000e-004**		**8.9400e-003**	**8.9400e-003**		**8.3600e-003**	**8.3600e-003**	**0.0000**	**11.1196**	**11.1196**	**2.8000e-003**	**0.0000**	**11.1897**

3.4 Demolition - 2016

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	3.5000e-004	2.8000e-004	2.7800e-003	1.0000e-005	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.5115	0.5115	2.0000e-005	0.0000	0.5120
Total	**3.5000e-004**	**2.8000e-004**	**2.7800e-003**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.5115**	**0.5115**	**2.0000e-005**	**0.0000**	**0.5120**

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	0.0148	0.1416	0.0789	1.2000e-004		8.9400e-003	8.9400e-003		8.3600e-003	8.3600e-003	0.0000	11.1196	11.1196	2.8000e-003	0.0000	11.1897
Total	**0.0148**	**0.1416**	**0.0789**	**1.2000e-004**		**8.9400e-003**	**8.9400e-003**		**8.3600e-003**	**8.3600e-003**	**0.0000**	**11.1196**	**11.1196**	**2.8000e-003**	**0.0000**	**11.1897**

3.4 Demolition - 2016

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	3.5000e-004	2.8000e-004	2.7800e-003	1.0000e-005	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.5115	0.5115	2.0000e-005	0.0000	0.5120
Total	**3.5000e-004**	**2.8000e-004**	**2.7800e-003**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.5115**	**0.5115**	**2.0000e-005**	**0.0000**	**0.5120**

3.4 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					
Off-Road	0.0138	0.1338	0.0778	1.2000e-004		8.2400e-003	8.2400e-003		7.7000e-003	7.7000e-003	0.0000	10.9834	10.9834	2.7800e-003	0.0000	11.0528
Total	**0.0138**	**0.1338**	**0.0778**	**1.2000e-004**		**8.2400e-003**	**8.2400e-003**		**7.7000e-003**	**7.7000e-003**	**0.0000**	**10.9834**	**10.9834**	**2.7800e-003**	**0.0000**	**11.0528**

3.4 Demolition - 2017

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	3.1000e-004	2.5000e-004	2.4400e-003	1.0000e-005	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4991	0.4991	2.0000e-005	0.0000	0.4995
Total	**3.1000e-004**	**2.5000e-004**	**2.4400e-003**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4991**	**0.4991**	**2.0000e-005**	**0.0000**	**0.4995**

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	0.0138	0.1338	0.0778	1.2000e-004		8.2400e-003	8.2400e-003		7.7000e-003	7.7000e-003	0.0000	10.9834	10.9834	2.7800e-003	0.0000	11.0528
Total	**0.0138**	**0.1338**	**0.0778**	**1.2000e-004**		**8.2400e-003**	**8.2400e-003**		**7.7000e-003**	**7.7000e-003**	**0.0000**	**10.9834**	**10.9834**	**2.7800e-003**	**0.0000**	**11.0528**

3.4 Demolition - 2017

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	3.1000e-004	2.5000e-004	2.4400e-003	1.0000e-005	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4991	0.4991	2.0000e-005	0.0000	0.4995
Total	**3.1000e-004**	**2.5000e-004**	**2.4400e-003**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4991**	**0.4991**	**2.0000e-005**	**0.0000**	**0.4995**

3.5 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					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2000e-003	0.0366	0.0141	3.0000e-005		1.7500e-003	1.7500e-003		1.6100e-003	1.6100e-003	0.0000	2.6216	2.6216	8.0000e-004	0.0000	2.6417
Total	**3.2000e-003**	**0.0366**	**0.0141**	**3.0000e-005**	**9.8300e-003**	**1.7500e-003**	**0.0116**	**5.0500e-003**	**1.6100e-003**	**6.6600e-003**	**0.0000**	**2.6216**	**2.6216**	**8.0000e-004**	**0.0000**	**2.6417**

3.5 Grading - 2017

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	8.0000e-005	6.0000e-005	6.0000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1229	0.1229	0.0000	0.0000	0.1230
Total	**8.0000e-005**	**6.0000e-005**	**6.0000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1229**	**0.1229**	**0.0000**	**0.0000**	**0.1230**

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					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2000e-003	0.0366	0.0141	3.0000e-005		1.7500e-003	1.7500e-003		1.6100e-003	1.6100e-003	0.0000	2.6216	2.6216	8.0000e-004	0.0000	2.6417
Total	**3.2000e-003**	**0.0366**	**0.0141**	**3.0000e-005**	**9.8300e-003**	**1.7500e-003**	**0.0116**	**5.0500e-003**	**1.6100e-003**	**6.6600e-003**	**0.0000**	**2.6216**	**2.6216**	**8.0000e-004**	**0.0000**	**2.6417**

3.5 Grading - 2017

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	8.0000e-005	6.0000e-005	6.0000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1229	0.1229	0.0000	0.0000	0.1230
Total	**8.0000e-005**	**6.0000e-005**	**6.0000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1229**	**0.1229**	**0.0000**	**0.0000**	**0.1230**

3.6 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	6.0000e-003	0.0613	0.0458	7.0000e-005		3.7100e-003	3.7100e-003		3.4200e-003	3.4200e-003	0.0000	6.2044	6.2044	1.8700e-003	0.0000	6.2510
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.0000e-003**	**0.0613**	**0.0458**	**7.0000e-005**		**3.7100e-003**	**3.7100e-003**		**3.4200e-003**	**3.4200e-003**	**0.0000**	**6.2044**	**6.2044**	**1.8700e-003**	**0.0000**	**6.2510**

3.6 Paving - 2017

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	3.1000e-004	2.5000e-004	2.4400e-003	1.0000e-005	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4991	0.4991	2.0000e-005	0.0000	0.4995
Total	**3.1000e-004**	**2.5000e-004**	**2.4400e-003**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4991**	**0.4991**	**2.0000e-005**	**0.0000**	**0.4995**

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	6.0000e-003	0.0613	0.0458	7.0000e-005		3.7100e-003	3.7100e-003		3.4200e-003	3.4200e-003	0.0000	6.2044	6.2044	1.8700e-003	0.0000	6.2510
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.0000e-003**	**0.0613**	**0.0458**	**7.0000e-005**		**3.7100e-003**	**3.7100e-003**		**3.4200e-003**	**3.4200e-003**	**0.0000**	**6.2044**	**6.2044**	**1.8700e-003**	**0.0000**	**6.2510**

3.6 Paving - 2017

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	3.1000e-004	2.5000e-004	2.4400e-003	1.0000e-005	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4991	0.4991	2.0000e-005	0.0000	0.4995
Total	**3.1000e-004**	**2.5000e-004**	**2.4400e-003**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4991**	**0.4991**	**2.0000e-005**	**0.0000**	**0.4995**

3.7 Site Preparation - 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					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9300e-003	0.0222	8.4000e-003	2.0000e-005		1.0500e-003	1.0500e-003		9.6000e-004	9.6000e-004	0.0000	1.6005	1.6005	4.9000e-004	0.0000	1.6128
Total	**1.9300e-003**	**0.0222**	**8.4000e-003**	**2.0000e-005**	**5.8000e-003**	**1.0500e-003**	**6.8500e-003**	**2.9500e-003**	**9.6000e-004**	**3.9100e-003**	**0.0000**	**1.6005**	**1.6005**	**4.9000e-004**	**0.0000**	**1.6128**

3.7 Site Preparation - 2017

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	4.0000e-005	3.0000e-005	3.0000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0614	0.0614	0.0000	0.0000	0.0615
Total	**4.0000e-005**	**3.0000e-005**	**3.0000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0614**	**0.0614**	**0.0000**	**0.0000**	**0.0615**

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					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9300e-003	0.0222	8.4000e-003	2.0000e-005		1.0500e-003	1.0500e-003		9.6000e-004	9.6000e-004	0.0000	1.6005	1.6005	4.9000e-004	0.0000	1.6128
Total	**1.9300e-003**	**0.0222**	**8.4000e-003**	**2.0000e-005**	**5.8000e-003**	**1.0500e-003**	**6.8500e-003**	**2.9500e-003**	**9.6000e-004**	**3.9100e-003**	**0.0000**	**1.6005**	**1.6005**	**4.9000e-004**	**0.0000**	**1.6128**

3.7 Site Preparation - 2017

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	4.0000e-005	3.0000e-005	3.0000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0614	0.0614	0.0000	0.0000	0.0615
Total	**4.0000e-005**	**3.0000e-005**	**3.0000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0614**	**0.0614**	**0.0000**	**0.0000**	**0.0615**

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	0.1786	0.8731	1.6388	3.4200e-003	0.2186	7.1400e-003	0.2258	0.0588	6.7800e-003	0.0656	0.0000	313.5966	313.5966	0.0230	0.0000	314.1706
Unmitigated	0.1786	0.8731	1.6388	3.4200e-003	0.2186	7.1400e-003	0.2258	0.0588	6.7800e-003	0.0656	0.0000	313.5966	313.5966	0.0230	0.0000	314.1706

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	306.90	306.90	153.76	283,936	283,936
Regional Shopping Center	177.00	207.18	104.65	299,777	299,777
Total	483.90	514.08	258.41	583,713	583,713

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
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00	21	51	28
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.549789	0.045822	0.190768	0.114406	0.020727	0.005237	0.020995	0.039952	0.001967	0.003604	0.005612	0.000271	0.000852
Regional Shopping Center	0.549789	0.045822	0.190768	0.114406	0.020727	0.005237	0.020995	0.039952	0.001967	0.003604	0.005612	0.000271	0.000852

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	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	64.0788	64.0788	2.9000e-003	6.0000e-004	64.3299
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	64.0788	64.0788	2.9000e-003	6.0000e-004	64.3299
NaturalGas Mitigated	2.4600e-003	0.0224	0.0188	1.3000e-004		1.7000e-003	1.7000e-003		1.7000e-003	1.7000e-003	0.0000	24.3381	24.3381	4.7000e-004	4.5000e-004	24.4827
NaturalGas Unmitigated	2.4600e-003	0.0224	0.0188	1.3000e-004		1.7000e-003	1.7000e-003		1.7000e-003	1.7000e-003	0.0000	24.3381	24.3381	4.7000e-004	4.5000e-004	24.4827

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					
Automobile Care Center	417880	2.2500e-003	0.0205	0.0172	1.2000e-004		1.5600e-003	1.5600e-003		1.5600e-003	1.5600e-003	0.0000	22.2997	22.2997	4.3000e-004	4.1000e-004	22.4322
Regional Shopping Center	38198	2.1000e-004	1.8700e-003	1.5700e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	2.0384	2.0384	4.0000e-005	4.0000e-005	2.0505
Total		**2.4600e-003**	**0.0224**	**0.0188**	**1.3000e-004**		**1.7000e-003**	**1.7000e-003**		**1.7000e-003**	**1.7000e-003**	**0.0000**	**24.3381**	**24.3381**	**4.7000e-004**	**4.5000e-004**	**24.4827**

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					
Automobile Care Center	417880	2.2500e-003	0.0205	0.0172	1.2000e-004		1.5600e-003	1.5600e-003		1.5600e-003	1.5600e-003	0.0000	22.2997	22.2997	4.3000e-004	4.1000e-004	22.4322
Regional Shopping Center	38198	2.1000e-004	1.8700e-003	1.5700e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	2.0384	2.0384	4.0000e-005	4.0000e-005	2.0505
Total		**2.4600e-003**	**0.0224**	**0.0188**	**1.3000e-004**		**1.7000e-003**	**1.7000e-003**		**1.7000e-003**	**1.7000e-003**	**0.0000**	**24.3381**	**24.3381**	**4.7000e-004**	**4.5000e-004**	**24.4827**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	134075	39.0040	1.7600e-003	3.6000e-004	39.1568
Regional Shopping Center	86194	25.0748	1.1300e-003	2.3000e-004	25.1731
Total		**64.0788**	**2.8900e-003**	**5.9000e-004**	**64.3299**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	134075	39.0040	1.7600e-003	3.6000e-004	39.1568
Regional Shopping Center	86194	25.0748	1.1300e-003	2.3000e-004	25.1731
Total		**64.0788**	**2.8900e-003**	**5.9000e-004**	**64.3299**

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	0.1001					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.1001					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0.0118					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0883					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1000**					**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0118					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0883					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1000**					**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.0636	2.6100e-003	1.5700e-003	5.5960
Unmitigated	5.0636	2.6100e-003	1.5700e-003	5.5960

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	1.45826 / 0.893771	3.7214	1.9200e-003	1.1500e-003	4.1127
Regional Shopping Center	0.525915 / 0.322335	1.3421	6.9000e-004	4.2000e-004	1.4833
Total		**5.0636**	**2.6100e-003**	**1.5700e-003**	**5.5960**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	1.45826 / 0.893771	3.7214	1.9200e-003	1.1500e-003	4.1127
Regional Shopping Center	0.525915 / 0.322335	1.3421	6.9000e-004	4.2000e-004	1.4833
Total		**5.0636**	**2.6100e-003**	**1.5700e-003**	**5.5960**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	12.0191	0.7103	0.0000	29.7768
Unmitigated	12.0191	0.7103	0.0000	29.7768

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	59.21	12.0191	0.7103	0.0000	29.7768
Regional Shopping Center	7.46	0.0000	0.0000	0.0000	0.0000
Total		**12.0191**	**0.7103**	**0.0000**	**29.7768**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	59.21	12.0191	0.7103	0.0000	29.7768
Regional Shopping Center	7.46	0.0000	0.0000	0.0000	0.0000
Total		**12.0191**	**0.7103**	**0.0000**	**29.7768**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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APPENDIX B
Historic Resource Evaluation

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CAREY & CO. | A TreanorHL Company

August 29, 2017

2401 Broadway
Oakland, California

HISTORIC RESOURCE & PROJECT EVALUATION

INTRODUCTION

Signature Development Group is proposing a development project located along Broadway between 24th and 25th Streets, within the boundaries of the National Register-eligible 25th Street Garage District and in an Area of Primary Importance (API) as determined by the City of Oakland. The 2401 Broadway and 437 25th Street properties are within the development site, and the 444 24th Street and 443 25th Street properties are located immediately adjacent. This report reexamines the potential historic significance of the subject properties and evaluates the proposed project for conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties (Standards), including compatibility with the character-defining features of the historic district.

METHODOLOGY

Carey & Co. conducted a site visit on September 28, 2016 to evaluate the existing conditions of the historic district. Additional research was completed at the Oakland Planning Department and the DPR form for the 25th Street Garage District was reviewed to identify the significance and character-defining features of the district. These activities were undertaken to address, in part, the Broadway Valdez District Specific Plan's Mitigation Measure CUL-1.b):

> "Although the Plan Area has been surveyed by the City of Oakland's OCHS [Oakland Cultural Heritage Survey] and as part of the Broadway Valdez Specific Plan effort by ESA in 2009, evaluations and ratings may change with time and other conditions. There may be previously unidentified historical resources which would be affected by future development activities. For any future projects on or immediately adjacent to buildings 50 years old or older between 2013 and 2038, which is the build-out horizon for the Specific Plan (i.e., by the end of the Plan period, buildings constructed prior to 1988), the City shall require specific surveys and evaluations of such properties to determine their potential historical significance at the federal, state, and local levels. Intensive-level surveys and evaluations shall be completed by a qualified architectural historian who meets the *Secretary of the Interior's Standards*."[1]

We also reviewed a set of design documents from BAR Architects including graphic representations and design drawings (dated July 25, 2017). Based on the findings, the proposed

[1] ESA, *Broadway Valdez District Specific Plan, Draft Environmental Impact Report,* September 2013, page 4.4-38.

development's potential effects to the District are discussed below. The project was evaluated for its compatibility with the district in terms of size and scale, massing, composition, materials, and features. This evaluation takes into consideration the Broadway Valdez District Specific Plan's Mitigation Measure CUL-1.a) Avoidance, Adaptive Reuse, or Appropriate Relocation of Historically Significant Structures.

PROJECT DESCRIPTION

The U-shape project site is located on the east end of the block bounded by 25th Street to the north, Broadway to the east, 24th Street to the south and Telegraph Avenue to the west. Except for the parking lot located at the southwest corner of Broadway and 25th Street, the project site is located within the city's 25th Street Garage District. The project site is comprised of (1) a noncontributing one-story office/service building at 2401 Broadway, (2) a contributing one story plus mezzanine building at 437 25th Street, and (3) two auto-storage lots (one noncontributing and the other outside the district).

Table 1. Properties within and around the project area.

Address	Project Area	Current use	Proposed use	25th Street Garage District
2401 Broadway	Within	Commercial/Light industrial	Mixed-use	Noncontributor
2407-2435 Broadway	Within	Auto-storage lot	Mixed-use	Outside the district
422 24th Street	Within	Auto-storage lot	Mixed-use	Noncontributor
444 24th Street	Outside	Warehouse	NA	Contributor
427-433 25th Street	Outside	Auto-storage lot	NA	Outside the district
437 25th Street	Within	Auto-storage	Mixed-use	Contributor
443 25th Street	Outside	Warehouse	NA	Contributor

Figure 1. Aerial view of the subject lots, the porject area outlined in dashed red line (edited from Google Earth, retrieved January 4, 2017).

The proposed project would retain and restore the 24th Street and Broadway façades of 2401 Broadway and construct 216,000 sf of new development including hotel, residential and commercial uses. At 2401 Broadway, a seven-story, 73'-6" tall new mixed-used building would be constructed and set back above the existing façade. The rest of the structure would be built almost up against the front lot line to the north along Broadway. Along 25th Street, the seven-story building would wrap around, terminating at a parking lot that is not included in the development site. Along 24th Street, the seven-story building would also wrap and the façade of 2401 Broadway would be restored with the new seven-story building constructed behind and above it. About three-quarters of the way to the west along 24th Street, the building would step down to four stories or about 42 feet. This height would continue for the remainder of the project along 24th Street.

Along 25th Street, to the west side of the parking lot that is not in the project, is 437 25th Street. This structure will be retained with a new two-story, roof top addition that would be approximately 50 feet at the top of the roof.

Along the primary facades on Broadway and partially on 24th and 25th Streets, the design would include retail uses with glazed storefronts on the ground floor, and hotel and residential uses with punched openings on the upper floors. The design would restore and incorporate the façades of the existing buildings. The mass of the proposed building would be broken up with changes in massing, wall planes, materials/color, and fenestration pattern.

Figures 2 and 3. Perspective views of the proposed building; view from southeast (top) and from northeast (bottom).

Figure 4. Exterior elevations of the proposed building.

25th STREET GARAGE DISTRICT SUMMARY

The 25th Street Garage District generally occupies most of the both sides of the block of 25th Street between Broadway and Telegraph Avenue, and parts of the east end of the same blocks on 24th and 26th Streets. The 1985 DPR Form notes that the buildings in the District fill their lots with no setback and are one-story brick truss-roofed garages built between 1920 and 1929. Elevations are typically polychrome or ornamental bond pressed brick with stepped or peaked parapets, multi-lite metal-sash windows, and garage doors. Interiors feature concrete floors, hollow tile side walls, and concrete or wood posts supporting the roof beams.[2]

[2] City of Oakland, *Oakland Cultural Heritage Survey, 25th Street Garage District,* June 30, 1985, page 1.

Oakland's center for auto sales (on the avenues) and service (concentrated on the side streets) shifted to Upper Broadway beyond 20th Street in the early 1910s and continued through the 1920s. The development in the district stopped after 1929 until the late 1940s.[3] The district was found eligible for the National Register "as a concentrated, intact, and homogenous group of buildings of a distinctive type, dating from a specific period of Oakland's economic development." The DPR form indicates that of the 29 properties in the district, 24 are contributors and 5 are non-contributors (two would contribute if restored; three were too recent in date and type in 1985).[4] The period of significance is from 1920 to 1929.

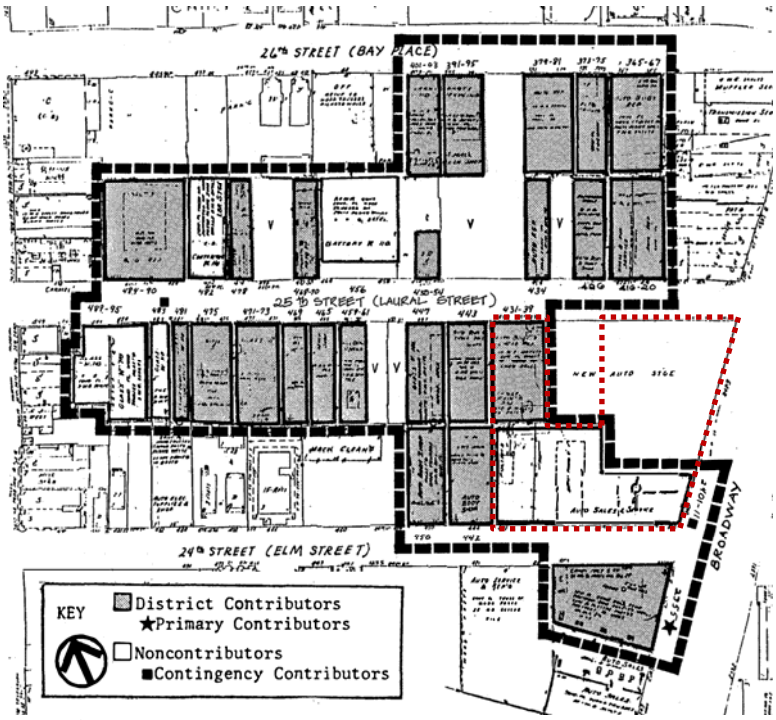


Figure 5. Map of the 25th Street Garage District, the porject area outlined in dashed red line (cropped and edited from *25th Street Garage District,* 1985).

Character-Defining Features

The following character defining features were culled from the DPR 523 District Record Form and direct observation:

- One-story, single-frontage, truss-roofed massing
- Building facades flush with the street
- Polychrome or ornamental bond brick on primary elevations
- Stepped or peaked parapets
- Two or three large bays
- Multi-lite metal-sash windows and garage doors
- Minimal ornamentation

Integrity

The 25th Street Garage District retains a high degree of integrity. The district remains in the location where it was first developed. The majority of the individual properties dates from the

[3] Ibid., pages 5-8.
[4] Ibid., page 2.

period of significance (1920-1929) and retains sufficient individual integrity to be contributors. Some buildings have received alterations including change of fenestration pattern, parapet infills or door replacements, but in many cases this work does not detract from the buildings' contributory status. Contributors retain the majority of visible exterior materials (brick, metal, glass) that were used in construction. Although one district contributor was demolished and three new buildings were constructed since 1985, the setting is mostly intact. The district is largely associated with Oakland's auto history. Currently, the service/garage-related nature of the area is evolving into more of a mixed-use character, but the association has not been diminished. Overall, the 25th Street Garage District maintains a high degree of integrity.

Two properties, 2401 Broadway (noncontributing) and 437 25th Street (contributing), are within the boundaries of the 25th Street Garage District and the proposed development site. The Oakland Cultural Heritage Survey rated 2401 Broadway as Eb-1* and as a contingency contributor to the district; a potential contributor if restored. The building has not received any restoration or major exterior alteration since then; therefore, retains its noncontributory status. 437 25th Street is rated as C1+ and is a district contributor that retains a high degree of integrity to maintain its status.

Two contributing properties, 444 24th Street and 443 25th Street, are immediately adjacent to the development site. They are district contributors that retain a high degree of integrity to maintain their statuses. The contributing buildings within the project site (i.e. 437 25th Street) and adjacent to the project site (444 24th Street and 443 25th Street) retain their character-defining features, such as their one-story massing, brick elevations, and shaped peaked or stepped parapets.

SECRETARY OF THE INTERIOR'S STANDARDS ANALYSIS

In case of new construction, the Secretary of the Interior's Standards are applied to determine the compatibility of the proposed project with the character-defining features and contributory properties of the 25th Street Garage District. The proposed project should be compatible with the district, and especially with the surrounding buildings.

The proposed project interprets the character-defining features of the district using a contemporary language that assures both differentiation and compatibility. The following evaluation addresses the compatibility of the proposed building's design in relation to the character defining features of the 25th Street Garage District. The proposed project conforms to the Standards as follows.

Standard 1: *A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.*

The project at 2401 Broadway includes a multi-story mixed-use building. Although mixed-use buildings are not typical of the historic district, they are located along Broadway, so this use is consistent with the Broadway Valdez District Specific Plan and existing uses in area. The proposed project would also continue to serve the local population and contribute to the feeling of the district. Therefore, the proposed project complies with Rehabilitation Standard 1.

Standard 2: *The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.*

The proposed project would not remove historic materials or alter features and spaces that characterize the 25th Street Garage District. Therefore, the historic character of the District would be retained. The proposed project complies with Rehabilitation Standard 2.

Standard 3: *Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.*

The proposed design does not include or incorporate any false-historic features and would be contemporary in character. Therefore, it complies with Rehabilitation Standard 3.

Standard 4: *Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.*

Not applicable.

Standard 5: *Distinctive features, finishes, and construction techniques or examples of fine craftsmanship that characterize a property will be preserved.*

Not applicable.

Standard 6: *Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacements of a distinctive feature, the new feature will match the old in design, color, texture and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.*

The proposed design would rehabilitate the front façade of 437 25th Street. The large street level openings, the mezzanine windows, the peaked parapet, and the original brickwork will be preserved. The easternmost window will be replaced by a storefront and the westernmost window with a garage door, both of which would be compatible with the building and the district. The rehabilitation would not affect the building's or the district's overall character and historical significance. Therefore, it complies with Rehabilitation Standard 6.

Standard 7: *Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.*

Not applicable.

Standard 8: *Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures will be undertaken.*

If cultural resources are discovered during ground disturbance activities, the Oakland Standard Conditions of Approval for Archaeological, Paleontological and Human Remains would be implemented.

Standard 9: *New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.*

The proposed project would be compatible with the district in terms of size, scale, massing, composition, features, and materials.

Size and Scale

One-story massing is a character-defining feature of the 25th Street Garage District. Most of the buildings in the district are one- or two-story tall with the exception of the four-story building located at 2355 Broadway. The proposed development would extend seven stories on Broadway with lower buildings along 24th and 25th Street. Although at seven stories the height of the building would result in a significantly taller building than those characteristic of the historic district, this height is along Broadway and responds to the scale and building forms of this prominent city artery. The building steps down to four stories (42-50 feet) towards west along 24th and 25th streets, which creates a transition from Broadway into the district—better meeting its neighbors and the scale of the district. The additional height along Broadway would not impair the ability of the historic district to continue to convey its historic significance.

Massing and Composition

Most of the contributing buildings in the district occupy the entire width of the lot and create continuous street walls. The proposed massing and elevations will address this feature. The east, north, and south elevations are segregated horizontally between a tall ground floor commercial story with storefronts, and hotel or residential units above. The existing four-story building at 2355 Broadway is similar in its massing and composition. The vertical articulation of the facades will break up the massing to better relate to its neighbors. The project consists of retaining and rehabilitating the east and south façades of 2401 Broadway including a vertical addition set back slightly from both. At 437 25th Street, building massing is retained and the addition is set back from the primary elevation to minimize the visual effect on the historic district and the contributing resource.

The project consists of retaining and rehabilitating the east and south façades of 2401 Broadway including a vertical addition set back slightly from both. At 437 25th Street, building massing is retained and the addition is set back 30 feet from the primary elevation to minimize the visual effect on the historic district and the contributing resource. The proposed new building façades are set back from the existing/restored façades to reinforce the fact that development has occurred over time. But in other portions of the proposed project, in non-historic building locations, the façades are moved out to hold the street frontage, which is also a character defining attribute of the district.

The proposed building massing contributes to the character of the immediate vicinity by holding the street frontage, and having active uses at the ground level—retail, restaurant, hotel and residential entries. In addition, proposed façade design changes correspond with changes in use within building or to demarcate significant points of entry to the building interior.

Features
The proposed design does not include or incorporate any false-historic features and would be contemporary in character. The buildings have flat roofs with straight parapets. Although not characteristic, the proposed sawtooth roof at 437 25th Street would not impair the district's significance. The proposed large openings and storefronts on the first floors are typical of the district. At 437 25th Street, the addition includes proposed multi-lite industrial windows that are compatible with the contributing building and the district.

Materials
The district is characterized by common materials such as polychrome or ornamental bond pressed brick, multi-lite metal-sash windows, and garage doors. The proposed building will be constructed of high-quality materials such as brick, concrete, stucco, metal panel cladding, and glazing which are all found in the district and the vicinity, and are therefore compatible.

The proposed building would be a contemporary, but compatible design that references the character-defining features of the surrounding historic district and the neighborhood. It is compatible with the district in terms of size and scale, composition, features, and materials. The massing is compatible in terms of lot occupancy, solid-to-void ratio, and façade articulation. Therefore, it complies with Rehabilitation Standard 9.

Standard 10: *New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.*

If new construction associated with the proposed project were to be removed in the future, the essential form and integrity of the 25th Street Garage District would be unimpaired. Therefore, the proposed project complies with Rehabilitation Standard 10.

In conclusion, 2401 Broadway is a non-contributor and the proposed work would not change its status. 437 25th Street is a contributor, and the proposed roof demolition, façade work, and two-story addition will not diminish its status as a contributor. The building's character-defining features, including the peaked parapet, large openings, and brick construction, will be preserved. Neither the demolition of 2401 Broadway nor the construction of the proposed project would cause the district to lose its current historic status. The demolition of a non-contributing property would not significantly affect the overall character of the district and would not materially alter the district's integrity or eligibility as an API. The replacement project would be a contemporary, but compatible design that references the character-defining features of the historic district. The project will be in conformance with the Secretary's Standards.

POTENTIAL IMPACTS

The proposed development will retain and rehabilitate the front façades of 2401 Broadway and restore and preserve the building at 437 25th Street, but include an addition to the roof of this structure. Both buildings will receive partial demolitions and vertical additions. 2401 Broadway is a noncontributor and the proposed work would not change its status. 437 25th Street is a contributor, and the proposed roof demolition, façade work, and two-story addition will not diminish its status as a contributor. The building's character-defining features, including the peaked parapet, large openings, and brick construction, will be preserved.

The proposed development is immediately adjacent to 444 24th Street and 443 25th Street, contributors to the district. Construction of the project may have a direct and indirect impact on these buildings by construction activies (see the City of Oakland's SCA 57, *Vibrations Adjacent to Historic Structures*).

Integrity of the 25th Street Garage District

The aspects of integrity, as defined and applied to the proposed intrusions upon the 25th Street Garage District, are as follows:

- The 25th Street Garage District will remain in the location where it was first developed; therefore, retains integrity of location.
- The District has been subject to a number of design alterations since its 1985 documentation. Three new buildings were constructed (448 25th St, 478 25th St, 385 26th St), one contributor at 450 25th Street was demolished, and architectural features of six contributors were altered. Common alterations include fenestration pattern, replacement doors (i.e. garage doors) and parapet infill. Majority of the buildings still retain their character-defining features, so the integrity of design remains high. Although additional construction of a large-scale project within the district and partial demolitions of contributors will have an effect on the district's overall design, the proposed development will not impair the character-defining features of the district. Therefore, the district will continue to communicate its integrity of design.
- Setting is the physical environment of a historic property, and it refers to the character of the place in which the property played its historical role. Contributors exist in the similar physical conditions under which they were documented in 1985, including: topography, block and lot layout, street design, neighborhood composition of commercial frontage on Broadway and service/industrial frontage on numbered streets, and relationships between buildings. The proposed development would not alter these conditions; therefore, integrity of setting is retained.
- The most common material of the District is pressed brick, metal and glass. Contributors retain the majority of visible exterior materials that were used in construction**.** The proposed development would use compatible materials not to affect the material integrity of the district.
- Evidence of original workmanship still exists on district contributors. The proposed development would not affect the workmanship of the existing buildings.
- Contributors retain design, materials, workmanship, and setting that cumulatively relate the feeling of the 1920s. The proposed development would retain the existing elevations of the contributors and the new construction would be compatible with the district. Therefore, the integrity of feeling would not be impaired.
- The District is largely associated with Oakland's auto history. Although the service/garage-related nature of the area is evolving into more of a mixed-use character, the association has not been diminished. The proposed mixed-use building would include commercial uses on the first floor, which would not diminish the integrity of association.

CITY OF OAKLAND STANDARD CONDITION OF APPROVAL

The proposed project is being constructed immediately adjacent to two contributing resources to the 25th Street Garage District. As a result, there could be direct impacts from construction activities such as excavation undermining existing foundations, construction equipment coming in contact with existing walls, demolition or other construction activities. City of Oakland Standard Condition of Approval (SCA) NOI-7: *Vibration Impacts on Adjacent Historic Structures or Vibration-Sensitive Activities* (see 2401 Broadway Project CEQA Analysis Attachment A) would be applicable to the proposed project to address potential direct and indirect impacts from construction activities:

> SCA NOI-7 (Standard Condition of Approval 66): *Vibration Impacts on Adjacent Historic Structures or Vibration-Sensitive Activities*
> Requirement: The project applicant shall submit a Vibration Analysis prepared by an acoustical and/or structural engineer or other appropriate qualified professional for City review and approval that establishes pre-construction baseline conditions and threshold levels of vibration that could damage the structure and/or substantially interfere with activities located at 444 24th Street and 443 25th Street. The Vibration Analysis shall identify design means and methods of construction that shall be utilized in order to not exceed the thresholds. The applicant shall implement the recommendations during construction.

As a part of implementing this SCA, the project applicant has proposed to prepare a Historic Property Protection Plan in conjunction with construction plans. Prior to the start of the proposed development, the project applicant will hire a historical architect and a structural engineer to undertake an existing condition study of 444 24th Street, 437 25th Street and 443 25th Street.5 The purpose of the study would be to establish the baseline condition of the buildings prior to construction, including the location and extent of any visible cracks or spalls. The documentation would take the form of written descriptions and photographs, and would include those physical characteristics of the resources that convey their historic significance and that justify their inclusion on, or eligibility for inclusion on, the National Register, California Register, and local register. Implementation of the Historic Property Protection Plan would include

1a. The historical architect and structural engineer shall monitor the three buildings during construction and any changes to existing conditions would be reported, including, but not limited to, expansion of existing cracks, new spalls, or other exterior deterioration. Monitoring reports shall be submitted to the general contractor in charge of construction and a designated representative of the project applicant on a periodic basis. The structural engineer shall consult with the historical architect, especially if any problems with character-defining features of a historic resource are discovered. If, in the opinion of the structural engineer in consultation with the historical architect, substantial adverse effects to historic resources related to construction activities are found during construction, the monitoring team shall inform the general contractor in charge of construction and a designated representative of the project applicant. The project applicant shall adhere to the monitoring team's recommendations for corrective measures, including halting construction in situations where construction activities would imminently endanger historic resources. The project applicant shall establish the appropriate frequency of

[5] Although the building located at 437 25th Street is part of the proposed project, the building will be retained and, as such, will need to be protected from adjacent construction activities.

monitoring and reporting, which shall reflect the demolition and construction methods and schedule of the project. Site visit reports and documents associated with claims processing shall be provided to the general contractor in charge of construction and a designated representative of the project applicant.

1b. The historical architect shall establish a training program for construction workers involved in the project that emphasizes the importance of protecting historic resources. This program shall include information on recognizing historic fabric and materials, and directions on how to exercise care when working around and operating equipment near the historic structures, including storage of materials away from historic buildings. It shall also include information on means to reduce vibrations from construction, and monitoring and reporting of any potential problems that could affect the historic resources in the area. A provision for establishing this training program shall be incorporated into the construction contract, and the construction contract provisions shall be reviewed and approved by the general contractor in charge of construction, by affidavit, and by a designated representative of the project applicant.

APPENDIX

BROADWAY HOTEL & RESIDENCE

ENTITLEMENTS PACKAGE UPDATE
07.25.17

BAR ARCHITECTS

SIGNATURE DEVELOPMENT

PROJECT TEAM

OWNER:

T: (510) 251-9270

EMAIL: JCHOY@SIGNATUREDEVELOPMENT.COM

ARCHITECT:

908 BATTERY STREET #300

T: (415) 293-5700

EMAIL: JGOODWIN@BARARCH.COM

CIVIL ENGINEER:

1931 SAN MIGUEL DRIVE, SUITE 100
WALNUT CREEK, CA 94596
T: (925) 932-6868

EMAIL: SHARTSTEIN@DKCONSULTING.COM

LANDSCAPE ARCHITECT:

T: (925) 254-5422

EMAIL: BRUCEJ@JETT.LAND

BUILDING & SITE DATA

BUILDING GROSS FLOOR AREA	216,316 SF
D-BV-1 SITE AREA	30,158 SF
CC-3 SITE AREA	22,620 SF
TOTAL SITE AREA	+/- 1.21 ACRES (+/- 52,778 SF)
FLOOR AREA RATIO	216,316 SF / 52,778 SF = 4.10
HOUSING DENSITY	72 D.U. / 1.21 ACRES = 59.5 D.U./ACRE

BUILDING & ZONING CODE

CONSTRUCTION TYPE	I-A, III-A
OCCUPANCY GROUP	R-1, R-2, M
BUILDING HEIGHT / STOREYS	73'-6" TOP OF ROOF / 84'-4" TOP OF PENTHOUSE ROOF / 7 STOREYS
USE	RESI., HOTEL, RETAIL, RESTAURANT
ZONING DESIGNATION	CC-3, D-BV-1
CODE EDITION	CBC 2016

D.U. COUNT & MIX

1-BED	20	28%
2-BED	21	29%
3-BED	5	7%
JR 1	20	28%
STUDIO	6	8%
TOTAL	72	

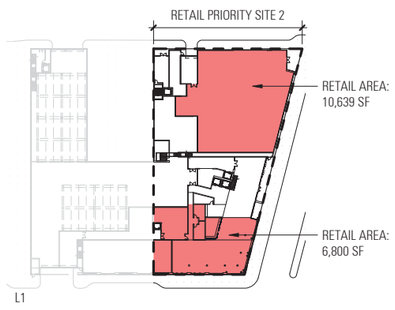
KEY COUNT & MIX

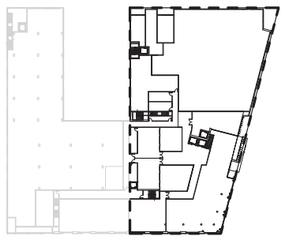
ALT KING	2	1%
EXEC KING	31	19%
EXEC KING (ADA)	3	2%
STD	108	68%
STD (ADA)	5	3%
SUITE	8	5%
SUITE (ADA)	1	1%
SUITE (LOFT)	1	1%
TOTAL	159	

RETAIL PRIORITY SITE 2 CONFORMANCE

-BV
- -1):
- RESIDENTIAL FACILITY ALLOWED IN D BV 1
- MAXIMUM BUILDING BASE HEIGHT = 85 FT

RETAIL AREA PROVIDED:	LEVEL 1	17,439 SF
	TOTAL	17,439 SF

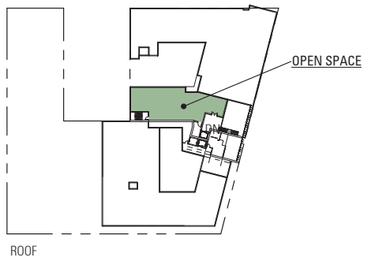




OPEN SPACE REQUIREMENT

PER TABLE 17.101C.06, 75 SF OPEN SPACE REQUIRED PER D.U.
75 SF X 72 UNITS = 5,400 SF OPEN SPACE REQUIRED

OPEN SPACE PROVIDED:	LEVEL 3	PODIUM AMENITY	3,071 SF
	ROOF	ROOF DECK AMENITY	2,948 SF
	TOTAL		6,019 SF



AREA - COMMERCIAL GROUND AND MEZZANINE

* REFERENCE AREA PLAN DIAGRAMS SHEET A25		
LEVEL 1	BAR	401 SF
LEVEL 1	CAFE	1,285 SF
LEVEL 1	HOTEL	7,801 SF
LEVEL 1	RESTAURANT	4,806 SF
LEVEL 1	RETAIL	14,616 SF
LEVEL 2	HOTEL	11,448 SF
TOTAL		40,357 SF

40,789 / 600 = **68** SPACES FOR GROUND AND MEZZANINE LEVEL USES

AREA - COMMERCIAL UPPER LEVELS

* REFERENCE AREA PLAN DIAGRAMS SHEET A25		
LEVEL 3	BAR	4,030 SF
LEVEL 3	HOTEL	18,716 SF
LEVEL 4	BAR	2,031 SF
LEVEL 4	HOTEL	18,707 SF
LEVEL 5	HOTEL	11,982 SF
LEVEL 6	HOTEL	11,980 SF
LEVEL 7	HOTEL	11,982 SF
ROOF	HOTEL	557 SF
TOTAL		79,984 SF

79,984 / 1,000 = **80** SPACES FOR UPPER LEVEL USES

TOTAL COMMERCIAL PARKING REQUIRED = 80 + 68 = **148 SPACES**

PARKING REQUIREMENT

Required Parking		Oakland Planning Code Section
Residential Activities		*17.116.060*
Total DU	72	
Space per DU in D-BV-1	0.5	
Total Res. Parking Required	36	
50% Max. Shared Parking Reduction		*17.116.110.D*
Residential Parking	36	
Commercial Parking	148	
Total Parking Before Reduction	184	
TOTAL PARKING REQUIRED	92.0	
Total Parking Provided	129	

LONG TERM BICYCLE PARKING:

RESIDENTIAL IN D-BV-1 ZONE (17.117.090): 1 PER 2 D.U.
72 UNITS / 2 = 36 BIKE SPACES
REST./RETAIL (COMMERCIAL 17.117.110)
IN D-BV-1 ZONE: 1 PER 8,000 SF
40,308 SF / 8,000 SF = 5 BIKE SPACES
IN CC-3 ZONE: 1 PER 12,000 SF
6,462 SF / 12,000 SF = 1 BIKE SPACE
HOTEL/TRANSIENT: 1 PER 20 ROOMS
159/20 = 8 BIKE SPACES

TOTAL LONG TERM BIKE PARKING REQ'D = **50 BIKE SPACES**

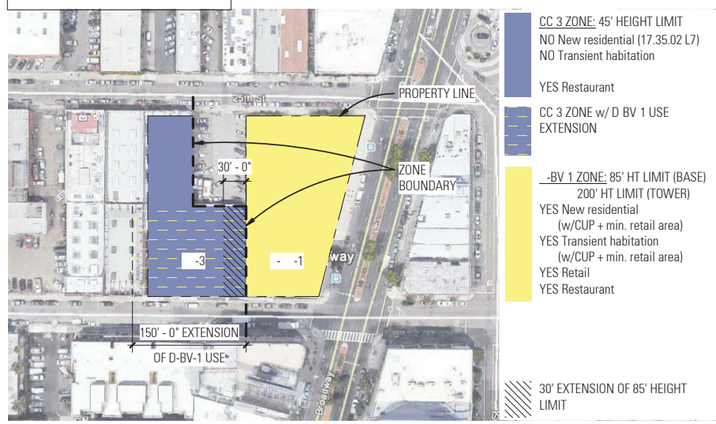
GROSS AREA BY LEVEL

LEVEL 1	
BAR	401 SF
CAFE	1,285 SF
HOTEL	7,801 SF
PARKING	18,533 SF
RESIDENTIAL	3,048 SF
RESTAURANT	4,806 SF
RETAIL	14,616 SF
	50,490 SF
LEVEL 2	
HOTEL	11,448 SF
RESIDENTIAL	194 SF
	11,642 SF
LEVEL 3	
BAR	4,030 SF
HOTEL	18,716 SF
RESIDENTIAL	14,540 SF
	37,287 SF
LEVEL 4	
BAR	2,031 SF
HOTEL	18,707 SF
RESIDENTIAL	14,748 SF
	35,486 SF
LEVEL 5	
HOTEL	11,982 SF
RESIDENTIAL	14,701 SF
	26,683 SF
LEVEL 6	
HOTEL	11,980 SF
RESIDENTIAL	14,701 SF
	26,681 SF
LEVEL 7	
HOTEL	11,982 SF
RESIDENTIAL	14,701 SF
	26,683 SF
ROOF	
HOTEL	557 SF
RESIDENTIAL	808 SF
	1,365 SF
TOTAL GROSS AREA	216,316 SF

SHEET INDEX

VICINITY MAP

ZONING DIAGRAM



BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

PROJECT INFORMATION

07.25.17	17001	BAR architects		A1

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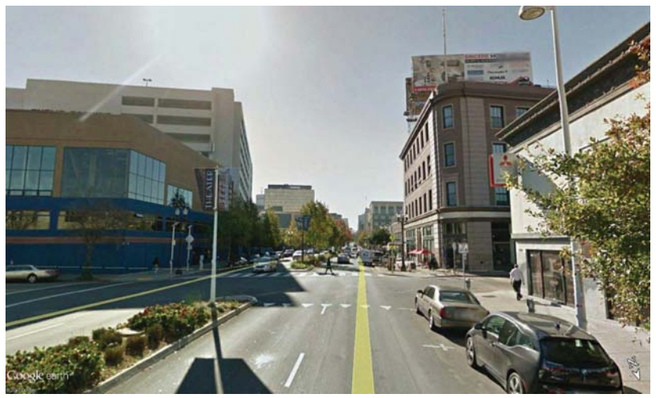

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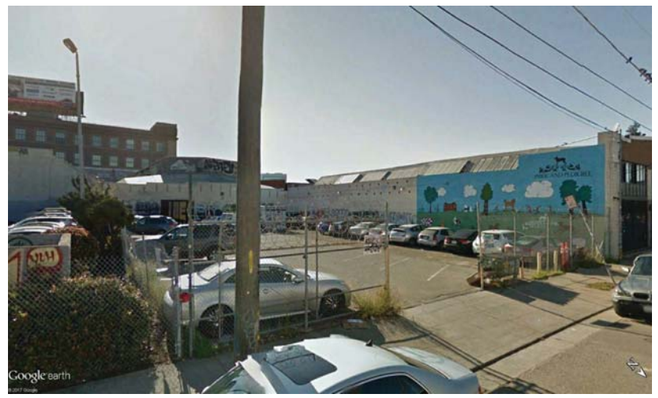

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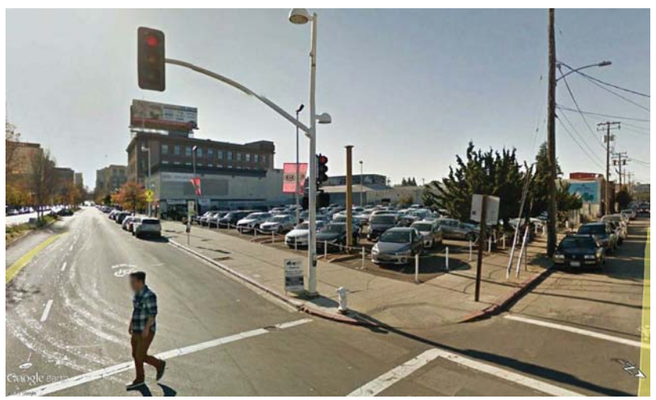

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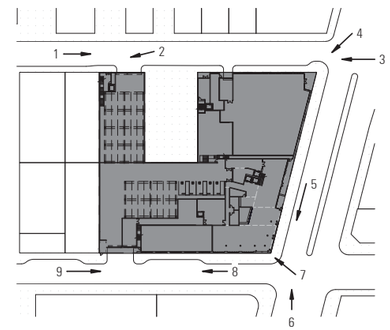

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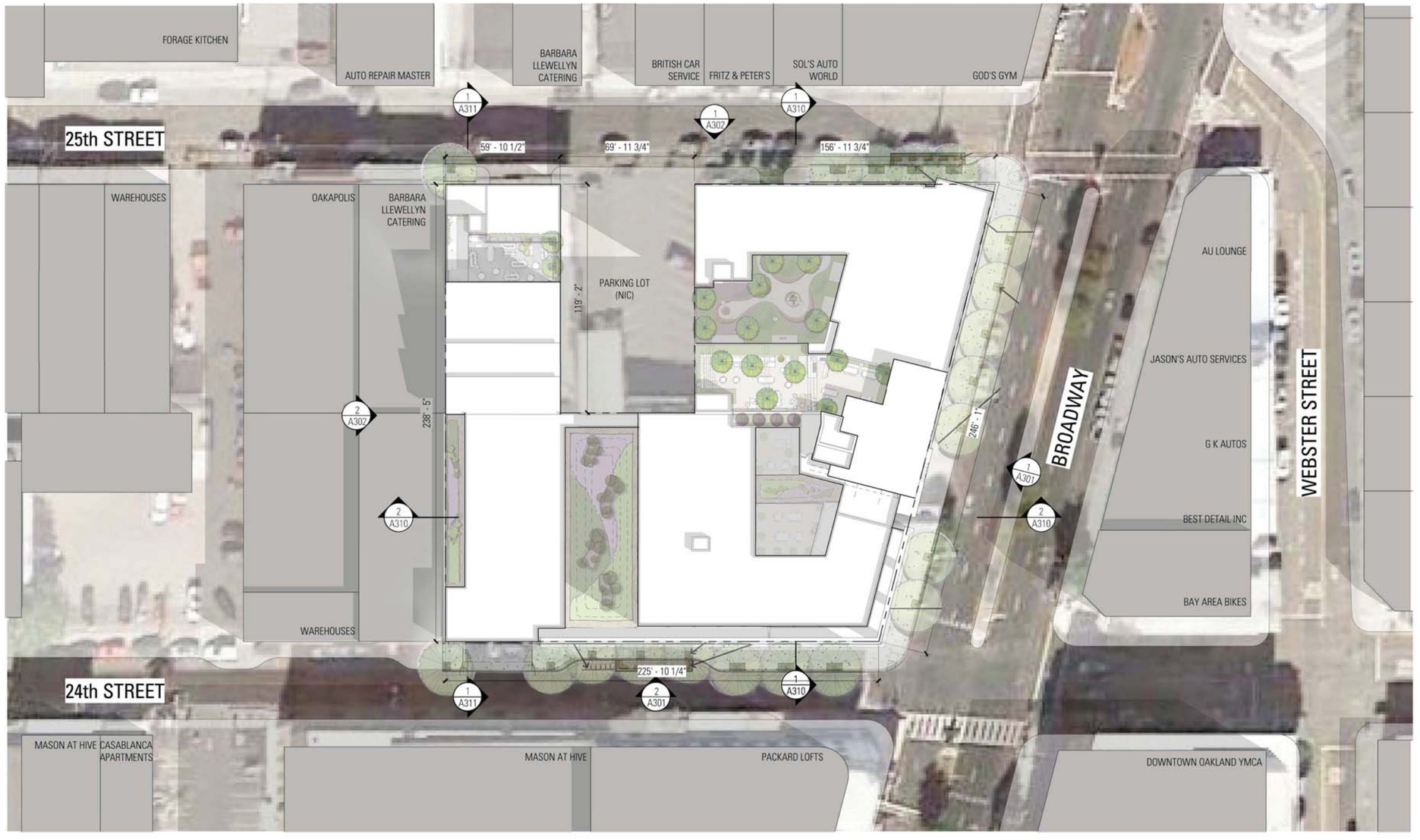
BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

SITE PHOTOS

05.22.17	17001	BAR architects		A2



SITE PLAN
1" = 30'-0"

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BROADWAY HOTEL 2401 BROADWAY, OAKLAND, CA				SITE PLAN
	05.19.17	17001	BAR architects	A3

BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

PERSPECTIVE VIEW - VIEW FROM SE

07.25.17	17001	BAR architects		A4

BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

PERSPECTIVE VIEW - VIEW FROM NE

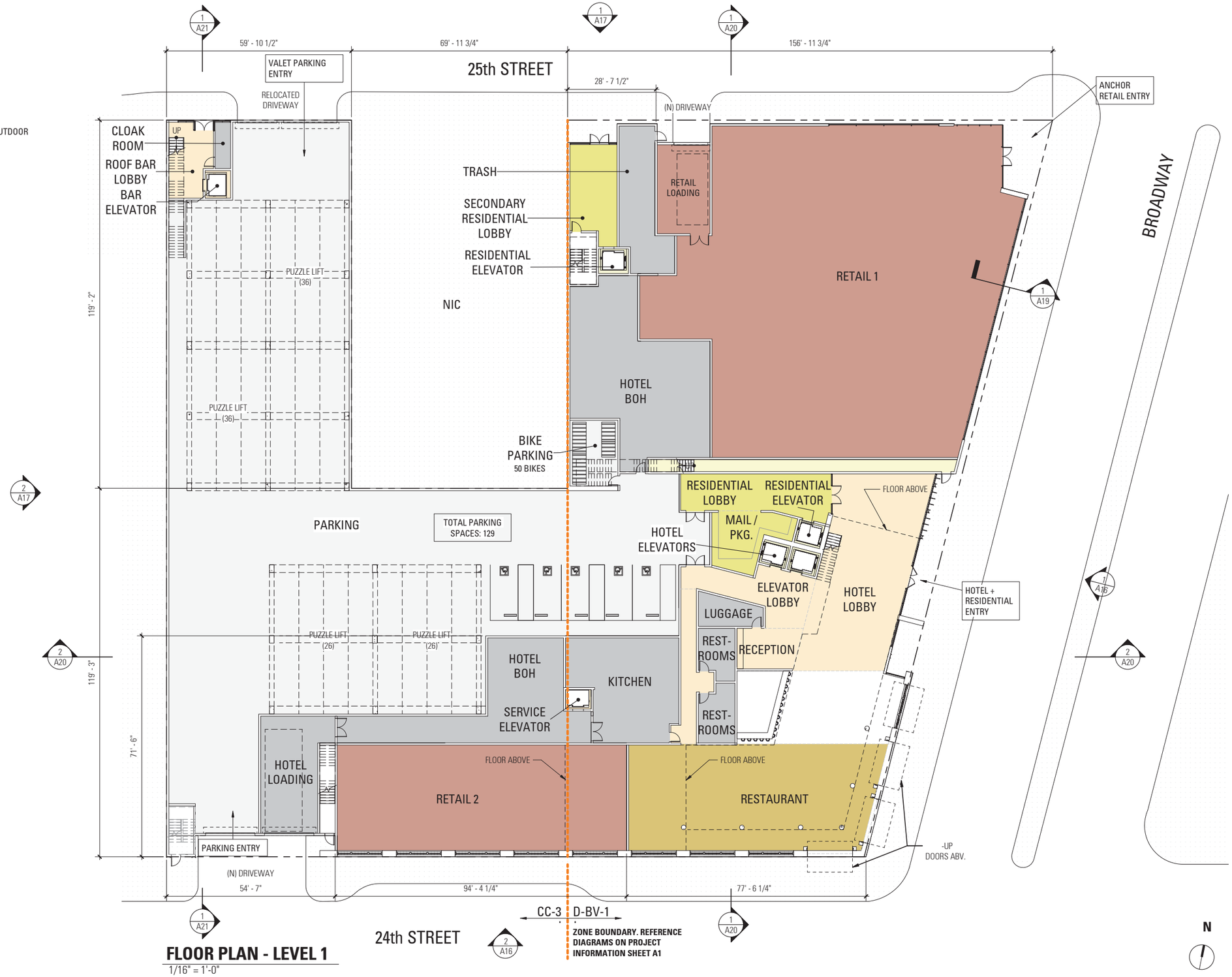
05.22.17	17001	BAR architects		A5

LEGEND

- HOTEL
- HOTEL CIRCULATION
- HOTEL AMENITY
- RESIDENTIAL
- RESIDENTIAL CIRCULATION
- RESIDENTIAL AMENITY
- RETAIL
- RESTAURANT
- SERVICE / BOH
- OUTDOOR

GROSS AREA - LEVEL 1

BAR	401 SF
CAFE	1,285 SF
HOTEL	7,801 SF
PARKING	18,533 SF
RESIDENTIAL	3,048 SF
RESTAURANT	4,806 SF
RETAIL	14,616 SF
LEVEL 1 TOTAL	50,490 SF



FLOOR PLAN - LEVEL 1

1/16" = 1'-0"

BROADWAY HOTEL

2401 BROADWAY, OAKLAND, CA

FLOOR PLAN - LEVEL 1

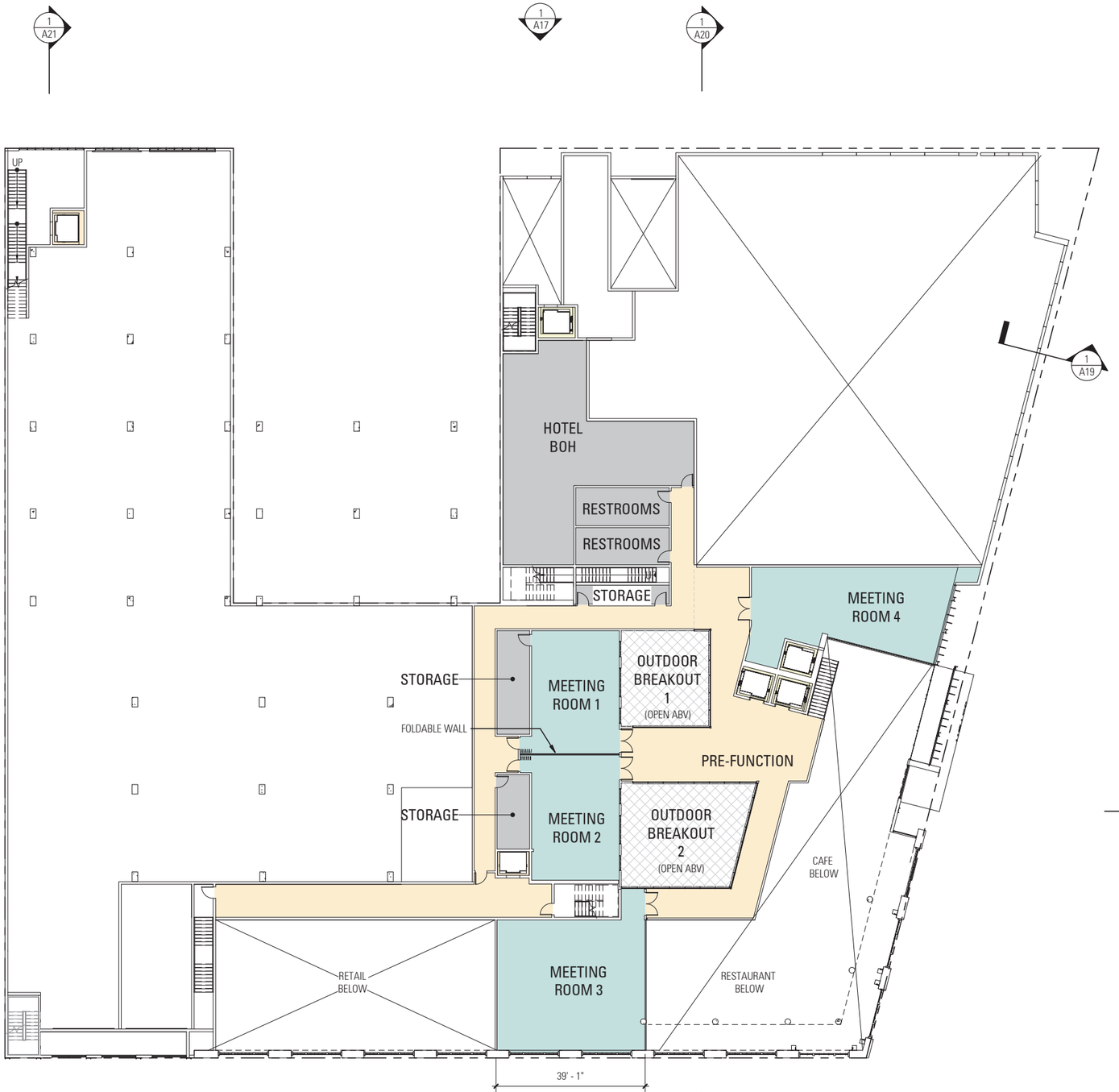
07.25.17	17001	BAR architects	8' 32' 0 16'	A6

LEGEND

- HOTEL
- HOTEL CIRCULATION
- HOTEL AMENITY
- RESIDENTIAL
- RESIDENTIAL CIRCULATION
- RESIDENTIAL AMENITY
- RETAIL
- RESTAURANT
- SERVICE / BOH
- OUTDOOR

GROSS AREA - LEVEL 2

HOTEL	11,448 SF
RESIDENTIAL	194 SF
LEVEL 2 TOTAL	11,642 SF



FLOOR PLAN - LEVEL 2

1/16" = 1'-0"

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BROADWAY HOTEL

2401 BROADWAY, OAKLAND, CA

FLOOR PLAN - LEVEL 2

07.25.17	17001	BAR architects	8' 0 16' 32'	A7

LEGEND

- HOTEL
- HOTEL CIRCULATION
- HOTEL AMENITY
- RESIDENTIAL
- RESIDENTIAL CIRCULATION
- RESIDENTIAL AMENITY
- RETAIL
- RESTAURANT
- SERVICE / BOH
- OUTDOOR

GROSS AREA - LEVEL 3	
BAR	4,098 SF
HOTEL	18,523 SF
RESIDENTIAL	14,540 SF
LEVEL 3 TOTAL	37,161 SF

RESIDENTIAL AREA EFFICIENCY		
RENTABLE	57,244 SF	78%
CORE	15,264 SF	
AMENITY	836 SF	
GROSS	73,344 SF	

RESIDENTIAL UNIT TYPE BREAKDOWN		
UNIT TYPE	COUNT	ACTUAL
STUDIO	6	8%
JR 1	20	28%
1-BED	20	28%
2-BED	21	29%
3-BED	5	7%
TOTAL	72	

HOTEL AREA EFFICIENCY		
RENTABLE	55,417 SF	70%
CORE	18,107 SF	
AMENITY	6,084 SF	
GROSS	79,608 SF	

HOTEL UNIT TYPE BREAKDOWN		
UNIT TYPE	COUNT	ACTUAL
ALT KING	2	1%
EXEC KING	31	19%
EXEC KING (ADA)	3	2%
STD	108	68%
STD (ADA)	5	3%
SUITE	8	5%
SUITE (ADA)	1	1%
SUITE (LOFT)	1	1%
TOTAL	159	

FLOOR PLAN - LEVEL 3

1/16" = 1'-0"

N

BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

FLOOR PLAN - LEVEL 3

05.22.17	17001	BAR architects	8' 0 16' 32'	A8

LEGEND

- HOTEL
- HOTEL CIRCULATION
- HOTEL AMENITY
- RESIDENTIAL
- RESIDENTIAL CIRCULATION
- RESIDENTIAL AMENITY
- RETAIL
- RESTAURANT
- SERVICE / BOH
- OUTDOOR

GROSS AREA - LEVEL 4	
BAR	2,043 SF
HOTEL	18,642 SF
RESIDENTIAL	14,748 SF
LEVEL 4 TOTAL	35,433 SF

RESIDENTIAL AREA EFFICIENCY		
RENTABLE	57,244 SF	78%
CORE	15,264 SF	
AMENITY	836 SF	
GROSS	73,344 SF	

RESIDENTIAL UNIT TYPE BREAKDOWN		
UNIT TYPE	COUNT	ACTUAL
STUDIO	6	8%
JR 1	20	28%
1-BED	20	28%
2-BED	21	29%
3-BED	5	7%
TOTAL	72	

HOTEL AREA EFFICIENCY		
RENTABLE	55,417 SF	70%
CORE	18,107 SF	
AMENITY	6,084 SF	
GROSS	79,608 SF	

HOTEL UNIT TYPE BREAKDOWN		
UNIT TYPE	COUNT	ACTUAL
ALT KING	2	1%
EXEC KING	31	19%
EXEC KING (ADA)	3	2%
STD	108	68%
STD (ADA)	5	3%
SUITE	8	5%
SUITE (ADA)	1	1%
SUITE (LOFT)	1	1%
TOTAL	159	

FLOOR PLAN - LEVEL 4
1/16" = 1'-0"

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BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

FLOOR PLAN - LEVEL 4

05.22.17	17001	BAR architects	8' 32' 0 16'	A9

LEGEND

- HOTEL
- HOTEL CIRCULATION
- HOTEL AMENITY
- RESIDENTIAL
- RESIDENTIAL CIRCULATION
- RESIDENTIAL AMENITY
- RETAIL
- RESTAURANT
- SERVICE / BOH
- OUTDOOR

GROSS AREA - LEVEL 5	
HOTEL	11,981 SF
RESIDENTIAL	14,701 SF
LEVEL 5 TOTAL	26,682 SF

RESIDENTIAL AREA EFFICIENCY		
RENTABLE	57,244 SF	78%
CORE	15,264 SF	
AMENITY	836 SF	
GROSS	73,344 SF	

RESIDENTIAL UNIT TYPE BREAKDOWN

UNIT TYPE	COUNT	ACTUAL
STUDIO	6	8%
JR 1	20	28%
1-BED	20	28%
2-BED	21	29%
3-BED	5	7%
TOTAL	72	

HOTEL AREA EFFICIENCY		
RENTABLE	55,417 SF	70%
CORE	18,107 SF	
AMENITY	6,084 SF	
GROSS	79,608 SF	

HOTEL UNIT TYPE BREAKDOWN

UNIT TYPE	COUNT	ACTUAL
ALT KING	2	1%
EXEC KING	31	19%
EXEC KING (ADA)	3	2%
STD	108	68%
STD (ADA)	5	3%
SUITE	8	5%
SUITE (ADA)	1	1%
SUITE (LOFT)	1	1%
TOTAL	159	

FLOOR PLAN - LEVEL 5

1/16" = 1'-0"

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BROADWAY HOTEL

2401 BROADWAY, OAKLAND, CA

FLOOR PLAN - LEVEL 5

05.22.17	17001	BAR architects	0 8' 16' 32'	A10

LEGEND

- HOTEL
- HOTEL CIRCULATION
- HOTEL AMENITY
- RESIDENTIAL
- RESIDENTIAL CIRCULATION
- RESIDENTIAL AMENITY
- RETAIL
- RESTAURANT
- SERVICE / BOH
- OUTDOOR

GROSS AREA - LEVEL 6	
HOTEL	11,970 SF
RESIDENTIAL	14,701 SF
LEVEL 6 TOTAL	26,671 SF

RESIDENTIAL AREA EFFICIENCY		
RENTABLE	57,244 SF	78%
CORE	15,264 SF	
AMENITY	836 SF	
GROSS	73,344 SF	

RESIDENTIAL UNIT TYPE BREAKDOWN

UNIT TYPE	COUNT	ACTUAL
STUDIO	6	8%
JR 1	20	28%
1-BED	20	28%
2-BED	21	29%
3-BED	5	7%
TOTAL	72	

HOTEL AREA EFFICIENCY		
RENTABLE	55,417 SF	70%
CORE	18,107 SF	
AMENITY	6,084 SF	
GROSS	79,608 SF	

HOTEL UNIT TYPE BREAKDOWN

UNIT TYPE	COUNT	ACTUAL
ALT KING	2	1%
EXEC KING	31	19%
EXEC KING (ADA)	3	2%
STD	108	68%
STD (ADA)	5	3%
SUITE	8	5%
SUITE (ADA)	1	1%
SUITE (LOFT)	1	1%
TOTAL	159	

FLOOR PLAN - LEVEL 6

1/16" = 1'-0"

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BROADWAY HOTEL

2401 BROADWAY, OAKLAND, CA

FLOOR PLAN - LEVEL 6

05.22.17	17001	BAR architects	0 8' 16' 32'	A11

LEGEND

- HOTEL
- HOTEL CIRCULATION
- HOTEL AMENITY
- RESIDENTIAL
- RESIDENTIAL CIRCULATION
- RESIDENTIAL AMENITY
- RETAIL
- RESTAURANT
- SERVICE / BOH
- OUTDOOR

GROSS AREA - LEVEL 7	
HOTEL	11,971 SF
RESIDENTIAL	14,701 SF
LEVEL 7 TOTAL	26,672 SF

RESIDENTIAL AREA EFFICIENCY		
RENTABLE	57,244 SF	78%
CORE	15,264 SF	
AMENITY	836 SF	
GROSS	73,344 SF	

RESIDENTIAL UNIT TYPE BREAKDOWN

UNIT TYPE	COUNT	ACTUAL
STUDIO	6	8%
JR 1	20	28%
1-BED	20	28%
2-BED	21	29%
3-BED	5	7%
TOTAL	72	

HOTEL AREA EFFICIENCY		
RENTABLE	55,417 SF	70%
CORE	18,107 SF	
AMENITY	6,084 SF	
GROSS	79,608 SF	

HOTEL UNIT TYPE BREAKDOWN

UNIT TYPE	COUNT	ACTUAL
ALT KING	2	1%
EXEC KING	31	19%
EXEC KING (ADA)	3	2%
STD	108	68%
STD (ADA)	5	3%
SUITE	8	5%
SUITE (ADA)	1	1%
SUITE (LOFT)	1	1%
TOTAL	159	

FLOOR PLAN - LEVEL 7

1/16" = 1'-0"

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BROADWAY HOTEL

2401 BROADWAY, OAKLAND, CA

FLOOR PLAN - LEVEL 7

05.22.17	17001	BAR architects	0 8' 16' 32'	A12

LEGEND

- HOTEL
- HOTEL CIRCULATION
- HOTEL AMENITY
- RESIDENTIAL
- RESIDENTIAL CIRCULATION
- RESIDENTIAL AMENITY
- RETAIL
- RESTAURANT
- SERVICE / BOH
- OUTDOOR

GROSS AREA - ROOF

HOTEL	557 SF
RESIDENTIAL	808 SF
ROOF TOTAL	1,365 SF

ROOF PLAN
1/16" = 1'-0"

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BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

ROOF PLAN

05.22.17	17001	BAR architects	0 8' 16' 32'	A13

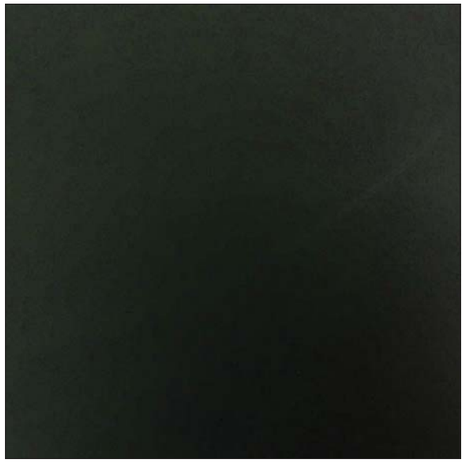
METAL CHANNEL TRIM

FRITTED GLASS SUNSCREEN

BRICK

DARK WINDOWS

GLASS BALCONY RAIL

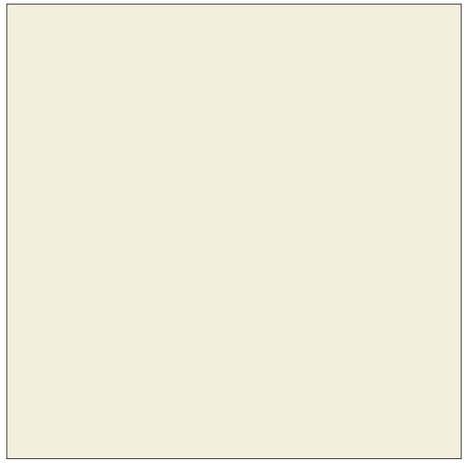


METAL PANEL

CONCRETE

STOREFRONT

MTL TILT DOOR



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BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

COLOR & MATERIALS

05.22.17	17001	BAR architects		A14

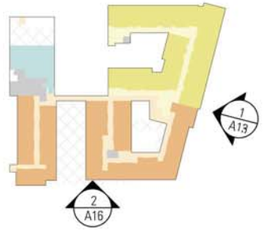
BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

PERSPECTIVE VIEW - BROADWAY ENTRY

07.12.17	17001	BAR architects		A15

2 A16 **EXTERIOR ELEVATION - SOUTH (24TH STREET)**
1/16" = 1'-0"

1 A16 **EXTERIOR ELEVATION - EAST (BROADWAY)**
1/16" = 1'-0"



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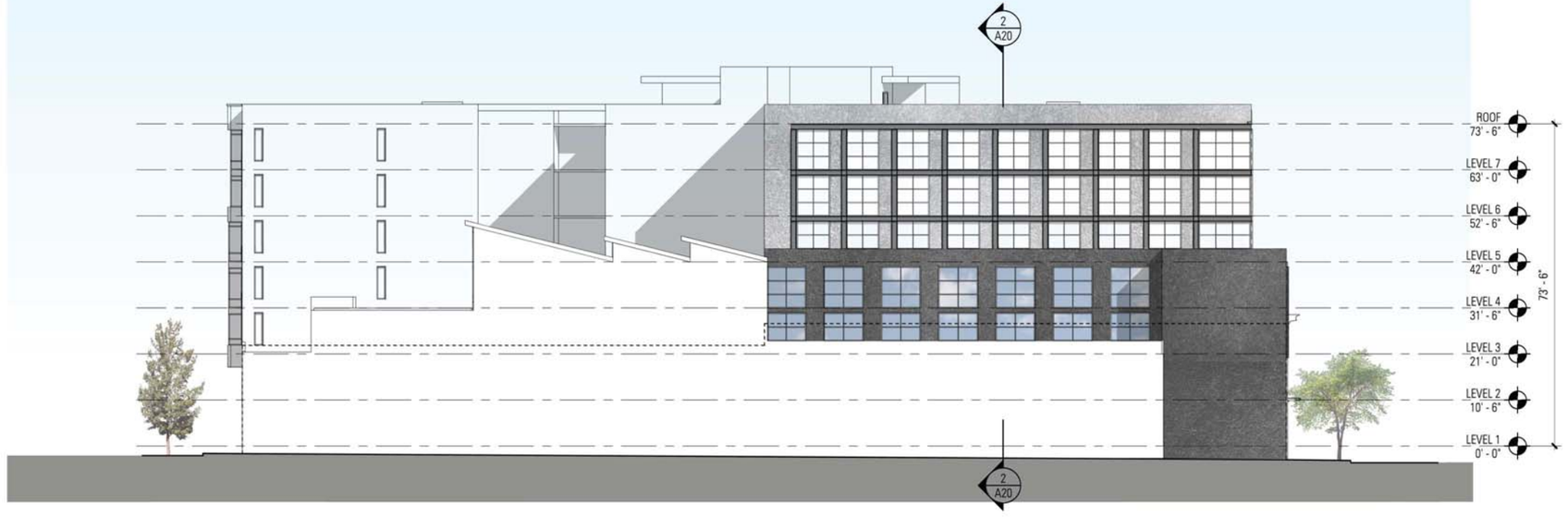
BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

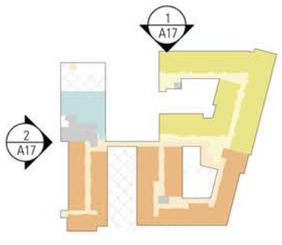
ELEVATIONS - SOUTH AND BROADWAY

07.12.17	17001	BAR architects	0 8' 16' 32'	A16

1 A17 **EXTERIOR ELEVATION - NORTH (25TH STREET)**
1/16" = 1'-0"



2 A17 **EXTERIOR ELEVATION - WEST**
1/16" = 1'-0"



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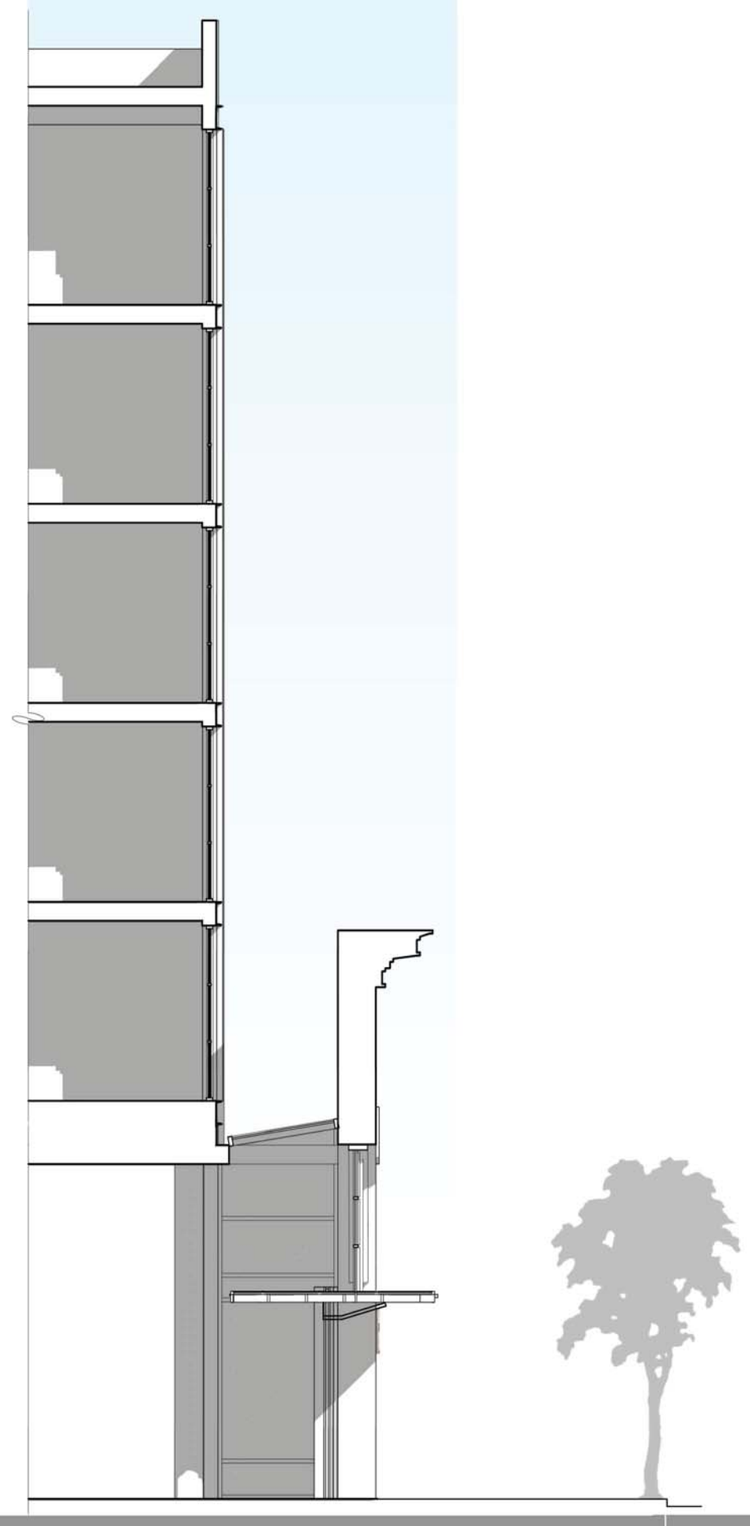
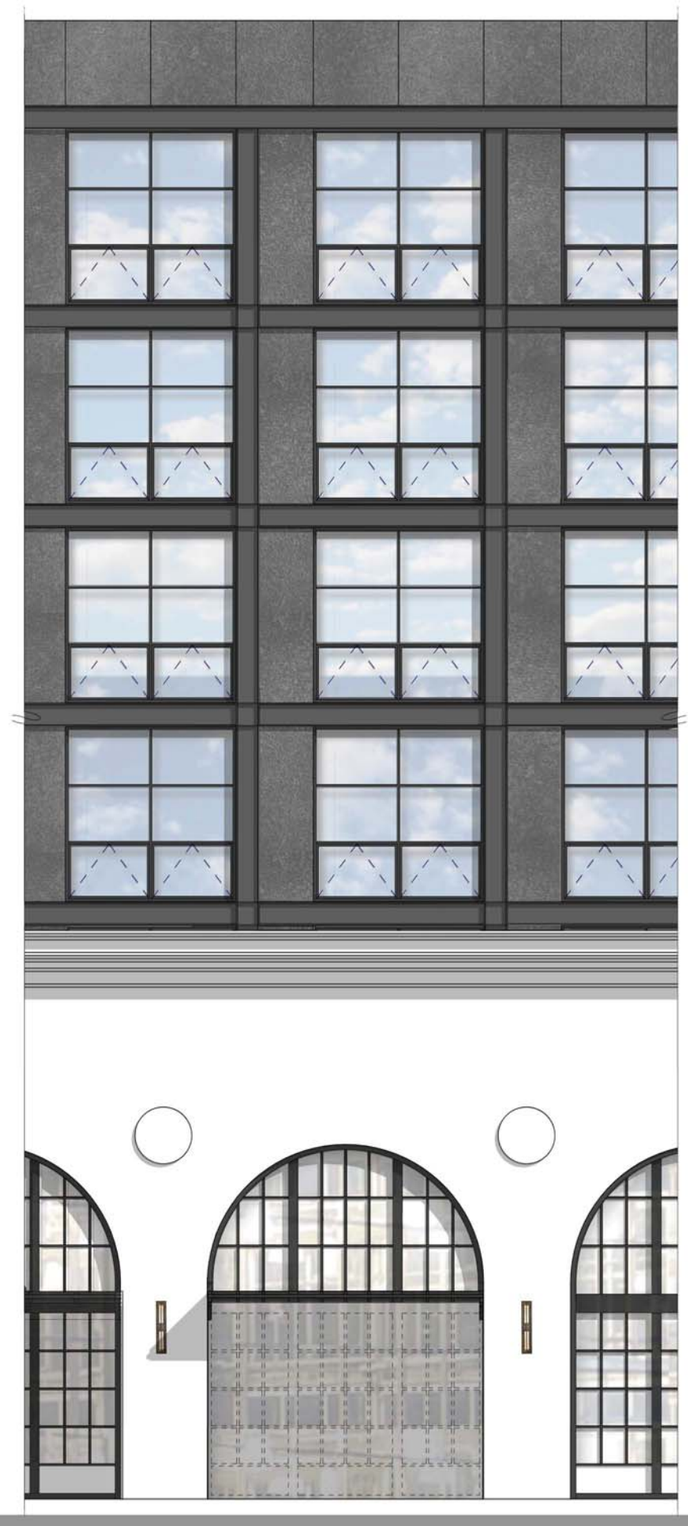
BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

ELEVATIONS - NORTH AND WEST

05.22.17	17001	BAR architects	0 8' 16' 32'	A17





ROOF 73' - 6"

LEVEL 7 63' - 0"

LEVEL 6 52' - 6"

LEVEL 5 42' - 0"

LEVEL 4 31' - 6"

LEVEL 3 21' - 0"

LEVEL 2 10' - 6"

LEVEL 1 0' - 0"

HOTEL WALL SECTION (L)
1/4" = 1'-0"

ENLARGED ELEVATION (R)
1/4" = 1'-0"

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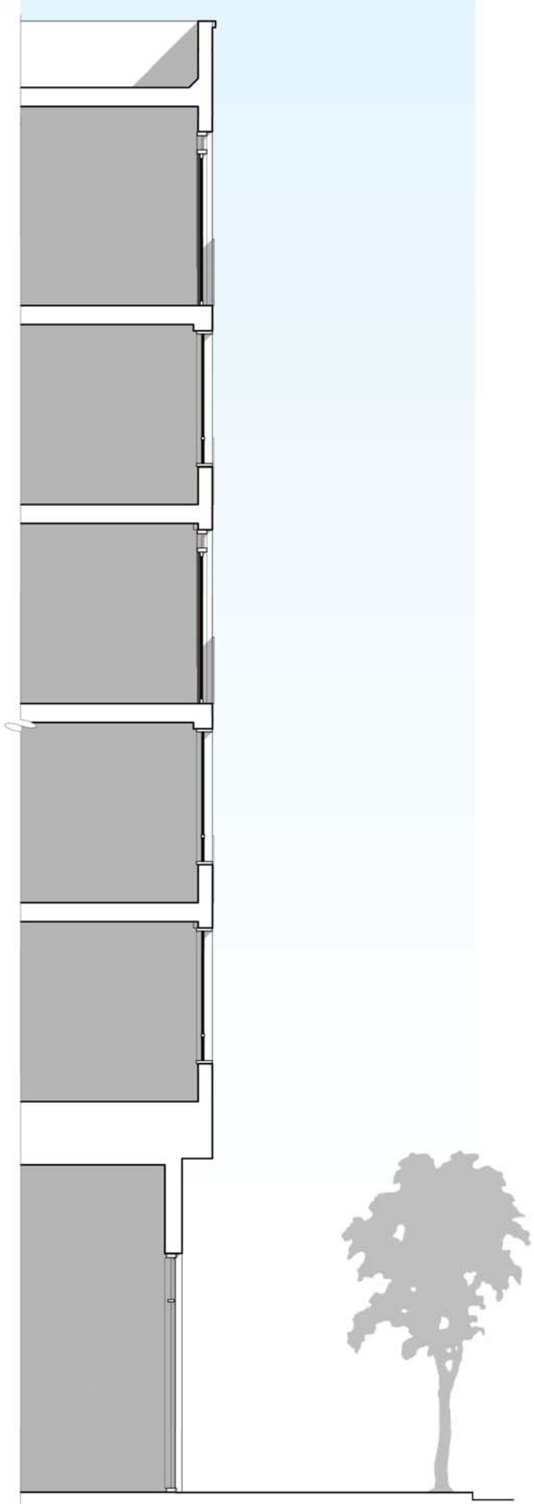
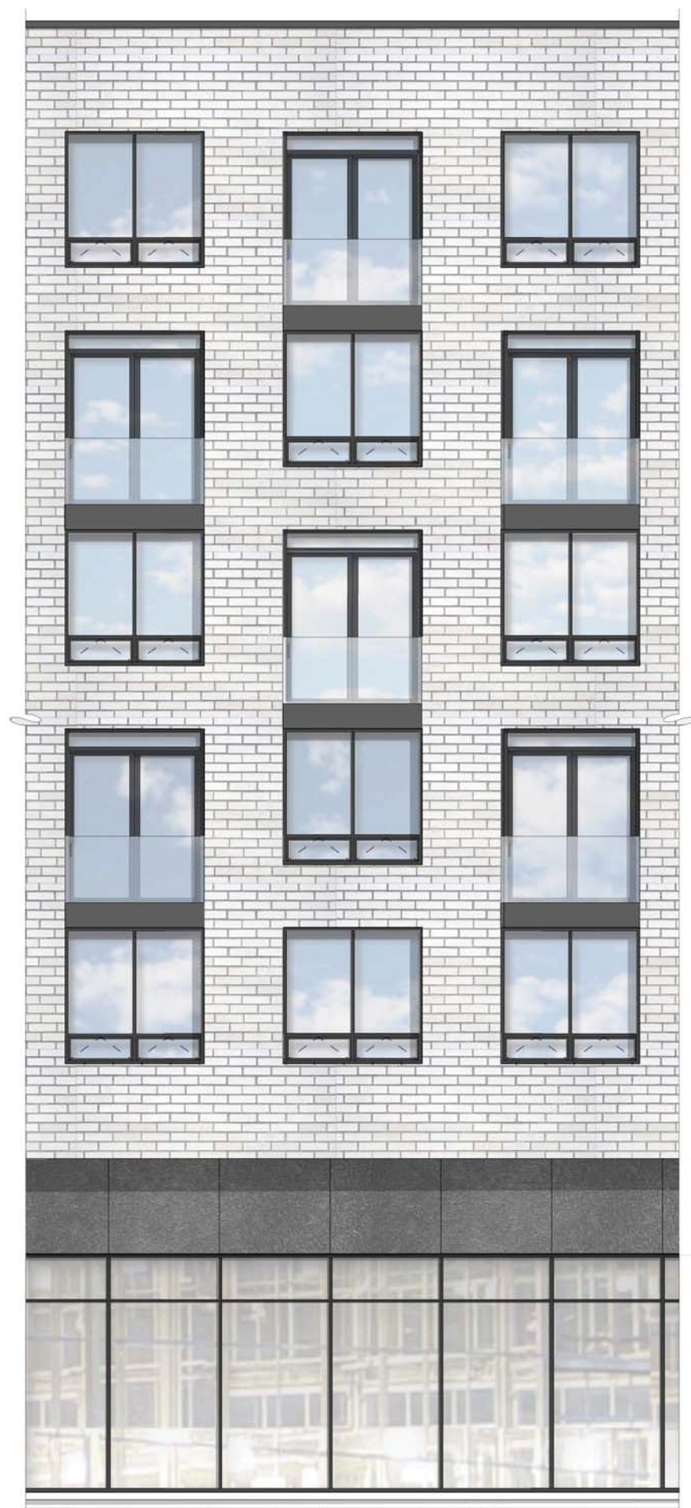
BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

ENLARGED SECTION - HOTEL

07.12.17	17001	BAR architects	0 2' 4' 8'	A18





RESIDENTIAL WALL SECTION (L)
1/4" = 1'-0"

ENLARGED ELEVATION (R)
1/4" = 1'-0"

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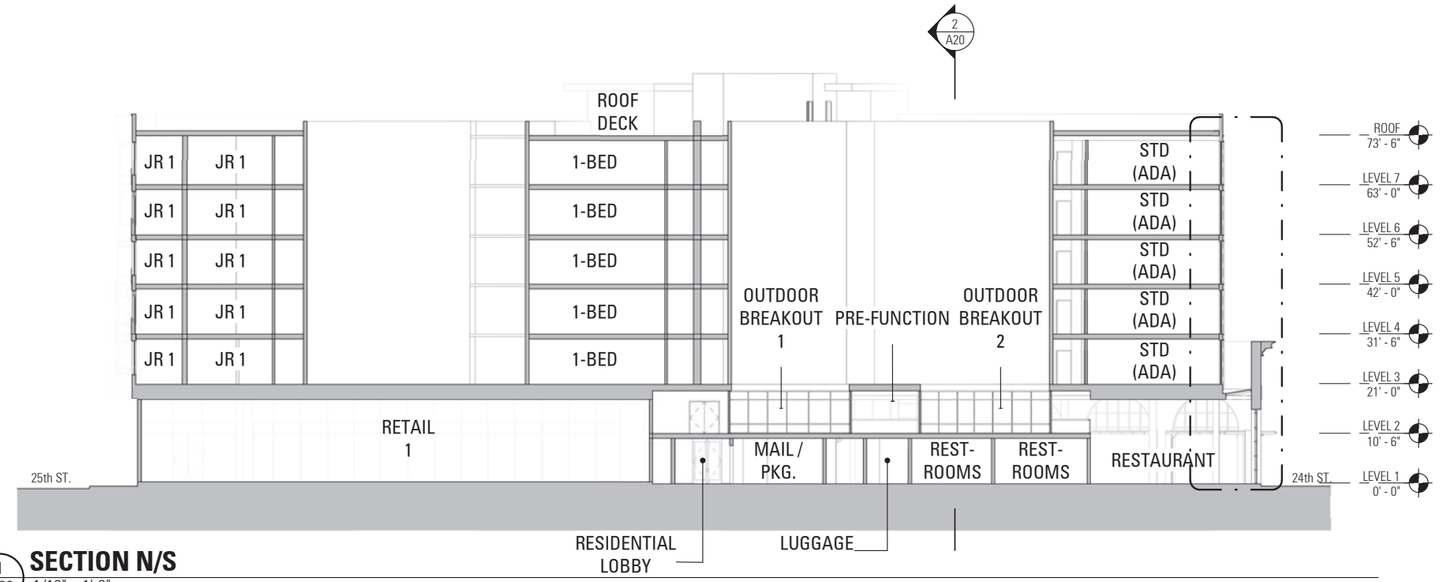
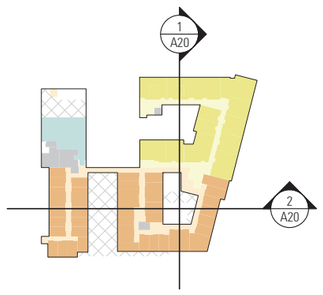
BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

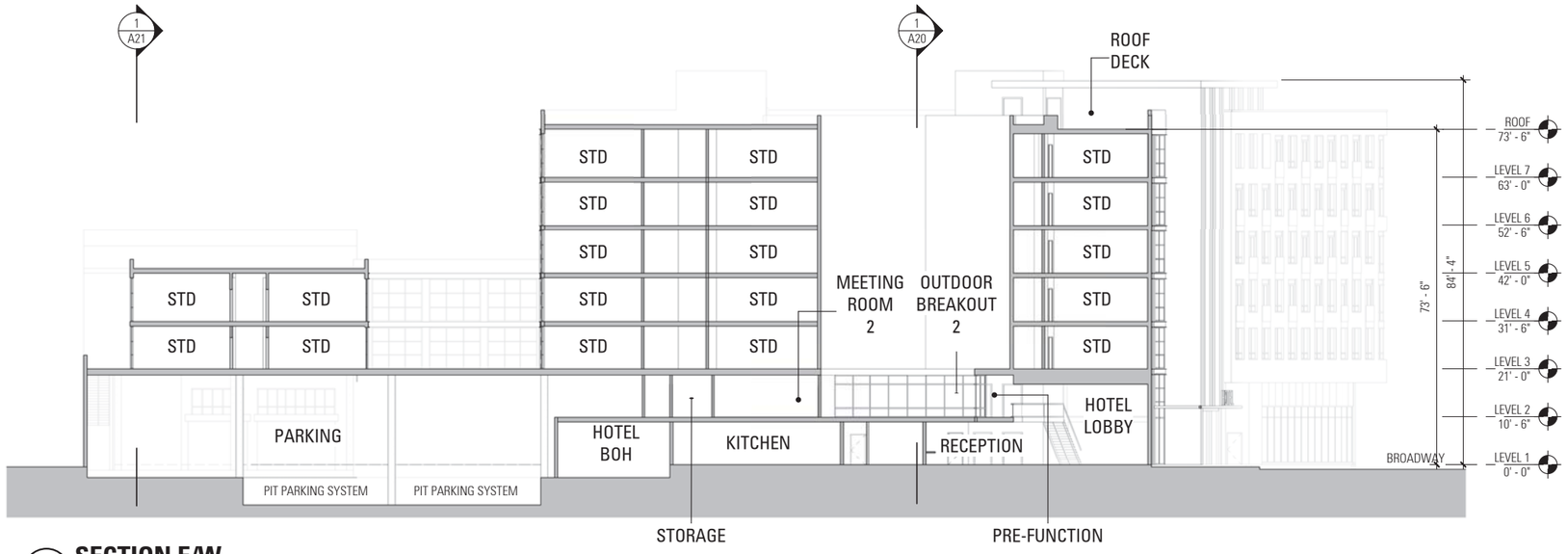
ENLARGED SECTION - RESIDENTIAL

05.19.17	17001	BAR architects	0 2' 4' 8'	A19



1 A20 **SECTION N/S**
1/16" = 1'-0"



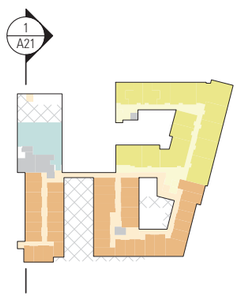


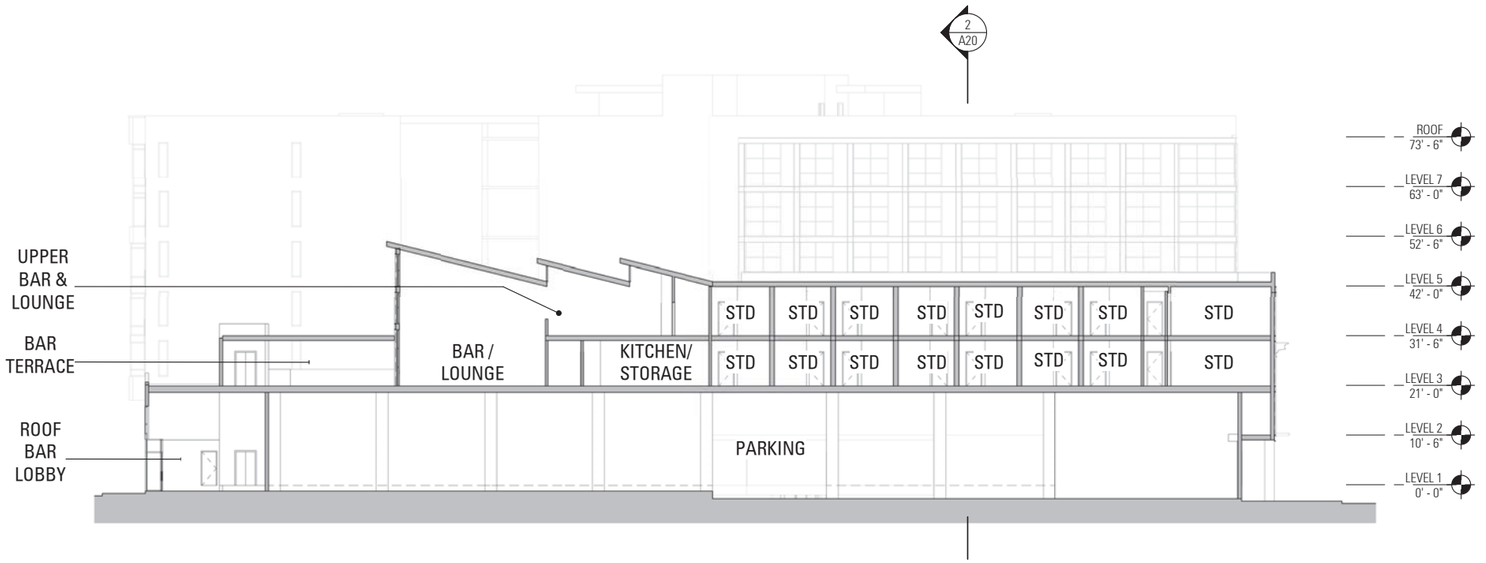
2 A20 **SECTION E/W**
1/16" = 1'-0"

BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

BUILDING SECTIONS

05.22.17	17001	BAR architects	8' 0 16' 32'	A20



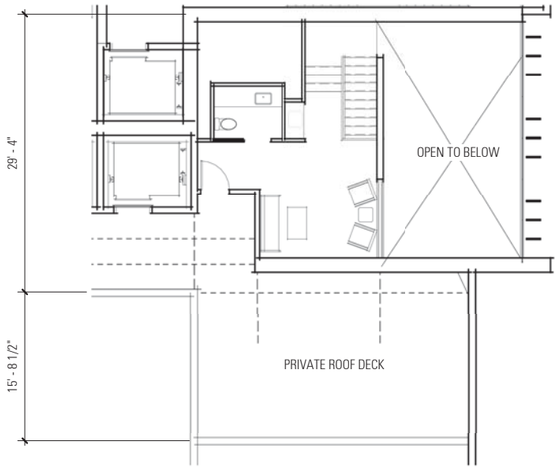


1 A21 **SECTION THROUGH ROOF BAR**
1/16" = 1'-0"

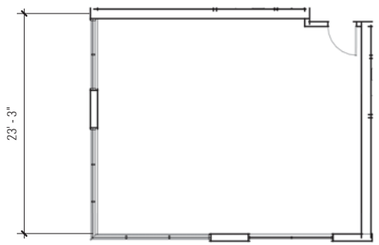
BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

BUILDING SECTIONS

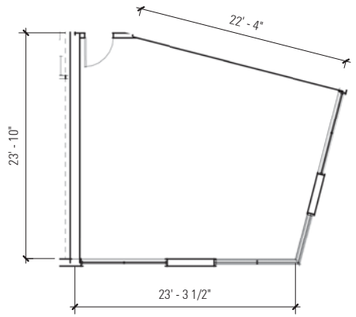
05.22.17	17001	BAR architects	0 8' 16' 32'	A21



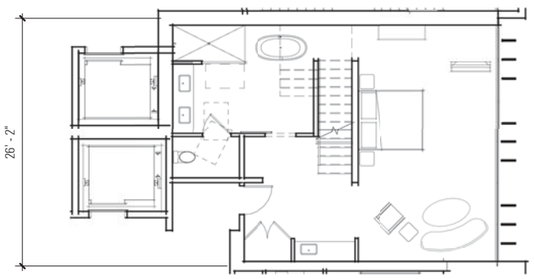
LOFT SUITE - ROOF LEVEL
1/8" = 1'-0"



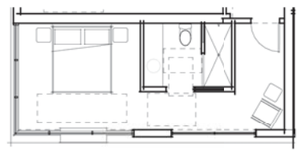
SUITE - SW
1/8" = 1'-0"



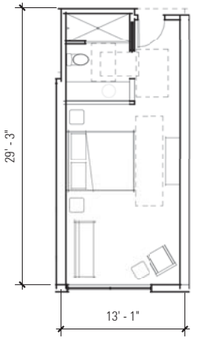
SUITE - SE
1/8" = 1'-0"



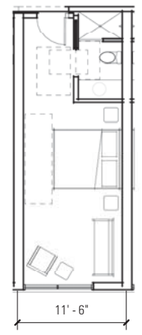
LOFT SUITE - LEVEL 7
1/8" = 1'-0"



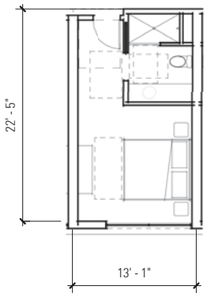
EXECUTIVE KING - SW CORNER
1/8" = 1'-0"



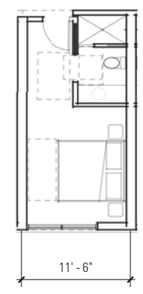
EXECUTIVE KING - 13'-1"
1/8" = 1'-0"



EXECUTIVE KING - 11'-6"
1/8" = 1'-0"



STANDARD KING - 13'-1"
1/8" = 1'-0"

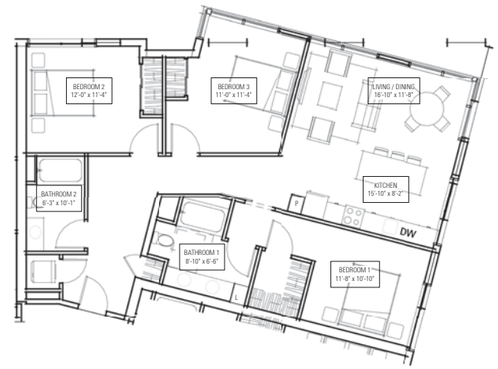


STANDARD KING - 11'-6"
1/8" = 1'-0"

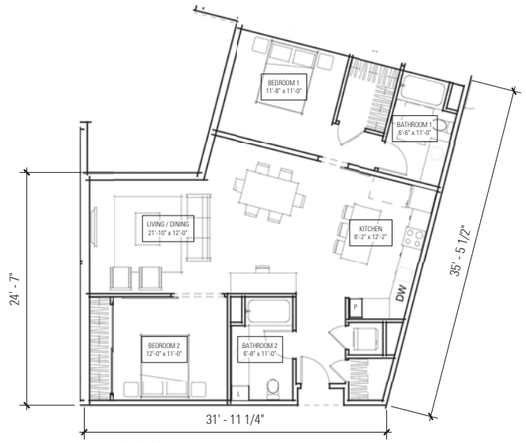
BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

HOTEL KEY PLANS

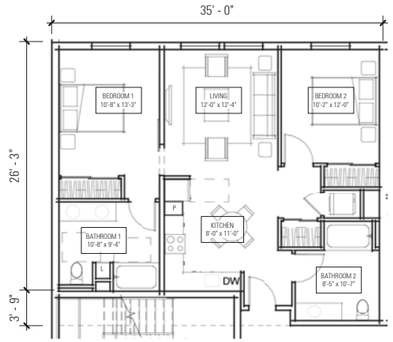
05.22.17	17001	BAR architects	4' 16' 0 8'	A22



