

Appendix K

Lamphier-Gregory

HUD's Acceptable Separation Distance (ASD) Electronic Assessment Tool results and supporting documentation, November 2020

Acceptable Separation Distance (ASD) Electronic Assessment Tool

The Environmental Planning Division (EPD) has developed an electronic-based assessment tool that calculates the Acceptable Separation Distance (ASD) from stationary hazards. The ASD is the distance from above ground stationary containerized hazards of an explosive or fire prone nature, to where a HUD assisted project can be located. The ASD is consistent with the Department's standards of blast overpressure (0.5 psi-buildings) and thermal radiation (450 BTU/ft² - hr - people and 10,000 BTU/ft² - hr - buildings). Calculation of the ASD is the first step to assess site suitability for proposed HUD-assisted projects near stationary hazards. Additional guidance on ASDs is available in the Department's guidebook "Siting of HUD- Assisted Projects Near Hazardous Facilities" and the regulation 24 CFR Part 51, Subpart C, Siting of HUD-Assisted Projects Near Hazardous Operations Handling Conventional Fuels or Chemicals of an Explosive or Flammable Nature.

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Is the container under pressure?	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
Does the container hold a cryogenic liquified gas?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>
Is the container diked?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
What is the volume (gal) of the container?	<input type="text"/>
What is the Diked Area Length (ft)?	<input type="text" value="155"/>
What is the Diked Area Width (ft)?	<input type="text" value="155"/>
<input type="button" value="Calculate Acceptable Separation Distance"/>	
Diked Area (sqft)	<input type="text" value="24025"/>
ASD for Blast Over Pressure (ASDBOP)	<input type="text"/>
ASD for Thermal Radiation for People (ASDPPU)	<input type="text"/>
ASD for Thermal Radiation for Buildings (ASDBPU)	<input type="text"/>
ASD for Thermal Radiation for People (ASDPND)	<input type="text" value="584.27"/>
ASD for Thermal Radiation for Buildings (ASBNPD)	<input type="text" value="115.25"/>

For mitigation options, please click on the following link: [Mitigation Options \(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/\)](/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)

Providing Feedback & Corrections

After using the ASD Assessment Tool following the directions in this User Guide, users are encouraged to provide feedback on how the ASD Assessment Tool may be improved. Users are also encouraged to send comments or corrections for the improvement of the tool.

Please send comments or other input using the [Contact Us \(https://www.hudexchange.info/contact-us/\)](https://www.hudexchange.info/contact-us/) form.

Related Information

- [ASD User Guide \(/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/\)](/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)
- [ASD Flow Chart \(/resource/3840/acceptable-separation-distance-asd-flowchart/\)](/resource/3840/acceptable-separation-distance-asd-flowchart/)



Pacific Operations

**PROVIDING SAFE, RELIABLE ENERGY
TRANSPORTATION AND STORAGE**

Through its Pacific Operations unit, Kinder Morgan operates approximately 3,000 miles of refined products pipeline that serves Arizona, California, Nevada, New Mexico, Oregon, Washington and Texas. With roots dating back to 1956, this is the largest products pipeline in the Western U.S., transporting more than one million barrels per day of gasoline, jet fuel and diesel fuel to our customers. Additionally, our company-owned terminals provide services such as liquid petroleum product storage and loading facilities for delivery trucks.

Kinder Morgan’s Pacific Operations unit is comprised of the Northern Region and Southern Region gathering systems, pipelines and terminals.

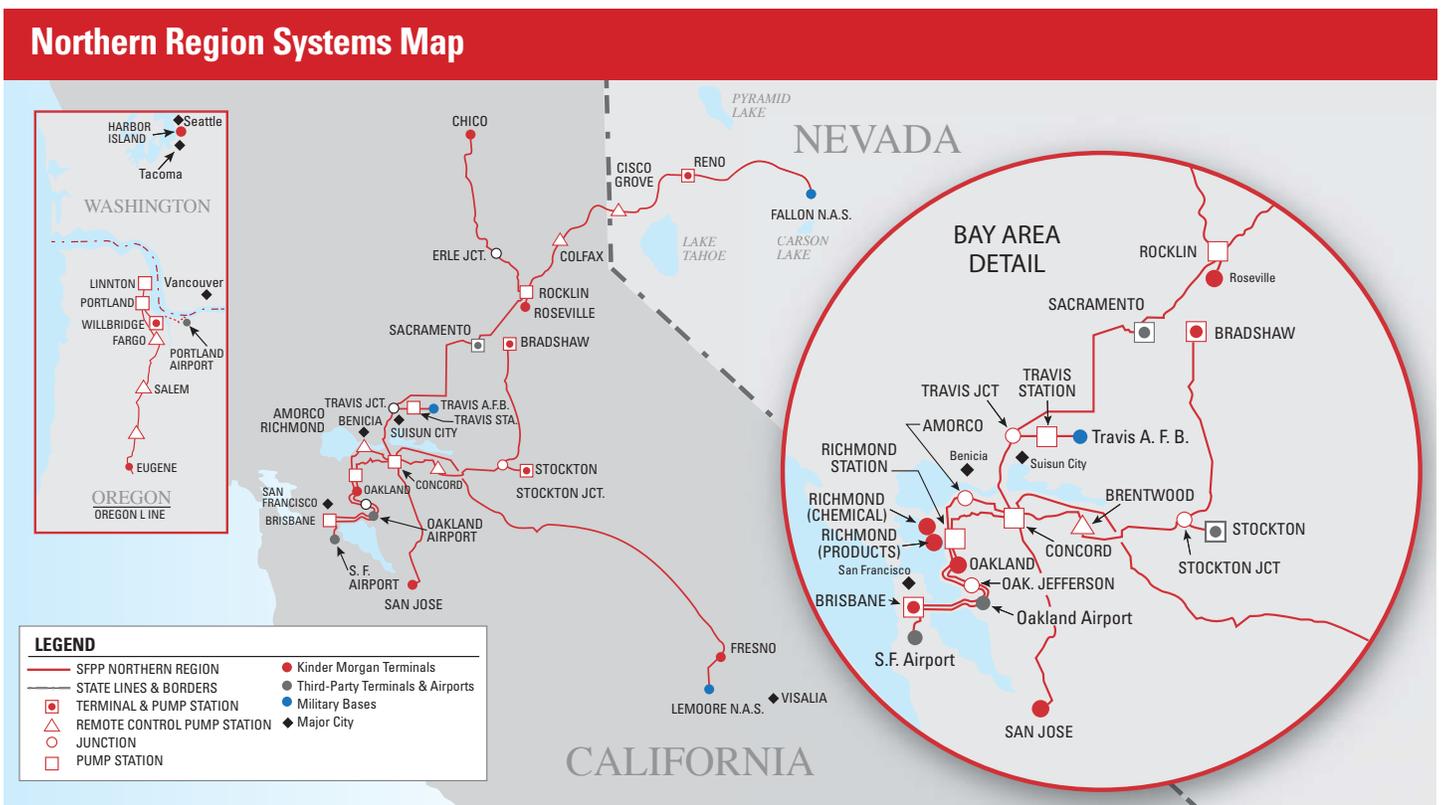
The Kinder Morgan entities that operate Pacific Region assets include SFPP, LP; CALNEV Pipe Line, LLC; Kinder Morgan Liquids Terminals, LLC; Kinder Morgan Cochin, LLC; Kinder Morgan Phoenix Holdings, LLC; and Lomita Rail, LLC.

Pacific Operations Northern Region

The Northern Region consists of a gathering system in Portland, Oregon, which offers third-party terminal connectivity to Portland Station for shipments to Kinder Morgan’s Willbridge Terminal, including a connection to the Portland Airport, and also to Kinder Morgan’s Eugene Terminal.

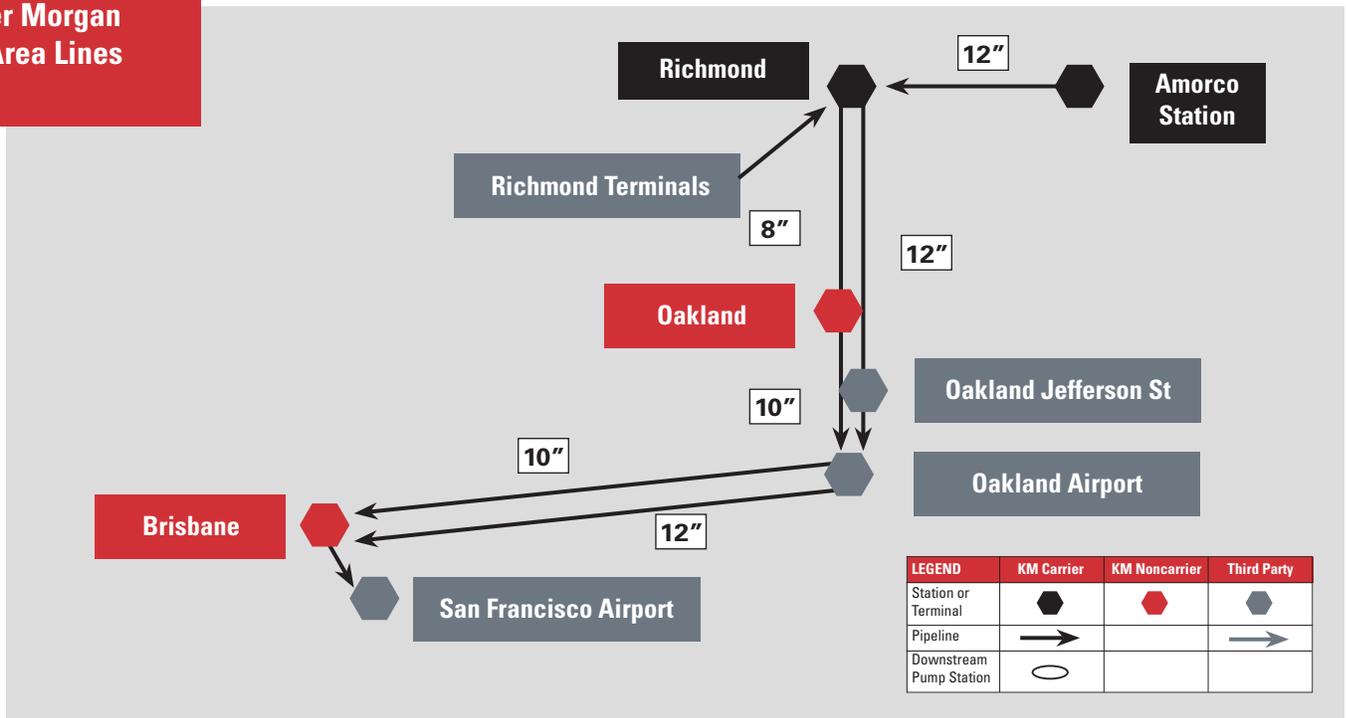
The region also includes gathering systems at Concord and Richmond, California, which connect refineries and third-party terminals to multiple destinations in the Bay Area and northern and central regions of California, and in Reno, Nevada.

Schematics for gathering systems, pipelines and terminals follow, along with specifications and services provided at each Kinder Morgan terminal.