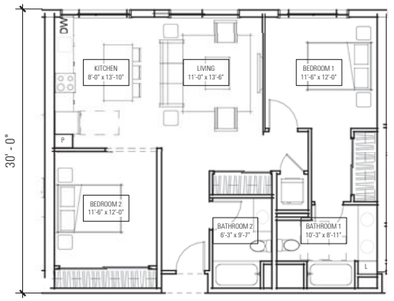
UNIT D1
1/8" = 1'-0"



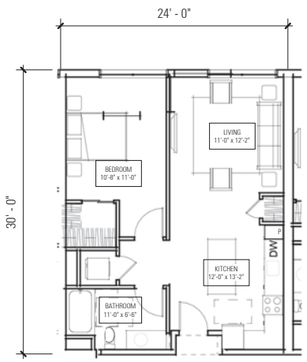
UNIT C3
1/8" = 1'-0"



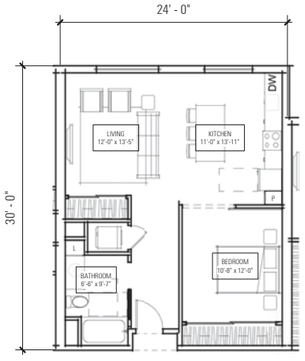
UNIT C2
1/8" = 1'-0"



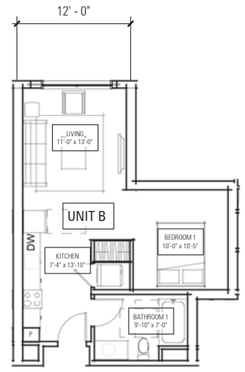
UNIT C1
1/8" = 1'-0"



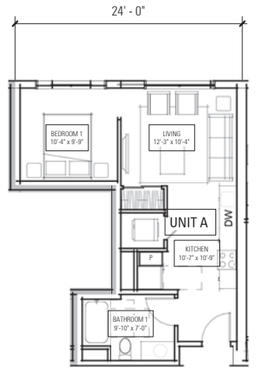
UNIT B2
1/8" = 1'-0"



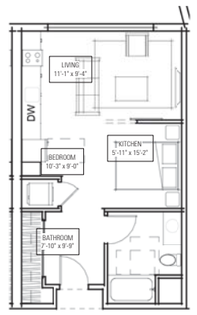
UNIT B1
1/8" = 1'-0"



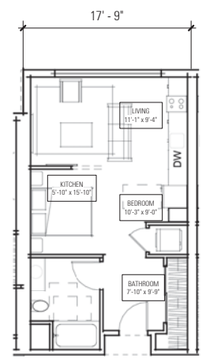
UNIT A3.2
1/8" = 1'-0"



UNIT A3.1
1/8" = 1'-0"



UNIT A2
1/8" = 1'-0"



UNIT A1
1/8" = 1'-0"

BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

RESIDENTIAL UNIT PLANS

05.22.17	17001	BAR architects	0 4' 8' 16'	A23

LEED v4 for BD+C: New Construction and Major Renovation

Project Checklist

Project Name:
Date:

Y	?	N			
			Credit	Integrative Process	1

13	0	0	**Location and Transportation**		16
			Credit	LEED for Neighborhood Development Location	16
1			Credit	Sensitive Land Protection	1
1			Credit	High Priority Site	2
5			Credit	Surrounding Density and Diverse Uses	5
5			Credit	Access to Quality Transit	5
1			Credit	Bicycle Facilities	1
			Credit	Reduced Parking Footprint	1
			Credit	Green Vehicles	1

6	0	0	**Sustainable Sites**		10
Y			Prereq	Construction Activity Pollution Prevention	Required
1			Credit	Site Assessment	1
			Credit	Site Development - Protect or Restore Habitat	2
			Credit	Open Space	1
3			Credit	Rainwater Management	3
2			Credit	Heat Island Reduction	2
			Credit	Light Pollution Reduction	1

7	0	0	**Water Efficiency**		11
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
2			Credit	Outdoor Water Use Reduction	2
4			Credit	Indoor Water Use Reduction	6
			Credit	Cooling Tower Water Use	2
1			Credit	Water Metering	1

6	0	0	**Energy and Atmosphere**		33
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
			Credit	Enhanced Commissioning	6
			Credit	Optimize Energy Performance	18
5			Credit	Advanced Energy Metering	1
			Credit	Demand Response	2
			Credit	Renewable Energy Production	3
1			Credit	Enhanced Refrigerant Management	1
			Credit	Green Power and Carbon Offsets	2

2	0	0	**Materials and Resources**		13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
			Credit	Building Life-Cycle Impact Reduction	5
			Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
			Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
			Credit	Building Product Disclosure and Optimization - Material Ingredients	2
2			Credit	Construction and Demolition Waste Management	2

5	0	0	**Indoor Environmental Quality**		16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
			Credit	Enhanced Indoor Air Quality Strategies	2
3			Credit	Low-Emitting Materials	3
1			Credit	Construction Indoor Air Quality Management Plan	1
			Credit	Indoor Air Quality Assessment	2
1			Credit	Thermal Comfort	1
			Credit	Interior Lighting	2
			Credit	Daylight	3
			Credit	Quality Views	1
			Credit	Acoustic Performance	1

1	0	0	**Innovation**		6
			Credit	Innovation	5
1			Credit	LEED Accredited Professional	1

0	0	0	**Regional Priority**		4
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1

40	0	0	**TOTALS**	Possible Points:	110

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

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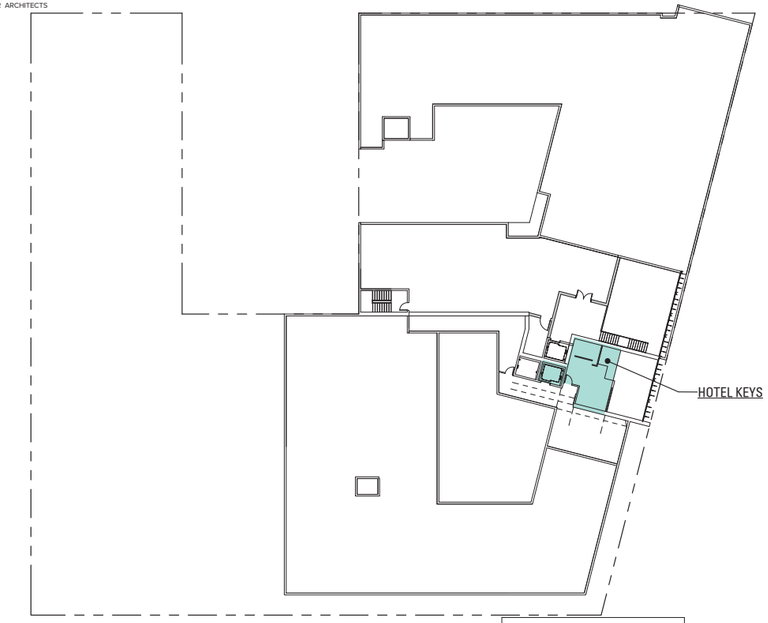
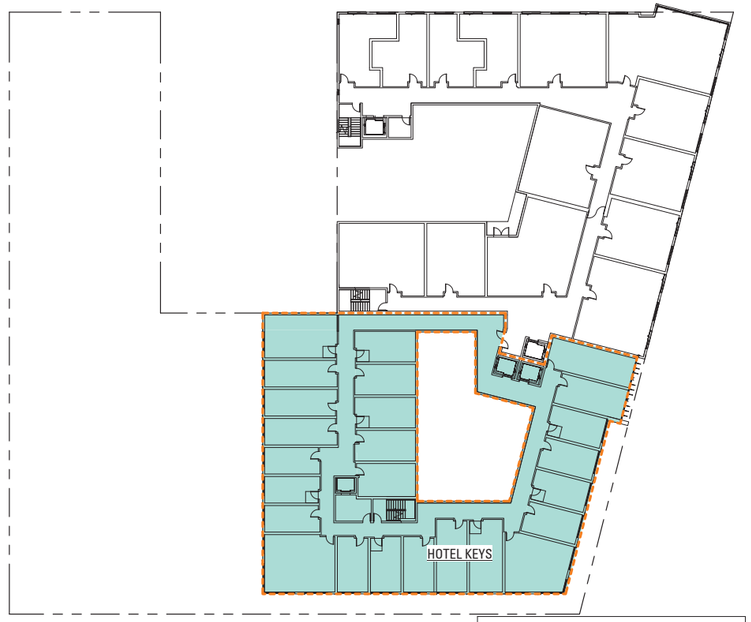


ROOF - PARKING ANALYSIS
1" = 30'-0"

AREA - ROOF	
HOTEL	557 SF
ROOF TOTAL	557 SF



LEVELS 5-7 - PARKING ANALYSIS
1" = 30'-0"

AREA - LEVEL 5 (6, 7 SIM.)	
HOTEL	11,982 SF
LEVEL 5 - 7 TYPICAL	11,982 SF
LEVELS 5-7 TOTAL =	35,946 SF

LEVEL 4 - PARKING ANALYSIS
1" = 30'-0"

AREA - LEVEL 4	
BAR	2,031 SF
HOTEL	18,707 SF
LEVEL 4 TOTAL	20,738 SF

LEVEL 3 - PARKING ANALYSIS
1" = 30'-0"

AREA - LEVEL 3	
BAR	4,030 SF
HOTEL	18,716 SF
LEVEL 3 TOTAL	22,746 SF

LEVEL 2 - PARKING ANALYSIS
1" = 30'-0"

AREA - LEVEL 2	
HOTEL	11,448 SF
LEVEL 2 TOTAL	11,448 SF

TO BE INCLUDED AS MEZZANINE FOR PARKING COUNTS

LEVEL 1- PARKING ANALYSIS
1" = 30'-0"

AREA - LEVEL 1	
BAR	401 SF
CAFE	1,285 SF
HOTEL	7,801 SF
RESTAURANT	4,806 SF
RETAIL	14,616 SF
LEVEL 1 TOTAL	28,909 SF

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BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

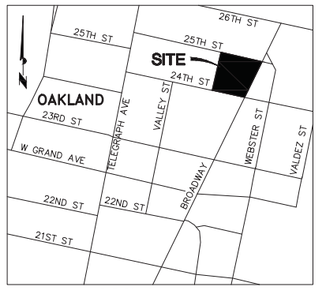
COMMERCIAL PARKING AREA PLANS

07.25.17	17001	BAR architects		A25

2401 BROADWAY

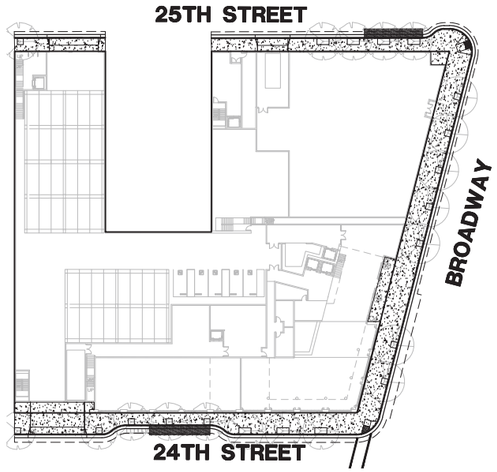
DESIGN DEVELOPMENT

OAKLAND, CALIFORNIA



VICINITY MAP

NOT TO SCALE



SITE MAP

50' 0' 25' 50' 100' 200'

(IN FEET)
1 INCH = 50 ft.

ABBREVIATIONS

AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
AD	AREA DRAIN
AP	ANGLE POINT
ARV	AIR RELEASE VALVE
BC	BEGINNING OF CURVE
BFP	BACKFLOW PREVENTER
BOV	BLOW-OFF VALVE
BOW	BACK OF WALK
BW	BOTTOM OF WALL
BVC	BEGINNING OF VERTICAL CURVE
C&G	CURB & GUTTER
CB	CATCH BASIN
CTV	CABLE TELEVISION
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
CONF.	CONFORM TO
CONST	CONSTRUCT
COTG	CLEANOUT TO GRADE
CR	CURB RETURN
D/W	DRIVEWAY
DIA	DIAMETER
DR	DRIVE
DTL	DETAIL
DWG	DRAWING
(E)	EAST
EC	END OF CURVE
EG	EXISTING GRADE
ELEC	ELECTRICAL
EP	EDGE OF PAVEMENT
EVAE	EMERGENCY VEHICLE ACCESS EASEMENT
EVC	END OF VERTICAL CURVE
EX	EXISTING
(F)	FUTURE
FC	FACE OF CURB
FDC	FIRE DEPARTMENT CONNECTION
FF	FINSIH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FI	FIELD INLET
FL	FLOW LINE
F-MAIN	FORCE MAIN
G	GAS
GB	GRADE BREAK
GR	GRATE
HCR	HANDICAP RAMP
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH POINT
INTX	INTERSECTION
INV	INVERT
IRR	IRRIGATION
JP	JOINT POLE
L	LEFT
LE	LANDSCAPE EASEMENT
LF	LINEAL FEET
LIP	LIP OF GUTTER
LP	LOW POINT
MAX	MAXIMUM
MEP	MECHANICAL, ELECTRICAL, PLUMBING
MIN	MINIMUM
MON	MONUMENT
(N)	NORTH
NEC.	NECESSARY
OC	ON CENTER
PCC	PONT OF COMPOUND CURVE
PG	PAVEMENT GRADE
PL	PROPERTY LINE
POC	POINT OF CONNECTION
PR	PEDESTRIAN RAMP
PSDE	PRIVATE STORM DRAIN EASEMENT
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE
R	RIGHT
(R)	RADIAL
RCP	REINFORCED CONCRETE PIPE
REC	RECORD INFORMATION
RD	ROAD
RL	RESTRAIN LENGTH
R/W	RIGHT OF WAY
(S)	SOUTH
SBL	SETBACK LINE
SD	STORM DRAIN
SDHW	STORM DRAIN HEADWALL
SDMH	STORM DRAIN MANHOLE
SF	SQUARE FEET
SHT	SHEET
S-LAT	SANITARY SEWER LATERAL
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
SSRI	SANITARY SEWER RODDING INLET
STD	STANDARD
S/W	SIDEWALK
T	TELEPHONE
TC	TOP OF CURB
TD	TRENCH DRAIN
TG	TOP OF GRADE
T-MAIN	TRANSMISSION MAIN
TS	TOP OF SLAB
TW	TOP OF WALL
TYP	TYPICAL
VC	VERTICAL CURB
W	WATER MAIN
(W)	WEST
W-LAT	WATER LATERAL
[ ]	RECORD INFORMATION

TWO DAYS BEFORE YOU DIG
CALL USA TOLL FREE
811
CALL BEFORE YOU DIG

CAUTION:

CONTRACTOR TO EXERCISE EXTREME CAUTION TO AVOID DAMAGING EXISTING UNDERGROUND UTILITIES. OBSTRUCTIONS INDICATED ARE FOR INFORMATION ONLY. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THE LOCATION AND DEPTH WITH THE APPROPRIATE AGENCIES. NEITHER THE OWNER NOR THE ENGINEER ASSUMES RESPONSIBILITY THAT THE OBSTRUCTIONS INDICATED WILL ACTUALLY BE THE OBSTRUCTIONS ENCOUNTERED. POTHOLING IS REQUIRED.

DESIGN TEAM

1. DEVELOPER/CONTRACTOR: SIGNATURE DEVELOPMENT GROUP
2335 BROADWAY, SUITE 200
OAKLAND, CA 94612
(510) 251-9276
CONTACT – JAMIE CHOY

2. CIVIL ENGINEER: dk CONSULTING
1931 SAN MIGUEL DRIVE, SUITE 100
WALNUT CREEK, CA 94596
(925) 932-6868
CONTACT – SCOTT E HARTSTEIN

3. ARCHITECT: BAR ARCHITECTS
901 BATTERY STREET, SUITE 300
SAN FRANCISCO, CA 94111
(415) 293-5700
CONTACT – BRADLEY SUGARMAN

4. LANDSCAPE ARCHITECT: BRUCE JETT ASSOCIATES, INC.
2 THEATRE SQUARE, STE 218
ORINDA, CA 94563
(925) 254-5422
CONTACT – JESSE MARKMAN

5. GEOTECHNICAL ENGINEER: ENGEO, INC.
2010 CROW CANYON PLACE, SUITE 250
SAN RAMON, CA 94583
(925) 866-9000
CONTACT – JEFF FIPPIN

PROJECT INFORMATION

1. PROJECT INFORMATION: APN: 008-0674-036, -005
008-0674-004, -003-1
SIZE: ±1.21 ACRES
ZONING: D-BV1
CC-3

2. TITLE REPORT: CHICAGO TITLE COMPANY
OWNERS POLICY TITLE NO.
14-58205703-B-KD
DATED NOVEMBER 21, 2014

3. BASIS OF BEARINGS: THE MONUMENT LINE ON 24TH STREET TAKEN AS NORTH 78°04'52" WEST, PARCEL MAP 9872 (314M53) SHOWN AS NORTH 78°05'47" WEST.

4. BENCHMARK: TOP OF CURB WEST RETURN OF THE NORTHWEST CORNER OF 23RD STREET AND TELEGRAPH AVENUE, WITH AN ELEVATION OF 17.684 FEET PER THE CITY OF OAKLAND MONUMENT BENCHMARK No 37Jc ON BOOK 18 AT PAGE 71.

5. TOPOGRAPHIC SURVEY BUILDING LOCATIONS ARE BASED UPON AERIAL SURVEY PERFORMED ON SEPTMEBER 17, 2015 AND FIELD VERIFIED ON SEPTEMBER 29, 2015 AND ARE PRELIMINARY. AN UPDATE TO THE BUILDING FACE TO FOLLOW.

LEGEND

EXISTING	PROPOSED	
		BOUNDARY
		RIGHT-OF-WAY
		ADJACENT PROPERTY
		MONUMENT LINE
		CURB AND GUTTER LINE
GV		GAS LINE, FIELD LOCATED, VALVE
(G)		RECORD GAS LINE
E		ELECTRIC LINE, BOX
C		COMMUNICATION MANHOLE AND LINE, PACIFIC BELL
S CO		RECORD SANITARY SEWER LINE, MANHOLE, CLEANOUT
D	D	RECORD STORM DRAIN LINE, FIELD INLET
	D	STORM DRAIN LINE, MANHOLE, CURB INLET
	C.3 W	C.3 TREATMENT
WV	M	WATER LINE, FIELD LOCATED, VALVE, METER, FH
(W)		RECORD WATER LINE
		SAWCUT LINE
15		CONTOUR LINE
SS		SANITARY SEWER, SS LATERAL
		UTILITY POLE WITH GUY ANCHOR
		VEGETATION, TREE
		FENCE
		FIRE HYDRANT
		ELECTROLIER
		POST
		SIGN
		OTHER MANHOLE, AS NOTED
		UTILITY VALVE
		FOUND STANDARD STREET MONUMENT
		MISSING STREET MONUMENT
		CALTRANS CURB RAMP
		DRIVEWAY
		CONCRETE SIDEWALK
		PARKLET
		BULB OUT
40		LOT NUMBER
[10"SS]		RECORD UTILITY INFORMATION
P=		PROPORTION FACTOR
SFNF		SEARCHED FOR, NOT FOUND
M-M		MONUMENT TO MONUMENT
NPS		NOT A PART OF THIS SURVEY
×15.00	×15.00	SPOT ELECTION
3.0%	3.0%	SLOPE

SHEET INDEX

F:\17001\1 Working\15-DD\Arch\17001 DD Cover.dwg

BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

COVER SHEET

05.22.17 | 17001 | BAR architects | dk CONSULTING | C1

GENERAL NOTES

1. THE ENGINEER ASSUMES NO RESPONSIBILITY BEYOND THE ADEQUACY OF HIS DESIGN CONTAINED HEREIN.
2. ALL STAKING REQUESTS SHALL BE DIRECTED TO THE ENGINEER AT LEAST 2 WORKING DAYS PRIOR TO ACTUAL NEED. THE PROTECTION OF THOSE STAKES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ANY ADDITIONAL STAKING OR RESTAKING WILL BE DONE ONLY AS DIRECTED AND AUTHORIZED BY THE OWNER OR HIS AUTHORIZED AGENT.
3. OBSTRUCTIONS INDICATED ARE FOR INFORMATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION AND DEPTH WITH THE APPROPRIATE AGENCIES. NEITHER THE OWNER NOR THE ENGINEER ASSUMES RESPONSIBILITY THAT THE OBSTRUCTIONS INDICATED WILL ACTUALLY BE THE OBSTRUCTIONS ENCOUNTERED. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (800) 642–2222, TWO WORKING DAYS PRIOR TO ANY EXCAVATION.
4. CONTRACTOR SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE STATE CONSTRUCTION SAFETY ORDERS.
5. THE CONTRACTOR WILL LIMIT CONSTRUCTION ACTIVITIES TO MONDAYS THROUGH FRIDAYS FROM THE HOURS SPECIFIED IN THE ENCROACHMENT PERMIT. CONSTRUCTION WILL NOT BE ALLOWED LATER THAN THESE HOURS AND/OR ON SATURDAYS, SUNDAYS OR FEDERAL HOLIDAYS UNLESS PRIOR APPROVAL IS GRANTED BY THE CITY AFTER CONSULTATION WITH ADJACENT USES.
6. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY, PROJECT ENGINEER, HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF OWNER OR ENGINEER.
7. IF IT APPEARS THAT THE WORK TO BE DONE, OR ANY MATTER RELATIVE THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT dk CONSULTING (925) 932–6868 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
8. ALL EXISTING ELEVATIONS SHOWN ARE AS MEASURED IN THE FIELD, UNLESS OTHERWISE NOTED.
9. THE WORKSITE SHALL BE MAINTAINED IN AN ORDERLY FASHION. FOLLOWING THE CESSATION OF CONSTRUCTION ACTIVITY, ALL CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE SITE.
10. THE CONTRACTORS SHALL FIT ALL INTERNAL COMBUSTION ENGINES WITH MUFFLERS AND SHALL LOCATE NOISE–GENERATING EQUIPMENT SUCH AS AIR COMPRESSORS, CONCRETE PUMPERS AND POWER GENERATORS AS FAR AWAY FROM EXISTING RESIDENCES AS POSSIBLE. UNNECESSARY IDLING OF ENGINES SHALL BE PROHIBITED. NEIGHBORS ADJACENT TO CONSTRUCTION AREA SHALL BE NOTIFIED OF THE CONSTRUCTION SCHEDULE IN WRITING. THE TELEPHONE NUMBER OF THE DESIGNATED DISTURBANCE COORDINATOR SHALL BE POSTED AT THE SITE.
11. CONTRACTOR SHALL OBTAIN ALL APPROPRIATE PERMITS FROM REQUIRED AGENCIES OR PUBLIC UTILITIES PRIOR TO COMMENCEMENT OF WORK.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RESTORATION OF ALL EXISTING IMPROVEMENTS DAMAGED OR DESTROYED BY HIS PERFORMANCE OF THE WORK SHOWN HEREIN AT HIS EXPENSE. SAID REPAIRS SHALL BE PERFORMED AS DIRECTED BY THE CITY ENGINEER.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROMPT CLEAN UP OF ANY MATERIALS SPILLED OR DROPPED ON ANY ABUTTING STREETS DURING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED TO THESE STREETS BY CONSTRUCTION VEHICLES ASSOCIATED WITH SUCH CONSTRUCTION. THE CITY ENGINEER MAY REQUIRE THE OWNER TO POST A CASH DEPOSIT PRIOR TO THE START OF CONSTRUCTION TO CAUSE TIMELY CLEAN UP AND REPAIR OF STREETS.
14. CONTRACTOR SHALL PROVIDE FOR INGRESS AND EGRESS TO PRIVATE PROPERTY ADJACENT TO WORK AREA THROUGHOUT CONSTRUCTION.
15. CONTRACTOR TO PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGMEN, AND OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY AND TO MAINTAIN TRAFFIC CONTROL AND AS DIRECTED BY THE CITY TRAFFIC ENGINEER.
16. CONTRACTOR SHALL NOT DISTURB OR DESTROY ANY PERMANENT SURVEY POINTS WITHOUT THE CONSENT OF THE CITY ENGINEER. ANY PERMANENT MONUMENTS OR POINTS DESTROYED SHALL BE REPLACED BY A SURVEYOR AT THE CONTRACTOR'S EXPENSE.
17. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 2009 EDITION, THE CITY OF OAKLAND MODIFICATIONS TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND STANDARD DETAILS FOR PUBLIC WORK CONSTRUCTION 2002 EDITION AS AMENDED AND SUPPLEMENTED BY THE CITY OF OAKLAND.

GRADING NOTES

1. IN THE EVENT AN ARCHEOLOGICAL RESOURCE IS DISCOVERED DURING DEMOLITION AND/OR CONSTRUCTION, CONTRACTOR SHALL NOTIFY THE CITY AND EARTHWORK WITHIN 100 FEET OF THESE MATERIALS SHALL BE STOPPED UNTIL A PROFESSIONAL ARCHAEOLOGIST WHO IS CERTIFIED BY THE SOA AND/OR SOPA HAS HAD AN OPPORTUNITY TO EVALUATE THE SIGNIFICANCE OF THE FIND AND SUGGEST APPROPRIATE MITIGATION MEASURES, IF DEEMED NECESSARY PRIOR TO COMMENCEMENT OF ACTIVITIES. THE ARCHAEOLOGIST SHALL BE HIRED AT THE APPLICANT'S EXPENSE.
2. IN THE EVENT A UNIQUE PALEONTOLOGICAL RESOURCE OR SITE IS DISCOVERED DURING DEMOLITION AND/OR CONSTRUCTION, THE APPLICANT SHALL STOP WORK IMMEDIATELY AND NOTIFY THE CITY. A CERTIFIED ARCHAEOLOGIST SHALL BE HIRED AT THE APPLICANT'S EXPENSE TO INVESTIGATE THE DISCOVERY AND RECOMMEND FURTHER ACTIONS PRIOR TO COMMENCEMENT OF ACTIVITIES.
3. IN THE EVENT HUMAN REMAINS ARE DISCOVERED DURING DEMOLITION AND/OR CONSTRUCTION, THE APPLICANT SHALL STOP WORK IMMEDIATELY AND NOTIFY THE CITY. A CERTIFIED ARCHAEOLOGIST SHALL BE HIRED AT THE APPLICANT'S EXPENSE TO INVESTIGATE THE DISCOVERY AND RECOMMEND FURTHER ACTIONS PRIOR TO COMMENCEMENT OF ACTIVITIES.
4. IF FOSSILS OF POTENTIAL SCIENTIFIC SIGNIFICANCE ARE FOUND DURING CONSTRUCTION, GRADING WITHIN 50 FEET OF THE FOSSIL LOCATION SHALL BE SUSPENDED UNTIL THE SIGNIFICANCE OF THE FIND HAS BEEN EVALUATED BY A PALEONTOLOGIST. THE CITY SHALL BE NOTIFIED WITHIN 24 HOURS AND ADVISED OF THE EVALUATION OF THE PALEONTOLOGIST. RESUMPTION OF WORK IN THE FOSSIL AREA SHALL REQUIRE WRITTEN APPROVAL FROM THE CITY OF OAKLAND PLANNING DEPARTMENT.
5. ALL CHEMICALS AND PETROLEUM PRODUCTS STORED ON–SITE DURING CONSTRUCTION SHALL BE WITHIN A BERMED CONTAINMENT AREA OR OTHER APPROPRIATE FACILITY. THE HANDLING, STORAGE AND DISPOSAL OF ANY HAZARDOUS MATERIALS USED ON THE SITE WILL BE IN ACCORDANCE WITH A BUSINESS PLAN (OR EQUIVALENT) ON FILE WITH THE COUNTY HEALTH SERVICES DEPARTMENT, HAZARDOUS MATERIALS DIVISION. ALL REFUELING AND VEHICLE MAINTENANCE ACTIVITY SHALL BE LOCATED AWAY FROM ANY DRAINAGE PATHWAYS. REFER TO EROSION CONTROL PLAN.
6. ALL GRADING, SITE PREPARATION, PLACING AND COMPACTION OF FILL TO BE DONE IN ACCORDANCE WITH CITY OF OAKLAND ORDINANCE; ALSO UNDER THE DIRECT SUPERVISION OF THE GEOTECHNICAL ENGINEER. SUBSEQUENT TO COMPLETION OF WORK, THE GEOTECHNICAL ENGINEER SHALL SUBMIT TO THE CITY OF OAKLAND ENGINEERING DEPARTMENT A REPORT STATING THAT ALL WORK HAS BEEN DONE TO ITS SATISFACTION.
7. ALL REVISIONS TO THIS PLAN MUST BE REVIEWED BY THE CITY OF OAKLAND ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION AND SHALL BE ACCURATELY SHOWN ON REVISED PLANS STAMPED AND DISTRIBUTED BY THE ENGINEERING DEPARTMENT PRIOR TO THE WORK BEING ADVANCED AND ACCEPTANCE OF THE WORK AS COMPLETE.
8. ALL TRENCHES SHALL BE SHORED IN ACCORDANCE WITH CAL–OSHA "CONSTRUCTION SAFETY ORDERS" CURRENT EDITION. ALSO AS SPECIFIED BY THE GEOTECHNICAL ENGINEER. CONTRACTOR MUST HAVE VALID TRENCH SHORING PERMIT ISSUED BY CAL–OSHA.
9. THE EXCAVATION TRENCH WIDTH FOR ALL PIPES, WITH THE EXCEPTION OF C.I.P.P., SHALL BE A MINIMUM OF 24" GREATER THAN THE OUTSIDE DIAMETER OF THE PIPE. ONE–HALF OF THE MINIMUM DIMENSION SHALL BE AVAILABLE ON EITHER SIDE OF THE PIPE. THE SAFETY REQUIREMENTS OF THE OCCUPATION SAFETY AND HEALTH ACT FOR TRENCH SHORING AND BRACING SHALL BE COMPLIED WITH WHERE APPLICABLE.
10. THE CONTRACTOR SHALL PROVIDE THE NECESSARY SAFETY TESTING OF EQUIPMENT AND PERSONNEL.
11. CONTRACTOR'S ATTENTION IS DIRECTED TO THE REQUIREMENTS OF THE DIVISION OF INDUSTRIAL SAFETY PERTAINING TO "CONFINED SPACES". ANY MANHOLES, CULVERT, DROP INLET OR TRENCH WHICH COULD CONTAIN AIR WHICH IS NOT READILY VENTILATED MAY BE CONSIDERED A "CONFINED SPACE"
12. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IMMEDIATELY NOTIFY THE CITY OF OAKLAND ENGINEERING INSPECTOR AND THE DESIGN ENGINEER UPON DISCOVERY OF ANY FIELD CONFLICTS.
13. ANY DEVIATIONS OR CHANGES IN THESE PLANS WITHOUT OFFICIAL APPROVAL OF THE DESIGN ENGINEER SHALL ABSOLVE THE DESIGN ENGINEER OF ANY AND ALL RESPONSIBILITY OF SAID DEVIATION OR CHANGE.
14. DURING THE GRADING OPERATION THE CONTRACTOR SHALL CONTROL THE GENERATION OF DUST BY FULLY SPRINKLING THE SITE AS DETERMINED TO BE NEEDED BY THE COUNTY GRADING INSPECTOR IN ACCORDANCE WITH THE COUNTY GRADING ORDINANCE.
15. COMPACTION TESTS WILL BE PERFORMED ON ALL STREET WORK TO VERIFY THE COMPACTION CONFORMS TO CITY OF OAKLAND STANDARDS AND THE GEOTECHNICAL REPORT (ENGEO INC PROJECT NO. 12215.000.000 DATED JULY 28, 2015). THE TEST OF SUBGRADE TO BE PERFORMED BY THE GEOTECHNICAL ENGINEER. INSPECTION OF ROCK AND PAVING TO BE PERFORMED BY THE CITY OF OAKLAND. (TWO WORKING DAYS NOTICE REQUIRED) WHERE UNSTABLE OR UNSUITABLE MATERIALS ARE ENCOUNTERED DURING SUBGRADE PREPARATION, THE AREA IN QUESTION SHALL BE OVER EXCAVATED AND REPLACED BY SELECT BACKFILL AS DIRECTED IN THE FIELD BY THE GEOTECHNICAL ENGINEER. ANY SLIDE REPAIR WORK, SUBDRAIN INSTALLATION, AND LINED DITCH WORK SHALL BE INSPECTED BY THE CITY OF OAKLAND ENGINEERING DEPARTMENT. A REPORT FROM THE GEOTECHNICAL ENGINEER SHALL BE SUBMITTED TO THE CITY OF OAKLAND ENGINEERING DEPARTMENT REGARDING THE SLIDE REPAIR AND/OR SUBDRAIN INSTALLATION. CUT AND GRADED SLOPES SHALL BE PERIODICALLY INSPECTED DURING GRADING OPERATION BY AN ENGINEERING GEOLOGIST OR GEOTECHNICAL ENGINEER WITH PERIODIC PROGRESS REPORTS AND A GRADING COMPLETION REPORT.
16. APPLICANT SHALL COMPLY WITH ALL RULES, REGULATIONS AND PROCEDURES OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM.

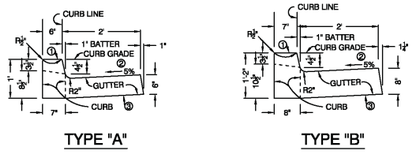
IMPROVEMENT NOTES

1. PRODUCTS AND MATERIALS SPECIFIED ARE SUBJECT TO CHANGE WITH APPROVED EQUIVALENCE. JURISDICTION SHALL REVIEW AND APPROVE PROPOSED SUBSTITUTIONS. SHOULD THE CONTRACTOR REQUEST A CHANGE OF MATERIALS, THE CONTRACTOR SHALL PAY FOR THE COST INVOLVED IN PLAN CHANGES AND PROCESSING THE CHANGE THROUGH THE APPROPRIATE AGENCY.
2. THE CONTRACTOR IS REQUIRED TO OBTAIN AN ENCROACHMENT PERMIT FOR ALL WORK WITHIN EXISTING CITY RIGHTS OF WAY. APPLICATIONS FOR ENCROACHMENT PERMIT, SUBMITTED MORE THAN 90 DAYS PAST ENGINEERING "REVIEWED" DATE STAMP, MAY REQUIRE ADDITIONAL TIME TO PROCESS. FOR FURTHER PERMIT INFORMATION, CONTACT THE ENGINEERING DEPARTMENT AT (510) 238–3659.
3. TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), PART 6 – TEMPORARY TRAFFIC CONTROL AND THE 2009 EDITION OF MUTCD.
4. IN CONFORM PAVING AREAS, IF A FULL STREET STRUCTURAL SECTION IS NOT FOUND AT THE APPARENT EDGE OF PAVEMENT, FURTHER STREET EXCAVATION WILL BE REQUIRED UNTIL THE FULL SECTION IS ENCOUNTERED. PAVING CONFORMS SHALL BE MADE AT A SMOOTHLY TRIMMED BUTT JOINT. DO NOT OVERLAP EXISTING PAVEMENT.
5. TRENCH BACKFILL, WHICH LIES WITHIN EITHER EXISTING OR NEW ROADWAYS, SHALL CONFORM TO THE CITY OF OAKLAND STANDARD DETAIL D–22 FOR TRENCH BACKFILL.
6. THE CONTRACTOR IS RESPONSIBLE FOR MATCHING EXISTING PAVEMENT, SIDEWALK, SURROUNDING LANDSCAPING AND OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION IN PAVING, CURB AND GUTTER, GRADING, ETC. AND TO AVOID ANY ABRUPT OR APPARENT CHANGES IN GRADES OR CROSS SLOPES, LOW SPOTS OR HAZARDOUS CONDITIONS.
7. ALL ELECTRICAL AND GAS UTILITIES TO BE PROVIDED BY P.G.& E. AND INSTALLED UNDERGROUND PRIOR TO THE CONSTRUCTION OF CURB, GUTTER AND SIDEWALKS.
8. ANY COST OF RELOCATING UTILITIES DUE TO IMPROVEMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
9. ALL UNDERGROUND UTILITIES WITHIN THE RIGHT–OF–WAY, INCLUDING MAINS, LATERALS AND CROSSINGS, SHALL BE INSTALLED, BACKFILLED AND COMPLETED PRIOR TO THE COMMENCEMENT OF CURB, GUTTER AND SIDEWALK CONSTRUCTION.
10. ALL UNDERGROUND FACILITIES SHALL BE INSTALLED PRIOR TO THE CONSTRUCTION OF CURB AND FINAL PREPARATION OF SUBGRADE AND PLACEMENT OF BASE MATERIAL. CURB AND GUTTER SHALL BE COMPLETE PRIOR TO THE PLACEMENT OF STREET BASE MATERIAL, UNLESS OTHERWISE APPROVED.
11. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL NECESSARY UTILITY RELOCATION WITH THE APPROPRIATE UTILITY AGENCY.
12. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR FINAL GRADE OF CONCRETE UNLESS FORMS ARE CHECKED PRIOR TO POURING.
13. ALL PEDESTRIAN IMPROVEMENTS SHALL CONFORM WITH THE REQUIREMENTS OF TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS AND THE AMERICANS WITH DISABILITIES ACT.
14. ALL WORK SHALL CONFORM TO THE CITY OF OAKLAND STANDARDS.

BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

GENERAL NOTES

05.22.17	17001	BAR architects	dk CONSULTING	C2



NOTES

1. OMIT THIS PORTION OF CURB AT DRIVEWAYS.
2. STANDARD SLOPE EXCEPT AS SHOWN ON PLANS.
3. PLACE 4" OF PROCESSED MISCELLANEOUS BASE UNDER CURB, GUTTER AND SIDEWALK UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

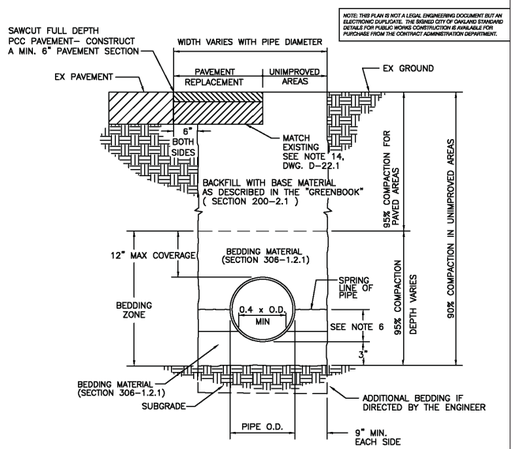
CITY OF OAKLAND | DESIGN AND CONSTRUCTION SERVICES DEPARTMENT

CONCRETE CURB AND GUTTER

ENGINEERING DESIGN MANAGER
DATED: JANUARY 2002 | REV. DATED: | DWG. S-1

PAVEMENT TYPES

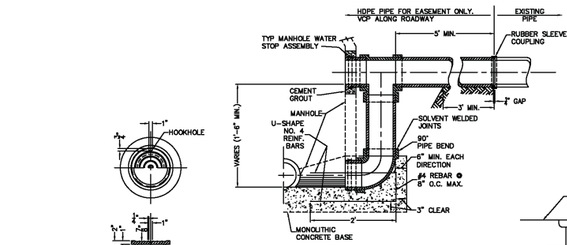
TYPE A	TYPE B	TYPE C	TYPE D	TYPE F
6" P.C.C . PER SECTION 201-1.1.2	3" A.C. PER SECTION 306-1.5.2	4" A.C. PER SECTION 306-1.5.2	3" A.C. PER SECTION 306-1.5.2	VARIABLE DEPTH A.C. PER SECTION 306-1.5.2
18" A.B. PER SECTION 306-1.3.1	6" P.C.C . PER SECTION 201-1.1.2			
	12" A.B.PER SECTION 306-1.3.	18" A.B. PER SECTION 306-1.3.1	18" A.B. PER SECTION 306-1.3.1	18" A.B. PER SECTION 306-1.3.1



CITY OF OAKLAND | DESIGN AND CONSTRUCTION SERVICES DEPARTMENT

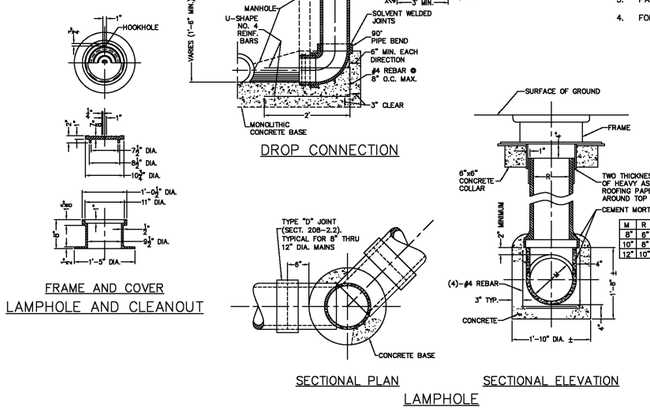
TRENCH DETAIL

ENGINEERING DESIGN MANAGER
DATED: JANUARY 2002 | REV. DATED: | DWG. D-22.0



DROP CONNECTION

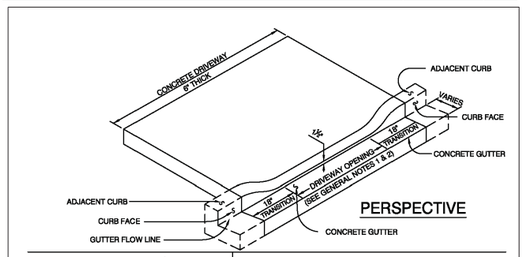
1. COVERS, PANS AND FRAMES TO CONFORM TO SECTION 206-3.
2. ALL CONTACT AND BEARING SURFACES OF BOTH FRAME AND COVER SHALL BE MACHINED TO FIT ACCURATELY.
3. PANS SHALL BE PLACED IN ALL LAMPHOLES.
4. FOR CLEANOUT LESS THAN 4' DEEP, OMIT 18" SECTION.

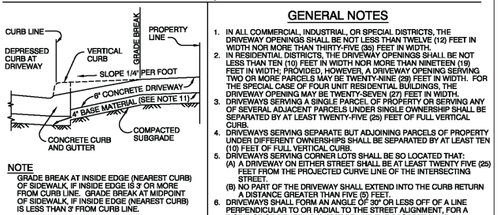


CITY OF OAKLAND | DESIGN AND CONSTRUCTION SERVICES DEPARTMENT

LAMPHOLE, CLEANOUT AND DROP CONNECTION

ENGINEERING DESIGN MANAGER
DATE: FEBRUARY 2006 | REV. DATE: | DRAWING D-2





NOTE

GRADE BREAK AT INSIDE EDGE (NEAREST CURB) OF SIDEWALK, IF INSIDE EDGE IS 2' OR MORE FROM CURB LINE. GRADE BREAK AT MIDPOINT OF SIDEWALK, IF INSIDE EDGE (NEAREST CURB) IS LESS THAN 3' FROM CURB LINE.

RESIDENTIAL

GENERAL NOTES

1. IN ALL COMMERCIAL, INDUSTRIAL, OR SPECIAL DISTRICTS, THE DRIVEWAY OPENINGS SHALL BE NOT LESS THAN TWELVE (12) FEET IN WIDTH NOR MORE THAN THIRTY-FIVE (35) FEET IN WIDTH.
2. IN RESIDENTIAL DISTRICTS, THE DRIVEWAY OPENINGS SHALL BE NOT LESS THAN TEN (10) FEET IN WIDTH NOR MORE THAN NINETEEN (19) FEET IN WIDTH; PROVIDED, HOWEVER, A DRIVEWAY OPENING SERVING TWO OR MORE PARCELS MAY BE TWENTY-NINE (29) FEET IN WIDTH. FOR THE SPECIAL CASE OF FOUR UNIT RESIDENTIAL BUILDINGS, THE DRIVEWAY OPENING MAY BE TWENTY-SEVEN (27) FEET IN WIDTH.
3. DRIVEWAYS SERVING A SINGLE PARCEL OF PROPERTY OR SERVING ANY OF SEVERAL ADJACENT PARCELS UNDER SINGLE OWNERSHIP SHALL BE SEPARATED BY AT LEAST TWENTY-FIVE (25) FEET OF FULL VERTICAL CURB.
4. DRIVEWAYS SERVING SEPARATE BUT ADJOINING PARCELS OF PROPERTY UNDER DIFFERENT OWNERSHIPS SHALL BE SEPARATED BY AT LEAST TEN (10) FEET OF FULL VERTICAL CURB.
5. DRIVEWAYS SERVING CORNER LOTS SHALL BE SO LOCATED THAT:
   (A) A DRIVEWAY ON EITHER STREET SHALL BE AT LEAST TWENTY FIVE (25) FEET FROM THE PROJECTED CURVE LINE OF THE INTERSECTING STREET.
   (B) NO PART OF THE DRIVEWAY SHALL EXTEND INTO THE CURB RETURN A DISTANCE GREATER THAN FIVE (5) FEET.
6. DRIVEWAYS SHALL FORM AN ANGLE OF 30° OR LESS OFF OF A LINE PERPENDICULAR TO OR RADIAL TO THE STREET ALIGNMENT, FOR A DISTANCE OF EITHEEN (18) FEET BEHIND THE PROPERTY LINE MEASURED ALONG THE SHORTEST SIDE OF SAID DRIVEWAY.
7. ALL DRIVEWAY CURB TRANSITIONS SHALL BE EIGHTEEN (18) INCHES WITH STANDARD SIX-INCH HIGH CURBS.
8. NO DRIVEWAY SHALL BE CONSTRUCTED OR RECONSTRUCTED WITHIN THIRTY (30) INCHES OF ANY EXISTING OBSTRUCTION IN THE STREET AREA.
9. REFER TO CHAPTER 12.04 OF THE OAKLAND MUNICIPAL CODE REGULATING THE CONSTRUCTION AND REPAIR OF SIDEWALKS, DRIVEWAYS AND CURBS.
10. CONCRETE SHALL BE MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2500 PSI IN ACCORDANCE WITH SUB-SECTION 201-1 UNLESS OTHERWISE NOTED.
11. BASE MATERIAL SHALL CONFORM TO SUB-SECTION 200-2.5 UNLESS OTHERWISE NOTED.
12. EXPANSION JOINTS 1/4" THICK SHALL EXTEND THROUGH THE ENTIRE THICKNESS OF THE SIDEWALK AT EACH SIDE OF DWYS. CURB RETURNS, AS DIRECTED BY THE ENGINEER TO CONFORM TO EX. CONDITIONS.

CITY OF OAKLAND | ENGINEERING DESIGN SERVICES DIVISION

CONCRETE DRIVEWAY

ENGINEERING DESIGN MANAGER
DATED: JANUARY 2002 | REV. DATED: | DWG. S-2

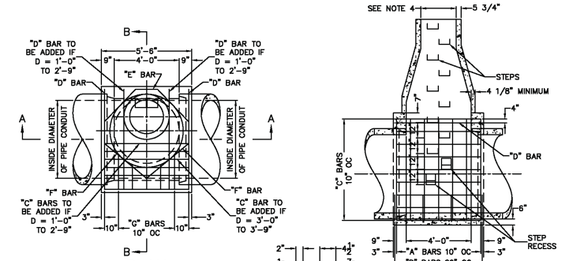
NOTES:

1. Excavated material shall not be used to fill voids caused by overexcavation; such voids shall be filled with compacted bedding material. Unless directed by the Engineer, no separate payment will be made for overexcavation.
2. Import backfill material shall conform to Subsection 306-1.31
3. Aggregate base shall conform to crushed miscellaneous base (Section 200-2.4) or better. The base material must be approved by the Engineer.
4. The streets of Oakland are generally paved with either AC, PCC, or a combination of the two. The existing pavement may differ from the replacement Pavement Type (A to F) indicated on the plans.
5. Compaction by jetting is not permitted.
6. When flexible pipe (HDPE, etc.) is used, pipe shall be backfilled to the spring line, compacted and backfill tested prior to completing initial backfill.
7. The compacted temporary resurfacing shall be a minimum of 2" thick placed on the required base, and shall be removed prior to placing the permanent paving.
8. Backfill testing is required and results shall be approved by the Engineer prior to paving.
9. No longitudinal joints or seams are allowed in bike lanes. If a longitudinal joint is constructed due to the Contractor's work or this requirement, the Contractor shall remove a minimum of 2" of asphalt from the pavement across the entire bike lane using a method approved by the City and then resurface the bike lane to the Engineer's satisfaction.
10. During backfill operations, the trench shall be backfilled, compacted, and tested to the spring line of any utilities crossing the trench before proceeding with further backfill.
11. Unless specified otherwise, measurement for payment of additional bedding, imported backfill and temporary paving (when listed as separate pay items) shall be based upon the trench widths defined on this detail. The lower trench width for 8" pipe shall be 30".
12. Clean and tackcoat sides of excavation and between paving courses with spray application of SS-1 emulsion before placing asphalt–concrete pavement section.
13. If the distance to the edge of gutter is less than 3' from one trench edge, the pavement replacement shall extend to the edge of existing gutter.
14. In areas where existing paving consists of rubberized AC, the trench area should be repaved with the equivalent pavement section of rubberized AC. As an alternate, a dense graded AC section equivalent to two–times the the thickness of the rubberized AC may be substituted.

CITY OF OAKLAND | DESIGN AND CONSTRUCTION SERVICES DEPARTMENT

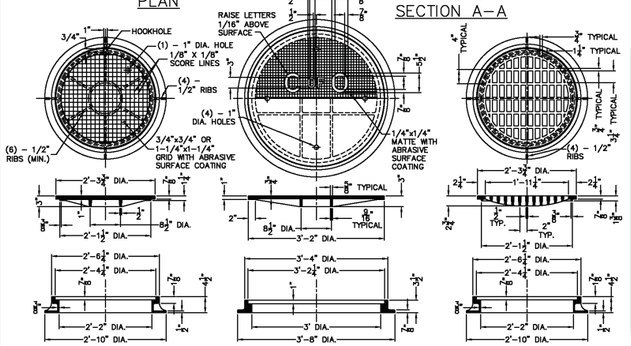
TRENCH DETAIL

ENGINEERING DESIGN MANAGER
DATED: JANUARY 2002 | REV. DATED: | DWG. D-22.1



GENERAL NOTES

1. PRECAST CONCRETE SHAFT IS OPTIONAL WHEN "D" IS 4'–0" OR GREATER.
2. ALL CONTACT AND BEARING SURFACES OF BOTH FRAME AND COVER SHALL BE MACHINED TO FIT ACCURATELY.
3. CONVERSION TO METRIC EQUIVALENTS SHALL BE IN ACCORDANCE WITH ASTM A–360.
4. SHAFT OPENING FOR TYPE "H" FRAMES AND COVERS SHALL BE 2'–0" DIAMETER.
5. STEPS SHALL BE 3/4" DIAM. HOT DIPPED GALVANIZED STEEL ROD OR FIBERGLASS. SEE SHEET D–11 FOR STEP DETAILS.
6. ALL STEEL A305 REINFORCING STEEL NO. 4 BARS.
7. REINFORING STEEL MAY BE SPREAD TO ADMIT SMALL PIPES ENTERING MANHOLE SIDES.
8. WHERE TWO SIZES OF PIPE ENTER AND LEAVE A MANHOLE, USE DIMENSIONS AND QUANTITIES FOR THE LARGER SIZE PIPE.