NORTHERN REGION | Gathering Facilities and Pipelines

Kinder Morgan Bay Area Lines



ORIGINS

Richmond Area Supply Richmond direct access through gathering lines; Bay Area pipelines origin

Concord Area Supply Richmond direct access through 12" LS 37 line

DESTINATIONS

Richmond Deliveries to third-party terminals Gasoline, diesel

Richmond KM Terminal Gasoline, diesel

Oakland Deliveries to railroad yard Diesel

Oakland Jefferson St Deliveries to third-party terminal Jet fuel

Oakland Airport Deliveries into airport storage Jet fuel

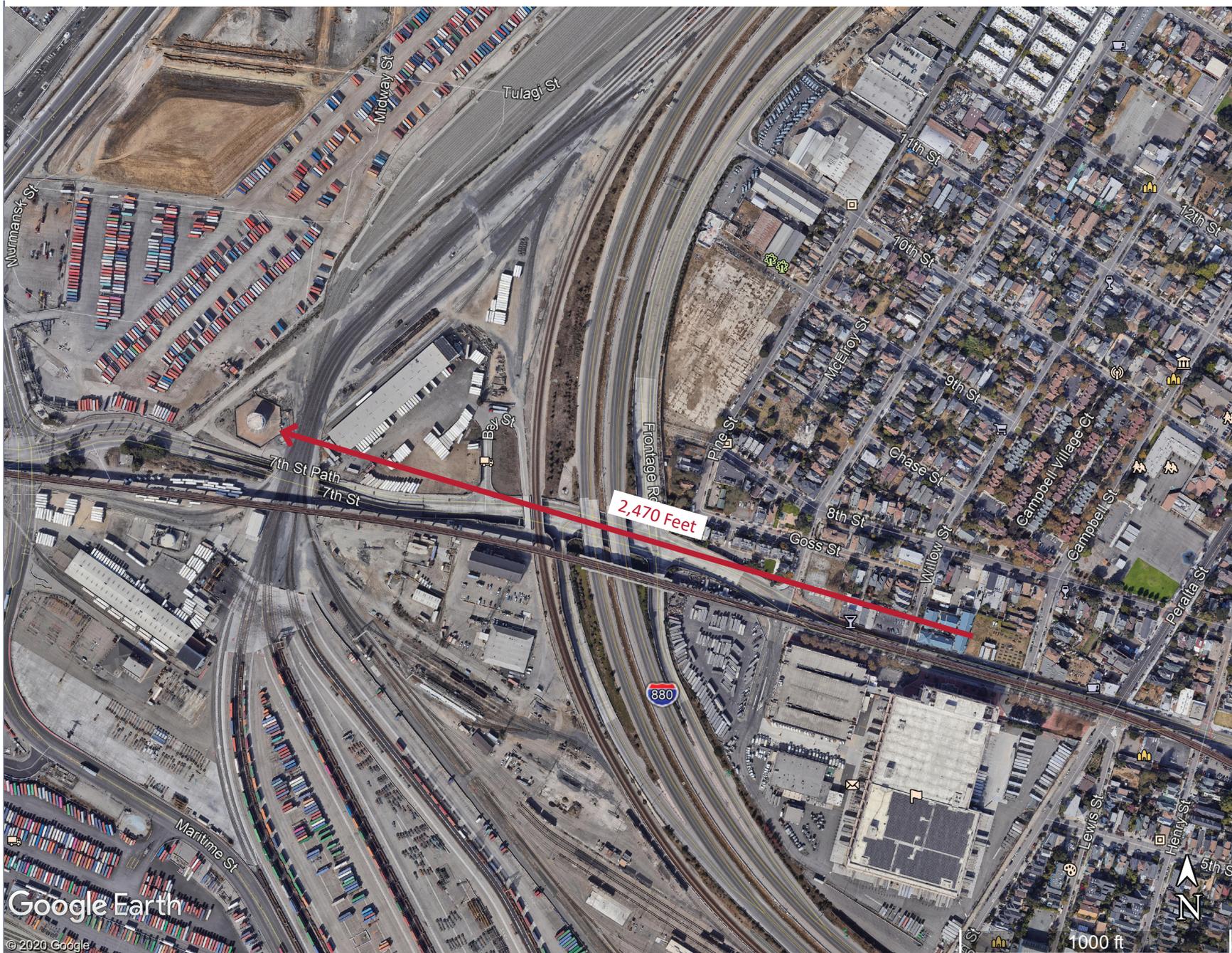
Brisbane KM terminal Gasoline, diesel, jet fuel

San Francisco Airport Deliveries to airport storage Jet fuel

Notes:

- » Lines are operated by SFPP, LP
- » Turbine service via 10" line from Richmond to Oakland Airport and Brisbane Terminal
- » Turbine service via 12" line from Richmond to Oakland Jefferson St., Oakland Airport, Brisbane Terminal and San Francisco International Airport
- » Gasoline/diesel service via 8" line to Oakland railroad yard, then 10" to Brisbane
- » No breakout storage available at Richmond





Google Earth

© 2020 Google

2,470 Feet



1000 ft

880

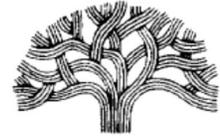
Murman St
Midway St
Tulag St
11th St
10th St
9th St
8th St
7th St Path
7th St
Frontage Rd
Pige St
McElroy St
Chase St
Goss St
Willow St
Campbell Village Ct
Campbell St
Perala St
Lewis St
Henry St
5th St
Maritime St

Appendix L

Lamphier-Gregory and PaleoWest Archaeologists

Historic and Cultural Resources Evaluation for Section 106 Review, November 2020 (as submitted to SHPO for Section 106 review)

CITY OF OAKLAND



250 FRANK H. OGAWA PLAZA, SUITE 3315 • OAKLAND, CALIFORNIA 94612-2032

Department of Planning and Building
Bureau of Planning, Historic Preservation Division

(510) 238-3941
FAX 510) 238-6538
TDD (510) 839-6451

November 16, 2020

Julianne Polanco
Office of Historic Preservation
Department of Parks & Recreation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Subject: Request For Section 106 Review: 7th and Campbell Project, 1662 through 1676 7th Street, Oakland, Alameda County, California

Dear Ms. Polanco:

7th and Campbell, LP proposes to use funding from the U.S. Department of Housing and Urban Development (HUD) as administered by the City of Oakland to acquire and develop the 7th and Campbell Project for the purpose of providing affordable housing. HUD requires the City to satisfy federal environmental review under the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA), all related Federal statutes and 24 CFR Part 58, HUD's Environmental Review Regulations, prior to use of its program funds.

Enclosed are materials to identify and evaluate historic properties and cultural resource within the Area of Potential Effects of this undertaking under Section 106 of the Historic Preservation Act and its implementing regulations at 36 CFR Part 800. On behalf of William Gilchrist, Agency Official for this project, I request your views regarding the effect of the project upon historic properties. Lamphier-Gregory has been engaged to prepare the federal environmental review under NEPA and 24 CFR Part 58, HUD Environmental Review Regulations, prior to use of federal funds.

Upon reviewing the attached Historic and Cultural Resources Evaluation, I concur with the description of the undertaking and the Area of Potential Effects. The undertaking will result in disturbance and removal of subsurface deposits of potentially important cultural resources during construction, which the City proposes to mitigate with Conditions of Approval that include archaeological monitoring, data recovery and post-discovery review protocols. Please contact me if you have any questions or need additional information. I can be reached at (510) 238-6879 or bmarvin@oaklandca.gov.

Thank you,

A handwritten signature in black ink that reads "Betty Marvin". The signature is written in a cursive, flowing style.

Betty Marvin
Historic Preservation Planner, for
William Gilchrist, Agency Official

Enclosure: Historic and Cultural Resources Evaluation, 7th and Campbell Project

Historic and Cultural Resources Evaluation for Section 106 Review 7th and Campbell Project

Prepared for the City of Oakland and 7th and Campbell, LP



November 2020



Lamphier-Gregory
1944 Embarcadero, Oakland CA 94606

Historic and Cultural Resources Evaluation for Section 106 Review 7th & Campbell Project

Table of Contents

<u>Background</u>	1
Regulatory Context	1
Oakland Cultural Heritage Survey/Historical and Architectural Rating System.....	2
<u>Undertaking/Project Description</u>	4
Project Location and Setting	4
Project Description	6
<u>Historic Resources</u>	10
Historic Resource APE	10
Description of Historic Properties and Historic Districts Represented within the APE	11
Potential Effects on Historic Resources	22
Recommended Determination	23
<u>Cultural/Archaeological Resources</u>	25
Cultural/Archaeological Resources APE	25
Mitigation	27
Recommended Determination	29
<u>Native American Tribes</u>	30

List of Tables

Table 1: Project’s Historic APE - Individual Properties	10
Table 2: 7th Street Commercial ASI - Individual OCHS Property Ratings	15

List of Figures

Figure 1 Project Location.....	7
Figure 2 Project Site	7
Figure 3 Project Site Plan	8
Figure 4 Project Elevation Along 7 th Street	8
Figure 5 Project Floor Plans	9
Figure 6 Historic and Cultural Resources Area of Potential Effect (APE)	16
Figure 7 Historic Buildings within the APE	17
Figure 8 Other Buildings within the APE	18
Figure 9 Historic Districts in the Vicinity	20
Figure 10 Other Buildings and Sites of the 7 th Street S-7 Combining Zone.....	21
Figure 11 Photo of Project Site frontage with overhead BART tracks	24
Figure 12 Photo showing elevated BART tracks and US Postal Service Building	24

Attachments

Attachment A: City of Oakland Cultural Heritage Survey, State of California Resources Agency - Department of Parks and Recreation Historic Resources Inventory Form (DPR 523 Primary Record), 7th Street West Oakland Commercial Area of Secondary Importance, 1987

Attachment B: PaleoWest Archaeology Cultural Resource Technical Report in Support of the 7th & Campbell Project, September 30, 2020

Attachment C: City of Oakland, Letter from Neil Gray, Planner IV, City of Oakland – to Elain Brown, West Oakland and the World Enterprises, Inc., July 21, 2020 - Approval of Minor Modification to the Original Design for the 7th and Campbell Mixed Use Project, with attached Conditions of Approval

Attachment D: City of Oakland, Tribal Notification Letter, June 15, 2020

Background

7th and Campbell, LP (the Project applicant) proposes to use federal funding sources from the U.S. Department of Housing and Urban Development (HUD) as administered by the City of Oakland to construct a mixed-use affordable housing project known as the 7th & Campbell project (the Project). To secure HUD release of funds for the Project, the City of Oakland, acting as Responsible Entity on behalf of HUD, must provide a suitable federal Environmental Review Record to HUD, prepared according to the requirements of the National Environmental Policy Act (NEPA) and HUD's own Environmental Regulations found in 24 CFR Part 58. The appropriate level of federal environmental review in this case is an Environmental Assessment leading to a Finding of No Significant Impact (FONSI). Both the Environmental Assessment and FONSI must be prepared for signature by the Certifying Officer for the City of Oakland.

To achieve a FONSI, HUD requires that the Environmental Assessment demonstrates that the Project complies with all applicable federal laws and regulations, including Section 106 of the National Historic Preservation Act. Regulations pertaining to Section 106 Review are found in 36 CFR Part 800.

As concluded in this Historic Resource Evaluation, there are no remaining historic buildings within the Project site. Historic properties are present in the vicinity, and cultural resources are present at the Project site, but will not be adversely affected by the Project.

Regulatory Context for Evaluation of Historical and Architectural Significance

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider the effects of their undertakings on historic properties. The Section 106 process seeks to accommodate historic preservation concerns with the needs of federal undertakings through consultation among the agency official and other interested parties. The goal of consultation is to identify historic properties potentially affected by the undertaking, assess the effects of the undertaking, and seek ways to avoid, minimize or mitigate any adverse effects on historic properties. To evaluate the significance of an historical resource, its integrity, and the ability of a property to convey that significance, a building is evaluated according to the National Register.

According to the Guidelines of the National Register Criteria for Evaluation,¹ the quality of significance in American history, architecture, archeology, engineering and culture is present in districts, sites, buildings, structures and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:

- that are associated with events that have made a significant contribution to the broad patterns of our history; or
- that are associated with the lives of persons significant in our past; or
- that embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

¹ National Park Service, *Guidance for National Register of Historic Places*, accessed at: <https://www.nps.gov/subjects/nationalregister/guidance.htm>

- that have yielded, or may be likely to yield information important in prehistory or history

Section 106 compliance requires the City of Oakland to obtain the views of the State Historic Preservation Officer (SHPO) as to whether any of the Project activities could have an adverse effect on the setting or character-defining features of any historically significant property in the Area of Potential Effects (APE). A historically significant property is one that would be eligible for listing on the National Register of Historic Places, whether it is currently listed or not.

Oakland Cultural Heritage Survey/Historical and Architectural Rating System

To better understand the description of historic resources as presented in subsequent sections of this report, the following provides a brief explanation of the City of Oakland’s Cultural Heritage Survey.²

Individual Property Ratings

The OCHS rating system, as adopted in the Oakland General Plan’s Historic Preservation Element, is shorthand for the relative historic importance of properties. The system uses letters A to E to rate individual properties. Individual properties can have dual ratings, with the first rating for "existing", and a second "contingency" (or potential rating under certain condition, such as "if restored", or "when older", or "with more information"). In general, A and B ratings indicate Oakland Landmarks and California/National Register-eligible buildings. C ratings and certain D ratings are considered of local interest and are classified as “Potential Designated Historic Properties” (or PDHPs). The rating system is summarized below.

- *A - Highest Importance:* Outstanding architectural example or extreme historical importance (about 150 properties in all of Oakland)
- *B: Major Importance:* Especially fine architectural example, major historical importance (about 600 properties in Oakland)
- *C: Secondary Importance:* Superior or visually important example, or very early (pre-1906). Cs "warrant limited recognition" (about 10,000 properties in Oakland)
- *D: Minor Importance:* Representative example (about 10,000 D-rated buildings are PDHPs, either because they have a higher contingency rating (e.g., "Dc") or because they are in districts (e.g., "D2+"))
- *E:* Of no particular interest
- ** or F:* Less than 45 years old or modernized. Some Es, Fs, and *s are also PDHPs because they have higher contingency ratings or are in districts.
- *X:* Used as a shorthand during the OCHS Survey for “Not a PDHP”, such as “D3” (minor Importance or representative example, not in a District), or “*/F” (too recent to rate).

District Rating System

The OCHS rating system also provides a rating of the relative historic importance of districts. The system uses numbers 1 to 3 to rate individual districts. The district rating system is summarized below.

² Derived from City of Oakland *Historic Preservation Element*, as amended 1998

- "1": In an Area of Primary Importance (API) or National Register-quality (or eligible) district
- "2": In an Area of Secondary Importance (ASI) or district of local interest
- "3": Not in a historic district

Areas of Primary Importance (APIs) are historically or visually cohesive areas, or property groups which usually contain a high proportion of individual properties with ratings of "C" or higher, and appear eligible for the National Register of Historic Places either as a district or as a historically-related complex. At least two-thirds of the properties in an API must be "contributors" to the API (i.e. they reflect the API's principal historical or architectural themes and have not had their character changed by major alterations). Properties which do not contribute to an API because of alterations, but which could contribute if the alterations are at least partly reversed, are "potential contributors" to the API. Properties which do not reflect the API themes are "noncontributors."

Areas of Secondary Importance (ASIs) are similar to APIs, except ASIs do not appear eligible for the National Register.

For properties in districts, the symbol "+" indicates contributors, "-" indicates non-contributors, and "*" indicates potential contributors.

Undertaking/Project Description

7th & Campbell Project, 1662 through 1676 7th Street, Oakland, Alameda County, California (Assessor Parcel Numbers 006-0017-17, -018, -019, -020, -021, -022)

Project Location and Setting

The Project site is located in the Prescott neighborhood of West Oakland, in area of West Oakland generally referred to as the Lower Bottoms, reflective of the area's high poverty and crime rate. Despite the overall depressed status of much of the surrounding area, housing costs are rising and making home ownership and rental of decent housing effectively prohibitive for the majority of people in the area, especially the poorest, black populations.

The Project site is located within an urbanized area, and surrounding land uses include large institutional uses, commercial uses, mixed-use residential/commercial development, and single-family and multi-family residential uses. To the north of the Project site is the Campbell Village Court public housing project, running from 8th to 10th Streets and between Campbell and Willow Streets. To the immediate west of the Project site is Slim Jenkins Court, a 32-unit, mostly-subsidized affordable apartment complex. To the south of the Project site and within the 7th Street right-of-way are the elevated BART tracks, which lead to the West Oakland BART Station approximately 2 blocks to the southeast. On the opposite side of 7th Street is the Oakland Main US Postal Service Building, a massive structure with parking and loading docks on the sides and rear for mail distribution and delivery vehicles. To the immediate east is an older commercial block with a mix of occupied and unoccupied building and vacant properties (see further discussion of the 7th Street Commercial ASI, below). Much of the other more recently-constructed housing developments in the general area, particularly further to the west along Wood Street, are predominantly market-rate rental apartments, beyond the reach of the majority of long-term area residents.

The entirety of West Oakland is designated as a Priority Development Area for needed housing production pursuant to the City of Oakland Housing Element.³ The City of Oakland's West Oakland Specific Plan identifies the Project site as part of the 7th Street Opportunity Area (see **Figure 1**). The West Oakland Specific Plan's land use vision for the 7th Street Opportunity Area generally seeks to capitalize on the presence of the BART station and the desire for increased neighborhood-serving commercial activities, and to support development that integrates the history of West Oakland's storied 7th Street corridor. The Project site is planned, zoned and anticipated for new development.

Project Site

The Project site is a flat, vacant lot that was previously developed but had been blighted for more than 30 years, prior to an agreement between the City of Oakland and Oakland & the World Enterprises to develop an affordable housing and mixed-use commercial project. At present, the Project site is in temporary use as a productive urban farm called West Oakland Farms (see **Figure 2**), operated by Oakland and the World Enterprises as a non-profit community benefit organization, selling organic produce to area restaurants. The site includes three portable buildings associated with the urban farm use that would be removed, and the urban farm would be relocated as part of the Project's construction.

³ City of Oakland, Housing Element, 2015–2023, December 2014

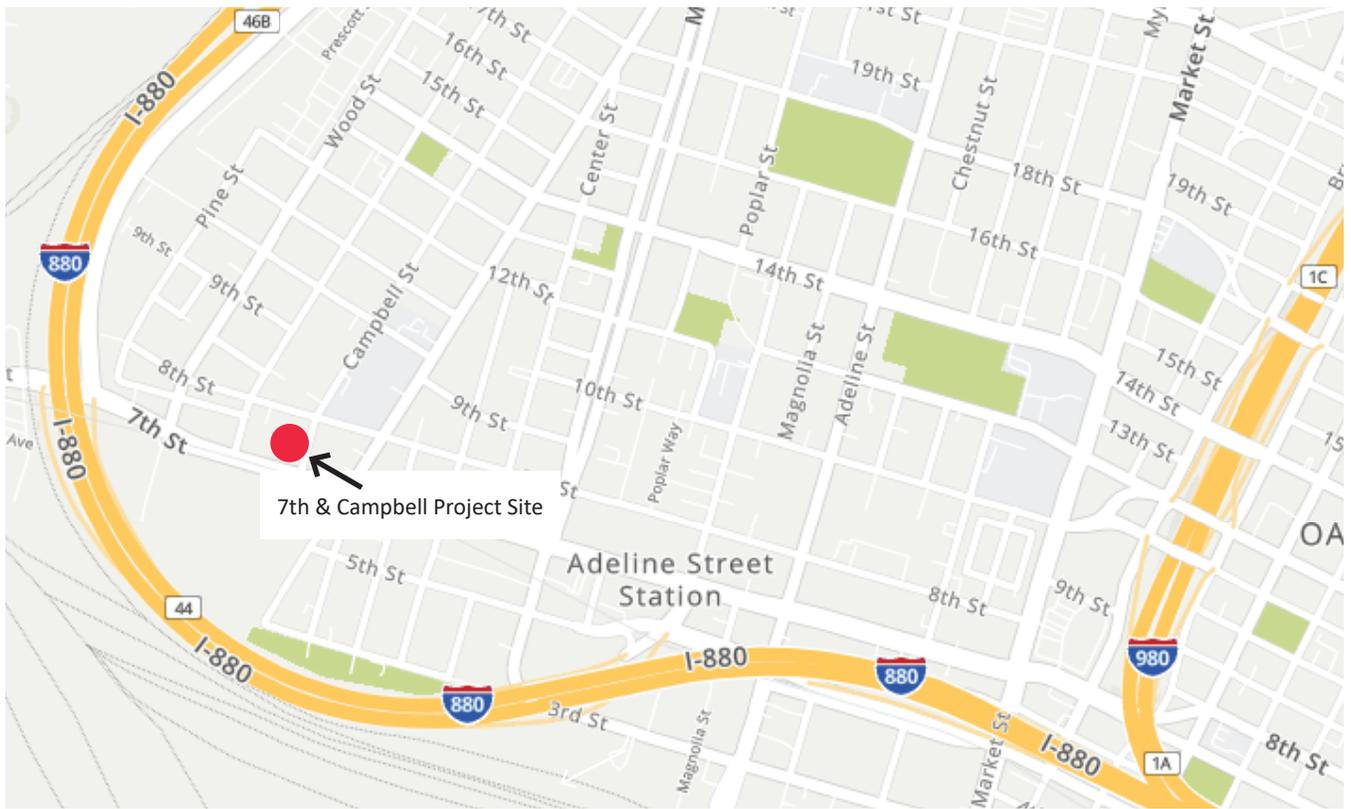


Figure 1 - Project Location



Figure 2 - Project Site

Figures 1 and 2 - Project Location and Project Site

The Project site is located within an urbanized area with immediate access to infrastructure and City services. The single greatest asset for development of this site is its proximity to the West Oakland BART station, the hub of the entire BART network, which is located less than two blocks from the Project site. The Project's site characteristics and location provide few, if any impediments to new development.

Project Description

7th and Campbell, LP (Project applicant) proposes to construct a 5-story mixed-use development on this 31,114 square-foot (0.71-acre) site at the corner of 7th Street and Campbell Street in Oakland, California (see Figures 3, 4 and 5). Redevelopment of this site with new affordable housing removes a formerly blighted property with needed complimentary, quality affordable housing. The Project is specifically targeted to provide permanent supportive housing for people returning to society from being incarcerated, a chronically homeless population that would specifically benefit from needed housing.

The Project is designed as a mixed-use living, working and shopping environment. The Project would include 16,750 square feet of commercial space on the first floor, containing a gym, a grocery, a restaurant and incubator business space – all providing for on-site job training. The ground floor of the Project also incorporates office space for three service businesses supporting the affordable housing units: a BART and neighborhood shuttle service, building maintenance, and security. The Project includes a total of 79 affordable residential units to be made available to low- and very-low income households. The Project's housing units would be in the second through fifth floors, and would include 23 studio units, 24 one-bedroom units and 32 two-bedroom units. The Project would also include approximately 9,425 square feet of open space (425 square feet would be private decks, and 9,000 square feet would be common open area). The building would be four floors of mid-rise wood-frame structure over one floor of concrete podium, and the total building footprint would be 27,342 square feet. The Project would include space on the podium-level deck for the continuation of the current West Oakland Farm operations that currently occupy the site, and an additional 1,000 square feet for associated storage. The Project also includes other associated improvements such as hardscape, landscaping along 7th and Campbell streets, and storm drain and utility connections.

Implementing the proposed Project would result in redevelopment of this site with 79 affordable housing units, helping the City of Oakland to meet a portion of its Regional Housing Needs Allocation.

Status of Local City of Oakland Approvals

In March of 2016, the Project applicant applied to the City of Oakland for Design Review approval for a 6-story, 112,200 square-foot mixed residential-commercial building on the site. That project included a total of 79 residential units (all dedicated as affordable housing, primarily intended to house formerly incarcerated persons), 19,400 square feet of commercial and amenity space, and a total of 48 parking spaces in a two-story podium parking garage. That application also included a minor Conditional Use Permit (CUP) to allow specified workshop activities; and a minor zoning variance (as affordable housing waivers or concessions) for building height, reliance on rooftop open space as a proportion of required open space, and reduction in parking.