FRAME AND COVER DETAILS

INSIDE DIAMETER OF CONDUIT	MANHOLE DIMENSIONS W	X	Y	Z	CUBIC YARDS OF CONCRETE	"A" BAR NO.	"A" BAR LENGTH	"B" BAR NO.	"B" BAR LENGTH	"C" BAR NO.	"C" BAR LENGTH	"D" BAR NO.	"D" BAR LENGTH	"E" BAR NO.	"E" BAR LENGTH	"F" BAR NO.	"F" BAR LENGTH	"G" BAR NO.	"G" BAR LENGTH	POUNDS OF REINFORCING STEEL
36"		5'-6"	4'-9"	6"	2.88	7	14'–0"	4	7'–8"	17	5'–2"			2	6'–10"					153.8
39"		5'-6"	5'-1/2"	4 1/2"	2.93	7	14'–7"	4	7'–4"	19	5'–2"			2	6'–10"					164.0
42"		5'-6"	5'-4"	3"	2.97	7	15'–2"	4	7'–0"	19	5'–2"			2	6'–10"					164.4
45"		5'-6"	5'-7 1/2"	1 1/2"	3.00	7	15'–9"	4	6'–8"	19	5'–2"			2	6'–10"					166.5
48"	4"	5'–10"	6'–2"	2"	3.30	7	17'–2"	4	7'–0"	19	5'–2"	2	5'–6"	2	6'–10"	SEE	"E" BAR			181.1
51"	7"	6'–1"	6'–5 1/2"	2"	3.60	7	18'–0"	4	7'–2"	19	5'–2"	2	5'–9"	2	6'–10"	SEE	"E" BAR	5	2'–9"	193.9
54"	10"	6'–4"	6'–8"	2"	3.80	7	18'–10"	4	7'–5"	23	5'–2"	2	6'–0"	1	6'–10"	2	2'–9"	5	3'–0"	206.9
57"	1'–1"	6'–7"	7'–1/2"	2"	4.10	7	19'–8"	4	7'–7"	23	5'–2"	2	6'–3"	1	6'–10"	2	3'–4"	5	3'–3"	213.2
60"	1'–4"	6'–10"	7'–4"	2"	4.20	7	20'–6"	4	7'–10"	23	5'–2"	2	6'–6"	1	6'–10"	2	3'–9"	5	3'–6"	219.5
63"	1'–7"	7'–1"	7'–7 1/2"	2"	4.50	7	21'–4"	4	8'–1"	25	5'–2"	2	6'–9"	1	6'–10"	2	4'–1"	5	3'–9"	239.2
66"	1'–10"	7'–4"	7'–11"	2"	4.90	7	22'–2"	4	8'–3"	25	5'–2"	2	7'–0"	1	6'–10"	2	4'–5"	5	4'–0"	245.3
69"	2'–1"	7'–7"	8'–2 1/2"	2"	5.20	7	23'–0"	4	8'–5"	28	5'–2"	2	7'–3"	1	6'–10"	2	4'–9"	5	4'–3"	254.6
72"	2'–4"	7'–10"	8'–6"	2"	5.30	7	23'–10"	4	8'–8"	28	5'–2"	2	7'–6"	1	6'–10"	2	5'–1"	5	4'–6"	267.7
75"	2'–7"	8'–1"	8'–9 1/2"	2"	5.70	7	24'–8"	4	8'–11"	28	5'–2"	2	7'–9"	1	6'–10"	2	5'–4"	5	4'–9"	273.7

CITY OF OAKLAND | DESIGN AND CONSTRUCTION SERVICES DEPARTMENT

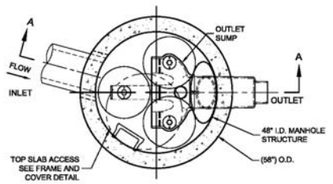
MANHOLE TYPE 2
(FOR 36" TO 75" DIA. PIPE CONDUIT)

ENGINEERING DESIGN MANAGER
DATE: FEBRUARY 2006 | REV. DATE: | DRAWING D-12

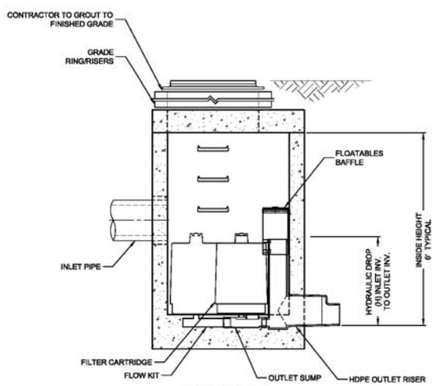
BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

DETAILS

05.22.17 | 17001 | BAR architects | CONSULTING | C3



PLAN VIEW
STANDARD OUTLET RISER
FLOWKIT: 40A



SECTION A-A

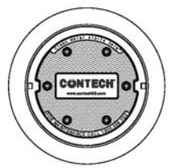
StormFilter®

STORMFILTER DESIGN NOTES

STORMFILTER TREATMENTCAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. THE STANDARD MANHOLE STYLE IS SHOWN WITH THE MAXIMUM NUMBER OF CARTRIDGES (3). VOLUME SYSTEM IS ALSO AVAILABLE WITH MAXIMUM 3 CARTRIDGES. 2148" MANHOLE STORMFILTER PEAK HYDRAULIC CAPACITY IS 1.0 CFS. IF THE SITE CONDITIONS EXCEED 1.0 CFS AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

CARTRIDGE SELECTION

CARTRIDGE HEIGHT	27"		18"		LOW DROP	
RECOMMENDED HYDRAULIC DROP (-I)	3.05'		2.3'		1.8'	
SPECIFIC FLOW RATE (gpm/sf)	2 gpm/ft²	1 gpm/ft²	2 gpm/ft²	1 gpm/ft²	2 gpm/ft²	1 gpm/ft²
CARTRIDGE FLOW RATE (gpm)	22.5	11.25	15	7.5	10	5



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	*
WATER QUALITY FLOW RATE (cfs)	*
PEAK FLOW RATE (cfs)	*
RETURN PERIOD OF PEAK FLOW (yrs)	*
# OF CARTRIDGES REQUIRED	*
CARTRIDGE FLOW RATE	*
MEDIA TYPE (CSF, PERLITE, ZPG, GAC, PHS)	*

PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE #1	*	*	*
INLET PIPE #2			
OUTLET PIPE	*	*	*

RIM ELEVATION	*

ANTI-FLOTATION BALLAST	WIDTH	HEIGHT
	*	*

NOTES/SPECIAL REQUIREMENTS:

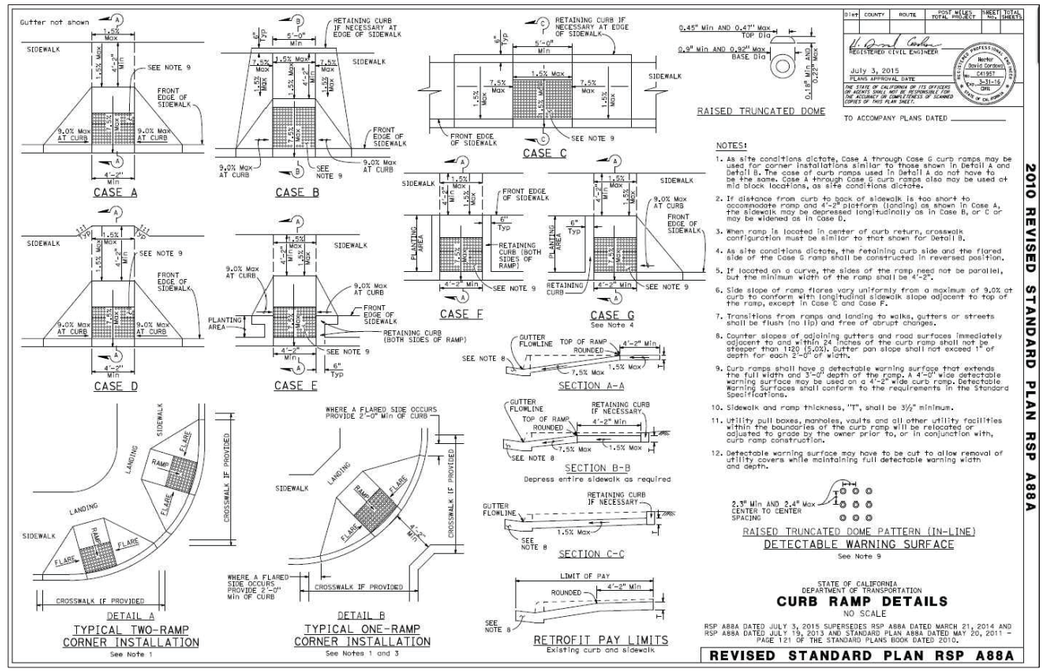
* PER ENGINEER OF RECORD

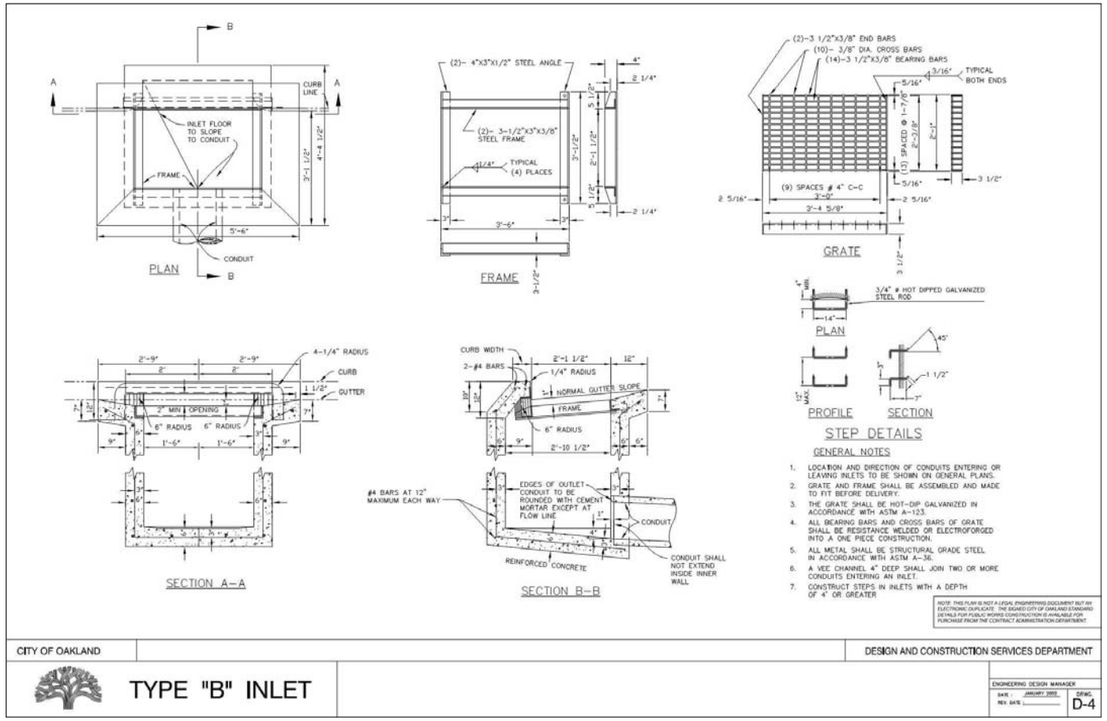
GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR SITE SPECIFIC DRAWINGS WITH DETAILED VAULT DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
4. STORMFILTER WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 5' AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
6. FILTER CARTRIDGES SHALL BE MEDIA-FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF CLEANING. RADIAL MEDIA DEPTH SHALL BE 7-INCHES. FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 39 SECONDS.
7. SPECIFIC FLOW RATE IS EQUAL TO THE FILTER TREATMENT CAPACITY (gpm) DIVIDED BY THE FILTER CONTACT SURFACE AREA (sq ft).

INSTALLATION NOTES
1. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
2. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMFILTER STRUCTURE (LIFTING CLUTCHES PROVIDED).
3. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
4. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET PIPE(S).
5. CONTRACTOR TO PROVIDE AND INSTALL CONNECTOR TO THE OUTLET RISER STUB. STORMFILTER EQUIPPED WITH A DUAL DIAMETER HDPE OUTLET STUB AND SAND COLLAR. IF OUTLET PIPE IS LARGER THAN 8 INCHES, CONTRACTOR TO REMOVE THE 8 INCH OUTLET STUB AT MOLDED IN CUT LINE. COUPLING BY FERNCO OR EQUAL AND PROVIDED BY CONTRACTOR.
6. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.

CONTECH
ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

SFMH48
STORMFILTER
STANDARD DETAIL





GENERAL NOTES
1. LOCATION AND DIRECTION OF CONDUITS ENTERING OR LEAVING INLETS TO BE SHOWN ON GENERAL PLANS.
2. GRATE AND FRAME SHALL BE ASSEMBLED AND MADE TO FIT BEFORE DELIVERY.
3. THE GRATE SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A-123.
4. ALL BEARING BARS AND CROSS BARS OF GRATE SHALL BE RESISTANCE WELDED OR ELECTROFORGED INTO A ONE PIECE CONSTRUCTION.
5. ALL METAL SHALL BE STRUCTURAL GRADE STEEL IN ACCORDANCE WITH ASTM A-36.
6. A VEE CHANNEL 4" DEEP SHALL JOIN TWO OR MORE CONDUITS ENTERING AN INLET.
7. CONSTRUCT STEPS IN INLETS WITH A DEPTH OF 4' OR GREATER

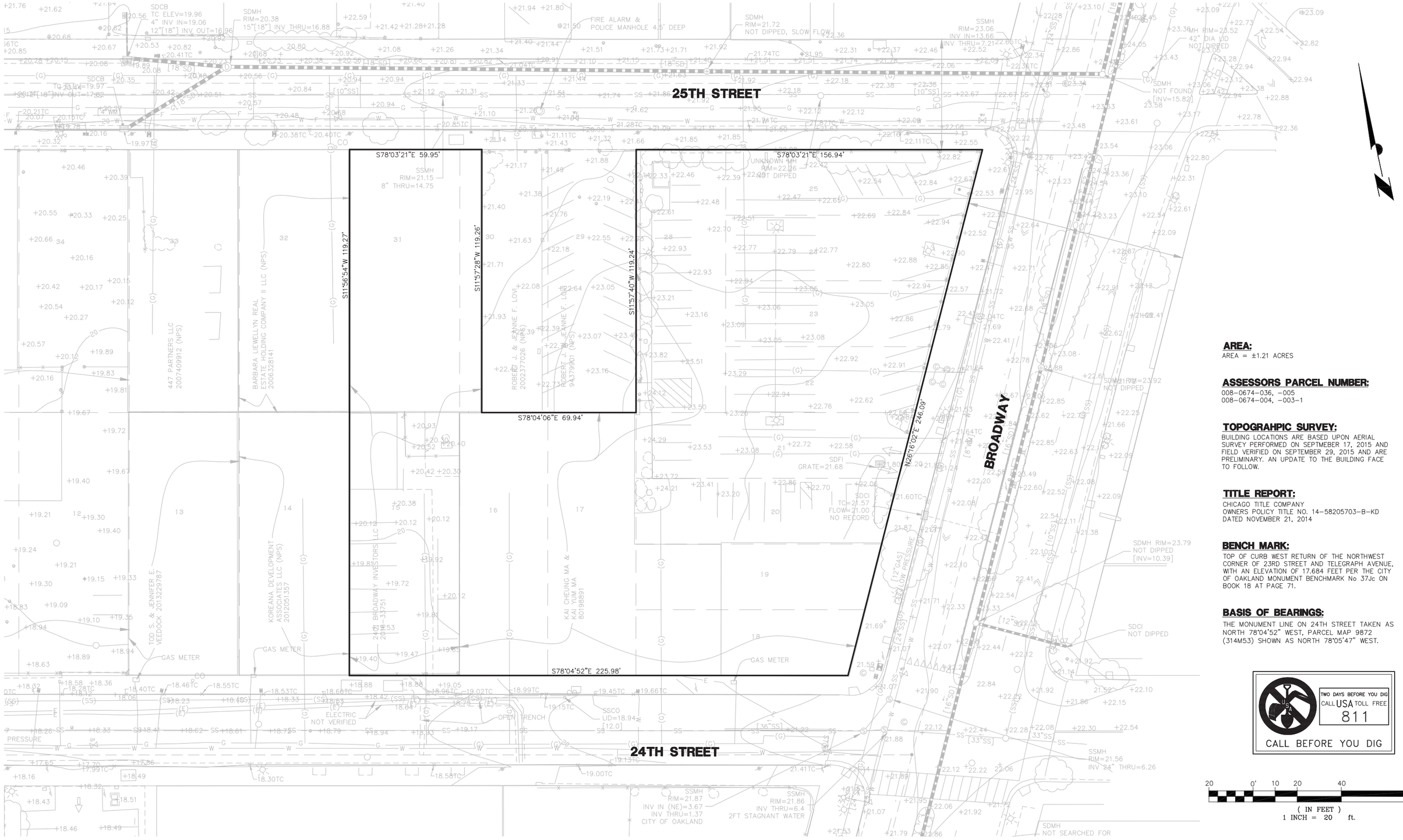
NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE SIGNED CITY OF OAKLAND STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION IS AVAILABLE FOR PURCHASE FROM THE CONTRACT ADMINISTRATION DEPARTMENT.

CITY OF OAKLAND
DESIGN AND CONSTRUCTION SERVICES DEPARTMENT
TYPE "B" INLET
ENGINEERING DESIGN MANAGER
DATE: JANUARY 2002
REV. DATE:
D-4

BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

DETAILS

05.22.17 | 17001 | BAR architects | CONSULTING | C4



AREA:
AREA = ±1.21 ACRES

ASSESSORS PARCEL NUMBER:
008-0674-036, -005
008-0674-004, -003-1

TOPOGRAHPIC SURVEY:
BUILDING LOCATIONS ARE BASED UPON AERIAL SURVEY PERFORMED ON SEPTMEBER 17, 2015 AND FIELD VERIFIED ON SEPTEMBER 29, 2015 AND ARE PRELIMINARY. AN UPDATE TO THE BUILDING FACE TO FOLLOW.

TITLE REPORT:
CHICAGO TITLE COMPANY
OWNERS POLICY TITLE NO. 14-58205703-B-KD
DATED NOVEMBER 21, 2014

BENCH MARK:
TOP OF CURB WEST RETURN OF THE NORTHWEST CORNER OF 23RD STREET AND TELEGRAPH AVENUE, WITH AN ELEVATION OF 17.684 FEET PER THE CITY OF OAKLAND MONUMENT BENCHMARK No 37Jc ON BOOK 18 AT PAGE 71.

BASIS OF BEARINGS:
THE MONUMENT LINE ON 24TH STREET TAKEN AS NORTH 78°04'52" WEST, PARCEL MAP 9872 (314M53) SHOWN AS NORTH 78°05'47" WEST.

TWO DAYS BEFORE YOU DIG CALL USA TOLL FREE 811
CALL BEFORE YOU DIG

20 0' 10 20 40 80
(IN FEET)
1 INCH = 20 ft.

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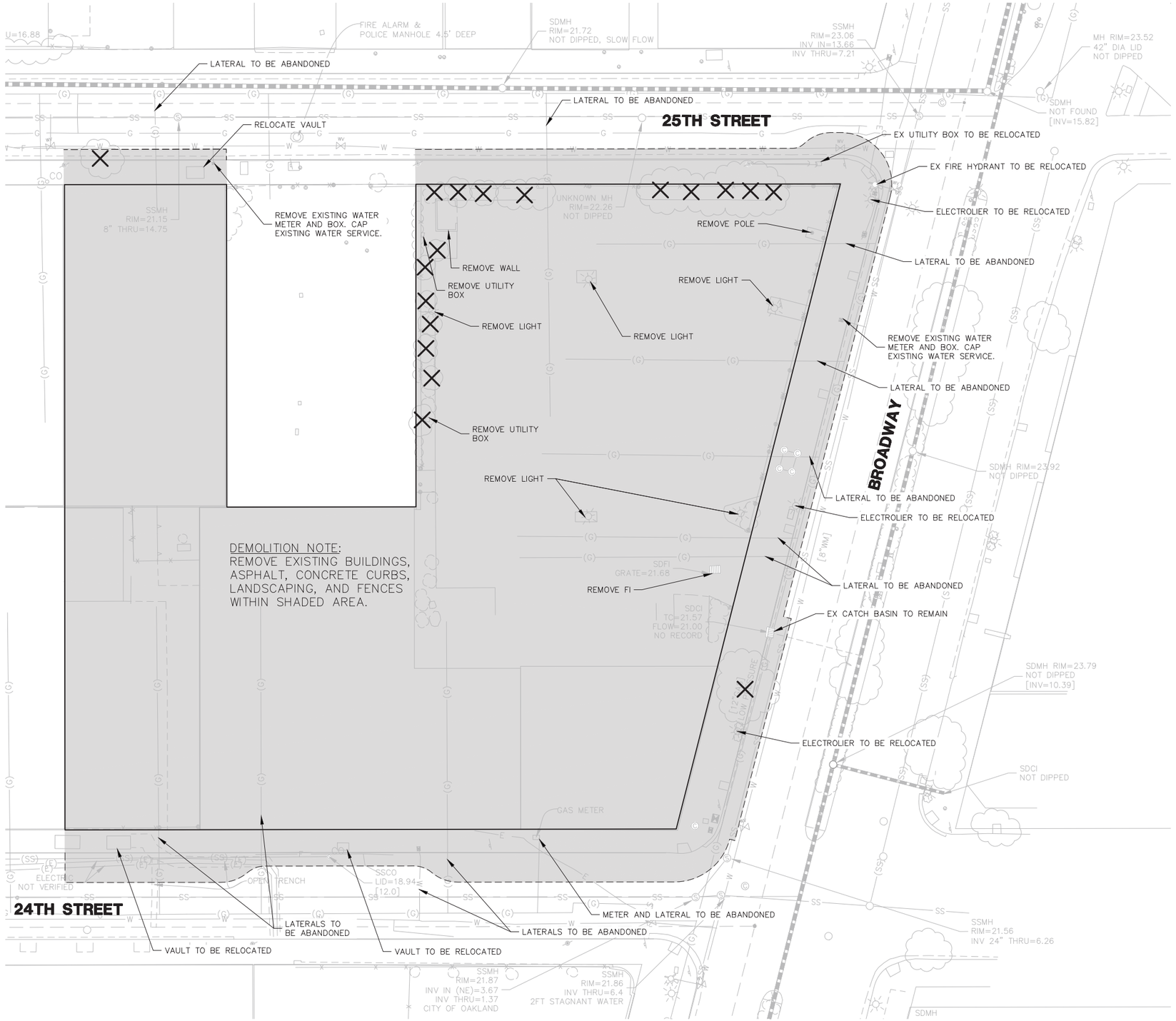
BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

TOPOGRAPHIC SURVEY

05.22.17	17001	BAR architects	CONSULTING	C5



DEMOLITION NOTE:
REMOVE EXISTING BUILDINGS, ASPHALT, CONCRETE CURBS, LANDSCAPING, AND FENCES WITHIN SHADED AREA.

LEGEND

- LIMIT OF DEMOLITION
- SAWCUT LINE
- REMOVE TREE

DEMOLITION NOTES

1. ALL UNDERGROUND UTILITIES SHALL REMAIN AND BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
2. TURN OFF ALL UTILITIES SERVING THE EXISTING BUILDING PRIOR TO DEMOLITION OF THE BUILDING.
3. DUST CONTROL MEASURES SHALL BE IMPLEMENTED DURING DEMOLITION.
4. SEE JOINT TRENCH PLAN FOR DRY UTILITY RELOCATION AND DRY UTILITY BOXES TO BE REMOVED, MODIFIED, OR ADJUSTED TO GRADE.
5. CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES BY CONTACTING USA AT 1-800-227-2600, OR 811.
6. TRAFFIC AND PEDESTRIAN CONTROL PLANS SHALL BE PREPARED PRIOR TO ANY SIDEWALK OR LANE CLOSURES.
7. PRIOR TO ANY DEMOLITION, EXISTING TREES TO REMAIN SHALL BE PROTECTED AS REQUIRED BY PROJECT ARBORIST.
8. ALL OTHER STRUCTURES SHALL REMAIN AND TO BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
9. ALL WORK INVOLVING CROSS WALK STRIPING, PAINTING OF CURB FACES, REMOVAL AND/OR PLACEMENT OF NEW STREET SIGNS, PARKING STALL STRIPING, AND REPLACING OF PARKING METERS NEED TO BE REVIEWED AND APPROVED BY PUBLIC WORKS TRANSPORTATION SERVICES DIVISION.

20 0' 10 20 40 80

(IN FEET)
1 INCH = 20 ft.

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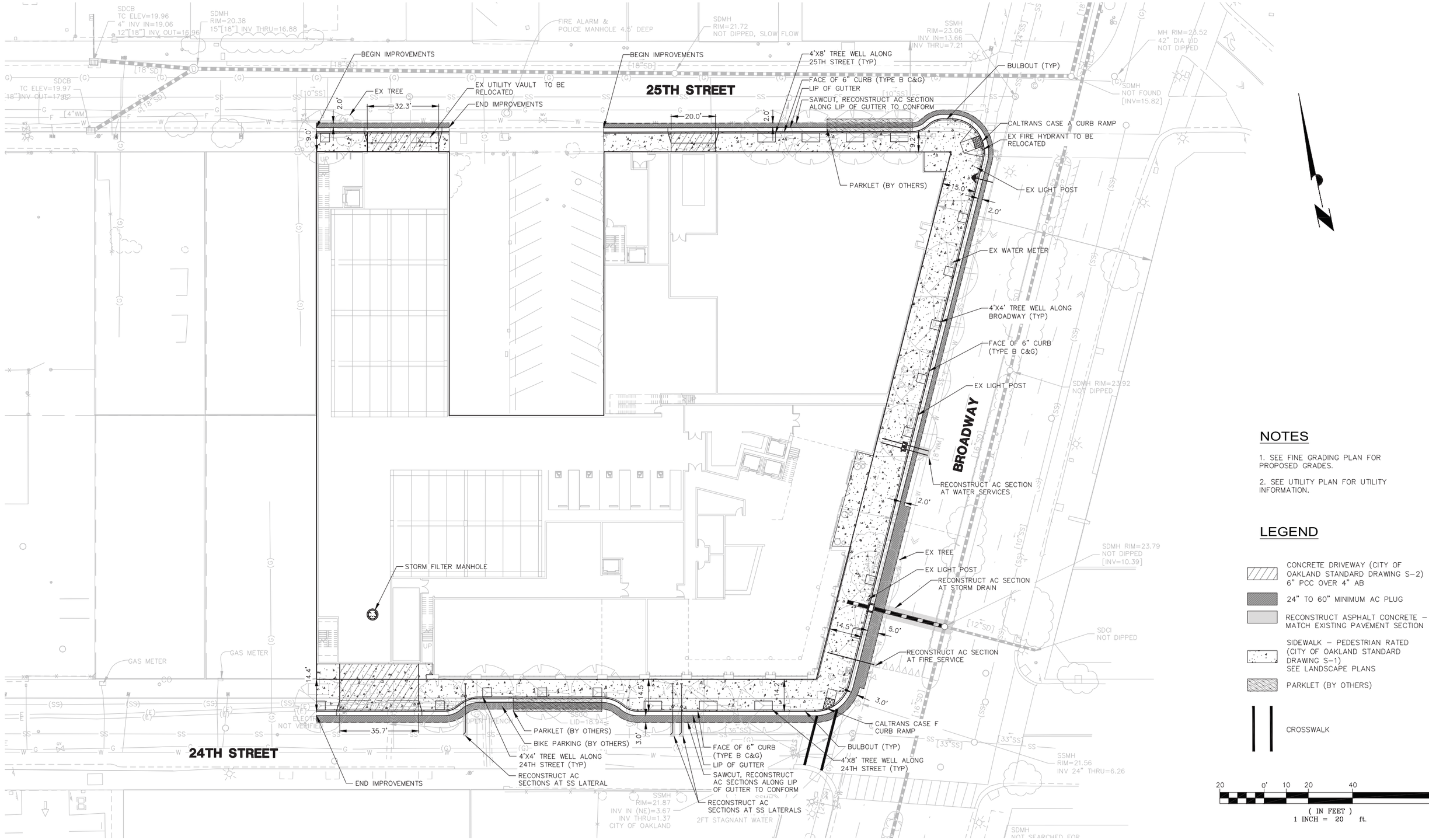
BROADWAY HOTEL

2401 BROADWAY, OAKLAND, CA

DEMOLITION PLAN

05.22.17	17001	BAR architects	CONSULTING	C6



NOTES

1. SEE FINE GRADING PLAN FOR PROPOSED GRADES.

2. SEE UTILITY PLAN FOR UTILITY INFORMATION.

LEGEND

- CONCRETE DRIVEWAY (CITY OF OAKLAND STANDARD DRAWING S-2) 6" PCC OVER 4" AB
- 24" TO 60" MINIMUM AC PLUG
- RECONSTRUCT ASPHALT CONCRETE – MATCH EXISTING PAVEMENT SECTION
- SIDEWALK – PEDESTRIAN RATED (CITY OF OAKLAND STANDARD DRAWING S-1) SEE LANDSCAPE PLANS
- PARKLET (BY OTHERS)
- CROSSWALK

20 0' 10 20 40 80

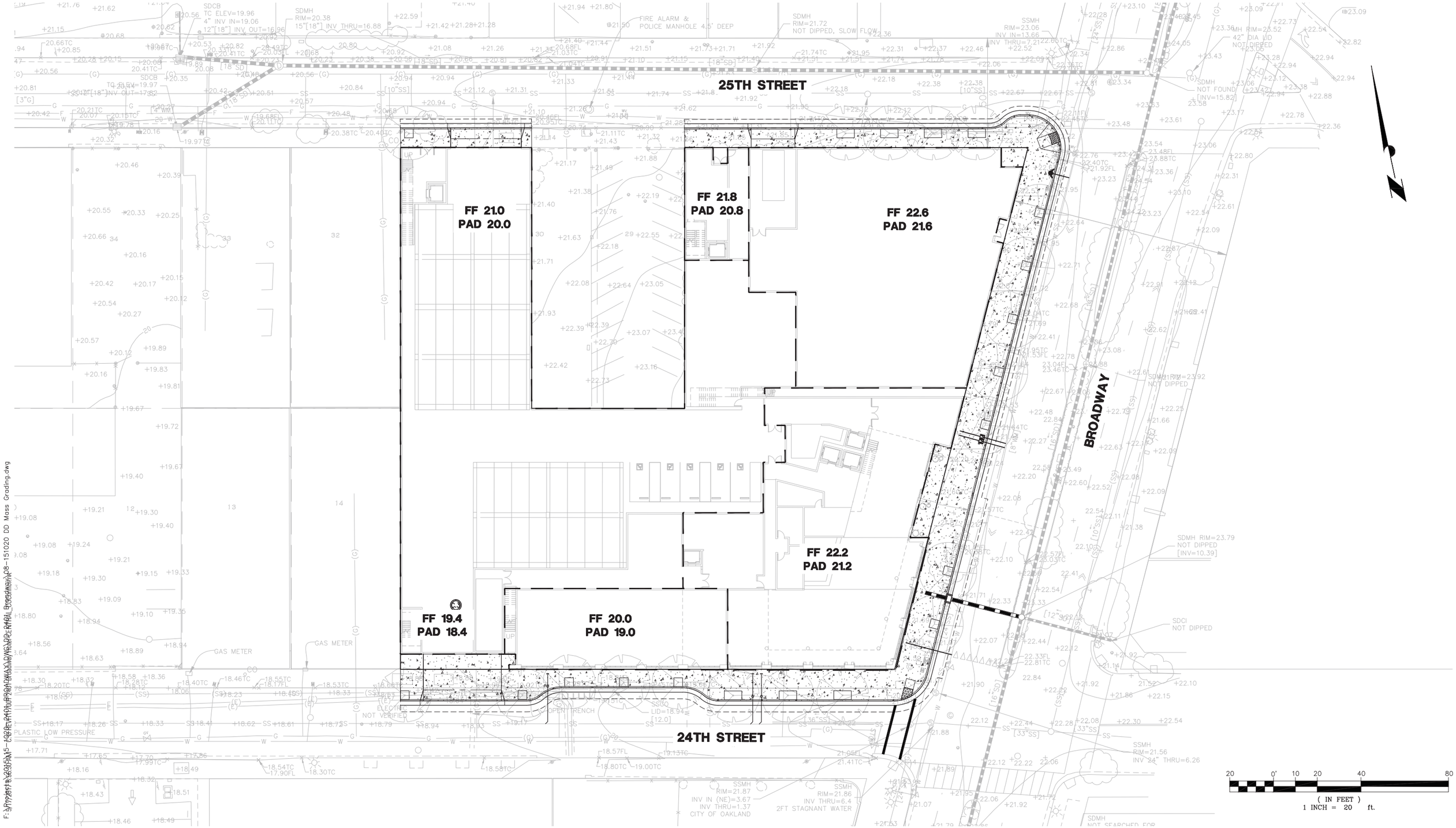
(IN FEET)
1 INCH = 20 ft.

BROADWAY HOTEL

2401 BROADWAY, OAKLAND, CA

SITE PLAN

05.22.17	17001	BAR architects	CK CONSULTING	C7



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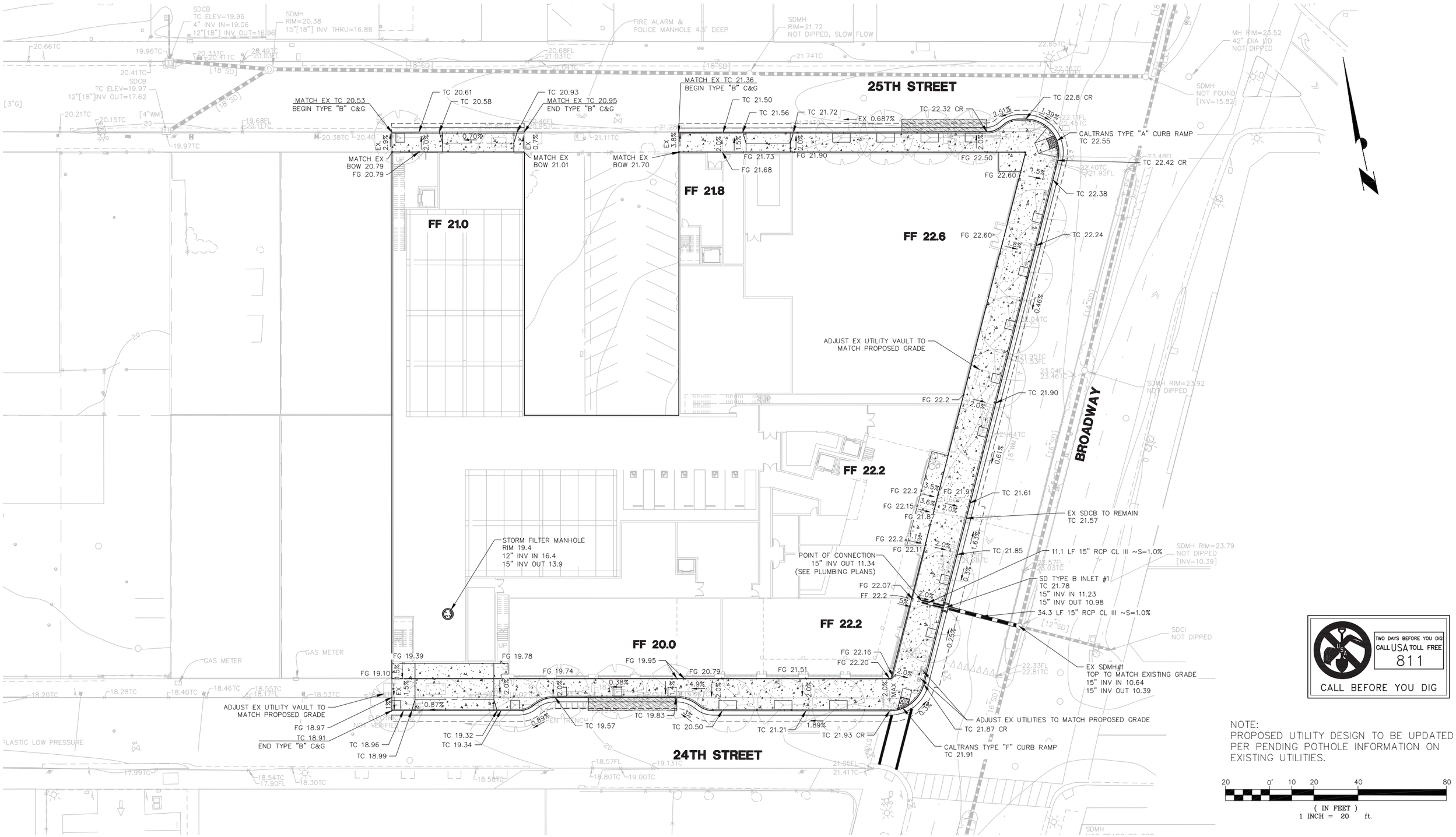
BROADWAY HOTEL

2401 BROADWAY, OAKLAND, CA

MASS GRADING PLAN

05.22.17	17001	BAR architects	CK CONSULTING	C8



TWO DAYS BEFORE YOU DIG
CALL USA TOLL FREE
811
CALL BEFORE YOU DIG

NOTE:
PROPOSED UTILITY DESIGN TO BE UPDATED PER PENDING POTHOLE INFORMATION ON EXISTING UTILITIES.

20 0' 10 20 40 80
(IN FEET)
1 INCH = 20 ft.

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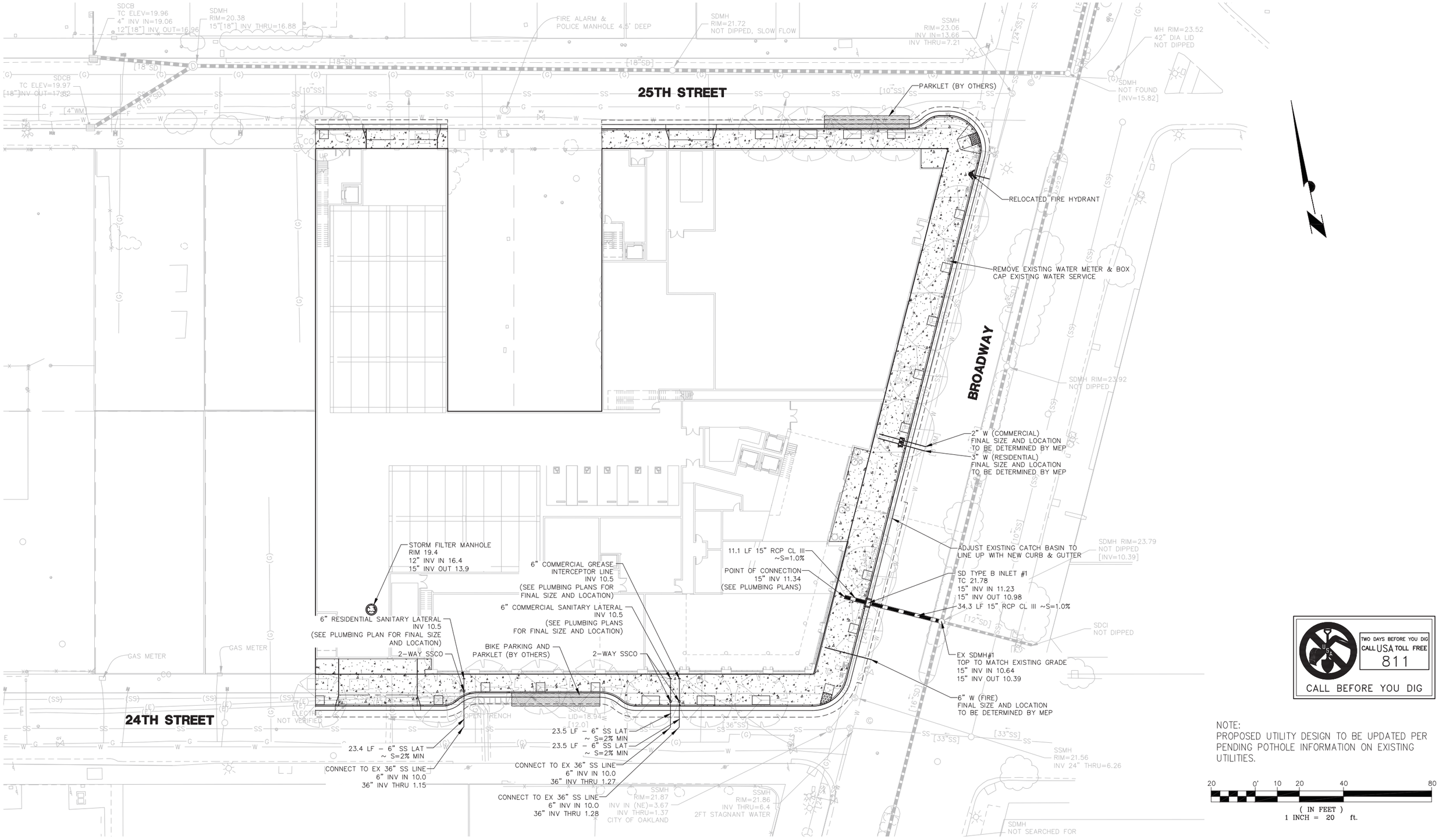
BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

FINE GRADING PLAN

05.22.17	17001	BAR architects	CONSULTING	C9



TWO DAYS BEFORE YOU DIG
CALL USA TOLL FREE
811
CALL BEFORE YOU DIG

NOTE:
PROPOSED UTILITY DESIGN TO BE UPDATED PER PENDING POTHOLE INFORMATION ON EXISTING UTILITIES.

20 0' 10 20 40 80
(IN FEET)
1 INCH = 20 ft.

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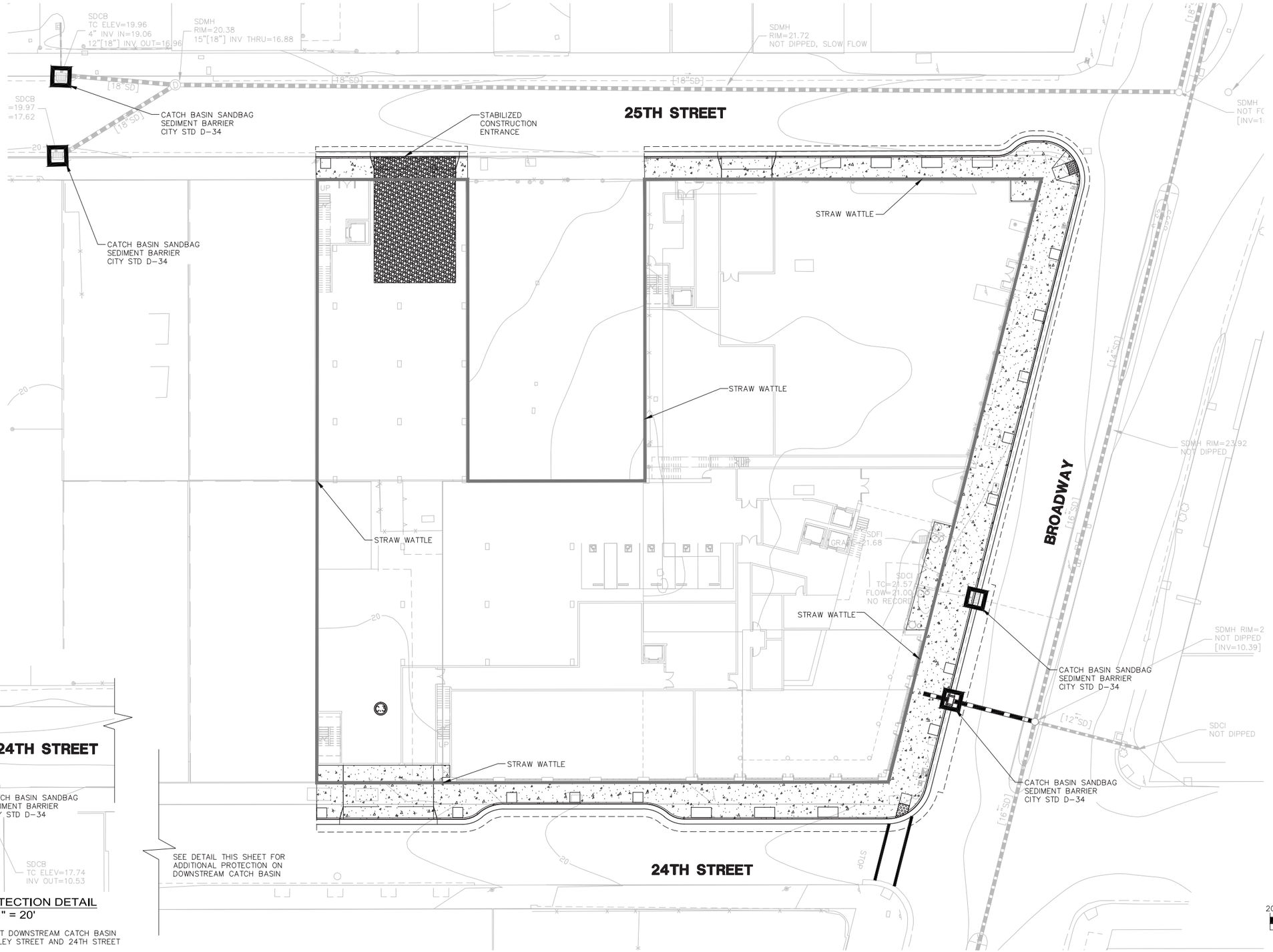
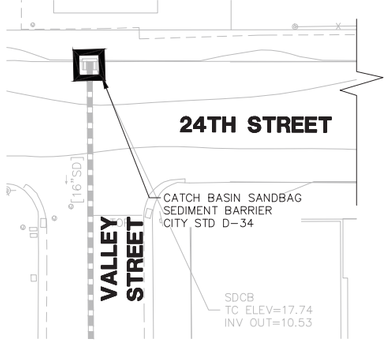
BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

UTILITY PLAN

05.22.17	17001	BAR architects	CONSULTING	C10





CATCH BASIN PROTECTION DETAIL
SCALE: 1" = 20'

NOTE: PROVIDE PROTECTION AT DOWNSTREAM CATCH BASIN AT THE INTERSECTION OF VALLEY STREET AND 24TH STREET

LEGEND

- STORM DRAIN INLET PROTECTION
- STABILIZED CONSTRUCTION ENTRANCE
- STRAW WATTLE

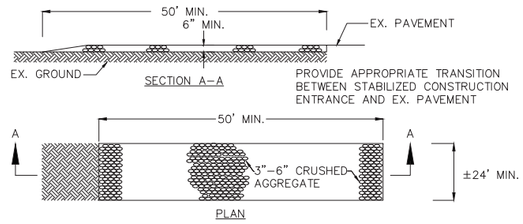
20 0' 10 20 40 80
(IN FEET)
1 INCH = 20 ft.

F:\Projects\17001_2401 Broadway\11-151020 DD Erosion Control.dwg

BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

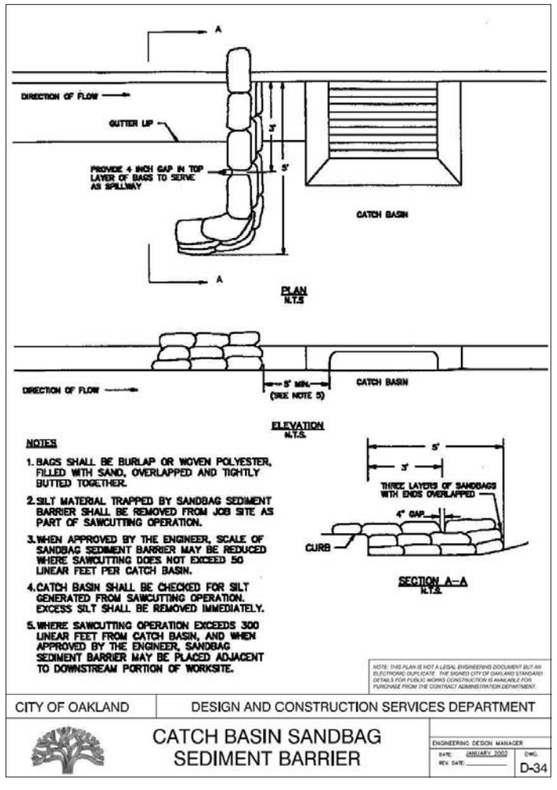
EROSION CONTROL PLAN

05.22.17	17001	BAR architects	CONSULTING	C11



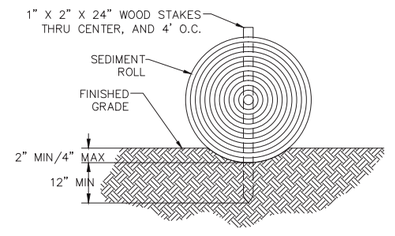
STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE



EROSION CONTROL NOTES

1. TEMPORARY EROSION CONTROL DEVICES SHOWN ON GRADING PLAN WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED WHEN THE INSPECTOR SO DIRECTS AS THE WORK PROGRESSES.
2. EXCEPT AS OTHERWISE DIRECTED BY THE INSPECTOR, ALL DEVICES SHOWN ON THE EROSION CONTROL PLAN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY. ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY DURING THE RAINY SEASON AND MAINTAINED DURING THE RAINY SEASON (OCTOBER 1 TO APRIL 15).
3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PROVISIONS OF THE ASSOCIATION OF BAY AREA GOVERNMENTS (ABAG) "MANUAL OF STANDARDS FOR EROSION AND SEDIMENT CONTROL MEASURES" UNLESS OTHERWISE STATED WITHIN THESE GENERAL NOTES. CONTROL MEASURES ARE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEERING DIVISION OF THE PUBLIC SERVICES DEPARTMENT. SCHEDULE AN ENGINEERING INSPECTION BY CALLING 925–943–5839 AT LEAST 48 HOURS PRIOR TO THE START OF ANY WORK.
4. ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREET AREAS UPON STARTING OPERATIONS AND PERIODICALLY THEREAFTER AS DIRECTED BY THE INSPECTOR. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT LADEN RUNOFF TO ANY STORM DRAIN SYSTEM.
5. A CONCRETE WASHOUT IS REQUIRED FOR ALL CONCRETE WORK. THE WASHOUT SHALL CONSIST OF A CONTAINMENT AREA ENCLOSED BY AN EARTHEN DIKE. PLASTIC TARP, COVERING THE CONTAINMENT AREA AND EARTHEN DIKE, SHALL BE STAKED IN AT OUTSIDE EDGE OF EARTHEN DIKE.
6. ADDITIONAL CONTAINMENT METHODS MUST BE PROVIDED FOR ANY WASTE STORAGE AREA, STOCKPILE/MATERIAL STORAGE AREA AND/OR CONSTRUCTION TOILET AREA.
7. STAND–BY CREWS SHALL BE ALERTED BY THE PERMITTEE OR CONTRACTOR FOR EMERGENCY WORK DURING RAINSTORMS.
8. AFTER OCTOBER 1, ALL EROSION CONTROL MEASURES WILL BE INSPECTED DAILY AND AFTER EACH STORM. AFTER OCTOBER 1, BREACHES IN DIKES AND SWALES WILL BE REPAIRED AT THE CLOSE OF EACH DAY AND WHENEVER RAIN IS FORECAST.
9. AS A PART OF THE EROSION CONTROL MEASURES, UNDERGROUND STORM DRAIN FACILITIES AND CONCRETE SHALL BE INSTALLED COMPLETE AS SHOWN ON THE GRADING PLAN.
10. IF ANY GRADING OPERATIONS, OTHER THAN LOT FINISH GRADING, ARE TO BE PERFORMED DURING THE RAINY SEASON, OCTOBER 1 THROUGH APRIL 15, AN EROSION CONTROL PLAN MUST BE SUBMITTED BY SEPTEMBER 1 AND THE PLAN MUST BE APPROVED BY THE CITY OF OAKLAND PRIOR TO THE COMMENCEMENT OF ANY SUCH GRADING OPERATIONS.
11. SANDBAGS, STRAW WATTLES AND/OR STRAW BALES SHALL BE STOCKPILED ON SITE AND PLACED AT INTERVALS SHOWN ON EROSION CONTROL PLANS, WHEN THE RAIN FORECAST IS 40% OR GREATER, OR WHEN DIRECTED BY THE INSPECTOR.
12. SANDBAGS REFERRED TO IN THE PRECEDING ITEMS MUST BE FULL. APPROVED SANDBAG FILL MATERIALS ARE DECOMPOSED GRANITE AND/OR GRAVEL, OR OTHER MATERIALS APPROVED BY THE INSPECTOR.
13. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THESE PLANS IN THE FIELD, SUBJECT TO APPROVAL OF THE CITY ENGINEER.
14. EROSION CONTROL STRUCTURES SHALL BE ADJUSTED BY THE CONTRACTOR TO REFLECT ALL CHANGES IN DRAINAGE AS STREETS AND BUILDING PADS ARE BEING INSTALLED.



STRAW WATTLES DETAIL

NOT TO SCALE

BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

EROSION CONTROL NOTES & DETAILS

05.22.17 | 17001 | BAR architects | CONSULTING | C12

NOTES

1. ROOF LEADERS WILL DIRECT STORMWATER RUNOFF TO C.3 TREATMENT DEVICE
2. PROPOSED SOURCE CONTROL MEASURES:
   - DIRECT DISCHARGE FROM COVERED TRASH, FOOD WASTE, AND COMPACTOR ENCLOSURES TO THE SANITARY SEWER.
   - DISCHARGE FIRE SPRINKLER TEST WATER TO THE SANITARY SEWER.

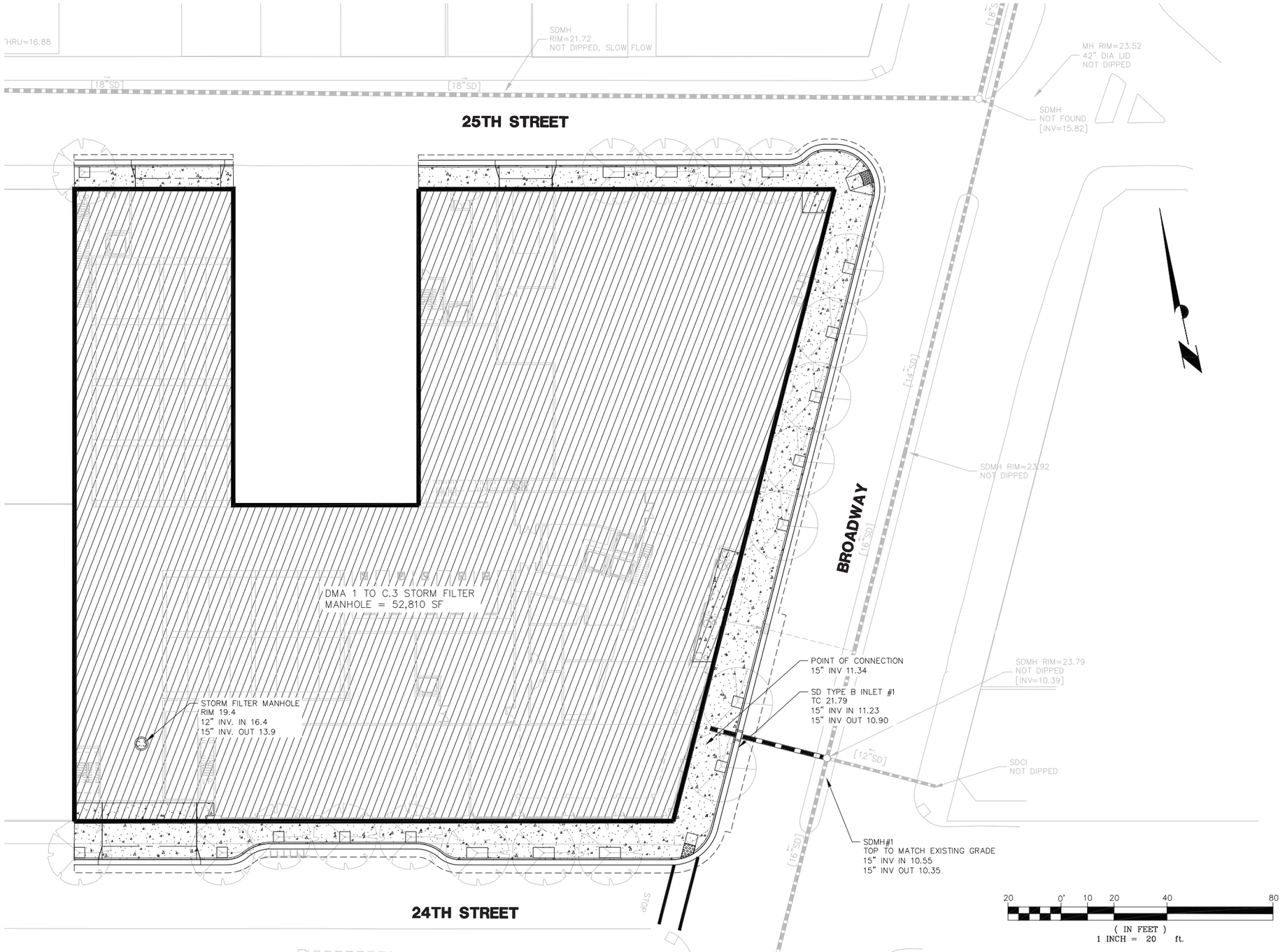
C.3 STORMWATER CONTROL EXHIBIT NOTES

1. CALCULATIONS ARE BASED ON THE ALAMEDA COUNTY CLEAN WATER PROGRAM'S "C.3 STORMWATER TECHNICAL GUIDANCE", VERSION 5.1, MAY 2, 2016 (GUIDEBOOK).
2. THE PROJECT TOTAL SITE AREA IS 1.21 ACRES AND THE TOTAL AREA OF LAND DISTURBED IS 1.50 ACRES.
3. THIS PROJECT PROPOSES TO CREATE 2,377 SQUARE FEET OF NEW IMPERVIOUS SURFACE AND WILL REPLACE 50,433 ACRES OF EXISTING IMPERVIOUS SURFACE AREA ON-SITE. THE TOTAL PRE-PROJECT IMPERVIOUS SURFACE AREA IS 1.16 ACRES ON-SITE. THE TOTAL POST-PROJECT IMPERVIOUS SURFACE AREA IS 1.21 ACRES ON-SITE.

   IN ADDITION, PROJECT PROPOSES TO REPLACE 11,951 SQUARE FEET OF EXISTING OFF-SITE IMPERVIOUS AREA, INCLUDING THE PUBLIC STREETS (SIDEWALK, DRIVEWAYS, AND ROAD). THE PRE-PROJECT OFF-SITE IMPERVIOUS AREA IS 12,383 SQUARE FEET, INCLUDING PUBLIC STREETS (ROAD AND SIDEWALK). THERE IS A REDUCTION OF OFF-SITE IMPERVIOUS AREA DUE TO THE ADDITIONS OF TREE GRATES ALONG 25TH STREET, BROADWAY, AND 24TH STREET.
4. PROVISION C.3 PROJECT REQUIREMENTS FOR CATEGORY B: LARGER INFILL PROJECTS UNDER APPENDIX J.3 INCLUDE:
   - 4.1. BE BUILT AS PART OF THE MUNICIPALITY'S STATED OBJECTIVE TO PRESERVE OR ENHANCE A PEDESTRAIN-ORENTED TYPE OF URBAN DESIGN.
   - 4.2. BE LOCATED IN A PERMITTEE'S DESIGNATED CENTRAL BUSINESS DISTRICT, DOWNTOWN CORE AREA OR DOWNTOWN CORE ZONING DISTRICT, NEIGHBORHOOD BUSINESS DISTRICT OR COMPARABLE PEDESTRIAN ORIENTED COMMERCIAL DISTRICT, OR HISTORIC PRESERVATION SITE AND/OR DISTRICT.
   - 4.3. CREATE AND/OR REPLACE GREATER THAN ONE-HALF ACRE, BUT NO MORE THAN 2 ACRES OF IMPERVIOUS SURFACE AREA.
   - 4.4. INCLUDE NO SURFACE PARKING, EXCEPT FOR INCIDENTAL SURFACE PARKING. INCIDENTAL SURFACE PARKING IS ALLOWED ONLY FOR EMERGENCY VEHICLE ACCESS, ADA ACCESSIBILITY, AND PASSENGER AND FREIGHT LOADING ZONES.
   - 4.5. HAVE AT LEAST 85% COVERAGE FOR THE ENTIRE PROJECT SITE BY PERMANENT STRUCTURES. THE REAMING 15% PORTION OF THE SITE IS TO BE USED FOR SAFETY ACCESS, PARKING STRUCTURE ENTRANCES, TRASH AND RECYCLING SERVICE, UTILITY ACCESS, PEDESTRIAN CONNECTIONS, PUBLIC USES, LANDSCAPING, AND STORMWATER TREATMENT.
5. DESIGN CRITERIA
   - 5.1. MEAN ANNUAL PRECIPITATION = 21 INCHES PER ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, FIGURE 9
   - 5.2. HYDRAULIC DESIGN CRITERIA: 0.2 INCHES PER HOUR RAINFALL INTENSITY
6. THIS PROJECT QUALIFIES AS A SPECIAL PROJECT UNDER CATEGORY B IN ACCORDANCE WITH THE ALAMEDA COUNTY CLEAN WATER PROGRAM'S "C.3 STORMWATER TECHNICAL GUIDANCE", VERSION 5.1. THE PERCENTAGE OF NON-LID TREATMENT IS 100%, RESULTING IN 1.21 ACRES OF STORMWATER RUNOFF TO BE TREATED BY HIGH FLOW-RATE MEDIA FILTERS.

LEGEND

EXISTING	PROPOSED	
		STORM DRAIN
	SD	STORM DRAIN MANHOLE
		CATCH BASIN
	C.3	STORM FILTER MANHOLE
		ROOF AREA DRAINING TO C.3 STORM FILTER MANHOLE



BROADWAY HOTEL

2401 BROADWAY, OAKLAND, CA

C.3 EXHIBIT

05.22.17	17001	BAR architects	CONSULTING	C13

LANDSCAPE PROGRAM

LEGEND

1. PUBLIC STREETSCAPE
2. HOTEL BREAKOUT COURTYARD 1
3. HOTEL BREAKOUT COURTYARD 2
4. HOTEL VIEWING GARDEN 1
5. HOTEL VIEWING GARDEN 2
6. HOTEL VIEWING GARDEN 3
7. BAR & LOUNGE TERRACE
8. RESIDENTIAL AMENITY COURTYARD
9. RESIDENTIAL ROOF DECK AT CLUB ROOM

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BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

LANDSCAPE PROGRAM

05.22.17	17001	BAR architects	JETT Landscape Architecture + Design	L1

PUBLIC STREETSCAPE PLAN

STREET RETAIL DISPLAY
NEW PARKLET TO CREATE INDOOR / OUTDOOR EXPERIENCE

ACER RUBRUM 'BRANDYWINE' STREET TREES AND LOW PLANTING IN TREE WELL. SPACING TO MATCH CITY STANDARDS FOR 25TH STREET.

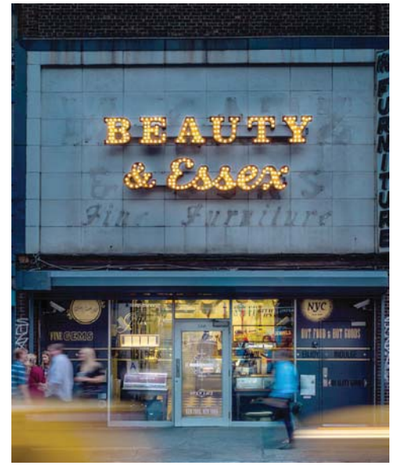
TRISTANIOPSIS LAURINA 'ELEGANT' STREET TREE IN 4X4 TREE WELL. SPACING TO MATCH CITY STANDARDS FOR BROADWAY CORRIDOR.

STREET RETAIL DISPLAY

GUEST DROP-OFF

ACER RUBRUM 'BRANDYWINE' STREET TREES AND LOW PLANTING IN TREE WELL. SPACING TO MATCH CITY STANDARDS FOR 24TH ST.

PARKLET TO CREATE INDOOR / OUTDOOR EXPERIENCE



Unique wayfinding

Street retail display

Parklet

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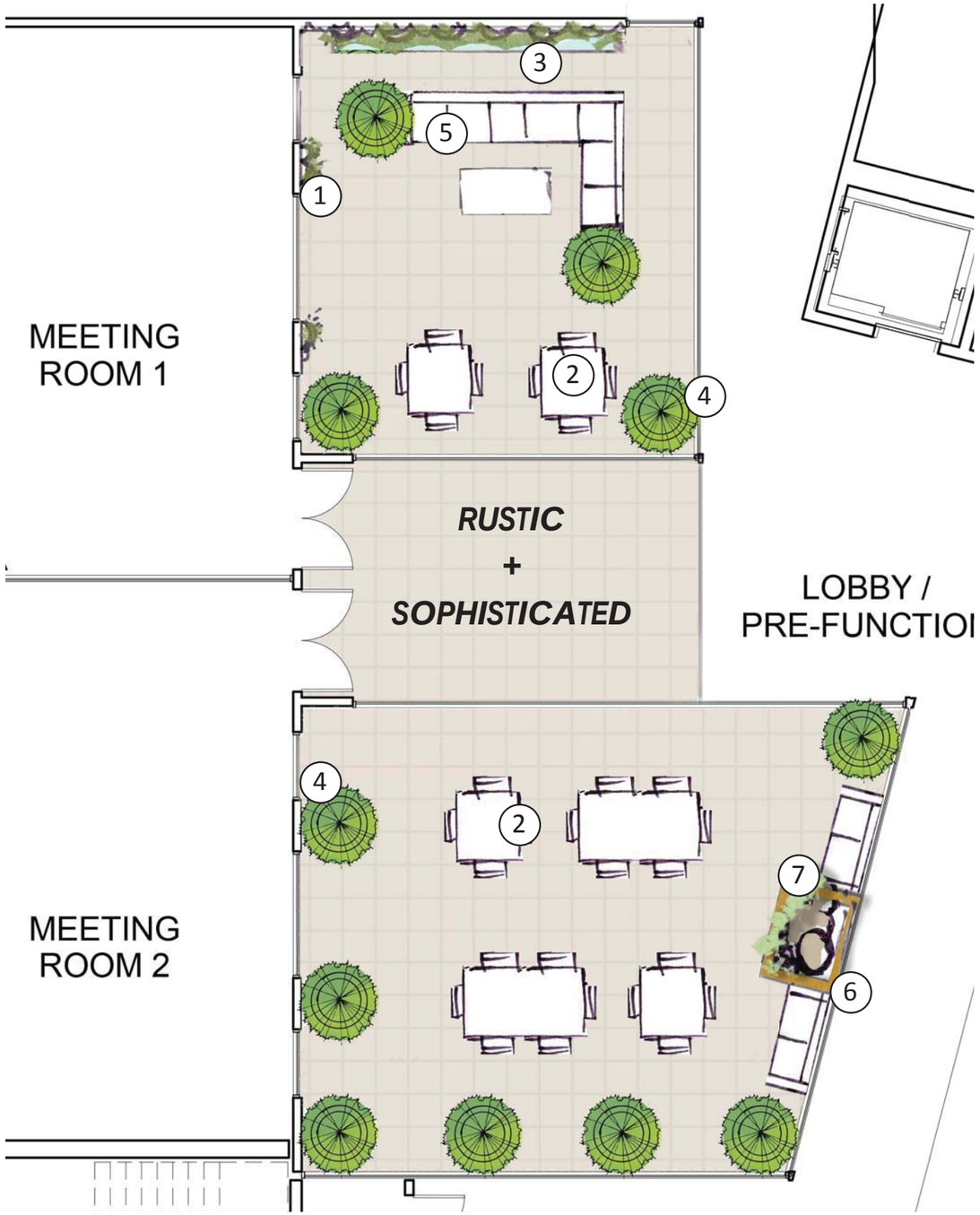
BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

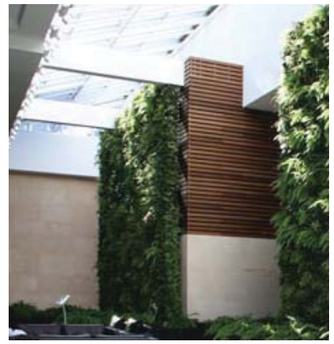
PUBLIC STREETSCAPE PLAN

05.22.17	17001	BAR architects	JETT Landscape Architecture + Design	L2

LEVEL 2 - HOTEL BREAKOUT COURTYARDS 1 & 2



1 Wall art



Atrium

2 Meeting tables

3 Wall water feature

4 Mobile planters

Lighting

5 Lounge seating

6 Reclaimed redwood mobile planter

7 Sculptural planting / Art

BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

LEVEL 2 - HOTEL BREAKOUT COURTYARDS

05.22.17	17001	BAR architects	JETT Landscape Architecture + Design	L3

LEVEL 3 - HOTEL VIEWING GARDEN 1

Sculptural planting element

Landscape massing

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BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

LEVEL 3 - HOTEL VIEWING GARDEN

05.22.17	17001	BAR architects	JETT Landscape Architecture + Design	L4

LEVEL 3 - HOTEL VIEWING GARDENS 2 & 3

Emergent Landscape

BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

LEVEL 3 - HOTEL VIEWING GARDENS

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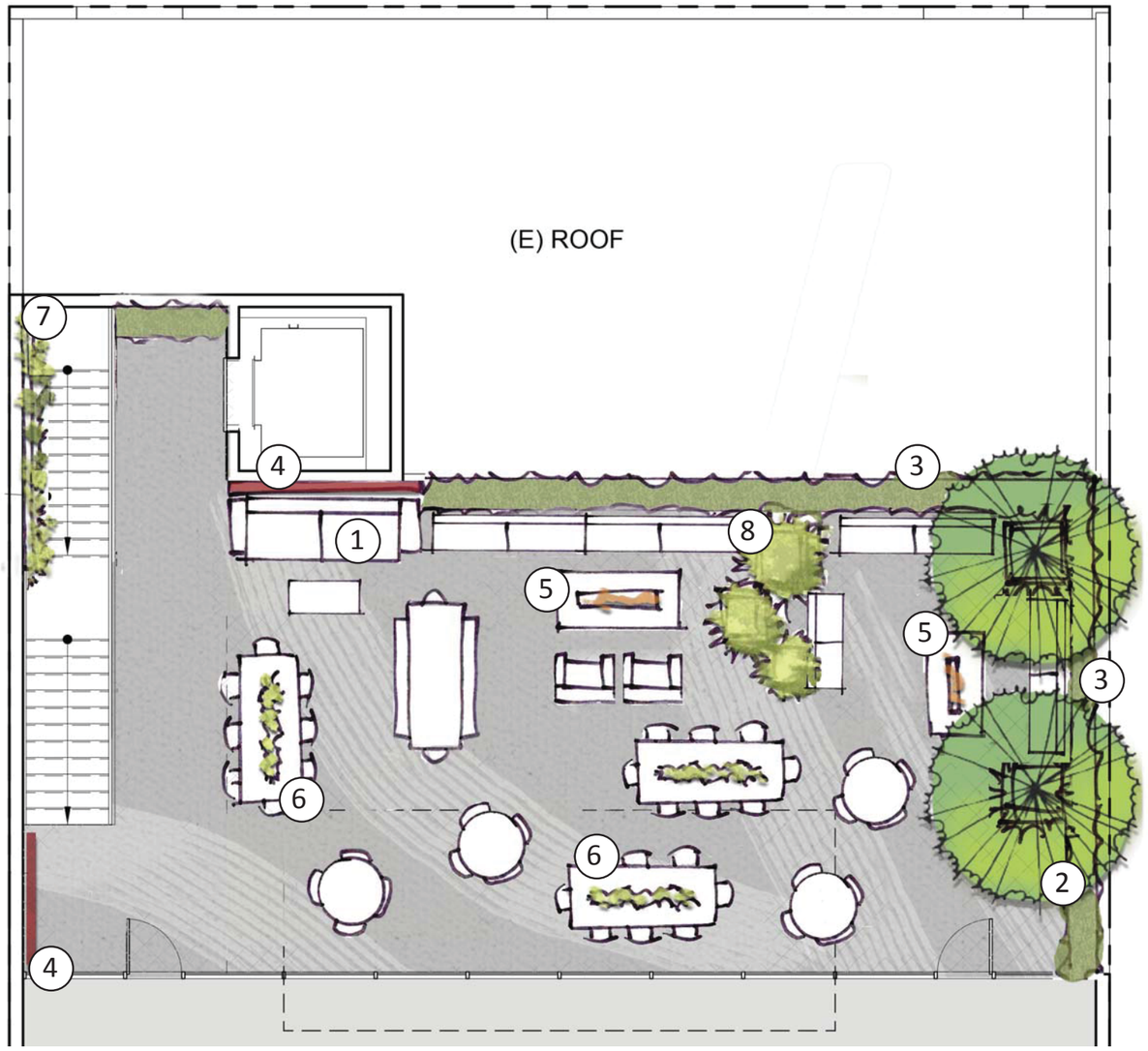
LEVEL 3 - BAR & LOUNGE TERRACE



1 Lounge furniture

Connection + community

2 Citrus trees + herbs

3 Reclaimed wood screening + planters

4 Local art

5 Firepits

6 Community tables

7 Greenwall

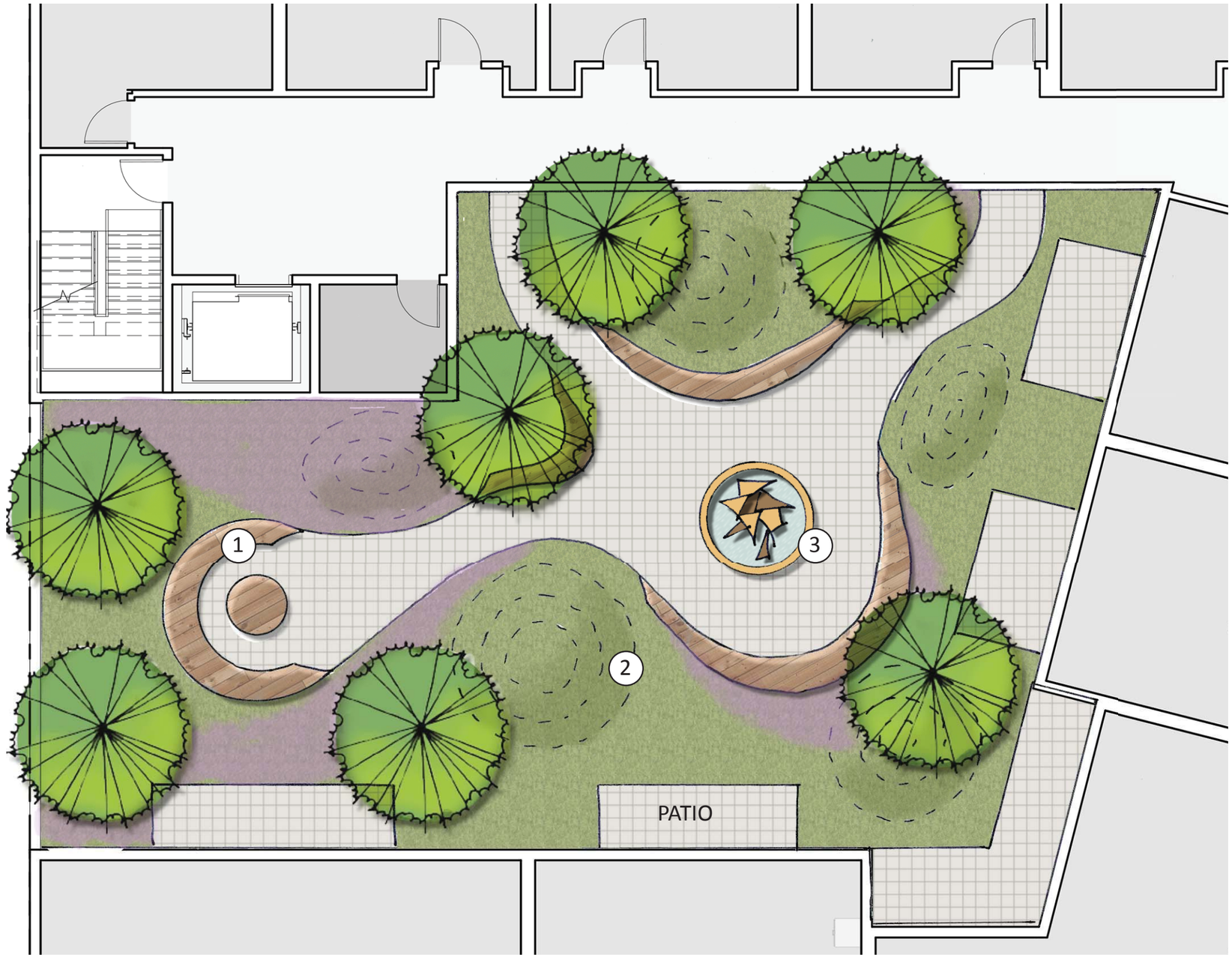
8 Cityscape planters

BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

LEVEL 3 - BAR & LOUNGE TERRACE

05.22.17	17001	BAR architects	JETT Landscape Architecture + Design	L6

LEVEL 3 - RESIDENTIAL AMENITY COURTYARD



1 Curved seating

2 Landscape mounds

3 Art sculpture / Water feature

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BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

LEVEL 3 - RESIDENTIAL AMENITY COURTYARD

05.22.17	17001	BAR architects	JETT Landscape Architecture + Design	L7

LEVEL 8 - RESIDENTIAL ROOF DECK AT CLUB ROOM

6 Lounge Seating

5 Bar Rail

1 Double sided fireplace

2 Outdoor kitchen

3 String lighting

4 Ornamental Vegetable + herb gardens

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BROADWAY HOTEL
2401 BROADWAY, OAKLAND, CA

LEVEL 8 - RESIDENTIAL ROOF DECK

05.22.17	17001	BAR architects	JETT Landscape Architecture + Design	L8

APPENDIX C
Greenhouse Gas Emissions Detail

Based on the findings of the Broadway Valdez District Specific Plan (BVDSP) Environmental Impact Report (EIR), the proposed 2401 Broadway (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 CO_2e per service population 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 CO_2e 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 CO_2e 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 thresholds of significance. The GHG Reduction Plan would be required to 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 2010 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 numerical thresholds of significance for GHG emissions from proposed land use developments and stationary sources are also derived from the BAAQMD's 2010 CEQA Air Quality Guidelines.

Table C-1 compares the development proposed under 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 C-1, the proposed project would trigger the GHG Reduction Plan requirement because all three criteria under Scenario A of SCA 38 are fully satisfied. Supporting analysis for the findings summarized in Table C-1 is provided below.

Comparison of Proposed Project with the City's Criteria for a "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:

i. Residential development of more than 500 dwelling units;

ii. Shopping center or business establishment employing more than 1,000 persons or encompassing more than 500,000 square feet of floor space;

iii. Commercial office building employing more than 1,000 persons or encompassing more than 250,000 square feet of floor space;

iv. Hotel/motel development of more than 500 rooms;

v. 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

Any combination of smaller versions of the above that when combined result in equivalent annual GHG emissions as the above.

TABLE C-1
COMPARISON OF PROPOSED PROJECT WITH SCERANIOS FOR SCA 38

Scenario	Criterion (a)	Criterion (b)	Criterion (c)	Criterion (d)	Applies to Project?
Scenario A	Involve land use development?	Exceeds BAAQMD's screening criteria?[a]	Exceeds both of the City's applicable thresholds?[b]	------	**Yes**
2401 Broadway	Yes (mixed use)	Yes (72 residential units, 159 room hotel, and 27,169 square feet retail)	Yes (see Table C-4)	------	
Scenario B	Involve land use development?	Exceeds BAAQMD's screening criteria?[a]	Exceeds one of the City's applicable thresholds?[b]	Very Large Project?	No
2401 Broadway	Yes (mixed use)	Yes (72 residential units, 159 room hotel, and 27,169 square feet retail)	Yes (see Table C-4)	No (see Table C-2)	
Scenario C	Involve a stationary source?	Exceeds the City's applicable thresholds?[c]	------	------	No
2401 Broadway	No (No backup generator)	No	------	------	

NOTES

[a] Based on Table 3-1 of the BAAQMD's 2010 *CEQA Air Quality Guidelines*, a mid-rise apartment building with 87 or less dwelling units OR a strip mall/regional shopping center with 19,000 or less square feet of area OR a hotel with 83 rooms or less 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 CO_2e annually and 4.6 metric tons of CO2e per service population annually.

[c] For stationary sources, the City's threshold of significance are 1,100 metric tons of CO_2e annually.

The project does not meet any of the Criteria A through E. The proposed 72 residential units are below the 500-dwelling-unit threshold. The retail component of the project would employ 54 persons (well below 1,000 persons) and at 27,169 square feet, would be less than 500,000 square feet of floor space. The project's hotel would include 159 rooms (less than 500 rooms required to qualify as a very large project). The proposed project does not include any commercial or industrial/manufacturing uses.

Criterion F is assessed in **Table C-2**, which shows the combined residential, retail and hotel uses, and evaluates each component of the project as a percentage of 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 C-2, the combined project components would not result in equivalent GHG emissions that represent a Very Large Project. Therefore, the proposed project would be not be considered a Very Large Project.

TABLE C-2
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	72	500	14.4%
Retail	Square feet	27,169	500,000	5.4%
Hotel	Rooms	159	500	31.8%
Total of all Project Components				51.6%

Quantification of Project GHG Emissions

As outlined in Scenarios A, B, and C of SCA 38 (Table C-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 C-3**. A copy of the CalEEMod output report for the project, which summarizes the input parameters, assumptions, and findings, is included in *Appendix A – Health Risk Assessment*.

TABLE C-3
SUMMARY OF LAND USE INPUT PARAMETERS FOR CALEEMOD

Project Land Use Type	CalEEMod Land Use Type	2401 Broadway Project Uses
Apartments	Apartments Mid Rise	72 units
Retail	Regional Shopping Center	27,169 square feet
Hotel	Hotel	159 rooms
Parking and Other Uses	Enclosed Parking with Elevator	18,500 square feet

Emissions of GHGs during project construction and operation were estimated using the CalEEMod input parameters summarized in Table C-3 and the following information:

- Debris from demolition of approximately 15,500 square feet of existing building space and 4,000 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 woodstoves and only gas fireplaces (CalEEMod default number) were included in the project operations.
- Sequestration from landscaping was assumed to be negligible and, therefore, was not included in the analysis.
- PG&E's predicted carbon dioxide emission factor for year 2020 of 290 pounds of CO2 per megawatt hour.[1]

The 2016 California Building Energy Efficiency Standards (Title 24, Part 6) that became effective on January 1, 2017 use 28 percent less energy for lighting, heating, cooling, ventilation, and water heating for residential uses and five percent less energy for non-residential uses than the default

[1] Pacific Gas & Electric Company, Greenhouse Gas Emission Factors: Guidance for PG&E Customers, November 2015, Available online at: https://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf

2013 Standards used in CalEEMod.2016.3.1.[2] This energy use reduction was included in the analysis to estimate GHG emissions for the 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 analysis for the proposed project.

In accordance with the City of Oakland's CEQA guidance for evaluating the GHG thresholds of significance, the construction CO_2e emissions were annualized over a project life period of 40 years and then added to the estimated CO_2e emissions during operation. The average annual CO_2e emissions per service population were determined based on a service population of 288 persons.

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) 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[5] included in a regional transportation plan.

The proposed project would be up to 198,310 square feet in size (excluding parking and circulation) with approximately 77,500 square feet of residential uses, and therefore would contain residential uses in approximately 39 percent of the total development area, which would be less than the 50 percent required to qualify the project as a Transit Priority Project. However, since the project will include up to 77,500 square feet of residential and 120,810 square feet of nonresidential uses (retail and hotel) over a site area of 52,708 square feet, both the residential floor area ratio (1.5) and non-residential floor area ratio (2.3) would exceed 0.75. The project site is 1.21 acres in area, and the proposed project would construct 72 dwelling units; therefore, the net density would be approximately 60 dwelling units per acre. The proposed project is within 0.5 miles of the 19th Street Oakland Bay Area Rapid Transit (BART) station, which is a major transit

[2] California Energy Commission, *2016 Building Energy Efficiency Standards – Frequently Asked Questions*, available at http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/2016_Building_Energy_Efficiency_Standards_FAQ.pdf
[3] Rating system and checklist determined by City of Oakland Planning Department based on square footage of each use.
[4] CaGreen, *2013 CalGreen Residential Mandatory Measures*, effective January 1, 2014.
[5] 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.

stop; in addition, Broadway just east 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.

As discussed above, though the proposed project satisfies requirements 2) and 3), as it does not include residential uses in at least 50 percent of the total development area, it would not qualify as a Transit Priority Project (and thereby a mixed-use residential project per PRC Section 21159.28[d]). Therefore, project mobile source emissions have been included in the project GHG inventory and calculation of emissions per service population.

The total average annual CO_2e emissions and the total average annual CO_2e emissions per service population for the proposed project are compared to the City's thresholds in **Table C-4** below. The proposed project would not include a backup generator and thus not include emissions from stationary sources.

TABLE C-4
PROPOSED PROJECT GHG EMISSIONS[a]

Project Component	CO_2e[b] (metric tons per year)
Area Sources	3.8
Energy Emissions	411.1
Mobile Sources [c]	1436.4
Solid Waste	74.8
Water and Wastewater [e]	13.6
Annualized Construction Emissions (Over 40 Years)	21.5
Less Existing Emissions	- 438
Net Increase without Generator	**1,523**
City of Oakland Screening Threshold	1,100
Exceeds Threshold?	**Yes**
Service Population (150 residents and 204 employees) [f]	288
Net Project Emissions (without Generator) per Service Population	**5.29**
City Emissions per Service Population Threshold	4.6
Exceeds Threshold?	**Yes**

NOTES:
[a] Project operational emissions estimates were made using CalEEMod version 2016.3.1.
[b] CO_2e – Carbon dioxide equivalents
[c] GHG emissions from mobile sources relied on inputs from the Transportation Analysis by Fehr & Peers.
[d] Emissions from stationary sources such as backup generators are assessed under a separate 10,000 metric ton per year threshold which is not exceeded.
[e] 20 percent reduction in indoor water use assumed in compliance with CalGreen code.
[f] The service population is the total number of residents and employees of a project.

The project would exceed both the thresholds of 1,100 metric tons of CO_2e per year and 4.6 metric tons of CO_2e per service population. As an impact under the City's significance thresholds occurs when **both** thresholds are exceeded, the total operational GHG emissions would be considered significant.

Conclusion

The analysis above indicates that the proposed project would be required to prepare a GHG Reduction Plan as it meets all the criteria described under Scenario A of SCA 38.

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APPENDIX D

Site Management Plan

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PES Environmental, Inc.
Engineering & Environmental Services

A Report Prepared for:

Signature Land Advisors, Inc.
2335 Broadway, Suite 200
Oakland, California 94612

SITE MITIGATION AND CONTINGENCY PLAN
2401 BROADWAY
OAKLAND, CALIFORNIA
GeoTracker Global ID T0600102225

JANUARY 11, 2016

By:

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1.0 INTRODUCTION

This Site Mitigation and Contingency Plan (SMP) has been prepared by PES Environmental, Inc. (PES) on behalf of Signature Land Advisors, Inc. (Signature) for redevelopment construction at the property located at 2401 Broadway in Oakland, California (the site or subject property; Plate 1). The site consists of approximately 0.868-acre of land on two parcels identified by Alameda County Assessor's Parcel Numbers (APNs) 8-674-4 and 8-674-3-1. PES was retained by Signature to develop procedures for soil and groundwater management, environmental health and safety, and contingency planning during redevelopment construction at the subject property.

The site is currently listed as an open Leaking Underground Storage Tank (LUST) case with the Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) as the lead environmental regulatory agency. The case is identified on the State Water Resources Control Board (SWRCB) Geotracker website as Chrysler Dealership, 2417 Broadway, and the website lists benzene, gasoline, and waste, motor, hydraulic, and/or lubricating oil as the potential contaminants of concern. PES is assisting Signature in working with the RWQCB to obtain LUST case closure as part of the site redevelopment process.

This SMP was prepared to provide environmental consultants, construction contractors and workers, RWQCB, and Signature's other representatives with: (1) information regarding known environmental conditions at the site (including known and/or suspected soil and groundwater contamination at and beneath the site); (2) protocols for managing soil during site redevelopment activities; and (3) protocols for implementing contingencies to manage contaminated soil or other environmental conditions in the event they are identified during site redevelopment construction[1].

This SMP was prepared in accordance with PES' proposal dated September 2, 2015 (Reference No. 935.044.01.P05).

2.0 BACKGROUND INFORMATION

2.1 Site and Vicinity Characteristics

The subject property is comprised of two parcels located on approximately 0.868-acre of land within a mixed-use area of Oakland, California (Plate 1). Access to the site is from Broadway on the east side of the site, 25th Street on the north side of the site, and 24th Street on the south side of the site. The surrounding area is utilized for a mixed commercial/light industrial and residential purposes. As shown on Plate 2, the subject property is developed with a single commercial building on the southern portion of the site. The site is currently operated

[1] Based upon the proposed redevelopment, the activities described in this SMP, when implemented, will prepare the site for redevelopment without requiring building design and engineering controls for long-term environmental risk mitigation. Therefore such controls are not warranted and are not included in this SMP.

by Oakland Mitsubishi as a new/used auto dealership and associated auto maintenance and service shop.

2.2 Historical Use

Available historical records indicate that the site was developed for residential uses prior to 1889 and was steadily developed for residential and commercial purposes between 1889 and 1939. A windmill and associated 3,000-gallon water tank were present on the southern portion of the subject property prior to 1902 (however, no information was available regarding a potential water supply well associated with the windmill and tank). By 1939, several commercial/light industrial structures were present on the site. Between 1968 and 1970 the property was redeveloped into the current configuration: an "L"-shaped commercial/light industrial building located on the south side of the site and associated paved parking, driveways, and landscaped areas located on the northern portion of the site. No significant development appears to have occurred at the subject property since approximately 1970 (PES, 2015a).

A review of historical records indicate that the subject property has been utilized for various commercial/light industrial uses, including auto-related uses (i.e. auto service, repair, and sales), since 1925. Past business operations at the subject property have included Motor Parts Co. (circa 1925), Dahl Chevrolet Co. (circa 1933 through 1938), Western Laboratories (circa 1933 through 1938), Ser-vus Cleaners (circa 1938), Nash Motor Garage (circa 1945 through 1955), Pac Leather Finishing (circa 1950), and Saturn of Oakland Sales (circa 2006 through 2008; PES, 2015a). The subject property is currently occupied by a new/used car dealership and associated car maintenance and service shop operated by Oakland Mitsubishi.

2.3 Geology and Hydrogeology

Regional surficial geology is characterized as Holocene- to Pleistocene-age alluvial fan and fluvial deposits comprised primarily of unconsolidated sandy or silty clay generally grading downward to gravelly sand or sandy gravel; fine-grained, natural levee deposits consisting of sandy or clayey silt and sandy or silty clay; well-sorted fine-grained sand deposits of the Merritt sand formation; and areas of artificial fill (Graymer, 2000).

The site is underlain by interbedded deposits of unconsolidated fine- to coarse-grained soil to the maximum explored depth of 24 feet below ground surface (bgs). In general, shallow soil encountered at the site consists of interbedded silty and clayey sand, silt, sandy silt, clay, and silty clay from the ground surface to depths of approximately 21 feet bgs. An interval of saturated silty to clayey sand, apparently limited in lateral extent, was encountered between depths of approximately 13 and 14 feet bgs in borings advanced in the southwestern portions of the site (SB-3 through SB-6). Wet sandy gravel was encountered between depths of approximately 21 and 23 feet bgs, underlain by stiff clay to the maximum explored depth of 24 feet bgs. First encountered groundwater at the site was generally observed at depths ranging from 19 feet bgs to 22.5 feet bgs (PES, 2015b).

2.4 Previous Environmental Investigations

In July 1994, Epigene International (Epigene) removed two USTs (including one approximately 295-gallon waste oil UST and one approximately 575-gallon gasoline UST) from beneath the off-site sidewalk adjacent to the southern boundary of the site and two in-ground hydraulic lifts from beneath the southwestern portion of the site. The locations of the former USTs and former hydraulic lifts are shown on Plate 2. Soil samples collected from the waste oil UST (including from beneath the concrete vault) and gasoline UST excavations indicated releases had occurred from the two USTs. Soil samples collected from beneath each of the two former hydraulic lifts reported the presence of long-chain petroleum hydrocarbons in soil (Epigene, 1994). Pertinent information from the Epigene report is provided in Appendix A.

A draft Phase I Environmental Site Assessment (ESA) prepared by PES on June 11, 2015 identified the following Recognized Environmental Conditions (RECs) in connection with the site:

- A LUST case is currently open for the subject property for documented release of hydrocarbons from two former USTs and two former hydraulic lifts removed in 1994. The extent of contamination in soil and groundwater has not been defined; and

- Based on documented volatile organic compound (VOC) impacts to groundwater in the vicinity of the subject property and the groundwater flow direction, there is the potential for vapor intrusion concerns to the subject property.

In order to further characterize subsurface conditions at the site and identify recommended next steps pursuant to LUST case closure, PES conducted a subsurface investigation at the subject property in June and July 2015. In a document entitled *Subsurface Investigation Report and Request for Case Closure* dated August 3, 2015 and correspondence entitled *Supplemental Soil Analytical Data* dated September 1, 2015, PES concluded that, based on the investigation results, soil, soil vapor and groundwater conditions at the site meet the criteria for LUST case closure in accordance with the State Water Resources Control Board (SWRCB) Low-Threat Underground Storage Tank Case Closure Policy (the LTCP; SWRCB, 2012). PES also concluded that, based on the results of the subsurface investigation, there does not appear to be a significant risk to human health or the environment due to the historical release of petroleum hydrocarbons from the former off-site USTs and former on-site hydraulic lifts, documented VOC contamination from off-site source(s) in groundwater, or current and former vehicle repair and maintenance activities conducted at the site. However, based on the documented and/or suspected presence of soil and groundwater contamination at the site not associated with the LUST case, as discussed below, PES recommended a SMP for redevelopment construction be prepared for the site.

A summary of the current conceptual model of environmental site conditions is presented in Section 2.5. Additional discussion of previous environmental investigations conducted at the

site, as well as copies of pertinent information from previous environmental documents prepared for the site, are presented in Appendix A.

2.5 Summary of Environmental Site Conditions

2.5.1 Site-Wide General Subsurface Conditions

During the June 2015 investigation, metals including arsenic, barium, chromium, cobalt, copper, lead, mercury, nickel, vanadium, and zinc were detected in soil samples collected across the site at concentrations below their respective residential Environmental Screening Level (ESL; RWQCB, 2013) values with the exception of arsenic, which was detected above the residential and commercial ESLs but within naturally-occurring background ranges for the San Francisco Bay area (PES, 2015b). Concentrations of metals in site soil are below levels which would indicate characteristics of a hazardous waste if removed from the site.

Analysis of grab groundwater samples collected in June and July 2015 identified chlorinated VOCs, including trichloroethene (TCE), cis-1,2-dichloroethene (DCE), trans-1,2-DCE, vinyl chloride, 1,1-dichloroethane (DCA), 1,2-DCA, 1,1-DCE, and 1,1,2-trichloroethane (TCA) in groundwater across the site. Select VOCs (specifically TCE, 1,1-DCA and 1,1-DCE) detected at the site are consistent with VOCs identified in groundwater at hydraulically upgradient and downgradient properties in the site vicinity (PES, 2015a). Furthermore, concentrations of chlorinated VOCs generally appear to decrease in the downgradient (southerly) direction across the site, suggesting an upgradient off-site source (PES, 2015b). Concentrations of chlorinated VOCs detected in site groundwater exceed the drinking water ESLs but are below the ESLs for potential vapor intrusion concerns. Drinking water in the City of Oakland is provided by the East Bay Municipal Utility District (EBMUD) and shallow groundwater is not used for water supply. Therefore, the presence of chlorinated VOCs in groundwater beneath the site does not present a significant threat to human health at the site.

The June and July 2015 investigation identified low concentrations of VOCs, including toluene, ethylbenzene and xylenes, in soil vapor beneath the site; all of the VOCs detected in soil vapor were below residential ESL values (i.e., the most conservative, health-protective ESLs).

2.5.2 Localized Subsurface Conditions

During the June and July 2015 investigation, total petroleum hydrocarbons quantified as gasoline (TPHg) and naphthalene were detected in shallow soil samples collected beneath the present-day parts and chemical storage room at the site (boring location SV-7; Plate 2). Concentrations of TPHg exceeded the residential and/or commercial ESL in soil samples collected from boring SV-7. Naphthalene was not detected at concentrations at or above the residential ESL (Appendix A). Sub-slab vapor, soil vapor, and soil data collected in the vicinity of the parts and chemical storage room indicate the TPHg impact to soil is limited in lateral extent and not associated with the former off-site USTs or former hydraulic lifts at the site (Appendix A). The vertical extent of TPHg-impacted soil has not been defined. Localized

petroleum hydrocarbon impact to shallow soil at the site will be mitigated through implementation of this SMP as described in Section 3.4.2.

TPHg, total petroleum hydrocarbons quantified as diesel (TPHd), and total petroleum hydrocarbons quantified as heavy oil (TPHho) were detected in soil the vicinity of the former in-ground hydraulic lifts, all below their respective residential ESL values. Petroleum hydrocarbons were not detected in off-site soil samples collected adjacent to the former gasoline and waste oil USTs; however, TPHg, TPHd, and low concentrations of polycyclic aromatic hydrocarbons (PAHs) were detected in groundwater adjacent to the former gasoline and waste oil USTs. Concentrations of TPHg and TPHd exceeded the drinking water ESL in the groundwater sample collected adjacent to the former waste oil UST (boring location SB-6). As noted above, drinking water in the City of Oakland is provided by EBMUD and shallow groundwater is not used for water supply.

In June 2015, tetrachloroethene (PCE) was identified in sub-slab vapor (sample locations SSV-1 and SSV-4; Plate 2) at concentrations above indoor air ESLs (after applying the default attenuation factor recommended by the California Environmental Protection Agency, Department of Toxic Substances Control [DTSC][2]) in limited areas beneath the site building. A supplemental investigation in July 2015 was conducted to further define the extent of PCE at the site and included soil vapor and soil sampling beneath the building. The results of the supplemental sampling and analysis indicate that soil and soil vapor beneath and surrounding the impacted sub-slab vapor samples do not appear to be impacted with PCE and the impact to sub-slab vapor appears to be localized or associated with off-site source(s). Although no source of the VOCs was confirmed by the supplemental sampling, these areas are identified in this SMP as areas with potential to encounter VOC-impacted soil (Plate 2).

2.6 Proposed Site Development and Excavation Considerations

The planned redevelopment consists of: (1) demolition and removal of the existing commercial building, pavement, and landscaping; (2) site grading; (3) construction of the foundation system for the new building including limited excavations for concrete mat foundations, elevator and/or car stacker pits, and underground utility installations; and (4) construction of a new multi-story commercial/residential building and associated parking and landscaped areas. The ground level of the planned development will consist of parking and retail space, with residential units above. Construction activities for the proposed development are expected to result in a currently undetermined volume of material that will be excavated and removed from the site during the early stages of construction.

[2] In order to estimate concentrations of VOCs in sub-slab vapor which would theoretically result in an indoor air concentration above the applicable indoor air ESL, the DTSC (2011) recommends applying a default attenuation factor of 0.05 to the sub-slab vapor analytical result.

3.0 SITE MITIGATION PLAN

The results of subsurface investigations conducted by PES at the subject property indicate localized petroleum hydrocarbon-affected soil is present beneath the parts and chemical storage area of the existing site building. As such, portions of the material anticipated to be excavated at the site is not suitable for unrestricted on- or off-site use. Due to the history of commercial/light industrial (in particular, auto-related) use of the site, the potential exists for encountering additional, previously unidentified soil and/or groundwater contamination at the site not associated with the LUST case. This SMP has been prepared to provide site management procedures to be implemented during construction.

Construction management procedures presented herein consist of: (1) worker health and safety procedures; (2) procedures for management of on-site soils during construction; and (3) protocols for off-site disposal of excess soil. Contingency procedures for assessing previously unidentified affected soils, if any, that may be encountered during site work are also included.

Hazardous substances in soil across the site will be removed as part of redevelopment construction and concentrations of VOCs in groundwater do not present a significant threat to human health at the site. Therefore, design features to mitigate future site occupant exposure to hazardous substances in soil and groundwater do not appear warranted.

3.1 Responsibilities for SMP Implementation

Signature or designated personnel shall oversee implementation of the SMP at the site. Signature and the General Contractor shall make all third-party subcontractors working at the site aware of the requirements of the SMP, and provide an electronic copy and hard-copy to all subcontractors that are performing activities covered by this SMP (see Section 3.2) and may encounter suspect subsurface conditions during execution of their work.

Prior to the initiation of construction activities that are covered under this SMP, Signature shall confirm the Owner's project representative and project environmental consultant (Consultant) listed below. Regular and 24-hour emergency contact information for these individuals shall be confirmed and updated as necessary. A project contact sheet shall be provided to the General Contractor and posted in an accessible and suitable location at the subject property.

Project Responsibility	Company Name	Contact Person	Phone Number Normal/24-hr
Owner Representative	Signature Development Group	Jamie Choy	(510) 251-9276
General Contractor	TBD_____	TBD_____	TBD_____
Earthwork Subcontractor	TBD_____	TBD_____	TBD_____
Utility Subcontractor	TBD_____	TBD_____	TBD_____
Environmental Consultant	PES Environmental, Inc.	Kyle Flory, P.G.	(415) 899-1600/ (415) 497-2729

3.2 Activities Covered by the SMP

The following activities, when performed on the subject property, constitute the work covered under this SMP:

- **Subsurface Construction or Repair** – any activity occurring beneath the existing grade level, including mass excavation for construction of the planned site building;
- **Utility Line Work** – any subterranean inspection, excavation, or repair of electrical, telephone, water, sanitary sewer or storm drains occurring within or outside of existing vaults;
- **Groundwater Extraction or Construction De-watering** – any activity involving collection and removal of shallow groundwater during or after construction; and
- **Other** – other subgrade activities not expressly listed above.

3.3 Worker Health and Safety Training

In addition to following the SMP, the general contractor, and each of its subcontractors, will work under the guidance of a site-specific health and safety plan (HASP) and injury and illness prevention plan (IIPP). The purpose of these documents is to provide general guidance regarding the work hazards that may be encountered during each phase of site construction activities, including potential chemicals of concern that may be encountered on-site. The HASP will be prepared in accordance with California Occupational Safety and Health Administration (CAL-OSHA) Construction Safety Orders within Title 8 CCR.

3.4 Soil Management

3.4.1 Planned Earthwork Activities

Planned earthwork activities for the redevelopment project will begin with demolition and removal of the existing site building, pavement materials, and landscaping (e.g., lawn, trees, shrubs). Thereafter, the site will be graded smooth and firm to allow for construction equipment access.

Excess soil (volume to be determined) generated during earthwork operations at the site will require removal from the site. Because space limitations and sequencing of soil excavation may preclude significant stockpiling on the site, excess soil may be direct-loaded at the time of excavation and transported off-site for disposal or off-site reuse, as appropriate based on pre-characterization data (refer to Section 3.4.3 below). In support of direct-loading and off-haul, the general contractor (or its earthwork subcontractor) will profile the soil in place in advance of excavation, using analytical data from the 2015 investigation by PES (supplemented by additional data collection if required by the acceptance facility), and obtain landfill or off-site

end user acceptance, as applicable, prior to the excavation activities. Further details regarding soil profiling are provided below.