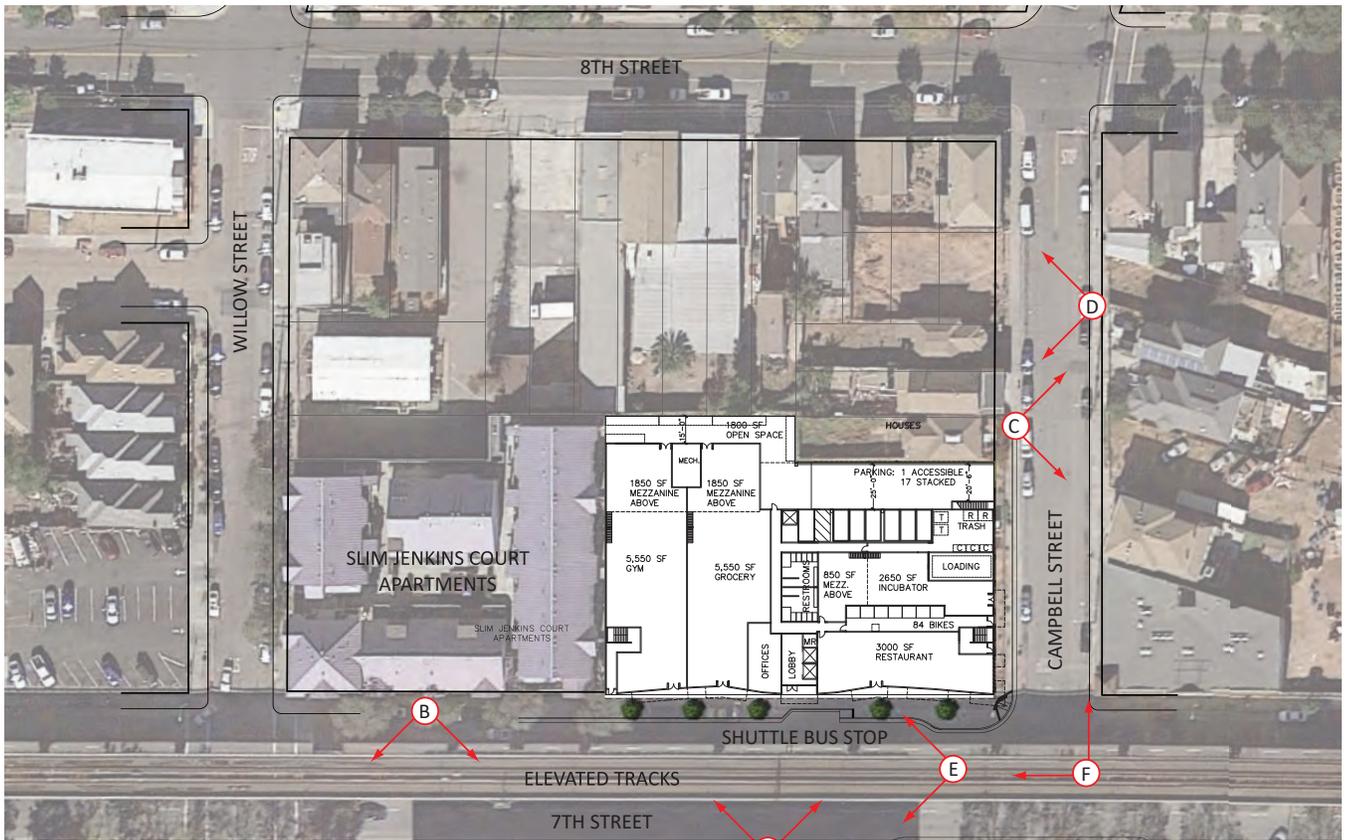
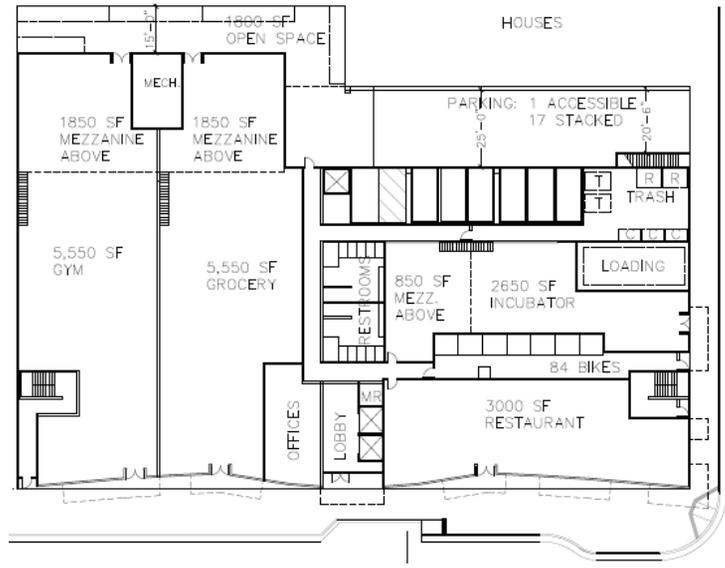


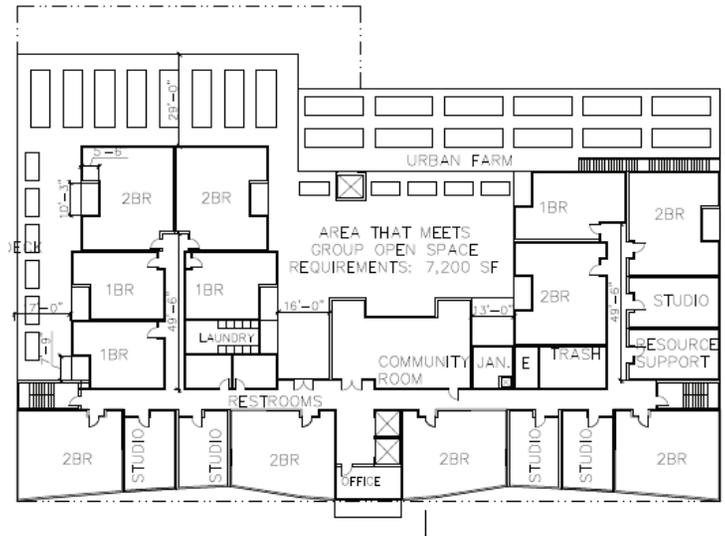
Figure 3 - Project Site Plan, Source: MWA Architects, June 2020



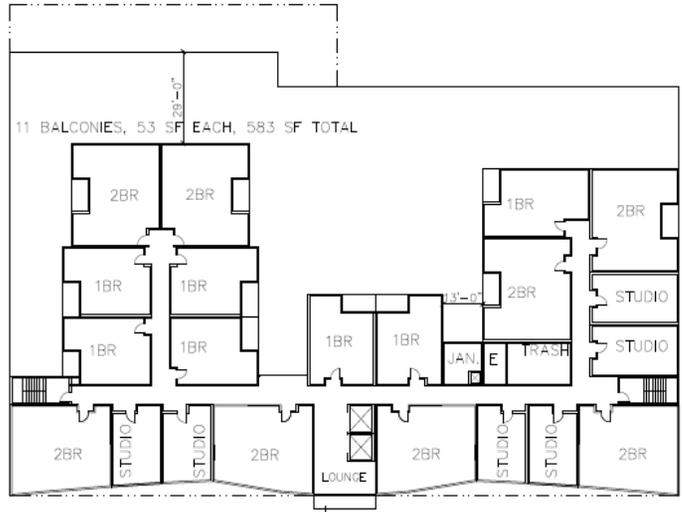
Figure 4 - Project Elevation along 7th Street, Source: MWA Architects, June 2020



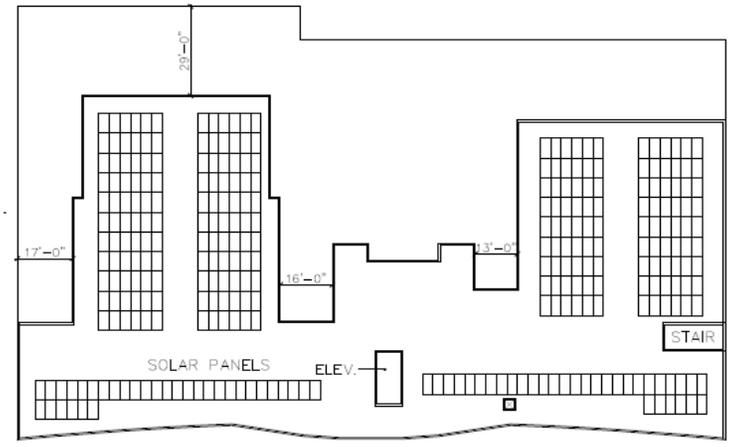
Ground Floor



Second Floor



Floors 3 through 5



Roof Plan

Figure 5 - Project Floor Plans, Source: MWA Architects, June 2020

The City of Oakland conducted environmental review of this proposed project pursuant to the California Environmental Quality Act (CEQA), including preparation of a CEQA Checklist. The analysis concluded that the Project site was a vacant property and did not contain any historic buildings or other historic resources pursuant to the City's definition, and as used in the West Oakland Specific Plan EIR (i.e., it does not contain any surviving early commercial buildings). The Project site is located across Campbell Street from the 7th Street S-7 Preservation Combining Zone and immediately across the street from the surviving Mission Revival-style Arcadia Hotel. Development of the Project was not found to have any material effect on any aspect of this historic building or the small S-7 historic district that would materially impair any of the character-defining elements of this historic district or the adjoining Arcadia Hotel.

Design Review of that project was approved, along with a minor CUP and affordable housing waivers or concessions. In May of 2017, the City of Oakland entered into a Lease Disposition and Development Agreement (LDDA) with the applicant for the long-term ground lease of the property at 7th Street and Campbell Street for development as a mixed-use affordable housing development.

In June of 2020, the applicant proposed revisions to the previously approved project design. This revised Project (the subject of current NEPA review) now intends to construct a five-story building instead of a six story building by substantially reducing parking, to construct the parking podium at 10 feet from the rear property line (instead of the required 15 feet), and to change the window patterns on the facades of the building. This revised Project was approved by the Zoning Manager in July 2020 as a minor modification to the original design, with the rear setback reduction as an additional waiver under the California State Density Bonus Law. The revised Project was approved subject to the original Conditions of Approval.⁴

⁴ City of Oakland, Letter from Neil Gray, Planner IV, City of Oakland – to Elain Brown, West Oakland and the World Enterprises, Inc., July 21, 2020 - Approval of Minor Modification to the Original Design for the 7th and Campbell Mixed Use Project

Historic Resources

Historic Resource APE

The Area of Potential Effects (APE) for historic resources includes the Project site’s six parcels, and 11 additional properties that are either adjacent to the Project site or immediately across Campbell Street (see **Figure 6**). The property immediately across 7th Street from the Project site is not included in the APE because it is physically separated by the intervening BART tracks, and because it is the Main Oakland US Post Office building and its surrounding parking lot and is not considered a historic resource.

Table 1: Project’s Historic APE - Individual Properties

<u>APN #</u>	<u>Address</u>	<u>Historic Status</u>	<u>Date of Construction</u>	<u>OCHS Rating</u>
6-3-21	1632 7 th Street	S-7 Preservation Zone / 7 th St. Commercial ASI	1906-07	Db-/2+
6-3-22	712 Campbell	PDHP	1872-73	C/3
6-3-23	718 Campbell	-	vacant	-
6-3-24	724 Campbell	Heritage Property	1875-76	Ec/3
6-3-25	728 Campbell	PDHP	1876-77	C/3
6-17-16	723 Campbell	PDHP	1875-76	Dc/3
6-17-15	729 Campbell	PDHP	1878	Dc/3
6-17-10	1671 8 th Street	PDHP	1904-06	Dc/3
6-17-9	1677 8 th Street	-	1949	*/3
6-17-7/8	1681 8 th Street	former Landmark	vacant	former Ca/3
16-17-261	7320 Willow St.	7th St. Commercial ASI	1991 -redev.	former */2-
Project:	1676 7 th Street	7 th Street Commercial ASI	vacant	former Dc/2
	1674 7 th Street	7 th Street Commercial ASI	vacant	former Cb/2
	1664 7 th Street	7 th Street Commercial ASI	vacant	former Dc/2

OCHS Rating Key:

Capital letter: Existing Rating – Properties receiving an Existing rating of A, or potentially B are considered eligible for the National Register

Lowercase letter = potential rating, if rehabilitated

/Number = District rating (1= Contributor to a National Register-quality (or eligible) district; 2= Contributor to a locally important district (ASI), 3= Not in a district)

Source: City of Oakland, Planning and Zoning Map, accessed November 2020



Figure 6 - Historic Area of Potential Effect (APE) for the Project, and Project Site

As indicated in Table 1, the properties included within the Project's APE represent historic resources or potential historic resources of several different types. The APE includes two properties that are considered historic resources by the City of Oakland (see **Figure 7**):

- 1 property that is a contributor to a City-designated historic district (S-7 Preservation Zone) at 1632 7th Street
- 1 individually important City of Oakland Heritage Property at 724 Campbell Street

The APE also includes several properties that are considered of local interest but not designated historic properties and not considered National register-eligible historic resources (see **Figure 8**), including:

- 2 properties plus the Project site that are within the 7th Street Commercial Area of Secondary Importance (7320 Willow Street, 1632 7th Street, and the 6 parcels that comprise the Project site), and
- 5 properties that are individually identified as Potentially Designated Historic Properties (712, 728, 723, and 729 Campbell Street, and 1671 8th Street)

The 1989 Loma Prieta earthquake destroyed a number of buildings that were formerly located within the APE on the 1600 blocks of 7th and 8th Street, including the buildings that were previously located on the Project site (now vacant), buildings on the immediately adjacent property at 7320 Willow Street (now redeveloped as Slim Jenkins Court), and a former City of Oakland Landmark (the Oakland Point Fire House – now vacant) that used to occupy 1681 8th Street.

Description of Historic Properties and Historic Districts Represented within the APE

S-7 Preservation Combining Zone

The S-7 Preservation Combining Zone is one of the City's historic preservation zoning districts. Areas eligible for S-7 designation are those having "special importance due to historical association, basic architectural merit, or the embodiment of a style or special type of construction or other special character, interest or value." The S-7 zoning designation is comparable to individual City Landmark status. Like City Landmarks, S-7 zoning designation is by City Council ordinance upon recommendation by the Landmarks Preservation Advisory Board and City Planning Commission. Though not formally required by the Planning Code, these designations do not occur without owner consent and participation, so for all practical purposes, Landmark and S-7 designations take place only when a property owner undertakes a nomination.