3.4.2 Removal of Petroleum Hydrocarbon-Affected Soil and Assessment of Suspect VOC-Affected Soil

Documented petroleum hydrocarbon-affected soil has been identified at one location in the vicinity of the parts and chemical storage room at the site (Plate 2). Based on prior investigation results, the petroleum hydrocarbon-affected soil exhibits chemical characteristics which will likely result in classification as non-hazardous waste for off-site transportation and disposal. Following site demolition, the lateral and vertical limits of soil requiring removal from the site due to levels of petroleum hydrocarbons in excess of residential screening levels and management as non-hazardous waste will be established in accordance with the procedures described in Section 3.4.4 below, and using the location shown on Plate 2 (estimated as a 20 by 20-foot area centered on boring location SV-7) as the initial assessment area. The following presents the procedures for excavation of the petroleum hydrocarbon-affected soil and collection of verification soil samples.

The soil in the vicinity of sub-slab vapor samples SSV-1 and SSV-4 will be assessed by the environmental consultant during mass grading operations (Section 3.4.3.1). The potential areas of suspect VOC-affected soil are presented on Plate 2. The environmental consultant will observe soil conditions for the presence of evidence of contamination, such as discoloration and/or odors. If suspect soils are identified, excavation activities will be halted and the environmental consultant will be notified so that further assessment and mitigation, if necessary, will be conducted in accordance with procedures outlined in Section 3.4.4.

3.4.2.1 Excavation and Materials Management

Although the removal of the petroleum hydrocarbon-affected soil is not a soil aeration process, some volatilization may occur during excavation and soil management activities. Consequently, guidelines and notification requirements set by the Bay Area Air Quality Management Division (BAAQMD) in Regulation 8, Rule 40 of the BAAQMD Rules and Regulations for aeration of contaminated soil may apply to the soil removal. Therefore, notification will be provided by the General Contractor to BAAQMD as required.

Soil affected with concentrations of TPHg in excess of the residential ESL will be excavated from an area having plan dimensions of approximately 400 square feet (approximately 20 feet by 20 feet) to an estimated depth of 8 feet bgs. The approximate area of excavation is shown on Plate 2. Therefore, the volume of excavated soil is estimated to be approximately 120 cubic yards (in-place). The environmental consultant will provide a field engineer or geologist to observe the excavation activities.

The excavated soils will be visually inspected for signs of contamination (e.g., staining). The excavated soil will be placed on plastic sheeting and covered at the end of the work day.

During the period the excavation area is open, appropriate barricades and flagging may be placed around it for safety purposes.

3.4.2.2 Soil Verification Sampling and Analysis

To confirm that the target cleanup goals (residential ESLs) are achieved, verification soil samples from the excavation bottom and sidewalls will be collected for laboratory analysis after the limits of the excavation has been reached. The approximate planned locations of the verification soil samples are shown on Plate 2.

Following verification soil sample collection, the sample containers will be labeled for identification and immediately placed in a chilled, thermally insulated cooler containing "blue-ice" packs or bagged ice. The soil samples will be sent under chain-of-custody documentation to a California-certified laboratory for chemical analysis. The verification soil samples will be analyzed for TPHg using U.S. EPA Test Method 8015B and naphthalene using U.S. EPA Test Method 8260B.

If the verification sample results indicate the target cleanup goals have been attained, no further excavation will be conducted and the excavation will be backfilled with clean fill as described below and in accordance with the geotechnical engineer's specifications. If the verification sample analysis indicates the target cleanup goals have not been attained, further excavation and confirmation sampling will be conducted, to the extent practicable.

Based on prior investigation results, it is expected that the majority of soil to be removed from the site as part of the planned redevelopment activities may exhibit chemical characteristics suitable for unrestricted on- or off-site reuse. However, based on the volume of soil to be removed from the site, additional characterization may be required to comply with requirements of the receiving facility.

3.4.3 Soil Management Procedures

Soil management procedures detailed in the following sections will be implemented during mass grading, utility installation and construction of the new building foundation. Soil management and handling activities shall be conducted in accordance with applicable federal, state, and local regulations including that for construction dust control.

3.4.3.1 Mass Grading

During mass grading operations, soil will be removed from the site in preparation for construction of the ground-level parking and retail areas. The environmental consultant will be present during excavation to observe exposed and excavated soil for the presence of evidence of contamination, such as unusual discoloration and/or odors. If identified, further evaluation of the suspect soil will be conducted in accordance with contingency procedures outlined in Section 3.4.4.

3.4.3.2 Subgrade Utility Installation at Project Perimeter

Limited quantities of soil may be generated during subgrade utility and building foundation installation for the new development. During excavation as part of these activities, the general contractor (or the excavation subcontractor), will observe soil conditions for the presence of evidence of contamination, such as discoloration and/or odors. If suspect soils are identified, excavation activities will be halted and the environmental consultant will be notified so that further assessment and mitigation, if necessary, can be conducted in accordance with procedures outlined in Section 3.4.4.

3.4.4 Contingency Procedures for Suspect Soil

In the event that suspect soils, that have not been previously identified or evaluated, are identified through visual or olfactory observations during grading and excavation, work shall be halted in the area of suspected materials. The suspect area will be cordoned off using delineators and caution tape, or similar materials, and the soil management contingency procedures described below will be instituted. Contingency measures will be conducted by HAZWOPER-trained environmental professionals and/or workers following a HASP as discussed in Section 3.2.

Preliminary assessment of the previously unidentified suspect soil will include confirmation that access control measures installed by the general contractor/manager are adequate to provide necessary protection to on-site workers and the public during the evaluation phase. Confirmation will consist of visual assessment of the installed barriers as well as monitoring of the air outside the secured area.

Air sampling will be conducted around the perimeter of the secured area using a photoionization detector (PID) meter to measure VOCs in the breathing zone and a lower explosive limit (LEL)/oxygen (O_2) meter to measure concentrations of combustible gases and available oxygen. If the air sampling suggests that the control measures are improperly positioned to provide necessary protection to on-site workers, the barriers will be relocated as necessary.

The environmental consultant will conduct a preliminary assessment of the suspect soil to determine if there are conditions that present a significant risk to human health or the environment based on field observations and/or laboratory analysis. This assessment may include collecting representative samples using hand and/or mechanized equipment at an appropriate frequency determined by the environmental consultant. The soil samples would then be submitted to a California-certified analytical laboratory for testing in accordance with U.S. Environmental Protection Agency (EPA)-approved methods. The analytical program will be developed by the environmental consultant based on on-site historical chemical use, visual observations and field measurements. If the preliminary assessment suggests that the conditions are consistent with prior site observations described above and covered under this SMP, then the environmental consultant will terminate implementation of these procedures

and release the suspect areas to the general contractor for continuation of the grading and excavation process.

After the evaluation is complete, the environmental consultant will provide Signature and the general contractor with conclusions regarding potential risks posed by identified soils to human health and the environment as well as recommendations for proper management (including removal and disposal) of such soils.

3.4.5 Soil Stockpiling and Sampling Procedures

Space limitations and sequencing of soil excavation may preclude stockpiling of significant quantities of excess soil during mass grading activities. Therefore, excess soil will likely be direct-loaded at the time of excavation and transported off-site for disposal or off-site reuse.

In the event that stockpiling of soil for further characterization is deemed necessary and feasible prior to or during mass grading activities, the procedures described in this section will be followed. The stockpiles will be lined with polyethylene plastic sheeting (10 mil [0.010 inch] minimum thickness) beneath and above the soil to prevent stormwater runon/runoff and fugitive dust emissions. Stockpiled soil will be covered and secured at the end of each day.

The soil sampling procedures and analytical program for stockpiled soil are as follows:

- One discrete soil sample will be collected per 100 cubic yards of excavated soil unless otherwise required by the landfill disposal facility;
- Soil samples will be collected using a pre-cleaned hand trowel and transferred into laboratory-supplied glass containers or stainless steel tubes, as appropriate;
- Following soil sample collection, the containers will be labeled for identification and immediately placed in a chilled, thermally insulated cooler containing bagged ice or blue ice. The cooler containing the samples will then be delivered under chain-of-custody protocol to a state-certified laboratory; and
- The discrete samples collected from the soil stockpiles will be submitted for laboratory analysis for one or more compounds based on prior investigation data and/or site observations. Analyses may be conducted for VOCs, petroleum hydrocarbons, metals, and/or other compounds as required by the landfill or receiving facility for waste characterization purposes. If necessary, extraction procedures and further metals analyses will be conducted on the samples to determine if the soils are hazardous based on leaching characteristics.

3.4.6 Decontamination Procedures

Equipment used for soil excavation and loading (including heavy equipment and truck tires) will be cleaned using dry methods (stiff-bristled brushes/brooms or wire brushes) before leaving the site. In the event, dry methods are not feasible, equipment requiring decontamination will be cleaned using high-pressure hot water washes. Decontamination fluids will be containerized and stored on-site in appropriate containers (e.g., 55-gallon drums) pending characterization and appropriate disposal. During soil excavation and loading, the work areas will be kept reasonably clean and free of excessive soil or debris. Care will be exercised to minimize the potential for tracking soil out of the work area.

3.4.7 Dust Control Procedures

Depending upon the soil conditions, during excavation there is a potential to generate a nuisance dust condition and odors. As noted in the City of Oakland General Administrative Code 15.04.035, dust control measures shall be based on "Best Management Practices" and shall be used throughout all phases of construction. Examples of dust mitigation activities include:

- Watering active construction areas to control dust emissions;
- Trucks hauling soil, sand, and other loose materials should be covered, or required to maintain at least 2 feet of freeboard;
- Apply water to unpaved and staging areas, or apply non-toxic soil stabilizers as necessary to control dust; and
- If visible soil material is carried onto adjacent public streets, streets should be swept daily (with water sweepers).

To complement air monitoring efforts that may be conducted under an applicable HASP, dust monitoring may be implemented by others to evaluate the effectiveness of dust control measures.

To the extent feasible, the presence of airborne contaminants will be evaluated during the excavation and management of the petroleum hydrocarbon-impacted soil identified at the site (vicinity of boring SV-7) through the use of portable monitoring equipment. Information gathered will be used to ensure the adequacy of the levels of protection being employed at the site during excavation of this soil, and may be used as the basis for upgrading or downgrading levels of personal protection, at the discretion of the Site Safety Officer and as described in the site-specific HASP.

The following air sampling equipment will/may be utilized for dust and odor monitoring:

- Photo-Ionization Detector (PID); and

- Dust monitor (MiniRAM, Dataram, or similar).

The PID will serve as the primary instrument for personal exposure monitoring during excavation of soil identified to contain petroleum hydrocarbons or soil suspected to be contaminated. The instrument will utilized to fully characterize potential employee exposure and the need for equipment upgrades/downgrades.

3.5 Soil Disposal and Transportation Plan

Following acceptance of the excavated soil at an appropriately-licensed disposal or receiving facility, the soil will be loaded in licensed haul trucks (end-dumps or transfers) and transported off the site following appropriate California and Federal waste manifesting procedures. The appropriate waste manifest documentation will be provided to truck drivers hauling the affected soil off-site. As each truck is filled, an inspection will be made to verify that the waste soil is securely covered, to the extent practicable, and that the tires of the haul trucks are reasonably free of accumulated soil prior to leaving the site. A street sweeper will be made available, as needed, to keep the loading area clean. The soil will be wetted, as necessary, to reduce the potential for dust generation during loading and transportation activities. Transportation routes have been developed to minimize transporting the affected soil through residential areas. The affected soil will be transported via surface streets to the closest suitable freeway, which is Interstate 980/State Highway 24. The proposed routes for transportation on Interstate 980/State Highway 24 are as follows:

- To Interstate 980 West: Head south on Broadway toward West Grand Avenue; turn right onto West Grand Avenue; after approximately ½-mile, turn left onto Brush Street; continue on Brush Street for approximately ¼-mile, then use the two left lanes to take the I-980 W ramp; merge onto I-980 W; and

- To Interstate 980 East/State Highway 24 East: Head south on Broadway toward West Grand Avenue; turn right onto West Grand Avenue; after approximately ¼-mile, turn right onto Northgate Avenue; after approximately ¼ mile, use the left lane to take the ramp onto I-980 E/CA-24 E.

The remainder of the freeway route(s) will be established upon selection of the appropriate landfill(s).

3.6 Soil Importation

While not anticipated, potential fill materials utilized at the site will be selected and tested in accordance with the DTSC *Information Advisory, Clean Imported Fill Material, October 2001* (DTSC Advisory). Specific laboratory analyses will be based on the fill source characteristics, once the borrow source area has been determined.

3.7 Groundwater Management

Based on the depth to groundwater observed during subsurface investigations described above (approximately 19 to 22.5 feet bgs, with possible shallow perched saturated zone between approximately 13 to 14 feet bgs beneath the southwestern portion of the site) and the anticipated depth of grading activities, redevelopment activities may require construction dewatering.

In the event construction dewatering is necessary, procedures and methodologies will be developed for de-watering by the general contractor or its designee prior to commencing excavation activities. It is anticipated that extracted groundwater, if any, will either be: (1) discharged to the sanitary sewer under a batch wastewater discharge permit obtained from EBMUD; (2) treated on-site through a portable treatment system, as appropriate, and then discharged to the sanitary sewer or storm drain under a National Pollutant Discharge Elimination System (NPDES) permit; or (3) hauled off-site for disposal or recycling. If the water is discharged to the sanitary sewer or storm drain then it may need to be filtered to remove inert suspended sediments. Groundwater will be characterized in accordance with applicable permitting requirements for discharge or disposal.

3.8 Historical Subsurface Features

Historical documents indicate a windmill and associated 3,000-gallon water tank were present on the southern portion of the site prior to 1902. No information was available regarding a potential water supply well associated with the windmill and tank. However, the potential exists to encounter abandoned water supply wells or other historical subsurface features (e.g. dry wells, sumps, or leach fields) during site grading and excavation activities.

In the event that previously unidentified subsurface features or potential environmental concern are encountered during grading and excavation, work shall be halted in the area of the identified feature. The suspect area will be cordoned off using delineators and caution tape, or similar materials, and the environmental consultant will be contacted to conduct a preliminary assessment of the feature(s) to determine if there are conditions that present a significant risk to human health or the environment based on field observations and/or laboratory analysis.

After the evaluation is complete, the environmental consultant will provide Signature and the general contractor with conclusions regarding potential risks posed by identified features to human health and the environment as well as recommendations for proper management (potentially including removal, destruction, and/or disposal) of the feature(s). Further management or removal of historical site features (e.g. destruction of improperly-abandoned wells) will be preceded by notifications to the appropriate regulatory agencies.

4.0 REPORTING

Following the completion of the SMP activities described herein, a SMP Implementation report will be prepared and submitted to RWQCB. The report will document the completed SMP

activities, including disposition of the material excavated for construction and, if applicable, sampling and analysis performed during implementation of this SMP.

5.0 REFERENCES

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PES, 2015c. *Transmittal – Supplemental Soil Analytical Data, 2401 Broadway, Oakland, California, Geotracker Global ID T0600102225*. September 1.

ILLUSTRATIONS

Aerial Photo: June 9, 2014 (Google 2015)

PES Environmental, Inc.
Engineering & Environmental Services

Site Location
Site Mitigation and Contingency Plan
2401 Broadway
Oakland, California

PLATE
1

935.044.01.003	935-04401003_SMCP_1-2	DRAFT	10/15
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

Aerial Photo: June 9, 2014 (Google 2015)

PES Environmental, Inc.
Engineering & Environmental Services

Site Plan Showing Locations of Known or Suspected Contaminated Soil
Site Mitigation and Contingency Plan
2401 Broadway
Oakland, California

PLATE
2

935.044.01.003	935-04401003_SMCP_1-2	DRAFT	10/15
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

APPENDIX A

SUMMARY OF PREVIOUS ENVIRONMENTAL INVESTIGATIONS

APPENDIX A

SUMMARY OF PRIOR ENVIRONMENTAL INVESTIGATIONS

The following sections provide a summary of site characterization activities and other environmental actions conducted at the subject property and vicinity. Previous subsurface sample locations are included on Plate 2. Copies of pertinent information from previous environmental documents prepared for the site are included below.

A.1 1994 Underground Storage Tank and Hydraulic Lift Removal and Soil Sampling

According to Epigene (1994), two USTs (one approximately 295-gallon waste oil UST and one approximately 575-gallon gasoline UST) were removed from beneath the off-site sidewalk along the southern boundary of the subject property and two in-ground hydraulic lifts removed from the site in July 1994. The locations of the former USTs and former hydraulic lifts are shown on Plate 2. The waste oil UST was encased within a concrete vault, and Epigene noted that there were no obvious holes in the concrete at the time of removal, however, the soil surrounding the UST inside the vault was observed to be contaminated. The soil was removed from the vault and one soil sample was collected from approximately 6 inches below the concrete vault (at a depth of approximately 8 feet bgs). Soil beneath the gasoline UST was removed to a depth of approximately 11 to 12 feet bgs and one soil sample was collected from each of the four sidewalls of the excavation at depths ranging from 8.5 to 10 feet bgs.

The soil samples collected from the waste oil UST and gasoline UST excavations yielded maximum concentrations of total petroleum hydrocarbons quantified as diesel (TPHd), total petroleum hydrocarbons quantified as gasoline (TPHg), benzene, toluene, ethyl benzene, xylenes, and lead total threshold limit concentration (TTLC) of 1,500 milligrams per kilogram (mg/kg), 570 mg/kg, 7.4 mg/kg, 60 mg/kg, 32 mg/kg, 190 mg/kg and 12 mg/kg, respectively. Soil samples collected from beneath each of the two former hydraulic lifts reported total petroleum hydrocarbons quantified as hydraulic oil at concentrations of 450 mg/kg and 1,800 mg/kg (Epigene, 1994).

A May 1995 *Proposed Workplan for Subsurface Investigation of Potential Soil and Groundwater Contamination for Site Located at 2417 Broadway, Oakland* prepared by Epigene (1995) proposed the installation of three monitoring wells and the advancement of three soil borings on site to assess the extent of groundwater and soil contamination. Based on the review of available records, it appears the Epigene workplan was never implemented.

A.2 2012 Transfer of Regulatory Oversight

Based on the results of the sampling conducted at the time of the removal of the USTs and hydraulic lifts, a LUST case was opened by the Alameda County Environmental Health Department (ACEH). On March 22, 2012, ACEH transferred oversight of the LUST case to the RWQCB (ACEH, 2012). The SWRCB Geotracker website identifies the subject property as an open LUST cleanup site. The case is listed on the website as Chrysler Dealership

located at 2417 Broadway, and the website lists benzene, gasoline, and waste, motor, hydraulic, and/or lubricating oil as the potential contaminants of concern.

A.3 2015 Draft Phase I Environmental Site Assessment

A draft Phase I Environmental Site Assessment (ESA) was prepared by PES on June 11, 2015. As part of the draft Phase I ESA, regulatory records and historical documents were reviewed in connection with the open LUST case at the site. The findings are discussed in Sections A-1 and A-2 above.

According to the draft Phase I ESA, grab groundwater results from previous investigations at Milligan & Casentini Property (385 26th Street) and the Negherbon Properties (2301 Broadway), located 240 feet northwest and 50 feet south of site, respectively, identified VOCs in groundwater in the vicinity of the subject property. VOC impacts to groundwater identified at the Milligan and Casentini property have not been defined. VOC impacts at the Negherbon properties appear to be sourced at locations north of that property. Groundwater has been documented to flow to the south. Based on documented VOC impacts to groundwater in the vicinity of the subject property, and the groundwater flow direction, the draft Phase I ESA identified the potential for vapor intrusion concerns for the subject property.

The draft Phase I ESA identified the following Recognized Environmental Conditions (RECs) in connection with the site:

- A LUST case is currently open for the subject property for documented release of hydrocarbons from two former USTs and two former hydraulic lifts removed in 1994. The extent of contamination in soil and groundwater has not been defined; and

- Based on documented VOC impacts to groundwater in the vicinity of the subject property and the groundwater flow direction, there is the potential for vapor intrusion concerns to the subject property.

In addition, historical records reviewed for the draft Phase I ESA indicate that the subject property has been utilized for commercial/light industrial purposes, primarily auto-related purposes (i.e. auto service, auto repair, auto sales), since approximately 1925.

A.4 2015 Subsurface Investigation

In order to further characterize subsurface conditions at the site and identify recommended next steps pursuant to LUST case closure, PES conducted a subsurface investigation at the subject property in June and July 2015. The investigation results are documented in a report entitled *Subsurface Investigation Report and Request for Case Closure* dated August 3, 2015 and correspondence entitled *Supplemental Soil Analytical Data* dated September 1, 2015. On June 29 and 30, 2015, sub-slab vapor, soil vapor, soil, and grab groundwater sampling activities were conducted using manual methods and direct push drilling technology at 16 locations at the site as shown on Plate 2, including:

- Six borings (SB-1 through SB-6) advanced to approxima*te depths of 12 to 24 feet bgs at various locations at the s*ite and in the public right-of-way to evaluate sha*llow soil and groundwater conditi*ons associated with potential on-site and off-site sources of VOCs and/or petroleum hydrocarbons, including the former USTs and former in-ground hydraulic lifts;

- Four temporary sub-slab vapor probes (SSV-1 through SSV-4) installed at various locations beneath the on-site building to evaluate potential vapor intrusion concerns associated with potential releases of petroleum hydrocarbons and VOCs from potential on-site and off-site sources; and

- Six temporary soil vapor probes (SV-1 through SV-6) installed at a depth of approximately 5 feet bgs in exterior areas of the site (i.e. the parking lot) to evaluate shallow soil vapor conditions associated with potential releases of petroleum hydrocarbons and VOCs from potential on-site and off-site sources.

Following receipt and evaluation of the results of the sampling activities conducted on June 29 and 30, 2015, PES performed supplemental soil vapor and shallow soil sampling at the site on July 14, 2015. The additional sample locations, shown on Plates 2, included:

- Five temporary soil vapor probes (SV-7 through SV-11) were installed at approximately 5 feet bgs at locations within the site building to further evaluate the lateral and vertical extent of VOCs detected in sub-slab vapor during the June 29 and 30, 2015 investigation.

Findings Pertaining to Historical Auto-Related and Other Industrial Uses

The investigation identified low concentrations of VOCs, including toluene, ethylbenzene and xylenes, in soil vapor beneath the site; all of the VOCs detected in soil vapor were below residential ESL values (i.e., the most conservative, health-protective ESLs). TPHg, TPHd, and TPHho were detected in soil the vicinity of the former in-ground hydraulic lifts, all below their respective residential ESL values.

TPHg and naphthalene were detected in shallow soil samples collected beneath the present-day parts and chemical storage room at the site (SV-7). Concentrations of TPHg exceeded the residential and/or commercial ESL in soil samples collected from boring SV-7; however, naphthalene was not detected at concentrations at or above the residential ESL. Sub-slab vapor, soil vapor, and soil data collected in the vicinity of the parts and chemical storage room indicate the TPHg impact to soil is limited in extent and not associated with the former USTs or former hydraulic lifts at the site.

Petroleum hydrocarbons were not detected in soil samples collected adjacent to the former gasoline and waste oil USTs, however, TPHg, TPHd, and low concentrations of PAHs were detected in groundwater adjacent to the former gasoline and waste oil USTs. Concentrations of TPHg and TPHd exceeded the drinking water ESL in the groundwater sample collected adjacent to the former waste oil UST (SB-6). However, drinking water is supplied by East

Bay Municipal Utility District (EBMUD) and shallow groundwater is not used for water supply in the City of Oakland. Therefore, the presence of petroleum hydrocarbons in groundwater in the vicinity of the former USTs does not pose a significant threat to human health or the environment at the site.

Metals, including arsenic, barium, chromium, cobalt, copper, lead, mercury, nickel, vanadium, and zinc, were detected in soil samples collected across the site at concentrations below their respective residential ESL values with the exception of arsenic, which was detected above the residential and commercial ESLs but within naturally-occurring background ranges for the San Francisco Bay area.

Findings Pertaining to Vapor Intrusion Concerns from Potential Off-Site Sources

The investigation identified concentrations of PCE in sub-slab vapor at or above indoor air ESLs (after applying the default attenuation factor) in limited areas beneath the site building. Supplemental investigation was conducted to further define the extent of PCE at the site and included soil vapor and soil sampling beneath the building. The results of the supplemental sampling and analysis indicate that soil and soil vapor beneath and surrounding the impacted sub-slab vapor samples do not appear to be impacted with PCE and the impact to sub-slab vapor appears to be localized or associated with off-site source(s). Additional sampling of soil or soil vapor in the vicinity of the impacted sub-slab vapor samples does not appear warranted based on the results of the supplemental sampling conducted.

Grab groundwater analytical results identified chlorinated VOCs, including TCE, cis-1,2-DCE, trans-1,2-DCE, vinyl chloride, 1,1-DCA, 1,2-DCA, 1,1-DCE, and 1,1,2-TCA in groundwater across the site. Select VOCs (specifically TCE, 1,1-DCA and 1,1-DCE) detected at the site are consistent with detections of VOCs during investigations at both hydraulically upgradient and downgradient properties in the site vicinity. Furthermore, concentrations of chlorinated VOCs generally appear to decrease in the downgradient (southerly) direction across the site, suggesting an upgradient off-site source.

Detected concentrations of chlorinated VOCs exceed the drinking water ESLs, however, all VOCs detected in site grab groundwater samples were below the ESLs for potential vapor intrusion concerns. As noted above drinking water is provided by EBMUD and shallow groundwater is not used for water supply in the City of Oakland. Therefore, the presence of chlorinated VOCs in groundwater beneath the site does not pose a significant threat to human health at the site.

Low-Threat LUST Case Closure Evaluation

The subsurface analytical data collected at the site during the June and July 2015 investigation was evaluated with respect to the SWRCB Low-Threat Underground Storage Tank Case Closure Policy (the LTCP; SWRCB, 2012). PES concluded the site meets both the general and media-specific criteria for low-threat closure as required by the LTCP.

However, based on the documented and/or suspected presence of soil and groundwater contamination at the site not associated with the LUST case (see above), PES recommended a SMP for redevelopment construction be prepared for the site.

Table 1 - Summary of Results of Sample Analysis in PPM

Sample ID	Depth (FT)	TPH Gas	TPH Diesel	Benzene	Toluene	Ethyl-benzene	Xylene	Total Lead
T-1 Center	8	910	570	ND	0.76	ND	4.4	5.0
T-2 East	8.5	1500	NA	7.4	60	32	190	12
T-2 South	9	1500	NA	ND	15	15	15	NA
T-2 S.W.	8.5	450	NA	0.49	1.4	5.9	22	5.8
T-2 North	10	280	NA	0.57	4.3	2.6	12	NA
Stockpile** 1-4	-	120	51	0.16	0.86	0.89	4.9	28
Pit North	8	NA	450*	NA	NA	NA	NA	NA
Pit South	7	NA	1800*	NA	NA	NA	NA	NA
		39	660	NO				

b=26 TPH=180 beneath hydraulic lifts

*TPH as hydraulic oil; ** four to one composite; NA is not analyzed, ND is not detected.

Table 2 - Results of 8240 Analysis for Spoilpile

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE RESULT (%)
ACETONE	47	25	N.D.	--
BENZENE	42	5.0	N.D.	129
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--
BROMOFORM	N.D.	5.0	N.D.	--
BROMOMETHANE	N.D.	5.0	N.D.	--
2-BUTANONE	N.D.	5.0	N.D.	--
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--
CHLOROBENZENE	N.D.	5.0	N.D.	105
CHLOROETHANE	N.D.	5.0	N.D.	--
2-CHLOROETHYLVINYLETHER	N.D.	5.0	N.D.	--
CHLOROFORM	N.D.	5.0	N.D.	--
CHLOROMETHANE	N.D.	5.0	N.D.	--
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	120
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--
1,3-DICHLOROPROPENE (CIS)	N.D.	5.0	N.D.	--
1,3-DICHLOROPROPENE (TRANS)	N.D.	5.0	N.D.	--
ETHYL BENZENE	2600	120	N.D.	--
2-HEXANONE	N.D.	5.0	N.D.	--
METHYLENE CHLORIDE	N.D.	25	N.D.	--
4-METHYL-2-PENTANONE	N.D.	5.0	N.D.	--
STYRENE	N.D.	5.0	N.D.	--
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--
TETRACHLOROETHENE	N.D.	5.0	N.D.	--
TOLUENE	1600	120	N.D.	108
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--
TRICHLOROETHENE	N.D.	5.0	N.D.	96
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--
VINYL ACETATE	N.D.	5.0	N.D.	--
VINYL CHLORIDE	N.D.	5.0	N.D.	--
XYLENES (TOTAL)	19000	120	N.D.	--

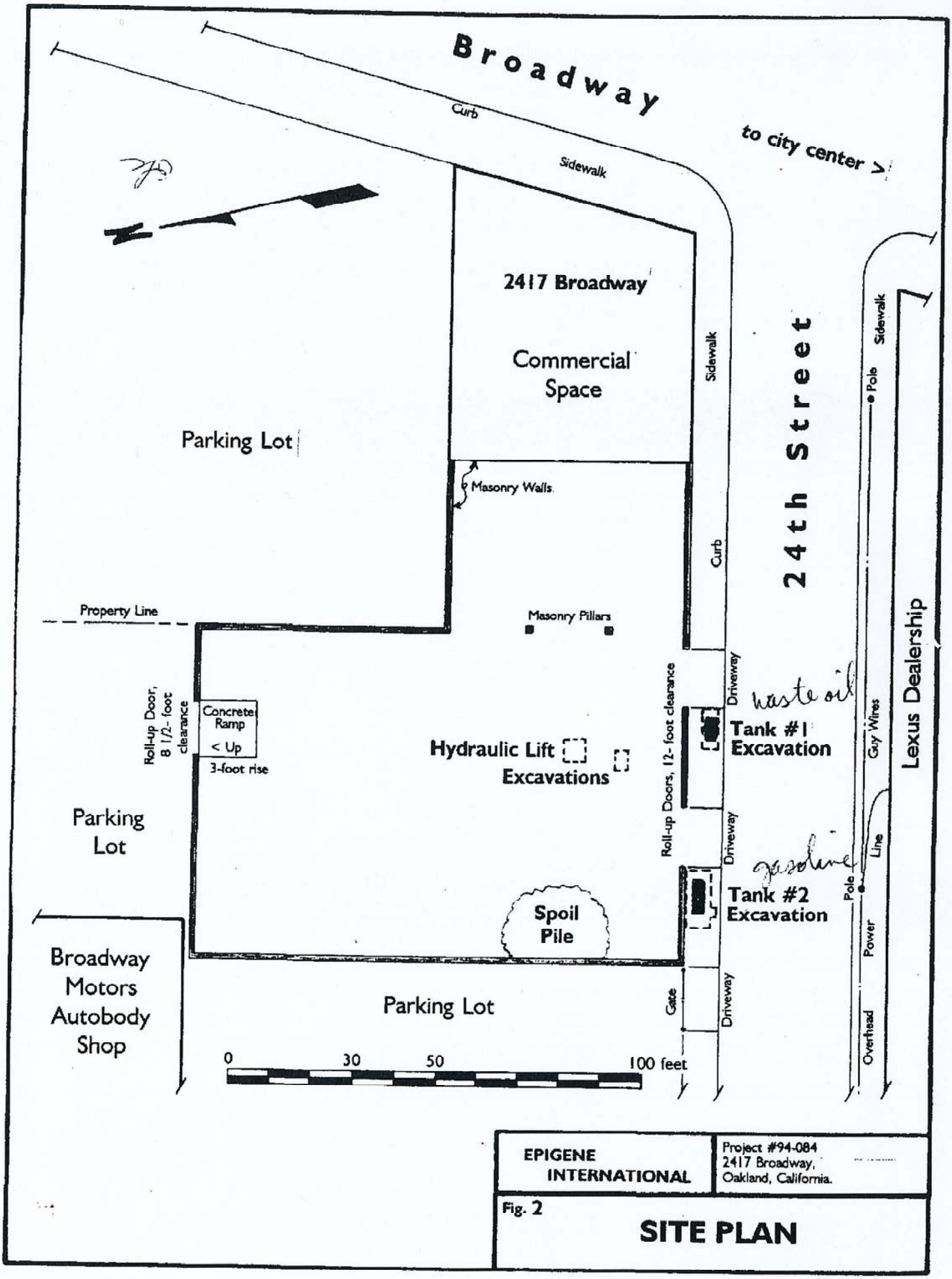
Table 3 - Results of CAM 17 Metals Analysis for Spoilpile

Lab Id	40176				Detection Limit	
Client ID	S-1 to 4					
Matrix	Soil					
Extraction°	TTLC				TTLC	STLC
Compound	Concentration*	Concentration*	Concentration*	Concentration*	mg/kg	mg/L
Antimony (Sb)	ND				1.00	0.05
Arsenic (As)	ND				2.5	0.25
Barium (Ba)	140				0.2	0.01
Beryllium (Be)	ND				0.2	0.01
Cadmium (Cd)	ND				0.2	0.01
Cobalt (Co)	9.4				0.4	0.02
Chromium (Cr)	39				0.02	0.005
Copper (Cu)	45				0.3	0.015
Lead (Pb)	---				0.6	0.03
Mercury (Hg)	ND				0.08	0.004
Molybdenum (Mo)	ND				0.4	0.02
Nickel (Ni)	44				0.4	0.02
Selenium (Se)	ND				5.0	0.1
Silver (Ag)	1.5				0.2	0.01
Thallium (Tl)	ND				2.00	0.1
Vanadium (V)	29				0.4	0.02
Zinc (Zn)	70				0.2	0.01
% Recovery Surrogate						
Comments						

* water samples are reported in mg/L, soil samples in mg/kg and all TCLP & STLC extracts in mg/L

° EPA extraction methods 1311(TCLP), 3010/3020(water,TTLC), 3040(organic matrices,TTLC), 3050(solids,TTLC); STLC from CA Title 22

a) aqueous sample that contains greater than ~ 2 vol. % sediments; the sediments are extracted with the liquid, in accordance with EPA methodologies, and can significantly increase reported metals values.


Broadway
Curb
Sidewalk
to city center >
2417 Broadway
Commercial Space
Parking Lot
Masonry Walls
Curb
24th Street
Sidewalk
Pole
Property Line
Masonry Pillars
Lexus Dealership
Roll-up Door, 8 1/2- foot clearance
Concrete Ramp
< Up
3-foot rise
Hydraulic Lift Excavations
Roll-up Doors, 12- foot clearance
Driveway
waste oil
Tank #1 Excavation
Guy Wires
Parking Lot
gasoline
Tank #2 Excavation
Pole
Line
Spoil Pile
Power
Broadway Motors Autobody Shop
Parking Lot
Gate
Driveway
Overhead
0
30
50
100 feet
EPIGENE INTERNATIONAL
Project #94-084
2417 Broadway,
Oakland, California.
Fig. 2
SITE PLAN

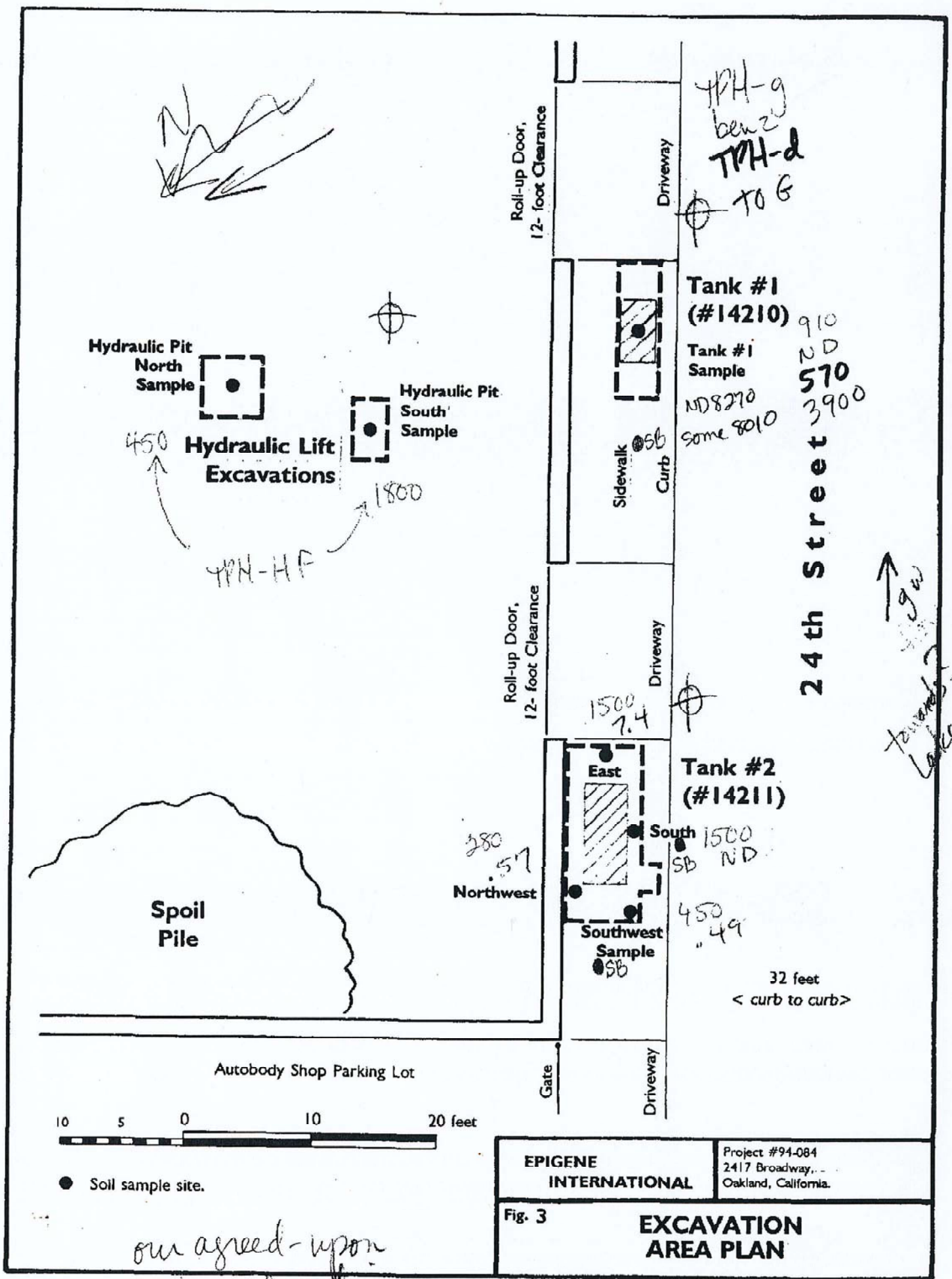

N
Roll-up Door, 12- foot Clearance
Driveway
TPH-g benz
TPH-d
TOG
Tank #1 (#14210)
910
ND
570
3900
Tank #1 Sample
ND8270
some 8010
Hydraulic Pit North Sample
Hydraulic Pit South Sample
Hydraulic Lift Excavations
450
1800
TPH-HF
Sidewalk
Curb
SB
24th Street
Roll-up Door, 12- foot Clearance
Driveway
1500
1.4
towards Lake
Tank #2 (#14211)
East
South
1500
SB
ND
280
.57
Northwest
Spoil Pile
450
.49
Southwest Sample
SB
32 feet
< curb to curb>
Autobody Shop Parking Lot
Gate
Driveway
10 5 0 10 20 feet
Soil sample site.
EPIGENE INTERNATIONAL
Project #94-084
2417 Broadway,
Oakland, California.
Fig. 3
EXCAVATION AREA PLAN
our agreed-upon SB/MW locations

Table 1
Summary of Sub-Slab Vapor Analytical Results
Subsurface Investigation
2401 Broadway, Oakland, California

Sample Location	Sample ID	Date Sampled	PCE (µg/m³)	TCE (µg/m³)	cis-1,2-DCE (µg/m³)	Vinyl Chloride (µg/m³)	1,1-DCE (µg/m³)	1,1,1-TCA (µg/m³)	1,1-DCA (µg/m³)	Chloroethane (µg/m³)	Styrene (µg/m³)	Benzene (µg/m³)	Toluene (µg/m³)	Ethylbenzene (µg/m³)	m,p-Xylene (µg/m³)	o-Xylene (µg/m³)	1,3,5-TMB (µg/m³)	1,2,4-TMB (µg/m³)	Naphthalene (µg/m³)	Oxygen (%vol)	1,1-DFA (Leak Check Compound) (ppmV)
SSV-1	SSV-1	6/30/2015	**115** [2]	**7.31**	ND(3.97)	ND(2.56)	ND(3.97)	ND(5.46)	ND(4.05)	ND(2.64)	ND(4.26)	ND(3.19)	ND(3.77)	ND(4.34)	ND(4.34)	ND(4.34)	ND(4.92)	ND(4.92)	ND(5.24)	**20.4**	ND(10.0)
SSV-2	SSV-2	6/30/2015	ND(6.78)	ND(5.37)	ND(3.97)	ND(2.56)	ND(3.97)	ND(5.46)	ND(4.05)	ND(2.64)	ND(4.26)	ND(3.19)	ND(3.77)	**12.7**	**144**	**263**	**444**	**1,020**	ND(5.24)	**19.1**	ND(10.0)
SSV-3	SSV-3	6/30/2015	ND(6.78)	ND(5.37)	ND(3.97)	ND(2.56)	ND(3.97)	ND(5.46)	ND(4.05)	ND(2.64)	ND(4.26)	ND(3.19)	ND(3.77)	ND(4.34)	ND(4.34)	ND(4.34)	**5.60**	**9.34**	ND(5.24)	**20.4**	ND(10.0)
SSV-4	SSV-4	6/30/2015	**42.7** [2]	ND(13.4)	ND(9.91)	ND(6.39)	ND(9.91)	ND(13.6)	ND(10.1)	ND(6.60)	**19.2**	ND(7.99)	**31.2**	ND(10.9)	**66.0**	**39.9**	**42.8**	**98.8**	ND(13.1)	**14.2**	**147** [3]
Residential Exposure ESL (Indoor Air) [1,2]			*0.41*	*0.59*	*7.3*	*0.031*	*210*	*5,200*	*1.5*	*31,000*	*940*	*0.084*	*310*	*0.97*	*100*		*NE*	*NE*	*0.072*	*NE*	*NE*
Commercial/industrial Exposure ESL (Indoor Air) [1,2]			*2.1*	*3.0*	*31*	*0.16*	*880*	*22,000*	*7.7*	*130,000*	*3,900*	*0.42*	*1,300*	*4.9*	*440*		*NE*	*NE*	*0.36*	*NE*	*NE*

Notes:
Detections are shown in bold. Results equal to or exceeding applicable regulatory screening levels are shaded.
PCE = Tetrachloroethene.
TCE = Trichloroethene.
DCE = Dichloroethene.
DCA = Dichloroethane.
TCA = Trichloroethane.
TMB = Trimethylbenzene.
DFA = Difluoroethane.
µg/m³ = Micrograms per cubic meter.
%vol = Percent by volume.
ppmV = Parts per million by volume.
ND(6.78) = Not detected at or above the indicated laboratory method reporting limit.
NE = Not established.
1. ESL = December 2013 Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) Environmental Screening Levels (ESLs), Table E-3 Ambient and Indoor Air Screening Levels.
2. In order to estimate concentrations of VOCs in sub-slab vapor which would theoretically result in an indoor air concentration above the applicable indoor air ESL, the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC, 2011) recommends applying a default attenuation factor of 0.05 to the sub-slab analytical result.
3. The analytical result for sample SSV-4 contained leak check compound at a concentration of 0.42 percent of the analytical result for the sample collected within the shroud (i.e., 147 ppmV ÷ 35,100 ppmV x 100%), which is below the 5 percent maximum acceptable amount according to the Advisory – Active Soil Gas Investigations (DTSC, 2012).

Table 2
Summary of Soil Vapor Analytical Results
Subsurface Investigation
2401 Broadway, Oakland, California

Sample Location	Sample ID	Sample Depth (feet bgs)	Date Sampled	PCE (µg/m^3)	TCE (µg/m^3)	cis-1,2-DCE (µg/m^3)	Vinyl Chloride (µg/m^3)	1,1-DCE (µg/m^3)	1,1-DCA (µg/m^3)	Chloroethane (µg/m^3)	Styrene (µg/m^3)	Benzene (µg/m^3)	Toluene (µg/m^3)	Ethylbenzene (µg/m^3)	m,p-Xylene (µg/m^3)	o-Xylene (µg/m^3)	1,2,4-TMB (µg/m^3)	1,3,5-TMB (µg/m^3)	Naphthalene (µg/m^3)	Oxygen (%vol)	1,1-DFA (Leak Check Compound) (ppmV)
SV-1	SV-1	5.0	6/29/2015	ND(6.78)	ND(5.37)	ND(3.97)	ND(2.56)	ND(3.97)	ND(4.05)	ND(2.64)	ND(4.26)	**9.39**	**23.1**	**4.69**	**28.3**	**9.64**	**17.0**	ND(4.92)	ND(5.24)	**3.70**	ND(10.0)
SV-2	SV-2	5.0	6/29/2015	ND(6.78)	ND(5.37)	ND(3.97)	ND(2.56)	**28.1**	ND(4.05)	ND(2.64)	ND(4.26)	**9.10**	**44.5**	**11.2**	**56.1**	**18.0**	**15.9**	ND(4.92)	ND(5.24)	**10.6**	ND(10.0)
SV-3	SV-3	5.0	6/29/2015	ND(17.0)	ND(13.4)	**11.7**	ND(6.39)	**29.4**	**170**	ND(6.60)	ND(10.6)	**16.3**	**27.8**	ND(10.9)	**27.2**	ND(10.9)	**16.6**	ND(12.3)	ND(13.1)	**1.51**	ND(10.0)
SV-4	SV-4	5.0	6/29/2015	ND(6.78)	ND(5.37)	ND(3.97)	ND(2.56)	ND(3.97)	ND(4.05)	ND(2.64)	ND(4.26)	**3.45**	**18.9**	**6.51**	**33.0**	**10.5**	**11.1**	ND(4.92)	ND(5.24)	**3.92**	ND(10.0)
SV-5	SV-5	5.0	6/29/2015	ND(13.6)	ND(10.7)	ND(7.93)	ND(5.11)	ND(7.93)	**50.8**	ND(5.28)	ND(8.52)	**12.3**	**21.1**	ND(8.68)	**31.7**	**12.2**	**15.1**	ND(9.83)	ND(10.5)	**1.90**	ND(10.0)
SV-6	SV-6	5.0	6/29/2015	ND(6.78)	ND(5.37)	ND(3.97)	ND(2.56)	ND(3.97)	ND(4.05)	**6.49**	ND(4.26)	**10.7**	**35.6**	**7.55**	**41.2**	**13.4**	**19.8**	**4.92**	ND(5.24)	**10.4**	ND(10.0)
SV-7	SV-7	5.0	7/14/2015	ND(13,600)	ND(10,700)	ND(7,930)	ND(5,110)	ND(7,930)	ND(8,100)	ND(5,280)	ND(8,520)	ND(6,390)	ND(7,540)	ND(8,680)	ND(8,680)	ND(8,680)	ND(9,830)	ND(9,830)	--	--	ND(20.0)
SV-8	SV-8	5.0	7/14/2015	ND(6.78)	ND(5.37)	ND(3.97)	ND(2.56)	ND(3.97)	ND(4.05)	ND(2.64)	--	--	--	--	--	--	--	--	--	--	ND(10.0)
SV-9	SV-9	5.0	7/14/2015	ND(6.78)	ND(5.37)	ND(3.97)	ND(2.56)	ND(3.97)	ND(4.05)	ND(2.64)	--	--	--	--	--	--	--	--	--	--	ND(10.0)
SV-10	SV-10	5.0	7/14/2015	**47.7**	ND(5.37)	ND(3.97)	ND(2.56)	ND(3.97)	ND(4.05)	ND(2.64)	--	--	--	--	--	--	--	--	--	--	ND(10.0)
SV-11	SV-11	5.0	7/14/2015	ND(10.2)	ND(8.06)	ND(5.95)	ND(3.83)	ND(5.95)	ND(6.07)	ND(3.96)	ND(6.39)	**13.8**	**10.7**	ND(6.51)	ND(6.51)	ND(6.51)	ND(7.37)	ND(7.37)	--	--	ND(15.0)
Residential Land Use ESL (Soil Gas) [1]				*210*	*300*	*3,700*	*16*	*100,000*	*760*	*16,000,000*	*470,000*	*42*	*160,000*	*490*	*52,000*		*NE*	*NE*	*36*	*NE*	*NE*
Commercial/industrial Land Use ESL (Soil Gas) [1]				*2,100*	*3,000*	*31,000*	*160*	*880,000*	*7,700*	*130,000,000*	*3,900,000*	*420*	*1,300,000*	*4,900*	*440,000*		*NE*	*NE*	*360*	*NE*	*NE*

Notes:
Detections are shown in bold. Results equal to or exceeding applicable regulatory screening levels are shaded.
PCE = Tetrachloroethene.
TCE = Trichloroethene.
DCE = Dichloroethene.
DCA = Dichloroethane.
TMB = Trimethylbenzene.
DFA = Difluoroethane.
bgs = Below ground surface.
µg/m^3 = Micrograms per cubic meter.
%vol = Percent by volume.
ppmV = Parts per million by volume.
ND(6.78) = Not detected at or above the indicated laboratory method reporting limit.
NE = Not established.
-- = Not applicable/not analyzed.
1. ESL = December 2013 Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) Environmental Screening Levels (ESLs), Table E-2 Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion.