Arcadia Hotel at 1632-42 7th Street (APN # 6-3-21) - Contributor to the 7th Street S-7 Preservation Zone and 7th Street Commercial ASI



right: 724 Campbell Street (APN # 6-3-24) - Heritage Property, and left: 728 Campbell Street (not in APE)

Figure 7 - Historic Buildings within the APE



left: vacant lot (APN#16-3-23) and right: 712 Campbell Street (APN #6-3-22) - PDHP



left: 723 Campbell Street (APN #6-17-16) - PDHP and right: 729 Campbell Street (APN #6-17-15) - PDHP



left: 1665 8th Street (APN #6-17-11) - not in APE, and right: 1671 8th Street (APN #6-17-10) - PDHP



left: 1677 8th Street (APN #6-17-9) and right: vacant lot at 1681 8th Street (APN #6-17-7/8) - former Landmark Oakland Point Fire House

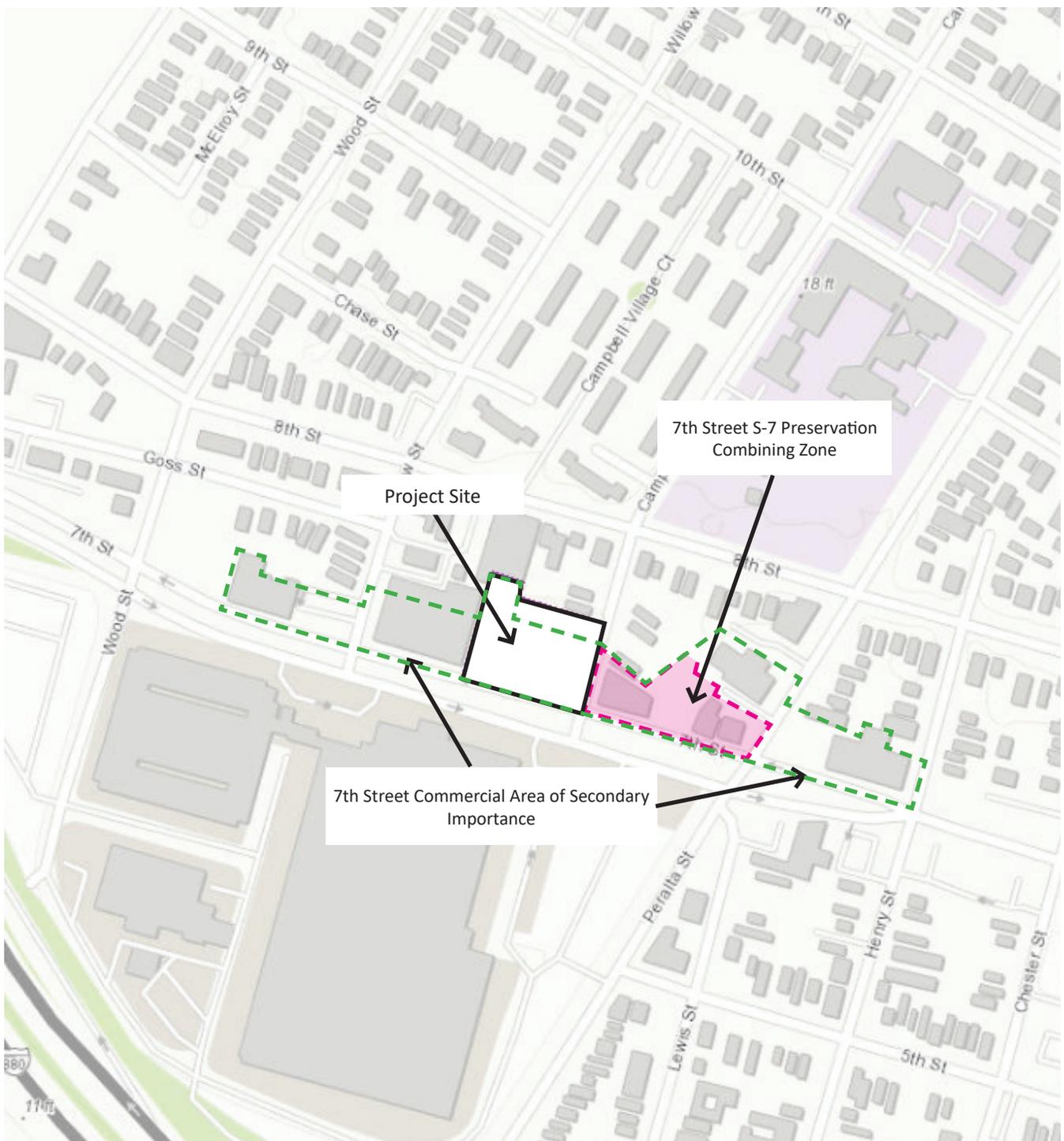
Figure 8 - Other Buildings within the APE



7320 Willow Street (APN #16-17-261) - now Slim Jenkins Court

The small S-7 Preservation Zone on 7th Street consists of three parcels on the north side of 7th Street, from Peralta Street on the east to Campbell Street on the west (see **Figure 9**). This small, 1-block district was nominated as the best surviving fragment of historic 7th Street, West Oakland's legendary commercial street of the 19th and early 20th centuries. The histories of these properties embody the important themes of 7th Street – railroad-related businesses and lodgings, entertainment, and the ethnic and economic evolution of the neighborhood. As an S-7 Preservation District, this district is on the City of Oakland's Local Register of Historical Resources, as are each of its individual contributors:

- *Arcadia Hotel – Isaacs & Schwartz Block (1632-1642 7th Street)*: The Arcadia Hotel (located within the Project APE) was built in 1906-07, and is a two-story wood frame, 26-room hotel with ground-floor storefronts along the 7th Street façade (see prior Figure 7). It is Mission Revival in style, with tiled pent roofs on closely spaced brackets, shaped parapets, and two overhanging rectangular bays, a shallow center one and a square corner tower. Exterior walls are stucco, with stucco quoins and crests on the bays, and three-dimensional window trim. In 1987, the Hotel had an OCHS rating of “Db+/A”, indicating that it was considered a representative example of minor Importance, but of major historical importance if restored, and an anchor of the historic district. It remains a contributor to the S-7 Zone and therefore on the Local Register.
- *Site of the Lincoln Theater (1620-1628 7th Street)*: This currently vacant lot was the site of the Lincoln Theater (see **Figure 10**). Built in 1919, the theater had a unique Arts and Crafts façade, and inside was a stage that offered live shows as well as films. This neighborhood theater was an anchor of the commercial district and a social and entertainment center for the West Oakland African-American community, as well as a visual landmark. The Lincoln Theater was one of the many theaters that closed in the late 1950s. In 1961 it became the Damascus Missionary Baptist Church, by 1970 it was vacant, and later suffered neglect, earthquake and fire damage. The roof and sides collapsed in early 2003, and the façade was demolished as a hazard. In 1987, the Theater had an OCHS rating of “Cb+/C”, indicating that it was a visually important building of secondary importance, but of major historical importance if restored, and a contributor to the historic district. Although this building is no longer in existence, its site is still part of the historic significance of the block.
- *Flynn Saloon – McAllister Plumbing (1600-1616 7th Street)*: The Flynn Saloon/McAllister plumbing shop building is a joined pair of two-story late 19th century wood frame commercial buildings, with one-story additions between, behind, and to the west (see also Figure 10). The earliest part of this building, at the eastern corner of this block, was built in 1885-86. It opened as a saloon and was later occupied by a plumbing shop. It has tall wood-sash windows with segmental-arched tops grouped in twos and threes, ground-floor storefronts, and a wide flat molded cornice with a wide plain frieze at the top of the parapet. The two-story section to the west, a few years newer, is generally similar to the corner section. The one-story sections, fairly basic early 20th century commercial vernacular structures, were built after 1902. All the storefronts have been altered over the years, but generally retain at least the outlines of transoms and recessed entries. The building had an OCHS rating of “Ec/N” in 1987, indicating that it was heavily altered and not a contributor to the District, but could be a C-rated building and a contributor if restored. At this time (now 33 years later) this building is considered a contributor to the S-7 district and on the Local Register, particularly as reflecting the cultural importance of 7th Street.



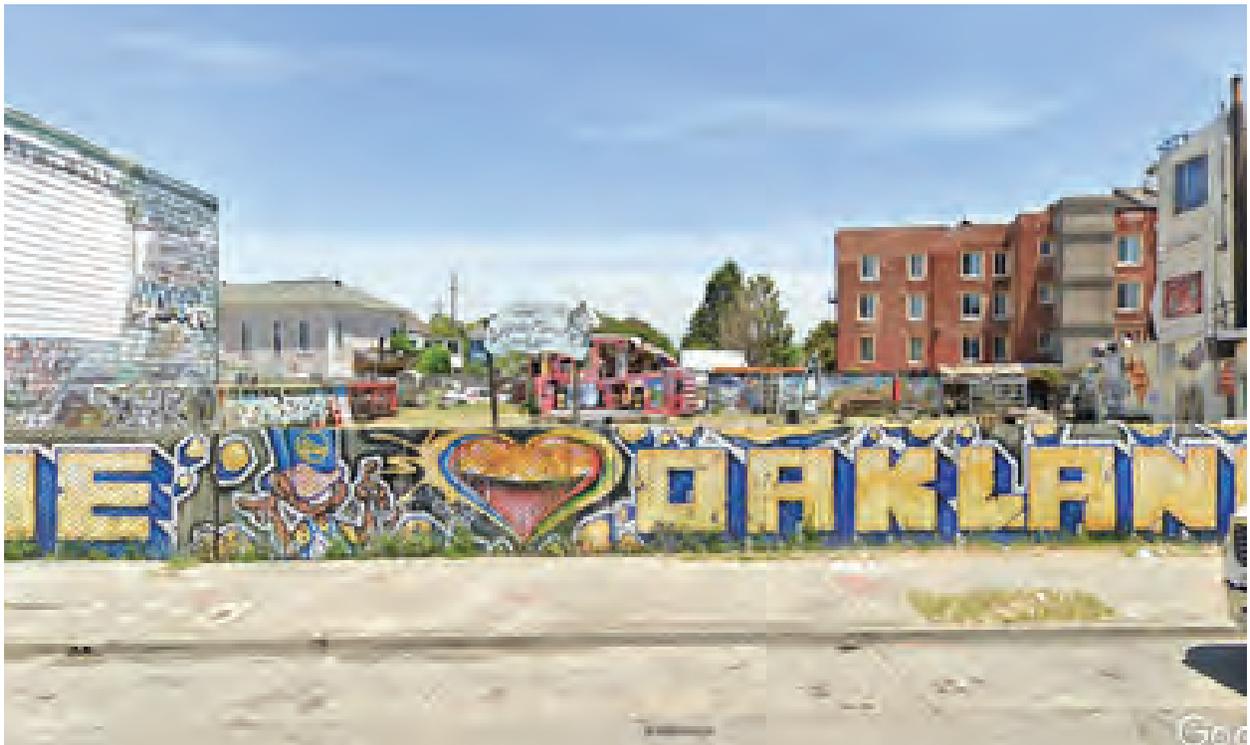
- S-7 Preservation Combining Zone
- Area of Secondary Importance (ASI)

Source: City of Oakland, West Oakland Specific Plan EIR, Figure 4.3-1

Figure 9 - Historic Districts in the Vicinity



Flynn Saloon – McAllister Plumbing, 1600-1616 7th Street



Former Site of the Lincoln Theater, 1620-28 7th Street

Figure 10 - Other Buildings and Sites of the 7th Street S-7 Combining Zone

When the 7th Street S-7 Preservation Combining Zone was designated, the Landmarks Board and Planning Commission urged expansion of the S-7 Zone to include other remaining early commercial buildings along 7th Street, but those other owners did not respond, consent or participate, and so were not designated. Despite the lack of official designation, much of the rest of the north side of 7th Street in the vicinity of Project APE contains buildings of similar local historic character and importance.

724 Campbell

The building at 724 Campbell (which is three parcels north the Arcadia Hotel and across Campbell Street from the Project site) is a remarkably well-restored locally designated Heritage property that fronts onto Campbell Street. It is not located within the 7th Street S-7 Preservation Zone, and is therefore not a contributor to that district.

7th Street Commercial Area of Secondary Importance

The 7th Street ASI is a locally important historic district, but is not considered to be a National Register-quality, or eligible district (see prior Figure 9). The following description of the 7th Street ASI is derived from the 1987 Oakland Cultural Heritage Survey (OCHS) form, prepared for the State of California Department of Parks and Recreation Inventory of Historic Resources for the 7th Street Commercial ASI, which includes properties at 1550 through 1722 7th Street, and 713 Peralta Street:

“The north side of 7th Street from Henry to Wood Street is a four-block long, one-sided fragment of West Oakland's main commercial street of the 1860s to 1960s. The south side of the street from Cypress to Cedar is occupied by two huge public buildings from the late 1960s-early 1970s, the West Oakland Bay Area Rapid Transit (BART) station and the Oakland Main Post Office, and their extensive parking lots. Elevated BART tracks run along the middle of 7th Street. The majority of commercial buildings on the north side of 7th Street are mostly vacant, boarded up, and gradually decreasing in number. A cluster of building from Henry to Wood, consisting of 16 buildings on 7th Street and one on Peralta Street that is visually connected, is still recognizable as a neighborhood commercial strip. It is a nearly continuous row of one- and two-story frame and brick buildings with no setback, transomed storefronts, flats upstairs, projecting cornices, and classical or Spanish or Victorian detailing. Their construction dates range from 1877 to 1940. Most are altered to some degree - some radically, but the Main Street character remains. Half of the buildings are considered so altered that they would not contribute to a National Register district unless restored.

Prominent buildings are the boxy two-story stores and flats at 1550-56 and 1600-1608 7th Street, which are heavily altered and non-descript in character, but anchor the southeast corners of their blocks. These buildings include the well preserved two-story dark red brick Lekos Bros. Market (1921) at 1674 7th Street [*now removed*]. . . ; the Lincoln Theatre and its attached storefront at 1620-1624 7th Street [*now removed*]. . . ; and the Mission Revival Arcadia Hotel at 1632-1642 7th Street [*still remaining*]. Two, two-story Victorian buildings at 1682-1684 [*now removed*] and 1716-1718 7th Street retain much of their period character. West of 1716-1718 7th Street, the last buildings in the group are also from the 19th century, but totally remodeled in the 1940s and 60s . . . The period strip ends with these buildings . . .”

The following description of historic significance of the 7th Street Commercial ASI is also derived from the 1987 Oakland Cultural Heritage Survey (OCHS) form;

“This group of 17 buildings, from 1550 to 1722 7th Street, plus 713 Peralta Street, is considered an Area of Secondary Importance (of local visual and historical significance) by the Oakland Cultural Heritage Survey, although neither the area as a whole nor the individual buildings appear to meet National Register standards of integrity. These four one-sided blocks are the surviving fragment of the 7th Street commercial district, West Oakland's main business street from the 1860s to the 1960s. This was the commercial strip associated with the [separate] National Register-eligible Oakland Point Prescott residential district [an Oakland-designated Area of Primary Importance, or API, as shown on prior Figure 9]. Enough period storefronts and architectural features survive to indicate visually what the area once was, with individual buildings that are historically significant, such as the Lincoln Theatre [*now removed*], West Oakland Free Reading Room, Alcatraz Masonic Hall, and the International Brotherhood of Sleeping Car Porters headquarters. The buildings in this fragment date from about 1885 through 1940 and were mainly neighborhood-oriented businesses. The earliest, more railroad-oriented section of the strip visible from Wood Street west to the water . . . has almost entirely vanished.”

As shown in **Table 2**, neither the 7th Street Commercial ASI as a whole, nor any of the individual buildings that comprise the ASI (with the potential exception of the Brotherhood of Sleeping Car Porters headquarters at 1716 7th Street, see description, below) appear to meet National Register standards of integrity (i.e., are remaining as A or B-rated buildings).

Table 2: 7th Street Commercial ASI - Individual OCHS Property Ratings

<u>Address</u>	<u>Historic Name</u>	<u>Date of Construction</u>	<u>Historic Status / OCHS Rating</u>
713 Peralta	Alcatraz Masonic Hall	1899, remod.1943	Ec/N
vacant			
1550 7 th Street	Gardiner Confectionery, Bank Buffet	1878, add. 1889	Dd/N
1558 7 th Street	Wolf furniture warehouse	1940	Ed/N
1568 7 th Street	Tait-Dearing office and residence	1907-08, inc. 1878	Cc/C
1570 7 th Street	Siendentopf paint shop – Aboumrad dry goods	1920, inc. 1878	Dd/C
1600 7 th Street	Flynn Saloon- McAllister Plumbing	1885, add. 1890	Ec/N
1620 7 th Street	Lincoln Theater (site of)	1919	Cb+/C (now removed)
1632 7 th Street	Arcadia Hotel	1906-07	Db-/A
vacant			
1666 7 th Street	Fakoury Dry Goods Store	1913	Ed/N (now removed)
1674 7 th Street	Lekos Bros. Market	1921	Cb-/A (now removed)
1676 7 th Street	unknown	1924	Dd/C (now removed)
1687 7 th Street	unknown	1928	Dd/C (now removed)
1684 7 th Street	Bullock Plumbing / West Oakland Reading Room	1889-90	B-b+/A (now removed)
1692 7 th Street	unknown	1915, inc. 1877	Ed/N (now removed)
vacant			
1716 7 th Street	International Brotherhood of Sleeping Car Porters	1889-90	B-b+/C
1720 7 th Street	Smith photo studio	1889, rem. 1928	Ec/N
1722 7 th Street	Unknown, later Villa restaurant/ Esther's Orbit Room	1870s, rem. 1944-64	Ed/N

Potential Effects on Historic Resources

Secretary of the Interior's Standards

The Secretary of the Interior's Standards for the Treatment of Historic Properties (Standards) provide guidance for reviewing projects that may affect historic resources.⁵ The intent of the Standards is to assist the long-term preservation of a property's significance through the preservation, rehabilitation and maintenance of historic materials and features. The Standards pertain to historic buildings of all materials, construction types, sizes and occupancy, and encompass the exterior and interior of the buildings. The Standards also encompass related landscape features and the building's site and environment. The Standards encourage maintaining the integrity of a historic district through appropriate design of infill buildings at vacant sites, or sites where new buildings replace non-contributing buildings. Standards for Rehabilitation expand the discussion to sites and neighborhoods. As written in the Rehabilitation Standards, there is a distinction, but not a fundamental difference, between the concerns for additions to historic buildings and new construction, or "infill" adjacent to historic buildings on a property or within a district.

New construction that is adjacent to or related to an existing historic resource (including an historic district) is best addressed in Standard 9 of the Secretary of the Interior's Standards for Rehabilitation. Standard 9 states, "*New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.*"⁶

Project Effects

The Project proposes new construction of a five-story mixed-use commercial and residential building within the 7th Street Commercial ASI – an Area of Secondary Importance, on a currently vacant lot that is temporarily being used as an urban farm.

Direct Effects

Development of the Project will not directly destroy any historic materials or features that characterize the adjoining 7th Street S-7 Preservation Combining Zone, the Heritage property at 724 Campbell, the locally important 7th Street Commercial ASI, or any other nearby historic resources. No direct modifications to any historic buildings would occur, and no destruction of existing spatial relationships associated with buildings within the historic districts represented within the APE would occur.

Indirect Effects

The Project will alter the setting and spatial relationships between the Project site and the adjacent 7th Street Commercial S-7 Preservation Combining Zone by inserting a new building on a currently vacant parcel. In order for this alteration to be considered a substantial adverse change, the integrity and/or significance of the 7th Street S-7 Preservation Combining Zone would need to be materially impaired by

⁵ National Park Service, The Secretary of the Interior's Standards for the Treatment of Historic Properties, accessed at: <https://www.nps.gov/tps/standards.htm>

⁶ National Park Service, *Secretary of the Interior's Standards for Rehabilitation*, accessed at: <https://www.nps.gov/tps/standards/rehabilitation/rehab/stand.htm>

the Project. The Project is not located within the S-7 Combining Zone (is separated by Campbell Street) and therefore would not materially alter the integrity or significance of that small district. The 7th Street Commercial S-7 Preservation Combining Zone will continue to convey its historic significance after the Project is constructed, and the remaining historic setting and integrity of this small district will not be jeopardized by the Project.

The Project will not materially impair the integrity of setting or spatial relationship within the 7th Street Commercial ASI. This locally important historic district is already substantially fragmented. Even before the 1987 designation of this ASI, there were several vacant properties that had previously contained historic buildings, and since 1987 seven of the remaining 18 buildings that comprised this historic district have now been removed. These previously removed buildings specifically included those in the 1600 block of 7th Street, including former buildings within and immediately adjacent to the Project site. The 7th Street Commercial ASI will continue to convey its remaining historic significance after the Project is constructed. The two clusters of early buildings at the east and west ends of the ASI will remain intact, and their remaining historic setting and integrity will not be jeopardized by the Project.

The Project will be substantially taller (at 5 stories) as compared to the predominantly 2-story buildings within the adjacent APE, and will also have a proportionally larger building mass fronting along 7th Street and Campbell Street. However, the Project will include a continuation of the historic ground-floor commercial pattern of land use along 7th Street, and Campbell Street will continue to provide a spatial buffer between the 7th Street Commercial S-7 historic district and the Heritage building at 724 Campbell, and new construction associated with the Project. The height and mass of the new building could have the potential to block or alter certain views and sightlines to and from the historic buildings and districts in the APE, but the majority of views and sightlines to and from the APE are already substantially altered by the overhead BART tracks, the Main US Postal Service building directly across 7th Street, and the BART station itself (see **Figures 11 and 12**). The Project's modern architectural style and materials will be differentiated from the architectural style and building materials of the remaining early buildings within the APE, but the Project would not pose an inherent incompatibility with the historic materials, features, size, scale and proportional massing that would jeopardize the remaining integrity of buildings and districts represented in the APE.

Recommended Determination

For purposes of Section 106 Review of this undertaking, Lamphier Gregory recommends that the Agency Official for HUD (City of Oakland) concur with the Area of Potential Effect for historic resources, and determine that no historic properties will be adversely affected by the undertaking.



Figure 11 - Photo of Project Site frontage with overhead BART tracks along 7th Street



Figure 12 - Photo across Project Site, showing elevated BART tracks and 7th Street US Postal Service Building

Figures 11 and 12 - Views of Project Site with BART Tracks and Post Office in Background

Cultural Archaeological Resources

A Cultural Resources Technical Report (CRTR) was prepared for the subject property by PaleoWest Archaeology (September 30, 2020), attached as **Appendix B**. This report summarizes the methods and results of the cultural resource investigation of the Project site. This investigation included background research, communication with the Native American Heritage Commission (NAHC) and interested Native American tribal groups, a field study, and management recommendations. The purpose of the investigation was to determine, in accordance with Section 106, the potential impacts to cultural resources. The major points and recommendations of this report are summarized below.

Cultural/Archaeological Resources APE

The APE for archeological resources is the Project site footprint, i.e. the Project site's six parcels (see prior Figure 6).

Brief History of the Project Site

The 1889 Sanborn Fire Insurance map for Oakland show three dwellings and associated outbuildings, a restaurant, a religious hall, a store, and a blacksmith shop as being located within the Project site.⁷ Two of the dwellings listed at 861 and 863 Campbell Street were single-story, wood framed houses with outbuildings, and the third dwelling at 1662 7th Street was a two-story wood frame building with bay window and a one-story attachment in the rear. Businesses located within the Project site in 1889 included a blacksmith shop at 1666 7th Street with two stables in the rear yard; a two-story "fancy goods" and candies store at 1658-1660 7th Street with residence on second floor; a diner with residence on the second floor located at 1652 7th Street at the intersection with Campbell Street; and a Gospel Hall at 1654-1656 7th Street - a two-story structure with residence on the second floor. The "fancy goods" store, Gospel Hall and diner, along with outhouses and a two-story stable or carriage house, were a contiguous structure called the Graffelman Block.

By 1902, Sanborn maps indicates that two new dwellings had been constructed within the Project site. The first was a small one-story dwelling attached to a large shed at 1676 7th Street, and the second was a one-story frame dwelling at 1668 7th Street. The diner was relocated, the former diner building was divided to include new businesses, the former Gospel Hall had become a store, but the blacksmith shop remained the same.

By 1912, Sanborn maps shows that the addresses of buildings within the Project site had all changed, and a large two-story flat had been constructed at 711 and 713 Campbell Street just south of the two Campbell Street dwelling. All of the buildings now fronting along 7th Street had become stores by 1912, except for the two-story dwelling and the former blacksmith shop (which was vacant in 1912). The large shed attached to the dwelling on 7th Street was now shown as being a coal storage shed, which occupied much of the western edge of the Project site.

All of these 1912 structures are visible on aerial photographs of 1931 and 1946.⁸ By 1958, the structures that composed the Graffelman Block on the corner of 7th and Campbell had been demolished, and a parking lot was constructed. Between 1968 and 1980, all structures within the Project site had been

⁷ Sanborn Fire Insurance Maps, 1889 - 1912

⁸ NETR 1931 through 1980

removed except for the western-most three structures at 1670-1676 7th Street (NETR 1968, NETR 1980). By 1993, all structures that were once on the site had been demolished, and the site remains vacant. By 2016, the existing trailers and urban garden appear as the only structures and improvements on the site.