Table 3
Summary of Soil Analytical Results - Petroleum Hydrocarbons and VOCs
Subsurface Investigation
2401 Broadway, Oakland, California

Sample Location	Sample ID	Sample Depth (feet bgs)	Date Sampled	TPHg (mg/kg)	TPHd (mg/kg)	TPHho (mg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethylbenzene (µg/kg)	m,p-Xylenes (µg/kg)	o,Xylene (µg/kg)	Naphthalene (µg/kg)	Fuel Oxygenates (µg/kg)	Other VOCs (µg/kg)
SB-1	SB-1-4.5-5.0	4.5	6/29/2015	ND(1.00)	ND(10.0)	ND(10.0)	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	ND(2.71)	--	ND
	SB-1-9.5-10.0	9.5	6/29/2015	ND(1.00)	ND(10.0)	ND(10.0)	ND(1.33)	ND(1.33)	ND(1.33)	ND(1.33)	ND(1.33)	ND(2.65)	--	ND
SB-2	SB-2-4.5-5.0	4.5	6/29/2015	ND(1.00)	ND(10.0)	ND(10.0)	ND(1.40)	ND(1.40)	ND(1.40)	ND(1.40)	ND(1.40)	ND(2.79)	--	--
	SB-2-9.5-10.0	9.5	6/29/2015	ND(1.00)	ND(10.0)	ND(10.0)	ND(1.49)	ND(1.49)	ND(1.49)	ND(1.49)	ND(1.49)	ND(2.97)	--	--
SB-3	SB-3-4.5-5.0	4.5	6/30/2015	ND(1.00)	ND(10.0)	ND(10.0)	ND(1.42)	ND(1.42)	ND(1.42)	ND(1.42)	ND(1.42)	ND(2.84)	--	--
	SB-3-9.5-10.0	9.5	6/30/2015	ND(1.00)	ND(10.0)	ND(10.0)	ND(1.48)	ND(1.48)	ND(1.48)	ND(1.48)	ND(1.48)	ND(2.95)	--	--
SB-4	SB-4-4.5-5.0	4.5	6/30/2015	ND(1.00)	**33.9** [AC]	**45.0**	ND(1.58)	ND(1.58)	ND(1.58)	ND(1.58)	ND(1.58)	ND(3.15)	--	--
	SB-4-9.5-10.0	9.5	6/30/2015	ND(1.00)	ND(10.0)	ND(10.0)	ND(1.02)	ND(1.02)	ND(1.02)	ND(1.02)	ND(1.02)	ND(2.04)	--	--
	SB-4-13.5	13.5	6/30/2015	**122**	**30.1** [AC]	**99.3**	--	--	--	--	--	--	--	--
SB-5	SB-5-4.5-5.0	4.5	6/30/2015	ND(1.00)	ND(10.0)	ND(10.0)	ND(1.64)	ND(1.64)	ND(1.64)	ND(1.64)	ND(1.64)	ND(3.28)	ND	ND
	SB-5-9.5-10.0	9.5	6/30/2015	ND(1.00)	ND(10.0)	ND(10.0)	ND(1.26)	ND(1.26)	ND(1.26)	ND(1.26)	ND(1.26)	ND(2.51)	ND	ND
SB-6	SB-6-4.5-5.0	4.5	6/30/2015	--	--	--	ND(1.55)	ND(1.55)	ND(1.55)	ND(1.55)	ND(1.55)	ND(3.09)	--	--
	SB-6-9.5-10.0	9.5	6/30/2015	--	--	--	ND(1.66)	ND(1.66)	ND(1.66)	ND(1.66)	ND(1.66)	ND(3.31)	--	--
SV-3	SV-3-4.5-5.0	4.5	6/29/2015	--	--	--	ND(1.57)	ND(1.57)	ND(1.57)	ND(1.57)	ND(1.57)	ND(3.14)	--	--
SV-4	SV-4-4.5-5.0	4.5	6/29/2015	--	--	--	ND(1.61)	ND(1.61)	ND(1.61)	ND(1.61)	ND(1.61)	ND(3.21)	--	--
SV-5	SV-5-4.5-5.0	4.5	6/29/2015	--	--	--	ND(1.54)	ND(1.54)	ND(1.54)	ND(1.54)	ND(1.54)	ND(3.07)	--	--
SV-6	SV-6-4.5-5.0	4.5	6/29/2015	--	--	--	ND(1.50)	ND(1.50)	ND(1.50)	ND(1.50)	ND(1.50)	ND(3.00)	--	--
SV-7	SV-7-2.5-3.0	2.5	7/14/2015	**124**	--	--	ND(199)	ND(199)	ND(199)	ND(199)	ND(199)	**644**	--	**314, 440** [1]
	SV-7-4.5-5.0	4.5	7/14/2015	**1,070**	--	--	ND(375)	ND(375)	ND(375)	ND(375)	ND(375)	**1,070**	--	**3,020, 3,130, 3,600, 4,930** [2]
SV-10	SV-10-2.5-3.0	2.5	7/14/2015	ND(1.00)	--	--	--	--	--	--	--	--	--	ND
	SV-10-4.5-5.0	4.5	7/14/2015	ND(1.00)	--	--	--	--	--	--	--	--	--	ND
Residential land use ESL (Shallow Soil <3 m bgs) [3]				*100*	*100*	*100* [6]	*44*	*2,900*	*3,300*	*2,300*		*1,200*	--	--
Commercial/industrial land use ESL (Shallow Soil <3 m bgs) [4]				*500*	*110*	*500* [6]	*44*	*2,900*	*3,300*	*2,300*		*1,200*	--	--
Residential land use ESL (Deep Soil >3 m bgs) [5]				*500*	*110*	*500* [6]	*44*	*2,900*	*3,300*	*2,300*		*1,200*	--	--

Notes:
Detections are shown in bold. Results equal to or exceeding applicable regulatory screening levels are shaded.
VOCs = Volatile organic compounds.
TPHg = Total petroleum hydrocarbons quantified as gasoline.
TPHd = Total petroleum hydrocarbons quantified as diesel (C12-23).
TPHho = Total petroleum hydrocarbons quantified as heavy oil (C24-C34).
Fuel oxygenates include methyl tertiary butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), and tertiary butyl alchohol (TBA)
bgs = Below ground surface.
mg/kg = Milligrams per kilogram.
µg/kg = Micrograms per kilogram.
ND(1.36) = Not detected at or above the indicated laboratory method reporting limit.
-- = Not applicable/not analyzed.
NE = Not established.
AC = Heavier hydrocarbons contributing to diesel range quantitation.
1. n-butylbenzene and sec-butylbenzene detected at concentrations of 314 µg/kg and 440 µg/kg, respectively.
2. n-butylbenzene, sec-butylbenzene, isopropylbenzene, and n-propylbenzene detected at concentrations of 3,020 µg/kg, 3,130 µg/kg, 3,600 µg/kg, and 4,930 µg/kg, respectively.
3. December 2013 Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) Environmental Screening Levels (ESLs), Table A-1. Shallow Soil Screening Levels (<3 m bgs), Residential Land Use (groundwater is a current or potential drinking water resource).
4. December 2013 Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) Environmental Screening Levels (ESLs), Table A-2. Shallow Soil Screening Levels (<3 m bgs), Commercial/industrial Land Use (groundwater is a current or potential drinking water resource).
5. December 2013 Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) Environmental Screening Levels (ESLs), Table C-1. Deep Soil Screening Levels (>3 m bgs), Residential Land Use (groundwater is a current or potential drinking water resource).
6. ESL for TPHmo.

Table 4
Summary of Soil Analytical Results - Metals
Subsurface Investigation
2401 Broadway, Oakland, California

Sample Location	Sample ID	Sample Depth (feet bgs)	Date Sampled	Antimony (mg/kg)	Arsenic [1] (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
SB-2	SB-2-4.5-5.0	4.5	6/29/2015	ND(2.50)	**4.95**	**93.1**	ND(2.50)	ND(2.50)	**33.8**	**7.17**	**17.5**	**5.46**	ND(0.100)	ND(2.50)	**36.7**	ND(2.50)	ND(2.50)	ND(2.50)	**32.0**	**46.3**
SB-4	SB-4-4.5-5.0	4.5	6/30/2015	ND(2.50)	**4.71**	**112**	ND(2.50)	ND(2.50)	**36.6**	**7.44**	**12.4**	**11.7**	ND(0.100)	ND(2.50)	**34.3**	ND(2.50)	ND(2.50)	ND(2.50)	**27.9**	**31.9**
SB-5	SB-5-4.5-5.0	4.5	6/30/2015	--	--	--	--	--	--	--	--	**4.08**	--	--	--	--	--	--	--	--
	SB-5-9.5-10.0	9.5	6/30/2015	--	--	--	--	--	--	--	--	**3.99**	--	--	--	--	--	--	--	--
SB-6	SB-6-4.5-5.0	4.5	6/30/2015	ND(2.50)	**2.71**	**154**	ND(2.50)	ND(2.50)	**32.2**	**10.8**	**13.8**	**5.09**	ND(2.50)	ND(2.50)	**36.5**	ND(2.50)	ND(2.50)	ND(2.50)	**28.8**	**29.1**
	SB-6-9.5-10.0	9.5	6/30/2015	ND(2.50)	ND(2.50)	**123**	ND(2.50)	ND(2.50)	**30.8**	**11.6**	**11.0**	**5.28**	ND(2.50)	ND(2.50)	**22.9**	ND(2.50)	ND(2.50)	ND(2.50)	**30.2**	**18.4**
SV-3	SV-3-4.5	4.5	6/29/2015	ND(2.50)	**2.79**	**188**	ND(2.50)	ND(2.50)	**28.2**	**8.88**	**14.4**	**11.1**	**0.152**	ND(2.50)	**28.8**	ND(2.50)	ND(2.50)	ND(2.50)	**25.2**	**23.8**
SV-6	SV-6-4.5	4.5	6/29/2015	ND(2.50)	ND(2.50)	**81.0**	ND(2.50)	ND(2.50)	**27.0**	**4.40**	**8.11**	**4.97**	**0.134**	ND(2.50)	**18.2**	ND(2.50)	ND(2.50)	ND(2.50)	**26.4**	**14.3**
Residential land use ESL (Shallow Soil <3 m bgs) [2]				*20*	*0.39*	*750*	*4.0*	*12*	*1,000 [4]*	*23*	*230*	*80*	*6.7*	*40*	*150*	*10*	*20*	*0.78*	*200*	*600*
Commercial/industrial land use ESL (Shallow Soil <3 m bgs) [3]				*40*	*1.6*	*1,500*	*8.0*	*12*	*2,500 [4]*	*80*	*230*	*320*	*10*	*40*	*150*	*10*	*40*	*10*	*200*	*600*

Notes:

Detections are shown in bold. Results equal to or exceeding applicable regulatory screening levels are shaded.

bgs = Below ground surface.

mg/kg = Milligrams per kilogram.

ND(2.50) = Not detected at or above the indicated laboratory method reporting limit.

-- = Not applicable/not analyzed.

NE = Not established.

1. Background concentrations of arsenic in soil in the San Francisco Bay Area, calculated as the 95th pencentile of 1,395 data points, is 17 mg/kg (LBL, 2002).
2. December 2013 Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) Environmental Screening Levels (ESLs), Table A-1. Shallow Soil Screening Levels (<3 m bgs), Residential Land Use (groundwater is a current or potential drinking water resource).
3. December 2013 Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) Environmental Screening Levels (ESLs), Table A-2. Shallow Soil Screening Levels (<3 m bgs), Commercial/industrial Land Use (groundwater is a current or potential drinking water resource).
4. ESL value is for total chromium.

Table 5
Summary of Grab Groundwater Analytical Results - VOCs
Subsurface Investigation
2401 Broadway, Oakland, California

Sample Location	Sample ID	Date Sampled	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,2-TCA (µg/L)	Chloroform (µg/L)	Toluene (µg/L)	Other VOCs (µg/L)
SB-1	SB-1-GW	6/29/2015	**2.24**	**2.58**	**1.26**	**0.770**	**79.4**	**5.57**	**21.3**	**9.54**	**0.680**	**0.500**	ND
SB-2	SB-2-GW	6/29/2015	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	**4.29**	ND(0.500)	1.64	ND(0.500)	ND(0.500)	ND(0.500)	ND
SB-3	SB-3-GW	6/30/2015	**5.26**	**0.960**	**1.43**	**1.08**	**46.4**	**1.22**	**24.8**	**7.26**	ND(0.500)	ND(0.500)	ND
SB-5	SB-5-GW	6/30/2015	**1.15**	**1.08**	**0.940**	**1.72**	**43.4**	**2.52**	**15.1**	**3.20**	ND(0.500)	ND(0.500)	ND
SB-6	SB-6-GW	6/29/2015	**1.72**	**1.14**	**1.19**	**1.63**	**62.3**	**3.26**	**19.4**	**5.61**	ND(1.00)	ND(1.00)	ND
Groundwater ESL (groundwater is a drinking water resource) [1]			*5.0*	*6.0*	*10*	*0.5*	*5.0*	*0.5*	*6.0*	*5.0*	*80*	*40*	--
Groundwater ESL - Residential Land Use (vapor intrusion) [2]			*130*	*3,100*	*14,000*	*1.8*	*NE*	*100*	*16,000*	*NE*	*170*	*95,000*	--

Notes:

Detections are shown in bold. Results equal to or exceeding applicable regulatory screening levels are shaded.

VOCs = Volatile organic compounds.

TCE = Trichloroethene.

DCE = Dichloroethene.

DCA = Dichloroethane.

DCE = Dichloroethene.

TCA = Trichloroethane.

µg/L = Micrograms per liter.

ND(0.500) = Not detected at or above the indicated laboratory method reporting limit.

-- = Not applicable/not analyzed.

NE = Not established.

1. December 2013 Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) Environmental Screening Levels (ESLs), Table F-1a. Groundwater Screening Levels (groundwater is a current or potential drinking water resource).
2. December 2013 Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) Environmental Screening Levels (ESLs), Table E-1. Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion (volatile chemicals only) - Fine-Coarse Mix - Residential Land Use.

Table 6
Summary of Grab Groundwater Analytical Results - Petroleum Hydrocarbons, PAHs, and PCBs
Subsurface Investigation
2401 Broadway, Oakland, California

Sample Location	Sample ID	Date Sampled	Petroleum Hydrocarbons				PAHs					PCBs (µg/L)
			TPHg (mg/L)	TPHd (mg/L)	TPHmo (mg/L)	TPHho (mg/L)	Acenaphthene (µg/L)	Fluorene (µg/L)	Naphthalene (µg/L)	Phenanthrene (µg/L)	Other PAHs (µg/L)	
SB-4	SB-4-GW	6/30/2015	ND(0.050)	ND(0.143)	--	ND(0.143)	--	--	--	--	--	ND
SB-5	SB-5-GW	6/30/2015	**0.052**	ND(0.143)	--	ND(0.143)	ND(0.010)	ND(0.010)	**0.013**	ND(0.010)	ND	--
SB-6	SB-6-GW	6/30/2015	**0.583**	**0.181**	--	ND(0.068)	**0.020**	**0.016**	ND(0.010)	**0.025**	ND	--
Groundwater ESL (groundwater is a drinking water resource) [1]			*0.1*	*0.1*	*0.1*	*NE*	*20*	*3.9*	*6.1*	*4.6*	*--*	*0.014*

Notes:

Detections are shown in bold. Results equal to or exceeding applicable regulatory screening levels are shaded.

TPHg = Total petroleum hydrocarbons quantified as gasoline.

TPHd = Total petroleum hydrocarbons quantified as diesel.

TPHmo = Total petroleum hydrocarbons quantified as motor oil.

TPHho = Total petroleum hydrocarbons quantified as heavy oil.

PAHs = Polycyclic aromatic hydrocarbons.

PCBs = Polychlorinated biphenyls.

mg/L = Milligrams per liter.

µg/L = Micrograms per liter.

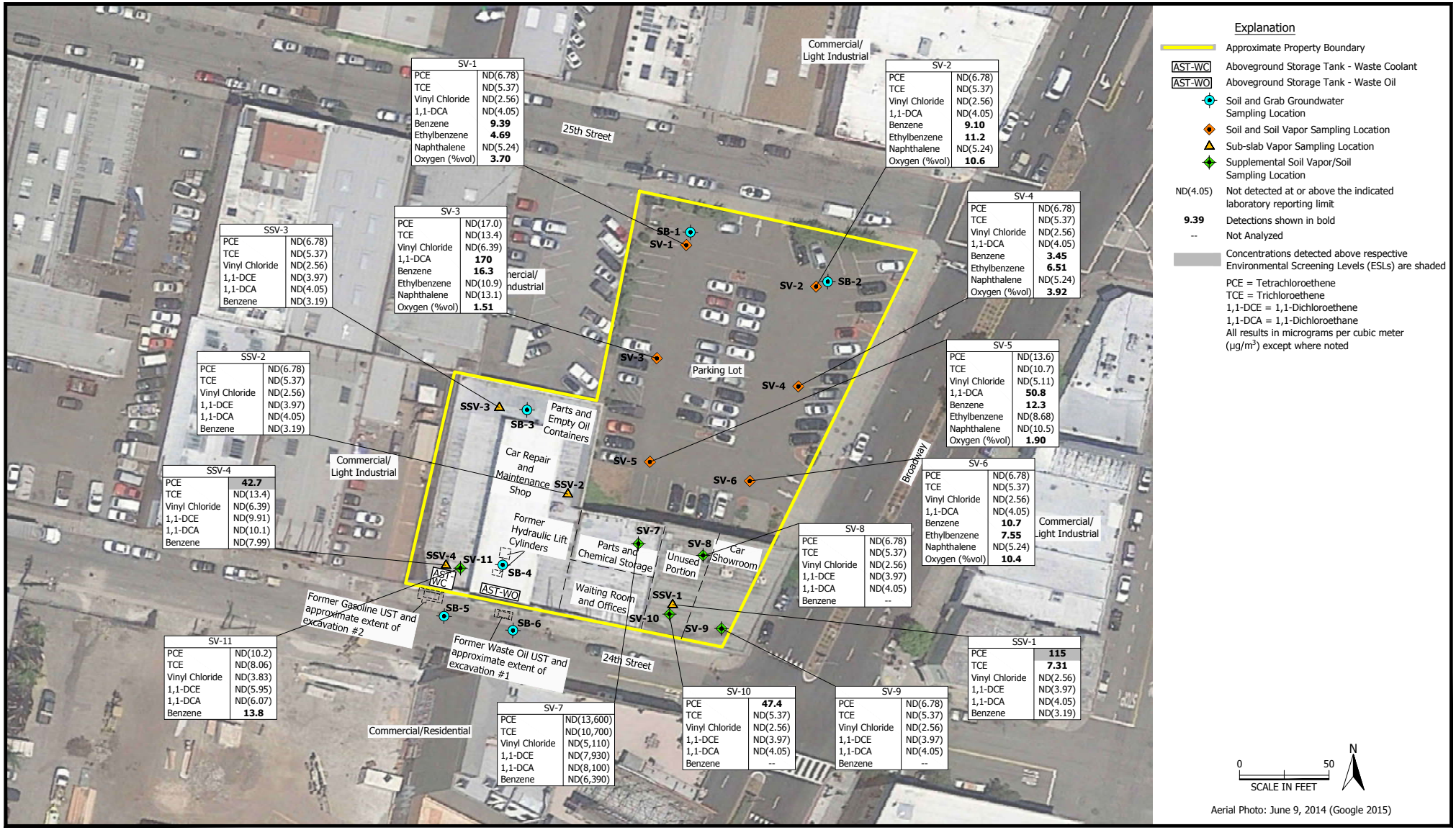
ND(0.143) = Not detected at or above the indicated laboratory method reporting limit.

ND = Not detected.

-- = Not applicable/not analyzed.

NE = Not established.

1. December 2013 Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) Environmental Screening Levels (ESLs), Table F-1a. Groundwater Screening Levels (groundwater is a current or potential drinking water resource).



PES Environmental, Inc.
Engineering & Environmental Services

Summary of Sub-Slab Vapor and Soil Vapor Analytical Results
Subsurface Investigation
2401 Broadway
Oakland, California

PLATE
3

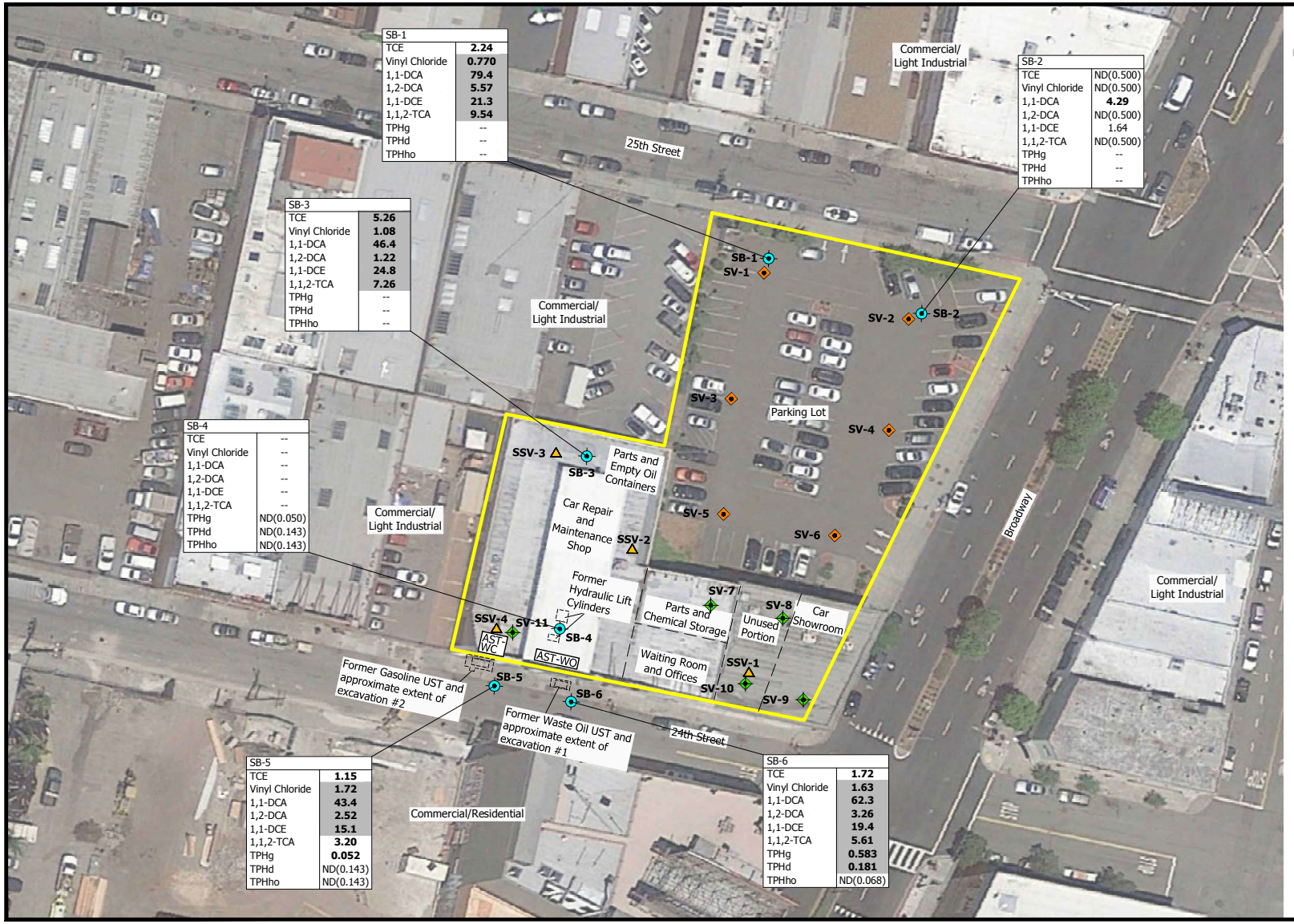
935.044.01.002	935-04401002_PhII_1-5	MJ	7/15
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

PES Environmental, Inc.
Engineering & Environmental Services

Summary of Soil Analytical Results - Organics
Subsurface Investigation
2401 Broadway
Oakland, California

PLATE
4

935.044.01.002	935-04401002_PhII_1-5	MJ	7/15
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Aerial Photo: June 9, 2014 (Google 2015)

PES Environmental, Inc.
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Summary of Grab Groundwater Analytical Results
Subsurface Investigation
2401 Broadway
Oakland, California

PLATE 5

935.044.01.002	935-04401002_PhII_1-5	MJ	7/15
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

PES Environmental, Inc.
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LOG OF SOIL BORING SB-1

PID (ppm)	Blows/6-in.	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				ASPHALT
				DARK BROWN GRAVEL WITH SILT AND SAND (GW) 7.5YR 3/3, moist, loose, well - graded, (70% gravel, 20% sand, 10% fines)
				BLACK SILT WITH SAND (ML) 10YR 2/1, moist, stiff, (0% gravel, 20% sand, 80% fines)
				DARK GRAYISH BROWN CLAY (CL) 10YR 4/2, moist, stiff
0.3		5		Sample ID: SB-1-4.5-5.0
				DARK GRAYISH BROWN CLAYEY SAND (SC) 10YR 4/2, moist, loose, (0% gravel, 70% sand, 30% fines)
				DARK GRAYISH BROWN CLAY (CL) 10YR 4/2, moist, stiff, (0% gravel, 70% sand, 30% fines)
				Color change to YELLOWISH BROWN (10YR 5/4)
0.0				Sample ID: SB-1-9.5-10.0
		10		Increase in sand to (0% gravel, 30% sand, 70% fines) YELLOWISH BROWN CLAY WITH SAND (CL) 10YR 5/4, moist, medium stiff
				YELLOWISH BROWN CLAY 10YR 5/4, moist, stiff
		15		
				Brick fragments and gravel at 17.5 feet bgs
				Color change to BROWN (10 YR 5/3)
			▽	
		20		
				DARK YELLOWISH BROWN GRAVEL WITH SAND (GW) 10YR 4/6, wet, dense, well - graded, brick debris present
				YELLOWISH BROWN CLAY 10YR 5/4, moist, stiff
				Boring terminated at 24 feet bgs.
		25		

PROFESSIONAL GEOLOGIST
MORGAN G. JONES
No. 9125
EXP. 5/17
STATE OF CALIFORNIA

PROJECT		REVIEWED BY	MJ
LOCATION	2401 Broadway, Oakland	DIAMETER OF HOLE	2.25 inches
JOB NUMBER	0935.044.01.002	TOTAL DEPTH OF HOLE	24 feet
LOGGED BY	M. EDDY	DATE STARTED	6/29/15
DRILL RIG	DP	DATE COMPLETED	6/29/15

PLATE
B-1

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF SOIL BORING SB-2

PID (ppm)	Blows/6-in.	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				ASPHALT
				DARK BROWN GRAVEL WITH SILT AND SAND (GW) 7.5YR 3/3, moist, loose, well - graded, (70% gravel, 20% sand, 10% fines)
				DARK BROWN CLAY WITH GRAVEL (CL) 7.5 YR 3/3, moist, stiff, subangular 0.2- to 1-inch diameter gravel, trace sand, (20% gravel, 5% sand, 75% fines)
0.0		5		Sample ID: SB-2-4.5-5.0
				Brick fragments present
0.0		10		Sample ID: SB-2-9.5-10.0
				Concrete fragments at 10.5 feet bgs
				YELLOWISH BROWN GRAVELLY CLAY WITH SAND (CH) 10YR 5/4, moist, stiff, (40% gravel, 20% sand, 40% fines), brick debris present
				YELLOWISH BROWN CLAY (CL) 10YR 5/4, moist, very stiff, (0% gravel, 0% sand, 100% fines)
		15		
		20		YELLOWISH BROWN CLAY WITH SAND (CL) 10YR 5/4, moist, very stiff, (0% gravel, 20% sand, 80% fines)
				Boring terminated at 22 feet bgs.
		25		

PROFESSIONAL GEOLOGIST
MORGAN G. JONES
No. 9125
EXP. 5/17
STATE OF CALIFORNIA

PROJECT		REVIEWED BY	MJ
LOCATION	2401 Broadway, Oakland	DIAMETER OF HOLE	2.25 inches
JOB NUMBER	0935.044.01.002	TOTAL DEPTH OF HOLE	22 feet
LOGGED BY	M. EDDY	DATE STARTED	6/29/15
DRILL RIG	DP	DATE COMPLETED	6/30/15

PLATE
B-2

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF SOIL BORING SB-3

PID (ppm)	Blows/6-in.	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
				BLACK SILT WITH SAND (ML) 2.5Y 2.5/1, dry, stiff, (5% gravel, 10% sand, 85% fines)
0.0		5		BROWN SILT WITH SAND (ML) 2.5YR 4/3, moist, stiff, (5% gravel, 10% sand, 85% fines) Sample ID: SB-3-4.5-5.0
0.0		10		Sample ID: SB-3-9.5-10.0
			▽	BROWN SAND (SP) 7.5 YR 4/3, wet, loose, poorly graded, medium - to coarse grained.
				Boring terminated at 12 feet bgs.
		15		
		20		
		25		

PROFESSIONAL GEOLOGIST
MORGAN G. JONES
No. 9125
EXP. 5/17
STATE OF CALIFORNIA

PROJECT		REVIEWED BY	MJ
LOCATION	2401 Broadway, Oakland	DIAMETER OF HOLE	2.25 inches
JOB NUMBER	0935.044.01.002	TOTAL DEPTH OF HOLE	12 feet
LOGGED BY	M. EDDY	DATE STARTED	6/29/15
DRILL RIG	DP	DATE COMPLETED	6/29/15

PLATE
B-3

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF SOIL BORING SB-4

PID (ppm)	Blows/6-in.	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
				DARK BROWN SILT WITH SAND (ML) 7.5YR 3/2, moist, medium, very fine-grained sand, (0% gravel, 20% sand, 80% fines)
0.0		5		Sample ID: SB-4-4.5-5.0
				DARK YELLOWISH BROWN SILTY SAND (SM) 10YR 4/4, moist, stiff, fine - to medium - grained sand, (0% gravel, 70% sand, 30% fines)
0.8		10		Sample ID: SB-4-9.5-10.0
				OLIVE GRAY SILTY SAND (SM) 5Y 4/2, moist, stiff, very fine- to very fine-grained sand, (0% gravel, 60% sand, 40% fines), strong organic odor
20.5				
80.0				OLIVE GRAY SAND WITH SILT AND GRAVEL (SW-SM) 5Y 4/2, moist, medium - to coarse - grained sand, well graded subangular 0.2- to 0.5-inch diameter gravel, (20% gravel, 70% sand, 10% fines), petroleum odor present
		15		
				YELLOWISH BROWN CLAY WITH SAND (CL) 10YR 5/6, moist, very stiff, medium - to coarse - grained sand, (0% gravel, 15% sand, 85% fines)
		20	▽	3-inch saturated interval beginning at 20 feet bgs, soft
				Boring terminated at 22 feet bgs
		25		

PROFESSIONAL GEOLOGIST
MORGAN G. JONES
No. 9125
Exp. 5/17
STATE OF CALIFORNIA

PROJECT		REVIEWED BY	MJ
LOCATION	2401 Broadway, Oakland	DIAMETER OF HOLE	2.25 inches
JOB NUMBER	0935.044.01.002	TOTAL DEPTH OF HOLE	22 feet
LOGGED BY	M. EDDY	DATE STARTED	6/30/15
DRILL RIG	DP	DATE COMPLETED	6/30/15

PLATE
B-4

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF SOIL BORING SB-5

PID (ppm)	Blows/6-in.	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				ASPHALT
				BROWN SAND (SW) 7.5 YR 4/3, loose, fine - to medium - grained sand, (0% gravel, 100% sand, 0% fines), possible fill sand
0.0		5		Sample ID: SB-5-4.5-5.0
				GRAY SILTY SAND (SM) 5Y 5/1, moist, medium dense, fine - grained, (0% gravel, 70% sand, 30% fines)
0.0		10		Sample ID: SB-5-9.5-10.0
				YELLOWISH BROWN CLAY WITH SAND (CL) 10YR 5/6, moist, very stiff, medium - to coarse - grained sand, (0% gravel, 15% sand, 85% fines), 2-inch gravel interval beginning at 13.5 feet bgs
		15		Mottling at 17 feet bgs Increase in sand to (0% gravel, 35% sand, 65% fines)
		20		YELLOWISH BROWN GRAVEL WITH CLAY AND SAND (GP-GC) 10YR 5/6, wet, stiff, medium- to fine-grained sand, subangular 0.2- to 0.5-inch diameter gravel, (60% gravel, 20% sand, 20% fines)
				Boring terminated at 24 feet bgs.
		25		

PROFESSIONAL GEOLOGIST
MORGAN G. JONES
No. 9125
Exp. 5/17
STATE OF CALIFORNIA

PROJECT		REVIEWED BY	MJ
LOCATION	2401 Broadway, Oakland	DIAMETER OF HOLE	2.25 inches
JOB NUMBER	0935.044.01.002	TOTAL DEPTH OF HOLE	24 feet
LOGGED BY	M. EDDY	DATE STARTED	6/30/15
DRILL RIG	DP	DATE COMPLETED	6/30/15

PLATE
B-5

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF SOIL BORING SB-6

PID (ppm)	Blows/6-in.	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				ASPHALT
				BROWN SAND (SW) 7.5 YR 4/3, loose, fine - to medium - grained sand, (0% gravel, 100% sand, 0% fines), possible fill sand
				BLACK CLAY WITH SAND (CL) 5Y 2.5/1, moist, stiff, fine-grained sand, (0% gravel, 20% sand, 80% fines)
				Sample ID: SB-6-4.5-5.0
		5		
				GRAY SILTY SAND (SM) 5Y 5/1, moist, medium dense, fine - grained, (0% gravel, 70% sand, 30% fines)
				Sample ID: SB-6-9.5-10.0
		10		
				▽ 4-inch saturated zone beginning at 12.5 feet bgs
				YELLOWISH BROWN CLAY WITH SAND (CL) 10YR 5/6, moist, very stiff, medium - to coarse - grained sand, (0% gravel, 15% sand, 85% fines)
		15		
				YELLOWISH BROWN GRAVEL WITH CLAY AND SAND (GP-GC) 10YR 5/6, wet, stiff, medium - to coarse - grained sand, subangular 0.2- to 0.5-inch diameter gravel, (60% gravel, 20% sand, 20% fines)
		20		
				Boring terminated at 24 feet bgs.
		25		

PROFESSIONAL GEOLOGIST
MORGAN G. JONES
No. 9125
Exp. 5/17
STATE OF CALIFORNIA

PROJECT		REVIEWED BY	MJ
LOCATION	2401 Broadway, Oakland	DIAMETER OF HOLE	2.25 inches
JOB NUMBER	0935.044.01.002	TOTAL DEPTH OF HOLE	20 feet
LOGGED BY	M. EDDY	DATE STARTED	6/30/15
DRILL RIG	DP	DATE COMPLETED	6/30/15

PLATE
B-6

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF SOIL BORING SV-7

PID (ppm)	Blows/6-in.	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
				BLACK SILTY CLAY (CL) damp, soft, medium plasticity, trace fine - grained sand, moderate organic odor.
15.8				
261				Grades with decreasing silt below 2.5 feet bgs. SV-7-2.5-3.0
				Greenish gray, firm, medium plasticity, ~20% fine - grained sand, strong organic odor below 3.5 feet bgs.
368				
517				SV-7-4.5-5.0
		5		Boring terminated at 5 feet bgs.
		10		
		15		
		20		
		25		
		30		

PROFESSIONAL GEOLOGIST
MORGAN G. JONES
No. 9125
Exp. 5/17
STATE OF CALIFORNIA

PROJECT		REVIEWED BY	MJ
LOCATION	2401 Broadway, Oakland	DIAMETER OF HOLE	2.25 inches
JOB NUMBER	0935.044.01.002	TOTAL DEPTH OF HOLE	5 feet
LOGGED BY	M. JONES	DATE STARTED	7/14/15
DRILL RIG	GEOPROBE 450M	DATE COMPLETED	7/14/15

PLATE
B-7

PES Environmental, Inc.
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LOG OF SOIL BORING SV-8

PID (ppm)	Blows/6-in.	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				TILE AND CONCRETE
				DARK GRAYISH BROWN SILTY CLAY (CL) damp, firm, with fine - grained sand, medium plasticity, no odor.
0.0				
0.0				DARK YELLOWISH BROWN CLAY (CH) damp, firm, high plasticity, no odor. SV-8-4.5-5.0
		5		Boring terminated at 5 feet bgs.
		10		
		15		
		20		
		25		
		30		

PROFESSIONAL GEOLOGIST
MORGAN G. JONES
No. 9125
Exp. 5/17
STATE OF CALIFORNIA

PROJECT		REVIEWED BY	MJ
LOCATION	2401 Broadway, Oakland	DIAMETER OF HOLE	2.25 inches
JOB NUMBER	0935.044.01.002	TOTAL DEPTH OF HOLE	5 feet
LOGGED BY	M. JONES	DATE STARTED	7/14/15
DRILL RIG	GEOPROBE 450M	DATE COMPLETED	7/14/15

PLATE
B-8

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF SOIL BORING SV-9

PID (ppm)	Blows/6-in.	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
				DARK GRAYISH BROWN SILTY CLAY (CL) damp, firm, trace fine sand, medium plasticity.
				DARK YELLOWISH BROWN CLAY (CH) damp, firm, fine - grained sand, high plasticity, no odor. SV-9-4.5-5.0
		5		Boring terminated at 5 feet bgs.
		10		
		15		
		20		
		25		
		30		

PROFESSIONAL GEOLOGIST
MORGAN G. JONES
No. 9125
EXP. 5/17
STATE OF CALIFORNIA

PROJECT		REVIEWED BY	MJ
LOCATION	2401 Broadway, Oakland	DIAMETER OF HOLE	2.25 inches
JOB NUMBER	0935.044.01.002	TOTAL DEPTH OF HOLE	5 feet
LOGGED BY	M. JONES	DATE STARTED	7/14/15
DRILL RIG	GEOPROBE 450M	DATE COMPLETED	7/14/15

PLATE
B-9

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF SOIL BORING SV-10

PID (ppm)	Blows/6-in.	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
				DARK GRAYISH BROWN SILTY CLAY (CL) damp, firm, trace fine sand, medium plasticity, mild organic odor.
11.7				SV-10-2.5-3.0
0.1				
0.4				DARK YELLOWISH BROWN CLAY (CH) damp, firm, fine - grained sand, high plasticity, no odor. SV-10-4.5-5.0
		5		Boring terminated at 5 feet bgs.
		10		
		15		
		20		
		25		
		30		

PROFESSIONAL GEOLOGIST
MORGAN G. JONES
No. 9125
EXP. 5/17
STATE OF CALIFORNIA

PROJECT		REVIEWED BY	MJ
LOCATION	2401 Broadway, Oakland	DIAMETER OF HOLE	2.25 inches
JOB NUMBER	0935.044.01.002	TOTAL DEPTH OF HOLE	5 feet
LOGGED BY	M. JONES	DATE STARTED	7/14/15
DRILL RIG	GEOPROBE 450M	DATE COMPLETED	7/14/15

PLATE
B-10

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF SOIL BORING SV-11

PID (ppm)	Blows/6-in.	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
				DARK GRAYISH BROWN CLAYEY SILT (ML) damp, soft, low plasticity, no odor.
0.1				Dark yellowish brown below 3 feet bgs, trace fine gravel.
				VERY DARK GRAYISH BROWN CLAY (CH) damp, firm, high plasticity, trace fine - grained sand, no odor.
0.0				SV-11-4.5-5.0
		5		Boring terminated at 5 feet bgs.
		10		
		15		
		20		
		25		
		30		

PROFESSIONAL GEOLOGIST
MORGAN G. JONES
No. 9125
EXP. 5/17
STATE OF CALIFORNIA

PROJECT		REVIEWED BY	MJ
LOCATION	2401 Broadway, Oakland	DIAMETER OF HOLE	2.25 inches
JOB NUMBER	0935.044.01.002	TOTAL DEPTH OF HOLE	5 feet
LOGGED BY	M. JONES	DATE STARTED	7/14/15
DRILL RIG	GEOPROBE 450M	DATE COMPLETED	7/14/15

PLATE
B-11

DISTRIBUTION

SITE MITIGATION AND CONTINGENCY PLAN
2401 BROADWAY
OAKLAND, CALIFORNIA
GeoTracker Global ID T0600102225

JANUARY 11, 2016

COPY NO. _____

		Copy No.
3 Copies	Signature Land Advisors, Inc. 2335 Broadway, Suite 200 Oakland, California 94612 Attention: Mr. Jamie Choy	1 – 3
2 Copies	PES Job Files	4 - 5
1 Copy	Unbound Original	6

APPENDIX E

Greenhouse Gas Reduction Plan

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Prepared for:
Signature Development Group

Prepared By:
Ramboll Environ US Corporation
San Francisco, California

Date
August 2017

Project Number
03-43604A

GREENHOUSE GAS REDUCTION PLAN

24TH AND BROADWAY

OAKLAND, CALIFORNIA

RAMBOLL ENVIRON

CONTENTS

TABLES

APPENDICES

ACRONYMS AND ABBREVIATIONS

ARB:	[California] Air Resources Board
BAAQMD:	Bay Area Quality Management District
BAU:	business as usual
CEQA:	California Environmental Quality Act
CO_2:	Carbon Dioxide
CO_2e:	Carbon Dioxide Equivalent
CPUC:	California Public Utilities Commission
ECAP:	Energy and Climate Action Plan
EIR:	Environmental Impact Report
ESA:	Environmental Science Associates
GGRP:	Greenhouse Gas Reduction Plan
GHG:	Greenhouse Gas
MT:	metric ton
MT/yr:	metric ton per year
N_2O:	nitrous oxide
PG&E:	Pacific Gas and Electric Company
SCA:	Standard Condition of Approval
SP:	service population
TDM:	Transportation Demand Management
VMT:	vehicle miles traveled

1. INTRODUCTION

The City of Oakland, California, requires a greenhouse gas (GHG) Reduction Plan (GGRP) for the 24th and Broadway Project ("Project") as a standard condition of approval (SCA). The Project is pursuing environmental entitlements under the California Environmental Quality Act (CEQA), with the City of Oakland as the lead agency. Under SCA GHG-1, the City of Oakland requires a GGRP that requires the Project to increase energy efficiency and reduce GHG emissions below at least one of the Bay Area Quality Management District's (BAAQMD's) CEQA Thresholds of Significance, as defined in the City's Energy and Climate Action Plan (ECAP).

1.1 Project Description and Overview

The Project site is comprised of 1.21 acres at 2401 Broadway, which includes 2417 Broadway, 422 24th Street, and 437 25th Street, and consists of four parcels. The site is bounded by two vacant single-story commercial/industrial buildings to the west, 24th Street to the south, Broadway to the east, and a small surface parking lot and 25th Street to the north. The project site is located in Subdistrict 3 of the Valdez Triangle Subarea of the BVDSP Plan Area, Retail Priority Site 2, and is northeast of Uptown Oakland and northwest of Lake Merritt.

The project site is accessible from Interstate 580, approximately 0.7 miles to the north, and Interstate 980/State Route 24, approximately 0.5 miles to the west. Multiple transit routes serve the project site, including Alameda-Contra Costa County Transit District (AC Transit) Routes 6, 51A, 651, 800, 851, and the Broadway Shuttle. The 19th Street Bay Area Rapid Transit District (BART) station is approximately 0.5 miles south of the site, and the MacArthur BART station is approximately 1.3 miles northwest of the site.

The Project site is currently occupied by two surface parking lots and a Mitsubishi and Kia service and parts center.

The Proposed Project would demolish the existing buildings and surface parking lots and would construct one three- to six-story mixed- used building. Table 1 shows the breakdown of proposed land uses.

Table 1. Project Land Uses

Land Use	Size	Units	Service Population
Hotel	159	Rooms	144
Apartment	72	Dwelling Units	135
Total Commercial Space (i.e., supermarket, health club, restaurant, other)	27,169	Square Feet	54
Parking Garage with Elevator	18,490	Square Feet	

The Project is anticipated to be fully built and occupied in the year 2020, with a service population (SP) (residents and employees) of 333. The existing service population consists of 45 employees.

1.2 SCA GHG-1

The City of Oakland applies *SCA GHG-1: Greenhouse Gas (GHG) Reduction Plan* to all projects which result in a net increase in GHG emissions. This GGRP is responsive to the requirements of SCA GHG-1, namely that the "project applicant shall retain a qualified air quality consultant to develop a Greenhouse Gas (GHG) Reduction Plan for City review and approval." The basic requirements of SCA GHG-1 are stated below, in text from SCA GHG-1:

> The goal of the GHG Reduction Plan shall be to increase energy efficiency and reduce GHG emissions to at least one of the Bay Area Quality Management District's (BAAQMD's) CEQA Thresholds of Significance (1,100 metric tons of CO_2e per year or 4.6 metric tons of CO_2e per year per service population). The GHG Reduction Plan shall include, at a minimum, (a) a detailed GHG emissions inventory for the project under a "business-as-usual" scenario with no consideration of project design features, or other energy efficiencies, (b) an "adjusted" baseline GHG emissions inventory for the project, taking into consideration energy efficiencies included as part of the project (including the City's Standard Conditions of Approval, proposed mitigation measures, project design features, and other City requirements), (c) a comprehensive set of quantified additional GHG reduction measures available to further reduce GHG emissions beyond the adjusted GHG emissions, and (d) requirements for ongoing monitoring and reporting to demonstrate that the additional GHG reduction measures are being implemented.

The GGRP shall be implemented beginning with Project construction, for instance construction of physical GHG reduction measures incorporated into the design of the Project. During and after construction, the applicant is committed to ongoing monitoring and reporting to ensure that GHG reduction measures are being implemented.

The GHG Reduction Plan shall be considered fully attained when project emissions are less than either of the two potentially applicable numeric BAAQMD CEQA Thresholds, as confirmed by the City through an established monitoring program. Monitoring and reporting activities will continue as directed by SCA GHG-1.

As part of this GHG Reduction Plan, Ramboll Environ prepared a detailed GHG emissions inventory for the project under a 2005 "business-as-usual" (BAU) scenario (hereafter called the "2005 BAU Project") with no consideration of regulatory standards adopted thereafter designed to reduce GHG emissions or other energy efficiencies. This 2005 BAU Project inventory is compared to an "adjusted" baseline GHG emissions inventory for the Project (hereafter called the "Project scenario"), taking into consideration energy efficiencies included as part of the Project (including the City's Standard Conditions of Approval, project design features, other City requirements, and federal, state and other local regulatory standards enacted since 2005). GHG emission sources associated with the Project include both on-site and off-site sources. On-site sources include off-road mobile equipment (loaders, tractors, etc.) during construction, on-road vehicles, and area sources such as hearths. Off-site sources include on-road vehicles and emissions from solid waste disposal. GHG emissions from purchased electricity, including for the supply, distribution, and treatment of water, are off-site sources. A summary of this analysis is provided in Section 2.

2. SUMMARY OF GHG EMISSIONS

Emissions representing two operational years were considered: 2005 and 2020 representing the baseline year for the City of Oakland's GHG reduction goal the year when construction of the project is anticipated to be complete, respectively.

The inventories for each year were based on information from the Project Description, information provided by the Project Sponsor to Environmental Science Associates (ESA) for the CEQA Analysis Document, as well as information from the Project traffic consultant. Ramboll Environ prepared a detailed GHG emissions inventory for the project under a 2005 BAU scenario with no consideration of project design features or other energy efficiencies. ESA prepared the "adjusted" baseline GHG emissions inventory for the project in the CEQA Analysis Document, taking into consideration energy efficiencies included as part of the project (including project design features and other City requirements). Details on the emissions inventories are provided below for the existing conditions, Project construction, and the proposed Project.

Methods for the Project scenario are discussed here for informational purposes and to compare to the 2005 BAU scenario only. Ramboll Environ estimated emissions for the 2005 BAU, but relied on CEQA Analysis Document emissions for the Project scenario.

2.1 Summary of Existing Conditions GHG Emissions

As noted above, at the time of the Notice of Preparation of the Project EIR, existing uses included two surface parking lots and a Mitsubishi and Kia service and parts center. As described further in the CEQA Analysis Document, the existing land uses emit 438 metric tons (MT) of carbon dioxide equivalents (CO_2e) per year. These emissions will be eliminated due to the Project so are subtracted from the Project GHG inventory.

2.2 Proposed One-time Project GHG Emissions

2.2.1 Summary of Construction GHG Emissions

ESA calculated construction emissions using the California Emission Estimator Model version 2016.3.1 (CalEEMod®) and construction activity. Total construction emissions are 861 metric tons (MT) of carbon dioxide equivalents (CO_2e). For inclusion in the ongoing GHG emissions inventory, this amount is annualized over the anticipated 40-year life of the Project, to an amount of 22 MT CO_2e per year. The same activity was used to estimate emissions in the BAU scenario, but 2005 emission factors were used.

2.2.2 Summary of Land-Use Change and Vegetation GHG Emissions

Permanent vegetation changes that occur as a result of land use development constitute a one-time change in the carbon sequestration capacity of a project site. In this case, no construction is proposed in open space areas, and redevelopment will be landscaped with trees where feasible. This will result in an overall negligible change in carbon sequestration once the vegetation reaches a steady state (i.e., new vegetation replaces dying vegetation). Consequently, vegetation change results in a negligible change in GHG emissions for this Project.

2.3 Proposed Ongoing Project GHG Emissions

Two analyses were prepared for proposed Project emissions, to reflect the Project and 2005 BAU scenarios. The use of 2005 BAU to represent the Project without adjustment for statewide and Project design GHG reduction measures is consistent with the emissions

reductions goal described in SCA GHG-1. The Project emissions were estimated by ESA in the CEQA Analysis Document. Accordingly, it includes all local, state, and federal measures expected to be implemented by 2020, including the SCAs. The Project scenario does not include the benefits of the Transportation Demand Management (TDM) program or solid waste reductions required by the City of Oakland Zero Waste target. These reductions are included in the GHG reduction measures in Section 3.

2.3.1 Methodology for Project Emissions Inventories

The Project operations were analyzed for the years 2005 and 2020, as discussed earlier. ESA's analysis of Project GHG emissions uses CalEEMod® version 2016.3.1. Consistent with the methodology in the Oakland ECAP, Ramboll Environ analyzed the 2005 BAU Project as if it was operating in 2005, and using CalEEMod® version 2016.3.1. Methods for the Project scenario are discussed here for informational purposes and to compare to the 2005 BAU scenario only. Ramboll Environ estimated emissions for the 2005 BAU, but relied on CEQA Analysis Document emissions for the Project scenario.

The GHG inventories are divided by source category to cover

1. Area Sources
2. Purchased electricity use not related to water usage
3. Natural gas use
4. Water usage, including purchased electricity use
5. Waste
6. Mobile Sources.

Each source category is discussed separately below.

2.3.1.1 Area Sources

The proposed Project includes area sources such as architectural coatings, consumer products use, hearths, and landscaping equipment. CalEEMod® does not consider architectural coatings and consumer products to be sources of GHG.

Hearth emissions for the 2020 Project were calculated with CalEEMod®. BAAQMD Rule 6-3-306 does not allow wood stoves in new building construction after November 1, 2016, so the percentage of dwelling units with wood stoves was assumed to be zero. The CalEEMod® default count of dwelling units with wood stoves was assumed to be zero, while the default number of dwelling units were assumed to still have natural gas fireplaces.

Hearth emissions for the 2005 BAU Project were calculated with CalEEMod®, assuming the default mix of wood and natural gas hearths. Although BAAQMD Rule 6-3-306 does not allow wood stoves in new building construction after November 1, 2016, the 2005 BAU Project does not reflect the implementation of this new rule, as the new rule is not considered business as usual for 2005 activity levels.

The Project land uses will employ gasoline and diesel landscaping equipment. Emissions from lawn and garden equipment are estimated using CalEEMod®. CalEEMod®'s emissions estimates are based on emission factors for the landscaping equipment from the California Air Resources Board (ARB) OFFROAD2011 model.

2.3.1.2 Purchased Electricity Not Related to Water Use

The Project includes operational emissions associated with purchased electricity for lighting, heating, household electronics, electric vehicle charging, and other uses not associated with water supply, treatment, and distribution. CalEEMod® estimates emissions based electricity use and carbon intensity of electricity.

CalEEMod® provides default electricity intensities based on the type and size of land uses associated with the Project. ESA adjusted the building envelope electricity usage for the 2020 Project to account for the 2016 Title 24 building energy efficiency standards, which will be in effect at the commencement of Project construction. The 2005 BAU Project inventory relies on the historical energy consumption data in CalEEMod®, which is more representative of energy consumption in 2005.

For estimating GHG emissions from electricity use for the 2020 Project, the Pacific Gas and Electric Company (PG&E) CO_2 intensity factor for 2020 was used in place of the default carbon intensity in CalEEMod®.[1] This intensity factor takes into account the State's Renewable Portfolio Standard (RPS) that requires 33% of electricity to be renewable in 2020. The 2005 BAU Project uses the default CalEEMod® CO_2 intensity factor. The default carbon intensity is from PG&E's 2008 carbon intensity for electricity. This intensity takes into consideration some benefit of the 2010 RPS goals due to the ramp up of renewables, so is conservative to assume for 2005.

2.3.1.3 Natural Gas

The Project emits GHGs from on-site natural gas combustion. ESA estimated 2020 Project emissions using CalEEMod® based on the type and size of land uses associated with the Project. Consistent with the approach for electricity use, ESA adjusted the building envelope natural gas usage for the Project to account for the 2016 Title 24 building energy efficiency standards, which apply to the Project. The 2005 BAU Project inventory relies on the historical energy consumption data in CalEEMod®, which is more representative of energy consumption in 2005.