Brief Description of the Potential Significance of the Site

An historic records search of the Project site indicates that there are two cultural resources that have been recorded within the site. These resources include a building reported as Michael Fakoury Dry Goods Store, an early building within the Historic APE (P-41-004847), and a building group that is classified as an individual district, likely also known as the Lekos Market (P-41-004856). A total of 102 cultural resources have been recorded within ½-mile of the APE. Two of the resources are prehistoric and the remainder are historic in age (see the PaleoWest CRTR appendices). Based on the results of the records search and the history of the APE, there is a high probability of finding subsurface deposits related to the historic resources listed above.

In accordance with Section 106 of the NHPA, and as a means of identifying previously unrecorded archaeological sites, PaleoWest archaeological field staff, under the supervision of a PaleoWest Principal Investigator who meets or exceeds the Secretary of the Interior's Standards for Professional Qualifications in Archaeology, conducted a pedestrian survey of the site on July 29, 2020, using survey transect spacing of not more than 10 meters. Much of the survey area was unpaved and undeveloped, with large areas of exposed ground surface. During the survey, numerous historic cultural materials were observed within and in the immediate vicinity of rodent holes. Various whiteware with and without transfer prints, glass bottle bases and finishes, sawn bone fragments, porcelain, and ceramics were identified within these areas. Historic artifacts were observed during the archaeological survey, there was no evidence of prehistoric cultural soils (midden) observed. Based on the results of the field survey, there is a high potential for subsurface historic deposits. Therefore, PaleoWest recommended a testing plan to aid in making a recommendation regarding potential site eligibility.

On September 23 and 25, 2020, PaleoWest staff conducted archaeological shovel testing within the site to identify deposits, establish the depth and extent of the deposits, and assess whether Project plans would adversely affect any potentially significant buried deposits. A total of nine shovel test plots were conducted across the site. Of the 9 shovel test locations, 6 contain historic cultural material (bottle fragments, metal pull tabs, nails, anthracite coal, and brick). In the upper levels of these tests the context was determined to be disturbed due to the presence of modern plastics intermixed with the historic materials. Within levels below these disturbed contexts, various historic materials were identified and likely associated with the elements of the prior Lekos Market (P-01-004856). The other 3 shovel test sites were disturbed and contained no cultural materials.⁹ The results of the on-site testing revealed two resources on the site: the foundation of the Lekos Brothers Market (20-481-01), and subsurface refuse associated with the historic block (20-481-02).

- The foundation of the Lekos Brothers Market (20-481-01) is recommended as not eligible for the National Register. It does not appear to be associated with events that have made a significant contribution to the broad patterns of our history, it does not appear to have any direct association

⁹ A large portion of the site has been disturbed due to the demolishing of buildings and leveling the ground surface. Fragments of historic glass have been churned to the surface by bioturbation, and the lack of intact artifacts is likely a result of a combination of collection by property occupants, and vandalism by trespassers.

with lives of significant persons in our past, and it does not appear to embody the distinctive characteristics of a type, period, or method of construction. This building foundation is unlikely to yield information important to prehistory or history, and no further management is recommended.

- Similarly, the subsurface deposit (20-481-02) does not appear to be associated with events that have made a significant contribution to the broad patterns of our history, does not appear to have any direct association with lives of significant persons in our past, and does not embody distinctive characteristics of a type, period, or method of construction. However, the subsurface deposit is likely to yield additional information important to the history of the historic APE. There are intact subsurface elements associated with the block that may yield information regarding the history of the region and its inhabitants. It is likely that further study of the deposit may result in meaningful changes to our understanding of the past. Therefore, the subsurface deposit is recommended as potentially eligible for the National Register under Criterion D, and additional management recommendations are necessary, as described below.

Mitigation

The City of Oakland proposes to mitigate potentially adverse effects on subsurface deposits at the Project site by imposing the following measures as Condition of Approval on the project:

1. Data Recovery: Based on the presence of a known eligible site within the Project APE, 20-481-02, a data recovery program is recommended for the portions of the site that will be impacted by Project activities. An Archaeological Data Recovery Plan (ADRP) shall be prepared, providing contextual information and outlining methods for data recovery and excavation prior to construction. This ADRP shall include the environmental context, the prehistoric and historic context of the area, expected resource and feature types, expanded research themes and questions, the methods and locations for data recovery, and archaeological monitoring intended to mitigate adverse impacts to the resource. The data recovery resolves adverse effects to the resource.
2. Archaeological Monitoring: Due to the historic sensitivity of the site, it is recommended that an archaeological monitoring program be implemented during ground disturbing activities associated with the Project. The archaeological monitoring program (AMP) shall minimally include the following provisions:
 - a. The archaeological consultant shall advise all Project contractors to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected resource(s), and of the appropriate protocol in the event of apparent discovery of an archaeological resource.
 - b. All construction crew workers shall attend a training session led by a qualified archaeologist that discusses the reasons for archaeological resource monitoring; regulatory policies protecting resources and human remains; basic identification of archaeological resources; and the protocol to follow in case of a discovery of such resources.
 - c. Due to the high sensitivity of historic deposits, monitoring of the entire vertical site will be required.
 - d. An archaeological monitor(s) shall be present on the Project site during all ground disturbing activity.

- e. The Project archaeologist, in consultation with the on-site archaeological monitor, will make recommendations about reducing monitoring to part-time or spot-checks if it is determined that the probability of encountering archaeological deposits has dropped below an acceptable level. Therefore, the frequency of the on-site monitoring will be determined by construction activities and as deemed necessary by the Project Archaeologist in consultation with the SHPO. In specific cases, it may also be determined, by the Project Archaeologist in consultation with the SHPO, that monitoring is no longer necessary. Written concurrence with SHPO will be required in order to change existing monitoring recommendations.
 - f. The archaeological monitor shall record and be authorized to collect soil samples and artifactual/eco-factual material as warranted for analysis.
 - g. If an archaeological deposit is encountered, all soils-disturbing activities within 30-feet of the discovery shall cease. The archaeological monitor shall be empowered to temporarily redirect demolition, excavation, or other construction activities and equipment until the deposit is evaluated. The archaeological consultant shall immediately notify the client of the encountered archaeological deposit. The archaeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological deposit.
 - h. If the archaeological monitor determines that the cultural resources are potentially significant archaeological resources and avoidance of the resource is not possible, data recovery may be necessary. Data recovery would require consultation and concurrence from the SHPO.
3. Post Discovery Review Protocol: In the event that potentially significant archaeological materials are encountered during Project-related ground-disturbing activities, all work should be halted in the vicinity of the archaeological discovery until a qualified archaeologist can visit the site of discovery and assess the significance of the archaeological resource. In addition, Health and Safety Code 7050.5, and Public Resources Code 5097.98 mandate the process to be followed in the unlikely event of an accidental discovery of any human remains in a location other than a dedicated cemetery. Finally, should additional actions be proposed outside the currently defined site that have the potential for additional subsurface disturbance, further cultural resource management may be required.
4. Human Remains: In the event that Native American human remains, or funerary objects are discovered, the provisions of Section 7050.5(b) of the California Health and Safety Code should be followed.
- a. In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized

representative, in the manner provided in Section 5097.94 of the Public Resources Code.

- b. The County Coroner, upon recognizing the remains as being of Native American origin, is responsible to contact the Native American Heritage Commission within 24 hours. The Commission has various powers and duties to provide for the ultimate disposition of any Native American remains, as does the assigned Most Likely Descendant. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to State law, then the remains would be reinterred with the items associated with the Native American burial on the property in a location not subject to further disturbance.

These measures are fully consistent with, and serve to implement Conditions of Approval already imposed on the Project during its prior CEQA review process (see **Appendix C**), with required monitoring to be performed by the Project applicant and the City.

Recommended Determination

For purposes of Section 106 Review of this undertaking, Lamphier Gregory recommends that the Agency Official for HUD (City of Oakland) concur with the Area of Potential Effect for cultural/archaeological resources, and determine that no cultural archaeological resources will be adversely affected by the undertaking, with required implementation and monitoring of the measures listed above.

Native American Tribes

The Project involves significant ground disturbance during excavation for building foundation construction and other improvements. There is one federally-recognized Native American tribe in Alameda County, California Valley Miwok. On June 15, 2020, a letter was sent to the tribe by the Agency Official, City of Oakland about the Project, and requesting notification of any tribal interests or comment on the Project (see **Appendix D**). As of the date of this report (November 2020) no response to this notification has been received. Any response received will be forwarded to your office.

On May 15, 2020, the Native American Heritage Commission (NAHC) was contacted for a review of the Sacred Lands File (see **Appendix E**). The objective of the Sacred Lands File search was to determine if the NAHC had any knowledge of Native American cultural resources (e.g., traditional use or gathering area, place of religious or sacred activity, etc.) within the immediate vicinity of the Project site. The NAHC response dated May 18, 2020, stated that “a record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced Project. The results were positive.”

The NAHC response also provided a list of Native American contacts. These Native American representatives were contacted by email on June 9, 2020, informing them of the Project (see also Appendix E). Follow up phone calls were made on August 29, 2020. Comments were received from Andrew Galvan of The Ohlone Indian Tribe, requesting the results from the CHRIS literature search. A full record of coordination efforts can be found in the Appendix to the CRTR (Appendix B).

Attachment A

City of Oakland

Oakland Cultural Heritage Survey, State of California Resources Agency - Department of Parks and Recreation Historic Resources Inventory Form (DPR 523 Primary Record)

7th Street West Oakland Commercial Area of Secondary Importance, 1987

HISTORIC RESOURCES INVENTORY

Ser. No. _____
HABS _____ HAER _____ Loc _____ SHL No. _____ NR Status 5
UTM: A 10/561820/4184380 C _____
B _____ D _____

IDENTIFICATION

- 1. Common name: 7th Street/West Oakland Commerical ASI
- 2. Historic name: None
- 3. Street or rural address: 1550 through 1722 7th Street and 713 Peralta Street
City Oakland Zip 94607 County Alameda
- 4. Parcel number: See continuation pages
- 5. Present Owner: Various Address: _____
City _____ Zip _____ Ownership is: Public Private
- 6. Present Use: Commerce/Vacant Original use: Commerce

DESCRIPTION

- 7a. Architectural style: 19th and early 20th century commercial
- 7b. Briefly describe the present *physical appearance* of the site or structure and describe any major alterations from its original condition:

The north side of 7th Street from Henry to Wood Street is a four-block-long, one-sided fragment of West Oakland's main commercial street of the 1860s to 1960s. The south side of the street from Cypress to Cedar is occupied by two huge public buildings from the late 1960s-early 1970s, the Oakland West Bay Area Rapid Transit station and the Oakland main post office, and their extensive parking lots. Elevated BART tracks run along the middle of 7th Street. The commercial buildings on the north side are mostly vacant, boarded up, and gradually decreasing in number. The cluster from Henry to Wood, consisting of 16 buildings on 7th Street and one on Peralta that is visually connected, is still recognizable as a neighborhood commercial strip. It is a nearly continuous row of one- and two-story frame and brick buildings with no setback, transomed storefronts, flats upstairs, projecting cornices, and classical or Spanish or Victorian detailing. Their construction dates range from 1877 to 1940. Most are altered to some degree - some radically - but the Main Street

(see continuation page 3)



- 8. Construction date: Estimated _____ Factual 1877-1940
- 9. Architect Various
- 10. Builder Various
- 11. Approx. property size (in feet)
Frontage _____ Depth _____
or approx. acreage 3 acres;
one side of 4 city blocks
- 12. Date(s) of enclosed photograph(s)

Photo No: 501- 5
Date: 09/24/87
Location: 7TH STREET ASI
VIEW WEST ON 7TH FROM PERALTA

13. Condition: Excellent ___ Good ___ Fair X Deteriorated ___ No longer in existence ___
14. Alterations: Extensive to storefronts, windows, surface materials
15. Surroundings: (Check more than one if necessary) Open land ___ Scattered buildings X Densely built-up X
Residential X Industrial ___ Commercial X Other: Institutional: Post Office and BART Station
16. Threats to site: None known ___ Private development ___ Zoning ___ Vandalism X
Public Works project X Other: _____
17. Is the structure: On its original site? X Moved? _____ Unknown? _____
18. Related features: None

SIGNIFICANCE

19. Briefly state historical and/or architectural importance (include dates, events, and persons associated with the site.)
- This group of 17 buildings, from 1550 to 1722 7th Street plus 713 Peralta Street, is considered an Area of Secondary Importance by the Oakland Cultural Heritage Survey, of local visual and historical significance although neither the area as a whole nor the individual buildings appear to meet National Register standards of integrity. These four one-sided blocks are the surviving fragment of the 7th Street commercial district, West Oakland's main business street from the 1860s to the 1960s. This was the commercial strip associated with the National Register-eligible Oakland Point Prescott residential district. Enough period storefronts and architectural features survive to indicate visually what the area once was, and individual buildings are historically significant as the Lincoln Theatre, West Oakland Free Reading Room, Alcatraz Masonic Hall, and International Brotherhood of Sleeping Car Porters headquarters. The buildings in this fragment date from about 1885 through 1940, and were mainly neighborhood-oriented businesses; the earliest,