2.3.1.4 Water Use, Including Purchased Electricity

Electricity is required to supply, treat, and distribute water and wastewater, and as such water use is a source of GHG emissions. The water use estimate for the Project is the CalEEMod® default for the Project land uses for Alameda County, minus a 20 percent reduction in indoor water consumption to comply with mandatory CalGreen requirements. As with GHG emissions from purchased electricity not related to water use, ESA used the PG&E CO_2e intensity factor for 2020 in place of the default energy intensity in CalEEMod® for the 2020 Project. As described in Section 2.3.1.2, the CalEEMod® emission factor for 2005 CO_2 intensity is used for water-related purchased electricity emissions from the 2005 BAU Project. Based on the design of the East Bay Municipal Utility District's wastewater treatment plan, emissions estimated from wastewater treatment assumed a process with 100 percent aerobic biodegradation and 100 percent anaerobic digestion with cogeneration. The indoor water demand is 20 percent higher for 2005 BAU than the 2020 Project, while the outdoor water demand is the same for 2005 as for the 2020 Project.

[1] Pacific Gas and Electric Company (PG&E). Greenhouse Gas Emission Factors: Guidance for PG&E Customers. November 2015. Available online at: http://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf

2.3.1.5 Waste

Waste generated by the Project will result in GHG emissions, which ESA estimated using CalEEMod®. The Oakland ECAP accounts for the City of Oakland Zero Waste goal, which reduces GHG emissions from waste by 89% between 2005 and 2020. However, this reduction has not been incorporated into the Project scenario, so the waste disposal is the same in the 2005 BAU and 2020 Project scenarios.

2.3.1.6 Mobile Sources

The Project would generate vehicle trips from residents traveling to and from the site and non-residents traveling to and from the site for work or commercial purposes. ESA relied on the trip generation data in the transportation impact analysis prepared by Fehr & Peers to estimate 2020 Project emissions using CalEEMod®. These trips incorporate a 43% reduction due to proximity to BART and other transit. This reduction is based on the City of Oakland *Transportation Impact Review Guidelines*[2] for projects less than 0.5 miles from Bay Area Rapid Transit (BART).

The Project is next to BART. One of the goals of Oakland's ECAP is to "encourage dense, transit-oriented, mixed-use development including housing, retail services and/or employment opportunities centered on transit hubs and corridors." Thus, the proximity to BART is a project feature that reduces GHG emissions compared to a "business as usual" case. As discussed above, trips for the Project were based on Institute of Transportation Engineers (ITE) *Trip Generation* (9th Edition) and were reduced by 43% due to the Project's proximity to BART for the Project analysis in the EIR. The rates generated directly from ITE would likely not be a representative BAU trip rate because they represent suburban new development. Thus, these BAU trip rates are reduced by 23.1% to represent an urban development that is not adjacent to BART.[3] The 23.1% reduction is consistent with a reduction for an urban development a mile away from BART from City of Oakland *Transportation Impact Study Guidelines*, which is the same source for the 43% reduction used for the Project. The 2005 BAU Project mobile source GHG emissions rely on emission factors for 2005, which is consistent with method used in the ECAP analysis.

2.3.1.7 Existing Land Uses

The Project site is currently occupied by two surface parking lots and a Mitsubishi and Kia service and parts center. Emissions from these land uses would be displaced by the Project. Emissions from existing land uses were estimated by ESA to be 438 MT CO_2e/year.

2.4 Current State and Local Requirements that Reduce GHG Emissions

2.4.1 State and Local Requirements

The following state programs and existing City requirements will reduce GHG emissions from the 2005 BAU scenario:

- The Project Transportation Demand Management (TDM) program will reduce trips by 20%, which reduces on-road mobile source emissions. This benefit is incorporated in the GHG reduction measures in Section 3.

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[2] City of Oakland. 2017. Transportation Impact Review Guidelines. Land Use Development Projects. April 17. Available online at: http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak063581.pdf

[3] The Transportation and Circulation Section of the EIR estimated 2,900 daily trips for the Project from ITE Trip Generation (9th Edition). With the 23.1% reduction, the BAU is assumed to have 2,230 trips per day

- The Pavley Act and ACC programs reduce on-road vehicle fleet emissions
- The City of Oakland's Zero Waste goal will reduce GHG emissions from waste by 89%. This benefit is incorporated in Section 3.
- The Renewable Portfolio Standard will reduce GHG from PG&E electricity generation
- The BAAQMD Rule 6-3 eliminates wood-fired hearths in new homes, thereby reducing GHG emissions per hearth
- Increased penetration of electric vehicles will reduce GHG emissions from on-road mobile sources, even without assuming mandated changes to charging infrastructure
- Increased residential and nonresidential building energy efficiency due to 2016 Title 24 standards (in compliance with SCA GHG-2)

These requirements, other than the TDM and Zero Waste goal, are considered as part of the Project scenario.

2.4.2 Comparison of 2005 BAU and 2020 Project Emissions Inventories

Table 2 shows the 2005 BAU Project and 2020 Project GHG inventories, with a column showing the percent reduction in emissions from the 2005 BAU Project inventory by source category.

Emissions from area sources (hearths and landscaping), decrease by 34% from the 2005 BAU Project scenario due to the replacement of wood-fired hearths with natural gas fireplaces, as required by BAAQMD Rule 6-3.

Emissions related to purchased electricity and natural gas decrease by 59% and 9%, respectively, due to the combined impacts of increased building energy efficiency and reductions in the carbon intensity of electricity provided by PG&E. These reductions are from the Title 24 building energy efficiency standards and the state Renewables Portfolio Standard.

Emissions related to water use, which are from wastewater treatment and the purchased electricity used to supply, distribute and treat the water, are reduced by 52%, due to the state Renewables Portfolio Standard lowering the carbon intensity of purchased electricity between the 2005 BAU Project and 2020 Project scenarios.

Between the 2005 BAU Project and 2020 Project scenarios, emissions from waste are constant, as this analysis did not take into account Oakland's Zero Waste goal.

On-road mobile source emissions decrease by 34% between the 2005 BAU Project scenario and the 2020 Project scenario. This is due to the reduction in trips for the Project due to its location next to BART. Also, the fleet average emission factors from CalEEMod® show that the vehicle fleet is more efficient by 2020.

Table 2: Summary of Full Buildout 2005 BAU Project and 2020 Project Greenhouse Gas Emissions (MT/yr CO_2e)

Source Category	GHG Emissions for 2005 BAU Project, Full Buildout (MT CO_2e/yr)	GHG Emissions for 2020 Project, Full Buildout (MT CO_2e/yr)	Percent Reduction from 2005 BAU Project
Hearths and Landscaping	6	3.8	34%
Purchased Electricity	473	193	59%
Natural Gas	240	218	9%
Water Use	28	14	52%
Waste Disposed	75	75	0%
Traffic	2,163	1,436	34%
Annualized Construction	23	22	8%
Total	3,009	1,962	35%
Existing Emissions	--	468	--
Net Increase	--	1,523	--
Net Service Population	--	288	--
Net Project Emissions per Service Population	--	5.29	--

Table 2 shows that the Project achieves a 35% reduction from the 2005 BAU Project scenario and a net project emission per service population of 5.29 MT CO_2e/SP/year.

3. PROPOSED GHG REDUCTION MEASURES

SCA GHG-1 requires the GGRP to both reduce GHG emissions per service population to below 4.6 MT CO_2e/SP/year. As shown in Section 2.4.2, the Project emissions are 35% below the 2005 BAU emissions and 5.29 MT CO_2e/SP/year. This section describes the reduction measures that are proposed to achieve the emissions reductions required by SCA GHG-1.

3.1 GHG Reduction Measures

To meet the SCA GHG-1 requirements, even after complying with other SCAs, local, and state regulations, the Project must reduce its GHG emissions to below 4.6 MT CO_2e/SP/year. To meet the 4.6 MT CO_2e/SP/year limit, the Project must reduce its emissions to 1,763 MT CO_2e/year, which is a 41% reduction from BAU and a net increase of 1,325 MT CO_2e/year. This equates to an additional reduction of 198 MT CO_2e/year.

As discussed below and summarized in Table 3, Ramboll Environ proposes a menu of measures that either singularly or in combination would accomplish the required numeric reductions. Note not all the measures identified below need to be implemented. This GGRP requires the project applicant to implement any mix or fraction of the measures listed in Table 3, provided that the mix results in an additional reduction of 198 MT CO_2e/year.

Table 3: Summary of Options of Mitigation Measures That Would Achieve The City's SCA GHG-1 Requirements

Source Category	Mitigation Measure	Reduction from Project (MT CO_2e)	Percent Reduction from BAU
Hearths	Elimination of natural gas fireplaces	2.9	0.1%
Solid Waste	Comply with Oakland Zero Waste 2020 target (89% reduction in waste)	67	2.2%
On-Road Exhaust	Comply with TDM Plan (20% reduction in mobile trips)	287	9.5%
	Install three electric vehicle chargers in commercial parking lots[A]	59	2.0%

Notes
[A] To achieve this reduction, vehicles would need to be charging for a total of 24 hours per day. This can be achieved with 3 chargers charging vehicles for 8 hours per day or with more chargers and fewer hours per day per charger. Additional chargers can be installed for additional reductions.

The measures are described as follows:

- Hearths: Natural gas combustion in decorative fireplaces (hearths) emits GHGs. By eliminating all hearths, GHG emissions from hearths for the Project are eliminated.

- Solid Waste: The Oakland ECAP accounts for the City of Oakland Zero Waste goal, which reduces GHG emissions from waste by 89% between 2005 and 2020.[4] By complying with the City of Oakland goal, solid waste emissions for the Project will be reduced by 89% from Business-as-Usual.
- TDM Plan: As required by SCA TRA4, the Project will implement a TDM program to reduce trips by 20%. The trips reduction will have a direct effect on running exhaust emissions from on-road vehicles. If trips are reduced by a different percentage, this reduction in emissions can be scaled linearly.
- Electric Vehicle Chargers: The Project can install electric vehicle charging stations in commercial parking lots to encourage electric vehicle adoption and use. Gasoline and diesel cars emit GHGs through fuel combustion, while electric vehicle charging results in indirect GHG emissions from fossil fuels used to generate electricity. The different between the indirect electricity GHG emissions and the fossil fuel combustion emissions for the miles assumed to be provided by the charging stations is the GHG benefit due to this measure.

3.2 Additional Potential GHG Reductions Not Quantified

The Project could reduce emission from mobile sources by installing electric car chargers in residential garages, which is anticipated to increase electric car penetration. The current assumptions of CalEEMod® do not account for changes in infrastructure that would encourage electric cars, promoting early adoption. Building electric vehicle chargers into new homes may lead to a higher localized use of electric vehicles, which would reduce the Project's mobile GHG emissions inventory. This analysis conservatively does not quantify any benefit from the installation of electric car chargers in residential garages. Furthermore, installing additional chargers in the commercial areas will further decrease GHG emissions. This analysis conservatively assumed only three chargers, charging vehicles for 8 hours per day each. However, with additional chargers, more electric vehicles can charge and reduce emissions further.

The California Public Utilities Commission (CPUC) has set a goal that by 2020, all new residential construction in California will be of Zero Net Energy (ZNE) homes. "ZNE" is defined as producing as much energy as what is consumed over the course of a year. This is anticipated to be codified in the 2019 Title 24 building energy efficiency standards. The current CPUC goal for commercial buildings is that they are also ZNE by 2030. This Project will comply with the Title 24 building energy efficiency standards in place at the time of construction. To the extent that homes built after 2019 are designed to meet future Title 24 standards, the emissions reductions in the Project scenario would exceed what is shown here, leading to lower emissions per service population and a greater percent reduction from 2005 BAU.

[4] City of Oakland. Zero Waste. Available at: http://www2.oaklandnet.com/Government/o/PWA/o/FE/s/IDR/o/ZW/index.htm. Accessed: August 2017.

4. IMPLEMENTATION AND ANNUAL REPORTING

Following submission of this GGRP to the City of Oakland, the City must approve the plan. Subsequent to approval by the City, the master developer and subsequent builders will implement the approved GGRP during construction, including "1) submitting drawings of GGRP measures to the City Planning Director or his/her designee for review and approval, 2) implementing off-site measures, or 3) purchasing carbon credits." For the Project, this may include submitting drawings of proposed electric vehicle charging stations.

In the operational phase of the Project, the Homeowners Association and commercial tenants will prepare and submit annual GGRP monitoring reports to the City of Oakland until the goals of SCA GHG-1 are fully attained. Full attainment is reached when project GHG emissions are below 4.6 MT CO_2e/SP/year, as confirmed by the City through an established monitoring program.

4.1 Plans for Future Reporting

Reports that verify annual operational inventories will be submitted to the City of Oakland on an ongoing basis. The GHG emissions metrics discussed in Sections 2.4.2 can be used to determine the overall inventory once the Project is in operation, although with time the emissions inventory methods may evolve. Monitoring of the GGRP by the City of Oakland will begin with Project construction, and the project applicant will begin reporting of Project emissions, after full Project construction and occupancy. If in five successive years (including at least one year reflecting complete development/occupancy of the entire Project), the Project is found to meet the stated GGRP goal, additional monitoring and reporting shall not be required.

5. SUMMARY

This GHG Reduction Plan demonstrates the Project can meet the goals of SCA GHG-1. Specifically, the goals met by this GGRP are to increase energy efficiency and reduce GHG emissions to below the applicable BAAQMD CEQA Threshold of Significance pertaining to an efficiency metric based on the Project's total population, and to reduce GHG emissions below 4.6 MT CO_2e/SP/year, consistent with the City's ECAP.

APPENDIX A
SUPPORTING CALCULATIONS

2401 Broadway - Hotel Option

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	18.49	1000sqft	0.00	18,533.00	0
Hotel	159.00	Room	0.00	93,594.00	0
Apartments Mid Rise	72.00	Dwelling Unit	1.21	77,466.00	135
Regional Shopping Center	27.16	1000sqft	0.00	27,169.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	63
Climate Zone	5			**Operational Year**	2005
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2005 operational year

Land Use - Revised Land Use

Construction Phase - Phase projections 2005

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment

Off-road Equipment

Trips and VMT

Demolition

Grading

Vehicle Trips - 23.1% reduction from default ITE trip rates

Energy Use - Using historical data

Water And Wastewater - 20% more indoor water use

Stationary Sources - Emergency Generators and Fire Pumps

- none

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblConstructionPhase	NumDays	10.00	60.00
tblConstructionPhase	NumDays	200.00	420.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	4.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	PhaseEndDate	6/22/2007	6/22/2004
tblConstructionPhase	PhaseEndDate	3/2/2007	3/1/2005
tblConstructionPhase	PhaseEndDate	4/29/2005	4/29/2003
tblConstructionPhase	PhaseEndDate	7/22/2005	7/22/2003
tblConstructionPhase	PhaseEndDate	3/30/2007	3/30/2005
tblConstructionPhase	PhaseEndDate	5/13/2005	5/13/2003
tblConstructionPhase	PhaseStartDate	3/31/2007	3/31/2004
tblConstructionPhase	PhaseStartDate	7/23/2005	7/23/2003
tblConstructionPhase	PhaseStartDate	3/5/2005	3/5/2003
tblConstructionPhase	PhaseStartDate	5/14/2005	5/14/2003

tblConstructionPhase	PhaseStartDate	3/3/2007	3/3/2005
tblConstructionPhase	PhaseStartDate	4/30/2005	4/30/2003
tblGrading	AcresOfGrading	18.75	1.21
tblGrading	AcresOfGrading	5.00	1.21
tblGrading	MaterialExported	0.00	4,000.00
tblLandUse	BuildingSpaceSquareFeet	18,490.00	18,533.00
tblLandUse	BuildingSpaceSquareFeet	230,868.00	93,594.00
tblLandUse	BuildingSpaceSquareFeet	72,000.00	77,466.00
tblLandUse	BuildingSpaceSquareFeet	27,160.00	27,169.00
tblLandUse	LandUseSquareFeet	18,490.00	18,533.00
tblLandUse	LandUseSquareFeet	230,868.00	93,594.00
tblLandUse	LandUseSquareFeet	72,000.00	77,466.00
tblLandUse	LandUseSquareFeet	27,160.00	27,169.00
tblLandUse	LotAcreage	0.42	0.00
tblLandUse	LotAcreage	5.30	0.00
tblLandUse	LotAcreage	1.89	1.21
tblLandUse	LotAcreage	0.62	0.00
tblLandUse	Population	206.00	135.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2018	2005
tblVehicleTrips	ST_TR	6.39	5.10
tblVehicleTrips	ST_TR	8.19	6.58
tblVehicleTrips	ST_TR	49.97	31.06
tblVehicleTrips	SU_TR	5.86	4.32
tblVehicleTrips	SU_TR	5.95	5.03
tblVehicleTrips	SU_TR	25.24	15.10
tblVehicleTrips	WD_TR	6.65	4.69
tblVehicleTrips	WD_TR	8.17	6.27
tblVehicleTrips	WD_TR	42.70	32.73
tblWater	AerobicPercent	87.46	100.00

tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	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
tblWater	SepticTankPercent	10.33	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					
2003	1.0287	5.6817	4.1564	0.0377	0.2232	0.3386	0.5619	0.0991	0.3357	0.4348	0.0000	397.6519	397.6519	0.0860	0.0000	399.8013
2004	4.1524	6.3144	6.7739	0.0434	0.1437	0.4156	0.5593	0.0389	0.4131	0.4520	0.0000	498.4300	498.4300	0.1255	0.0000	501.5680
2005	0.2294	1.0876	0.8687	8.2500e-003	0.0230	0.0736	0.0966	6.2200e-003	0.0733	0.0795	0.0000	92.0932	92.0932	0.0203	0.0000	92.5996
Maximum	**4.1524**	**6.3144**	**6.7739**	**0.0434**	**0.2232**	**0.4156**	**0.5619**	**0.0991**	**0.4131**	**0.4520**	**0.0000**	**498.4300**	**498.4300**	**0.1255**	**0.0000**	**501.5680**

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					
2003	1.0287	5.6817	4.1564	0.0377	0.2232	0.3386	0.5619	0.0991	0.3357	0.4348	0.0000	397.6516	397.6516	0.0860	0.0000	399.8011
2004	4.1524	6.3144	6.7739	0.0434	0.1437	0.4156	0.5593	0.0389	0.4131	0.4520	0.0000	498.4297	498.4297	0.1255	0.0000	501.5677
2005	0.2294	1.0876	0.8687	8.2500e-003	0.0230	0.0736	0.0966	6.2200e-003	0.0733	0.0795	0.0000	92.0931	92.0931	0.0203	0.0000	92.5996
Maximum	**4.1524**	**6.3144**	**6.7739**	**0.0434**	**0.2232**	**0.4156**	**0.5619**	**0.0991**	**0.4131**	**0.4520**	**0.0000**	**498.4297**	**498.4297**	**0.1255**	**0.0000**	**501.5677**

	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**3-5-2005**	**6-4-2005**	0.2518	0.2518
		Highest	0.2518	0.2518

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	1.0865	0.0123	0.8512	4.8000e-004		0.0353	0.0353		0.0353	0.0353	3.2825	2.2252	5.5077	6.6900e-003	2.2000e-004	5.7391
Energy	0.0241	0.2169	0.1693	1.3100e-003		0.0166	0.0166		0.0166	0.0166	0.0000	709.8834	709.8834	0.0259	8.7800e-003	713.1474
Mobile	2.5096	10.1746	27.1881	0.0724	1.5266	0.2235	1.7501	0.4117	0.2129	0.6246	0.0000	2,154.4214	2,154.4214	0.3254	0.0000	2,162.5566
Stationary	0.0308	0.1376	0.0785	1.5000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	14.2799	14.2799	2.0000e-003	0.0000	14.3300

Waste						0.0000	0.0000		0.0000	0.0000	30.1827	0.0000	30.1827	1.7838	0.0000	74.7764
Water						0.0000	0.0000		0.0000	0.0000	3.7985	21.6231	25.4216	0.0141	8.4600e-003	28.2948
Total	**3.6510**	**10.5414**	**28.2870**	**0.0743**	**1.5266**	**0.2800**	**1.8066**	**0.4117**	**0.2694**	**0.6811**	**37.2637**	**2,902.4330**	**2,939.6966**	**2.1578**	**0.0175**	**2,998.8443**

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	1.0865	0.0123	0.8512	4.8000e-004		0.0353	0.0353		0.0353	0.0353	3.2825	2.2252	5.5077	6.6900e-003	2.2000e-004	5.7391
Energy	0.0241	0.2169	0.1693	1.3100e-003		0.0166	0.0166		0.0166	0.0166	0.0000	709.8834	709.8834	0.0259	8.7800e-003	713.1474
Mobile	2.5096	10.1746	27.1881	0.0724	1.5266	0.2235	1.7501	0.4117	0.2129	0.6246	0.0000	2,154.4214	2,154.4214	0.3254	0.0000	2,162.5566
Stationary	0.0308	0.1376	0.0785	1.5000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	14.2799	14.2799	2.0000e-003	0.0000	14.3300
Waste						0.0000	0.0000		0.0000	0.0000	30.1827	0.0000	30.1827	1.7838	0.0000	74.7764
Water						0.0000	0.0000		0.0000	0.0000	3.7985	21.6231	25.4216	0.0141	8.4600e-003	28.2948
Total	**3.6510**	**10.5414**	**28.2870**	**0.0743**	**1.5266**	**0.2800**	**1.8066**	**0.4117**	**0.2694**	**0.6811**	**37.2637**	**2,902.4330**	**2,939.6966**	**2.1578**	**0.0175**	**2,998.8443**

	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**

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	3/5/2003	4/29/2003	5	40	
2	Site Preparation	Site Preparation	4/30/2003	5/13/2003	5	10	
3	Grading	Grading	5/14/2003	7/22/2003	5	50	
4	Building Construction	Building Construction	7/23/2003	3/1/2005	5	420	
5	Paving	Paving	3/3/2005	3/30/2005	5	20	
6	Architectural Coating	Architectural Coating	3/31/2004	6/22/2004	5	60	

Acres of Grading (Site Preparation Phase): 1.21

Acres of Grading (Grading Phase): 1.21

Acres of Paving: 0

Residential Indoor: 156,869; Residential Outdoor: 52,290; Non-Residential Indoor: 181,145; Non-Residential Outdoor: 60,382; Striped

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	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	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	0	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42

Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	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	1,533.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	500.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	108.00	31.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	22.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2003

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	0.1461	0.9484	0.3898	5.5200e-003		0.0679	0.0679		0.0679	0.0679	0.0000	48.3009	48.3009	0.0119	0.0000	48.5982
Total	**0.1461**	**0.9484**	**0.3898**	**5.5200e-003**		**0.0679**	**0.0679**		**0.0679**	**0.0679**	**0.0000**	**48.3009**	**48.3009**	**0.0119**	**0.0000**	**48.5982**

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	0.0702	0.8351	0.3220	6.1700e-003	0.0130	0.0312	0.0442	3.5600e-003	0.0299	0.0334	0.0000	63.4968	63.4968	7.3400e-003	0.0000	63.6803
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	5.5800e-003	6.9800e-003	0.0584	4.0000e-005	2.0600e-003	8.0000e-005	2.1400e-003	5.5000e-004	7.0000e-005	6.2000e-004	0.0000	2.1952	2.1952	3.4000e-004	0.0000	2.2038
Total	**0.0758**	**0.8421**	**0.3803**	**6.2100e-003**	**0.0150**	**0.0313**	**0.0463**	**4.1100e-003**	**0.0299**	**0.0340**	**0.0000**	**65.6920**	**65.6920**	**7.6800e-003**	**0.0000**	**65.8841**

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	0.1461	0.9484	0.3898	5.5200e-003		0.0679	0.0679		0.0679	0.0679	0.0000	48.3008	48.3008	0.0119	0.0000	48.5981
Total	**0.1461**	**0.9484**	**0.3898**	**5.5200e-003**		**0.0679**	**0.0679**		**0.0679**	**0.0679**	**0.0000**	**48.3008**	**48.3008**	**0.0119**	**0.0000**	**48.5981**

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	0.0702	0.8351	0.3220	6.1700e-003	0.0130	0.0312	0.0442	3.5600e-003	0.0299	0.0334	0.0000	63.4968	63.4968	7.3400e-003	0.0000	63.6803
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	5.5800e-003	6.9800e-003	0.0584	4.0000e-005	2.0600e-003	8.0000e-005	2.1400e-003	5.5000e-004	7.0000e-005	6.2000e-004	0.0000	2.1952	2.1952	3.4000e-004	0.0000	2.2038
Total	**0.0758**	**0.8421**	**0.3803**	**6.2100e-003**	**0.0150**	**0.0313**	**0.0463**	**4.1100e-003**	**0.0299**	**0.0340**	**0.0000**	**65.6920**	**65.6920**	**7.6800e-003**	**0.0000**	**65.8841**

3.3 Site Preparation - 2003

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					0.0270	0.0000	0.0270	0.0146	0.0000	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0226	0.1746	0.0631	1.0100e-003		9.8600e-003	9.8600e-003		9.8600e-003	9.8600e-003	0.0000	9.0478	9.0478	1.8400e-003	0.0000	9.0938
Total	**0.0226**	**0.1746**	**0.0631**	**1.0100e-003**	**0.0270**	**9.8600e-003**	**0.0369**	**0.0146**	**9.8600e-003**	**0.0244**	**0.0000**	**9.0478**	**9.0478**	**1.8400e-003**	**0.0000**	**9.0938**

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	8.6000e-004	1.0700e-003	8.9800e-003	1.0000e-005	3.2000e-004	1.0000e-005	3.3000e-004	8.0000e-005	1.0000e-005	1.0000e-004	0.0000	0.3377	0.3377	5.0000e-005	0.0000	0.3391
Total	**8.6000e-004**	**1.0700e-003**	**8.9800e-003**	**1.0000e-005**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**8.0000e-005**	**1.0000e-005**	**1.0000e-004**	**0.0000**	**0.3377**	**0.3377**	**5.0000e-005**	**0.0000**	**0.3391**

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					0.0270	0.0000	0.0270	0.0146	0.0000	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0226	0.1746	0.0631	1.0100e-003		9.8600e-003	9.8600e-003		9.8600e-003	9.8600e-003	0.0000	9.0478	9.0478	1.8400e-003	0.0000	9.0938
Total	**0.0226**	**0.1746**	**0.0631**	**1.0100e-003**	**0.0270**	**9.8600e-003**	**0.0369**	**0.0146**	**9.8600e-003**	**0.0244**	**0.0000**	**9.0478**	**9.0478**	**1.8400e-003**	**0.0000**	**9.0938**

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	8.6000e-004	1.0700e-003	8.9800e-003	1.0000e-005	3.2000e-004	1.0000e-005	3.3000e-004	8.0000e-005	1.0000e-005	1.0000e-004	0.0000	0.3377	0.3377	5.0000e-005	0.0000	0.3391
Total	**8.6000e-004**	**1.0700e-003**	**8.9800e-003**	**1.0000e-005**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**8.0000e-005**	**1.0000e-005**	**1.0000e-004**	**0.0000**	**0.3377**	**0.3377**	**5.0000e-005**	**0.0000**	**0.3391**

3.4 Grading - 2003

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					0.1138	0.0000	0.1138	0.0622	0.0000	0.0622	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0935	0.7175	0.2606	4.1400e-003		0.0409	0.0409		0.0409	0.0409	0.0000	37.0545	37.0545	7.6100e-003	0.0000	37.2448
Total	**0.0935**	**0.7175**	**0.2606**	**4.1400e-003**	**0.1138**	**0.0409**	**0.1547**	**0.0622**	**0.0409**	**0.1031**	**0.0000**	**37.0545**	**37.0545**	**7.6100e-003**	**0.0000**	**37.2448**

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	0.0229	0.2724	0.1050	2.0100e-003	4.2300e-003	0.0102	0.0144	1.1600e-003	9.7400e-003	0.0109	0.0000	20.7100	20.7100	2.3900e-003	0.0000	20.7698
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	4.2900e-003	5.3700e-003	0.0449	3.0000e-005	1.5800e-003	6.0000e-005	1.6400e-003	4.2000e-004	6.0000e-005	4.8000e-004	0.0000	1.6886	1.6886	2.7000e-004	0.0000	1.6953
Total	**0.0272**	**0.2777**	**0.1499**	**2.0400e-003**	**5.8100e-003**	**0.0102**	**0.0160**	**1.5800e-003**	**9.8000e-003**	**0.0114**	**0.0000**	**22.3986**	**22.3986**	**2.6600e-003**	**0.0000**	**22.4651**

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					0.1138	0.0000	0.1138	0.0622	0.0000	0.0622	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0935	0.7175	0.2606	4.1400e-003		0.0409	0.0409		0.0409	0.0409	0.0000	37.0545	37.0545	7.6100e-003	0.0000	37.2448
Total	**0.0935**	**0.7175**	**0.2606**	**4.1400e-003**	**0.1138**	**0.0409**	**0.1547**	**0.0622**	**0.0409**	**0.1031**	**0.0000**	**37.0545**	**37.0545**	**7.6100e-003**	**0.0000**	**37.2448**

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	0.0229	0.2724	0.1050	2.0100e-003	4.2300e-003	0.0102	0.0144	1.1600e-003	9.7400e-003	0.0109	0.0000	20.7100	20.7100	2.3900e-003	0.0000	20.7698
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	4.2900e-003	5.3700e-003	0.0449	3.0000e-005	1.5800e-003	6.0000e-005	1.6400e-003	4.2000e-004	6.0000e-005	4.8000e-004	0.0000	1.6886	1.6886	2.7000e-004	0.0000	1.6953
Total	**0.0272**	**0.2777**	**0.1499**	**2.0400e-003**	**5.8100e-003**	**0.0102**	**0.0160**	**1.5800e-003**	**9.8000e-003**	**0.0114**	**0.0000**	**22.3986**	**22.3986**	**2.6600e-003**	**0.0000**	**22.4651**

3.5 Building Construction - 2003

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	0.4602	1.9316	1.1062	0.0134		0.1546	0.1546		0.1546	0.1546	0.0000	113.2657	113.2657	0.0375	0.0000	114.2039
Total	**0.4602**	**1.9316**	**1.1062**	**0.0134**		**0.1546**	**0.1546**		**0.1546**	**0.1546**	**0.0000**	**113.2657**	**113.2657**	**0.0375**	**0.0000**	**114.2039**

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	0.0682	0.6206	0.3912	4.4800e-003	0.0118	0.0219	0.0337	3.4100e-003	0.0210	0.0244	0.0000	48.6670	48.6670	8.4000e-003	0.0000	48.8771
Worker	0.1344	0.1681	1.4062	8.9000e-004	0.0495	1.9200e-003	0.0515	0.0132	1.7800e-003	0.0150	0.0000	52.8877	52.8877	8.3000e-003	0.0000	53.0952
Total	**0.2025**	**0.7887**	**1.7974**	**5.3700e-003**	**0.0613**	**0.0239**	**0.0852**	**0.0166**	**0.0228**	**0.0394**	**0.0000**	**101.5547**	**101.5547**	**0.0167**	**0.0000**	**101.9724**

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	0.4602	1.9316	1.1062	0.0134		0.1546	0.1546		0.1546	0.1546	0.0000	113.2656	113.2656	0.0375	0.0000	114.2038
Total	**0.4602**	**1.9316**	**1.1062**	**0.0134**		**0.1546**	**0.1546**		**0.1546**	**0.1546**	**0.0000**	**113.2656**	**113.2656**	**0.0375**	**0.0000**	**114.2038**

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	0.0682	0.6206	0.3912	4.4800e-003	0.0118	0.0219	0.0337	3.4100e-003	0.0210	0.0244	0.0000	48.6670	48.6670	8.4000e-003	0.0000	48.8771
Worker	0.1344	0.1681	1.4062	8.9000e-004	0.0495	1.9200e-003	0.0515	0.0132	1.7800e-003	0.0150	0.0000	52.8877	52.8877	8.3000e-003	0.0000	53.0952
Total	**0.2025**	**0.7887**	**1.7974**	**5.3700e-003**	**0.0613**	**0.0239**	**0.0852**	**0.0166**	**0.0228**	**0.0394**	**0.0000**	**101.5547**	**101.5547**	**0.0167**	**0.0000**	**101.9724**

3.5 Building Construction - 2004

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	1.0394	4.3627	2.4986	0.0303		0.3491	0.3491		0.3491	0.3491	0.0000	255.8243	255.8243	0.0848	0.0000	257.9434
Total	**1.0394**	**4.3627**	**2.4986**	**0.0303**		**0.3491**	**0.3491**		**0.3491**	**0.3491**	**0.0000**	**255.8243**	**255.8243**	**0.0848**	**0.0000**	**257.9434**

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	0.1539	1.4016	0.8836	0.0101	0.0267	0.0496	0.0762	7.7100e-003	0.0474	0.0551	0.0000	109.9203	109.9203	0.0190	0.0000	110.3949
Worker	0.3035	0.3798	3.1761	2.0100e-003	0.1119	4.3400e-003	0.1162	0.0298	4.0200e-003	0.0338	0.0000	119.4532	119.4532	0.0188	0.0000	119.9220
Total	**0.4575**	**1.7814**	**4.0596**	**0.0121**	**0.1385**	**0.0539**	**0.1924**	**0.0375**	**0.0514**	**0.0889**	**0.0000**	**229.3735**	**229.3735**	**0.0377**	**0.0000**	**230.3169**

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	1.0394	4.3627	2.4986	0.0303		0.3491	0.3491		0.3491	0.3491	0.0000	255.8240	255.8240	0.0848	0.0000	257.9431
Total	**1.0394**	**4.3627**	**2.4986**	**0.0303**		**0.3491**	**0.3491**		**0.3491**	**0.3491**	**0.0000**	**255.8240**	**255.8240**	**0.0848**	**0.0000**	**257.9431**

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	0.1539	1.4016	0.8836	0.0101	0.0267	0.0496	0.0762	7.7100e-003	0.0474	0.0551	0.0000	109.9203	109.9203	0.0190	0.0000	110.3949
Worker	0.3035	0.3798	3.1761	2.0100e-003	0.1119	4.3400e-003	0.1162	0.0298	4.0200e-003	0.0338	0.0000	119.4532	119.4532	0.0188	0.0000	119.9220

Total	**0.4575**	**1.7814**	**4.0596**	**0.0121**	**0.1385**	**0.0539**	**0.1924**	**0.0375**	**0.0514**	**0.0889**	**0.0000**	**229.3735**	**229.3735**	**0.0377**	**0.0000**	**230.3169**

3.5 Building Construction - 2005

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	0.1440	0.6072	0.3607	4.8500e-003		0.0505	0.0505		0.0505	0.0505	0.0000	41.0100	41.0100	0.0118	0.0000	41.3038
Total	**0.1440**	**0.6072**	**0.3607**	**4.8500e-003**		**0.0505**	**0.0505**		**0.0505**	**0.0505**	**0.0000**	**41.0100**	**41.0100**	**0.0118**	**0.0000**	**41.3038**

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	0.0197	0.2132	0.1054	1.6300e-003	4.2700e-003	6.1700e-003	0.0104	1.2400e-003	5.9000e-003	7.1400e-003	0.0000	17.6377	17.6377	3.3200e-003	0.0000	17.7207
Worker	0.0297	0.0323	0.2852	2.1000e-004	0.0179	4.0000e-004	0.0183	4.7700e-003	3.7000e-004	5.1400e-003	0.0000	18.8863	18.8863	2.2600e-003	0.0000	18.9427
Total	**0.0495**	**0.2455**	**0.3906**	**1.8400e-003**	**0.0222**	**6.5700e-003**	**0.0288**	**6.0100e-003**	**6.2700e-003**	**0.0123**	**0.0000**	**36.5240**	**36.5240**	**5.5800e-003**	**0.0000**	**36.6635**

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	0.1440	0.6072	0.3607	4.8500e-003		0.0505	0.0505		0.0505	0.0505	0.0000	41.0100	41.0100	0.0118	0.0000	41.3038
Total	**0.1440**	**0.6072**	**0.3607**	**4.8500e-003**		**0.0505**	**0.0505**		**0.0505**	**0.0505**	**0.0000**	**41.0100**	**41.0100**	**0.0118**	**0.0000**	**41.3038**

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	0.0197	0.2132	0.1054	1.6300e-003	4.2700e-003	6.1700e-003	0.0104	1.2400e-003	5.9000e-003	7.1400e-003	0.0000	17.6377	17.6377	3.3200e-003	0.0000	17.7207
Worker	0.0297	0.0323	0.2852	2.1000e-004	0.0179	4.0000e-004	0.0183	4.7700e-003	3.7000e-004	5.1400e-003	0.0000	18.8863	18.8863	2.2600e-003	0.0000	18.9427
Total	**0.0495**	**0.2455**	**0.3906**	**1.8400e-003**	**0.0222**	**6.5700e-003**	**0.0288**	**6.0100e-003**	**6.2700e-003**	**0.0123**	**0.0000**	**36.5240**	**36.5240**	**5.5800e-003**	**0.0000**	**36.6635**

3.6 Paving - 2005

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	0.0346	0.2335	0.1048	1.5500e-003		0.0165	0.0165		0.0165	0.0165	0.0000	13.7265	13.7265	2.8300e-003	0.0000	13.7971
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0346**	**0.2335**	**0.1048**	**1.5500e-003**		**0.0165**	**0.0165**		**0.0165**	**0.0165**	**0.0000**	**13.7265**	**13.7265**	**2.8300e-003**	**0.0000**	**13.7971**

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	1.3100e-003	1.4200e-003	0.0126	1.0000e-005	7.9000e-004	2.0000e-005	8.1000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	0.8327	0.8327	1.0000e-004	0.0000	0.8352
Total	**1.3100e-003**	**1.4200e-003**	**0.0126**	**1.0000e-005**	**7.9000e-004**	**2.0000e-005**	**8.1000e-004**	**2.1000e-004**	**2.0000e-005**	**2.3000e-004**	**0.0000**	**0.8327**	**0.8327**	**1.0000e-004**	**0.0000**	**0.8352**

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	0.0346	0.2335	0.1048	1.5500e-003		0.0165	0.0165		0.0165	0.0165	0.0000	13.7265	13.7265	2.8300e-003	0.0000	13.7971
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0346**	**0.2335**	**0.1048**	**1.5500e-003**		**0.0165**	**0.0165**		**0.0165**	**0.0165**	**0.0000**	**13.7265**	**13.7265**	**2.8300e-003**	**0.0000**	**13.7971**

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	1.3100e-003	1.4200e-003	0.0126	1.0000e-005	7.9000e-004	2.0000e-005	8.1000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	0.8327	0.8327	1.0000e-004	0.0000	0.8352
Total	**1.3100e-003**	**1.4200e-003**	**0.0126**	**1.0000e-005**	**7.9000e-004**	**2.0000e-005**	**8.1000e-004**	**2.1000e-004**	**2.0000e-005**	**2.3000e-004**	**0.0000**	**0.8327**	**0.8327**	**1.0000e-004**	**0.0000**	**0.8352**

3.7 Architectural Coating - 2004

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	2.6150					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.1527	0.0675	8.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	7.6598	7.6598	2.1400e-003	0.0000	7.7134
Total	**2.6413**	**0.1527**	**0.0675**	**8.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**7.6598**	**7.6598**	**2.1400e-003**	**0.0000**	**7.7134**

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	0.0142	0.0177	0.1482	9.0000e-005	5.2200e-003	2.0000e-004	5.4200e-003	1.3900e-003	1.9000e-004	1.5800e-003	0.0000	5.5725	5.5725	8.7000e-004	0.0000	5.5943
Total	**0.0142**	**0.0177**	**0.1482**	**9.0000e-005**	**5.2200e-003**	**2.0000e-004**	**5.4200e-003**	**1.3900e-003**	**1.9000e-004**	**1.5800e-003**	**0.0000**	**5.5725**	**5.5725**	**8.7000e-004**	**0.0000**	**5.5943**

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	2.6150					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.1527	0.0675	8.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	7.6598	7.6598	2.1400e-003	0.0000	7.7133
Total	**2.6413**	**0.1527**	**0.0675**	**8.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**7.6598**	**7.6598**	**2.1400e-003**	**0.0000**	**7.7133**

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	0.0142	0.0177	0.1482	9.0000e-005	5.2200e-003	2.0000e-004	5.4200e-003	1.3900e-003	1.9000e-004	1.5800e-003	0.0000	5.5725	5.5725	8.7000e-004	0.0000	5.5943
Total	**0.0142**	**0.0177**	**0.1482**	**9.0000e-005**	**5.2200e-003**	**2.0000e-004**	**5.4200e-003**	**1.3900e-003**	**1.9000e-004**	**1.5800e-003**	**0.0000**	**5.5725**	**5.5725**	**8.7000e-004**	**0.0000**	**5.5943**

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	2.5096	10.1746	27.1881	0.0724	1.5266	0.2235	1.7501	0.4117	0.2129	0.6246	0.0000	2,154.4214	2,154.4214	0.3254	0.0000	2,162.5566
Unmitigated	2.5096	10.1746	27.1881	0.0724	1.5266	0.2235	1.7501	0.4117	0.2129	0.6246	0.0000	2,154.4214	2,154.4214	0.3254	0.0000	2,162.5566

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	337.68	367.20	311.04	780,858	780,858
Enclosed Parking with Elevator	0.00	0.00	0.00		
Hotel	996.93	1,046.22	799.77	1,853,963	1,853,963
Regional Shopping Center	888.95	843.59	410.12	1,427,300	1,427,300
Total	2,223.56	2,257.01	1,520.93	4,062,122	4,062,122

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-...	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.540639	0.064683	0.171972	0.117999	0.030504	0.004760	0.020161	0.036194	0.001764	0.004728	0.005037	0.000261	0.001298
Hotel	0.540639	0.064683	0.171972	0.117999	0.030504	0.004760	0.020161	0.036194	0.001764	0.004728	0.005037	0.000261	0.001298
Apartments Mid Rise	0.540639	0.064683	0.171972	0.117999	0.030504	0.004760	0.020161	0.036194	0.001764	0.004728	0.005037	0.000261	0.001298
Regional Shopping Center	0.540639	0.064683	0.171972	0.117999	0.030504	0.004760	0.020161	0.036194	0.001764	0.004728	0.005037	0.000261	0.001298

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	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	471.5488	471.5488	0.0213	4.4100e-003	473.3965
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	471.5488	471.5488	0.0213	4.4100e-003	473.3965
NaturalGas Mitigated	0.0241	0.2169	0.1693	1.3100e-003		0.0166	0.0166		0.0166	0.0166	0.0000	238.3346	238.3346	4.5700e-003	4.3700e-003	239.7509
NaturalGas Unmitigated	0.0241	0.2169	0.1693	1.3100e-003		0.0166	0.0166		0.0166	0.0166	0.0000	238.3346	238.3346	4.5700e-003	4.3700e-003	239.7509

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					
Apartments Mid Rise	676438	3.6500e-003	0.0312	0.0133	2.0000e-004		2.5200e-003	2.5200e-003		2.5200e-003	2.5200e-003	0.0000	36.0973	36.0973	6.9000e-004	6.6000e-004	36.3118
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
Hotel	3.64361e+006	0.0197	0.1786	0.1500	1.0700e-003		0.0136	0.0136		0.0136	0.0136	0.0000	194.4371	194.4371	3.7300e-003	3.5600e-003	195.5926
Regional Shopping Center	146169	7.9000e-004	7.1700e-003	6.0200e-003	4.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	7.8002	7.8002	1.5000e-004	1.4000e-004	7.8465
Total		**0.0241**	**0.2170**	**0.1693**	**1.3100e-003**		**0.0166**	**0.0166**		**0.0166**	**0.0166**	**0.0000**	**238.3346**	**238.3346**	**4.5700e-003**	**4.3600e-003**	**239.7509**

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					
Apartments Mid Rise	676438	3.6500e-003	0.0312	0.0133	2.0000e-004		2.5200e-003	2.5200e-003		2.5200e-003	2.5200e-003	0.0000	36.0973	36.0973	6.9000e-004	6.6000e-004	36.3118
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
Hotel	3.64361e+006	0.0197	0.1786	0.1500	1.0700e-003		0.0136	0.0136		0.0136	0.0136	0.0000	194.4371	194.4371	3.7300e-003	3.5600e-003	195.5926
Regional Shopping Center	146169	7.9000e-004	7.1700e-003	6.0200e-003	4.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	7.8002	7.8002	1.5000e-004	1.4000e-004	7.8465
Total		**0.0241**	**0.2170**	**0.1693**	**1.3100e-003**		**0.0166**	**0.0166**		**0.0166**	**0.0166**	**0.0000**	**238.3346**	**238.3346**	**4.5700e-003**	**4.3600e-003**	**239.7509**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	265818	77.3294	3.5000e-003	7.2000e-004	77.6324
Enclosed Parking with Elevator	124912	36.3385	1.6400e-003	3.4000e-004	36.4808
Hotel	900374	261.9292	0.0118	2.4500e-003	262.9555
Regional Shopping Center	329832	95.9518	4.3400e-003	9.0000e-004	96.3278
Total		**471.5488**	**0.0213**	**4.4100e-003**	**473.3965**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	265818	77.3294	3.5000e-003	7.2000e-004	77.6324
Enclosed Parking with Elevator	124912	36.3385	1.6400e-003	3.4000e-004	36.4808
Hotel	900374	261.9292	0.0118	2.4500e-003	262.9555
Regional Shopping Center	329832	95.9518	4.3400e-003	9.0000e-004	96.3278
Total		**471.5488**	**0.0213**	**4.4100e-003**	**473.3965**

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	1.0865	0.0123	0.8512	4.8000e-004		0.0353	0.0353		0.0353	0.0353	3.2825	2.2252	5.5077	6.6900e-003	2.2000e-004	5.7391
Unmitigated	1.0865	0.0123	0.8512	4.8000e-004		0.0353	0.0353		0.0353	0.0353	3.2825	2.2252	5.5077	6.6900e-003	2.2000e-004	5.7391

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	0.1179					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7754					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1661	3.8200e-003	0.2288	4.6000e-004		0.0327	0.0327		0.0327	0.0327	3.2825	1.3483	4.6307	5.2800e-003	2.2000e-004	4.8268
Landscaping	0.0271	8.4600e-003	0.6224	3.0000e-005		2.6300e-003	2.6300e-003		2.6300e-003	2.6300e-003	0.0000	0.8769	0.8769	1.4200e-003	0.0000	0.9123
Total	**1.0865**	**0.0123**	**0.8512**	**4.9000e-004**		**0.0353**	**0.0353**		**0.0353**	**0.0353**	**3.2825**	**2.2252**	**5.5077**	**6.7000e-003**	**2.2000e-004**	**5.7391**

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	0.1179					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7754					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1661	3.8200e-003	0.2288	4.6000e-004		0.0327	0.0327		0.0327	0.0327	3.2825	1.3483	4.6307	5.2800e-003	2.2000e-004	4.8268
Landscaping	0.0271	8.4600e-003	0.6224	3.0000e-005		2.6300e-003	2.6300e-003		2.6300e-003	2.6300e-003	0.0000	0.8769	0.8769	1.4200e-003	0.0000	0.9123
Total	**1.0865**	**0.0123**	**0.8512**	**4.9000e-004**		**0.0353**	**0.0353**		**0.0353**	**0.0353**	**3.2825**	**2.2252**	**5.5077**	**6.7000e-003**	**2.2000e-004**	**5.7391**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	25.4216	0.0141	8.4600e-003	28.2948
Unmitigated	25.4216	0.0141	8.4600e-003	28.2948

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.69109 / 2.95743	12.0553	6.1800e-003	3.7100e-003	13.3144
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	4.03332 / 0.448146	8.2322	5.2200e-003	3.1700e-003	9.3064
Regional Shopping Center	2.01181 / 1.23304	5.1341	2.6500e-003	1.5900e-003	5.6739
Total		**25.4216**	**0.0141**	**8.4700e-003**	**28.2948**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.69109 / 2.95743	12.0553	6.1800e-003	3.7100e-003	13.3144
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	4.03332 / 0.448146	8.2322	5.2200e-003	3.1700e-003	9.3064
Regional Shopping Center	2.01181 / 1.23304	5.1341	2.6500e-003	1.5900e-003	5.6739
Total		**25.4216**	**0.0141**	**8.4700e-003**	**28.2948**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	30.1827	1.7838	0.0000	74.7764
Unmitigated	30.1827	1.7838	0.0000	74.7764

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	33.12	6.7231	0.3973	0.0000	16.6561
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hotel	87.05	17.6704	1.0443	0.0000	43.7776
Regional Shopping Center	28.52	5.7893	0.3421	0.0000	14.3428
Total		**30.1827**	**1.7838**	**0.0000**	**74.7764**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e

Land Use	tons	MT/yr			
Apartments Mid Rise	33.12	6.7231	0.3973	0.0000	16.6561
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hotel	87.05	17.6704	1.0443	0.0000	43.7776
Regional Shopping Center	28.52	5.7893	0.3421	0.0000	14.3428
Total		**30.1827**	**1.7838**	**0.0000**	**74.7764**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	1	50	750	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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

Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (750 - 9999 HP)	0.0308	0.1376	0.0785	1.5000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	14.2799	14.2799	2.0000e-003	0.0000	14.3300
Total	**0.0308**	**0.1376**	**0.0785**	**1.5000e-004**		**4.5300e-003**	**4.5300e-003**		**4.5300e-003**	**4.5300e-003**	**0.0000**	**14.2799**	**14.2799**	**2.0000e-003**	**0.0000**	**14.3300**

11.0 Vegetation

GHG Emissions Reduction Associated with Non-Residential EV Charging Stations (2020)
24th and Broadway Oakland

Estimating GHG Emissions Reduction to Replace Conventional Vehicle with Electric Vehicle in 2020		
	Passenger Vehicle	
PG&E electricity emission factor[1]	0.13	(MT CO_2/MWh)
Fuel Economy[2]	0.3	(KWh/mile)
CO_2 emission while running[3]	310	(g/mile)
Annual VMT reduction per station[4]	73,000	(VMT/charging station/year)
Estimated Benefit from Installing Electric Vehicle Charging Stations		
GHG emissions of gasoline vehicle[5]	23	(MT CO_2/year)
GHG emissions of electric vehicle	3	(MT CO_2/year)
GHG reduction per charging station per year[6]	19.7	(MT CO_2/year)
Number of chargers[7]	3	-
Total GHG Reduction	59	(MT CO_2/year)

Notes:

1. CO_2 intensity factor for PG&E accounts for CO_2 emissions rates under the 2020 33% Renewable Portfolio Standard.

2. Fuel economy of a passenger vehicle obtained From US Department of Energy, 2013. Benefits and Considerations of Electricity as a Vehicle Fuel. Available at: http://www.afdc.energy.gov/fuels/electricity_benefits.html. Accessed: July 2017.

3. CARB, 2015. EMFAC 2014, running exhaust emission rate for CO_2 for vehicles in Alameda County, aggregated for all models and speeds, averaged over all seasons for 2020. Passenger vehicles are estimated to be LDA, LDT1, or LDT2 gasoline or diesel vehicles. Available at: http://www.arb.ca.gov/emfac/. Accessed: July 2017.

4. Annual VMT reduction for passenger vehicles estimated based on assumption of eight hours of charge time for a ChargePoint Level 2 charging station. Based on one charging port per station; a dual-port station would achieve two times this reduction.

5. GHG emissions calculated using annual VMT reduction and CO_2 emission rate. Nitrous oxide and methane are conservatively not included.

6. GHG emissions reduction is a difference of GHG emissions of conventional vehicles and GHG emissions of electric vehicles. Nitrous oxide and methane are conservatively not included.

7. Project specific estimate.

Abbreviations

CO_2 - carbon dioxide
EV - electric vehicle
g - grams
GHG - greenhouse gas
km - kilometer
kW - kilowatt
KWh - kilowatt hour
lb - pound
MT - metric ton
MWh - megawatt hour
PG&E - Pacific Gas & Electric
VMT - vehicle miles traveled