(see continuation page 5)

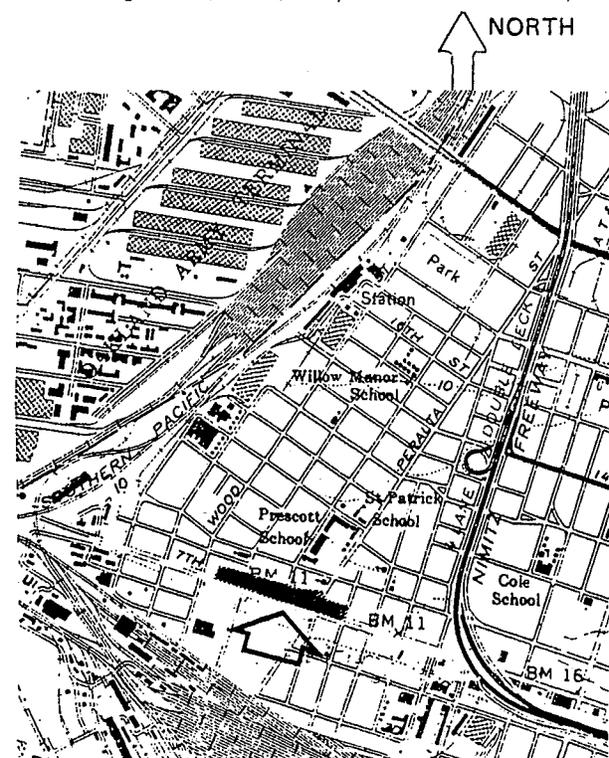
20. Main theme of the historic resource: (If more than one is checked, number in order of importance.)
- Architecture 3 Arts & Leisure _____
Economic/Industrial 1 Exploration/Settlement _____
Government _____ Military _____
Religion _____ Social/Education 2

21. Sources (List books, documents, surveys, personal interviews and their dates).

See continuation page 11

22. Date form prepared Sept. 30, 1988
By (name) Staff
Organization Oakland Cultural Heritage Survey
Address: 1 City Hall Plaza, 6th Fl.
City Oakland Zip 94612
Phone: (415) 273-3941

Locational sketch map (draw and label site and surrounding streets, roads, and prominent landmarks):





HISTORIC RESOURCES INVENTORY

CP

Street or rural address: 7th Street Commercial ASI

7b. Physical Description (continued from page 1)

character remains. Half of the buildings are considered so altered that they would not contribute to a National Register district unless restored.

Prominent buildings are the boxy two-story stores and flats at 1550-56 and 1600-08 7th Street, which are heavily altered and nondescript in character but anchor the southeast corners of their blocks; the well-preserved two-story dark red brick Lekos Bros. Market (1921) at 1674 7th, with its peaked parapet, flagpole, and painted wall signs; the Lincoln Theatre and its attached storefront at 1620-24, with tiled pilasters, multi-stepped parapet, and big theater arch; and the Mission Revival Arcadia Hotel at 1632-42, with tiled pent roofs and two overhanging bays - a shallow center one with espadana gable and flagpole, and a square corner tower with pyramid tiled roof. Two two-story Victorian buildings at 1682-84 and 1716-18 retain much of their period character: these are described in more detail below. West of 1716-18, the last buildings in the group are also from the 19th century, but totally remodeled in the 1940s and 60s, with tarpaper brick, glass blocks, a streamlined stucco facade, and a tall metal screen replacing a demolished second story (1720 and 1722 7th). The period strip ends with these buildings; beyond is a small 1967 restaurant building, and then vacant lots, parking, deteriorated garages, and a recent Church's Fried Chicken. Two more 19th-century buildings survive on the block between Pine and Cedar (1828-30 7th, once a seamen's mission, and an 1897-98 house at 1822 7th), but they are now isolated from the remainder of the once-continuous commercial strip. Other buildings related to but isolated from the district are found along 8th Street: a pair of 1920s store and flats buildings at 1647 and 1651 8th on either side of Campbell, the 1895 firehouse at 1681 8th (see SHRI), and a 1904 meat market at 1671 8th.

1684-86 7th Street is a two-story late-Victorian commercial building with brick side and rear walls, asymmetrical wooden front, and low-pitched gable roof surrounded by brick parapets and a false front with a quasi-mansard pent roof. It occupies a 25'-wide mid-block lot fronting on 7th Street, flanked by attached 1-story commercial buildings.

The ground floor consists of a storefront with a centered trapezoidal inset entry, plate glass windows, and wide transom. At the far right is a single door to the upstairs entry, also with transom. The upstairs door is a solid replacement, and the glazing and orange brick veneered base of the storefront also appear more recent than the building. The upper story is surfaced in rustic siding and has a polygonal bay with 4 double-hung windows on the left (narrower than the storefront) and a single double-hung window on the right. The bay has tall rectangular windows with shallow molded panels below and above, pipestem colonettes, and a row of tiny brackets and rounded dentil-like molding under the eaves. A blank space on the wall over the right-hand window indicates that it also originally had a cornice. The pent roof of the false front rests on a row of 8 simple curved brackets along the frieze, and larger brackets at each end which serve as capitals to fluted pilasters which edge the upper story. There is a belt molding along the base of the second story, and a partial capital at its left end suggests that the fluted pilasters

(see continuation page 4)



HISTORIC RESOURCES INVENTORY

CP

Street or rural address: 7th Street Commercial ASI

7b. Physical Description (continued from page 3)

originally extended to the ground. Early Sanborn maps show a canopy over the sidewalk. The side walls are red brick in common bond, with tie rods visible about 18" below the parapet tops. On both sides are faded painted wall signs, for J.C. Bullock & Sons Plumbing, Tinning and Galvanizing and for Coca Cola. There are no windows on the side walls, which are on the lot lines; Sanborn maps show a skylight toward the rear. A two-story frame rear addition has been removed, exposing the rear brick wall.

1716-18 7th Street is a two-story Stick/Queen Anne commercial building on a mid-block lot, its first story of brick construction and its second story wood with an overhanging rectangular bay centered in front. Its roof is a low gable concealed by stepped side parapets and a false-front mansard in front. The mansard rests on tall brackets, the only original ornament remaining. Wall surfaces to either side of the bay, and the base of the bay, are asbestos-shingled. Sash in the bay is aluminum. The ground floor facade consists of a storefront for most of its width, with a narrow upstairs doorway at the right. The storefront has tall transoms; its lower portion is boarded up. The right (east) wall, exposed by demolition of the neighboring building, is stuccoed below and asbestos-shingled above.



Photo No: 501-14
Date: 09/24/87
Location: 7TH STREET ASI
VIEW WEST ON 7TH FROM 1666-68



HISTORIC RESOURCES INVENTORY

CP

Street or rural address: 7th Street Commercial ASI

19. Historical and/or Architectural Importance (continued from page 2)

more railroad-oriented section of the strip, visible from Wood Street west to the water in the 1871 Snow & Roos birdseye map, has almost entirely vanished.

Seventh Street, historically known as Railroad Avenue, was from 1863 the route of commuter trains through West Oakland to the ferry wharf at Oakland Point, which in 1869 became the terminus of the transcontinental railroad. Stations were located at about six-block intervals, and (though it is hard to see today) Seventh Street was a thriving business street for its entire length, with a full range of neighborhood shops and services at each station. It was said that West Oaklanders never needed to go downtown. At the outer end of 7th Street, the 1700 and particularly the vanished 1800 blocks, the nearby railroad yards and shops, ferry wharf, and terminus gave the local economy a strong transient flavor from the very beginning, with numerous hotels and rooming houses, restaurants, saloons, billiard rooms, union halls, and "female boarding houses."

From casual railroad-related entertainment, West 7th Street also evolved into a noted center for black musical clubs, as early as the 1910s - Slim Jenkins' was probably the most famous of these. John Singer's at 1720 7th and Esther's Orbit Room at 1722 are surviving representatives of this activity. This culture was displaced in the late 1960s and early 70s with the rest of the 7th Street economy when the whole south side of the street was bought up for the Bay Area Rapid Transit station and post office.

The surviving buildings once housed neighborhood businesses including furniture, plumbing, shoe repair, groceries, dry goods, confectionery, real estate, and a photography studio. Neighborhood institutions in the area included Masonic halls at 1692 7th and 713 Peralta (in the district), several other lodge, union, and assembly halls, the fire station at 1681 8th (see SHRI), and Prescott School and St. Partick's church on the blocks to the northeast. A "Sightseeing Tour Along Seventh Street in the Late Eighties or Early Nineties," printed in 1939 in the journal of the West of Market Boys, a local old-timers' club, gives a cross-section of businesses along the street and their proprietors, as well as transportation patterns, about the same date as the 1889 Sanborn map, and the date of construction of several of the existing buildings.

At the far west end of 7th Street were the ferry wharf, S.P. shipyard and roundhouse, and a "bathhouse where the rheumatic patients in Oakland go for their hot salt water baths," and duck-hunting and clam-digging grounds. All this lay beyond the unguarded grade crossing at Bay Street ("Death Curve") and beyond "Cedar Street where all of the freight trains switch off the main line into the West Oakland yards." Seventh and Wood, the outer end of the present district, is described as "a lively corner as it is the terminal of the street car line that runs out Wood Street to Twelfth and a branch runs out Eighth Street to Peralta." At this time commercial development tapered off in the 1650 block at Campbell; Eiben & Nor's grocery there was planning to move east to 7th and Peralta where there was "not much anything of interest" yet (their

(see continuation page 6)



HISTORIC RESOURCES INVENTORY

CP

Street or rural address: 7th Street Commercial ASI

19. Historical and/or Architectural Importance (continued from page 5)

new building at 1584-90 7th, a showy flatiron Stick/Italianate with lodge halls upstairs, was built in 1886-87 and demolished in 1987, a major loss to the district). Sanborn maps confirm that the blocks from Campbell to Henry were still mostly residential. Businesses mentioned in this memoir include groceries, drugstores, barbers, wood and coal yards, saloons, a jeweler ("railroad men take pride in their watches"), a Chinese laundry, a livery stable, and the "West Oakland Building and Loan Association [where] Andrea Sbarboro is making so much money that he is going into the banking business in San Francisco." Most of the proprietors have English, Irish, and German names - O'Gara, Fick, Loud, Naismith, Reisdorf, Loomis, Shuler.

After the turn of the century, as is clear from the buildings themselves, this section of 7th Street filled in eastward, and Sanborn maps suggest that saloons and billiard rooms spread in the same direction from the railroad yards, replacing a restaurant (1722 7th), glove factory (1710), reading room (1682), house (1674), grocery (1650), and drugstore (1550) on these blocks between 1902 and 1911. A notable development in the 1920s is the prominence of Eastern and Southern European names among the owners of buildings and businesses: Gus Laios confectionery (1720 7th), Lekos Bros. Market (1674), Michael Fakoury dry goods (and developer of 1666, 1676, and 1678 7th), Mark Jurich (1550 7th), Merced Aboumrad (1570 7th). This parallels changes in the population of the neighborhood: an Italian "West of Market Boy" remarked on how times had changed since the days when his was the only "foreign" name in a program at the largely Irish St. Patrick's Church. By the interwar years there was also a substantial black community in West Oakland, anchored by railroad employment but also well dispersed in other occupations. Black institutions included Liberty Hall - see SHRI for 1483 8th Street. A recurring theme in West Oakland memoirs is the melting pot of races and nations in this period, disrupted by redevelopment of the Campbell Village public housing site (north of 8th Street between Campbell and Peralta, 1938-39) and then by the mass immigration of black war workers. In its latter decades West 7th Street was considered Oakland's black Main Street as well as an entertainment center. Its decline from about the 1960s can be traced to the decline of railroad employment, urban renewal of the surrounding residential areas, and the hard times that hit main streets everywhere; its fate was sealed by the post office and BART projects around 1970. Renewal or redevelopment proposals for 7th Street have been repeatedly put forth; there is currently a plan for a city-sponsored mixed-use project (named for Slim Jenkins) on the 1650 block.

As in most long-established commercial areas, the 7th Street buildings have evolved by additions and remodeling. The stores at 1568 and 1570 7th appear to incorporate houses built in 1877-78 by John Ziegenbein, a major residential developer in the area. Structures from the 1870s probably also form part of 1550, 1692, and 1722 7th. The apartment building at 713 Peralta is a 1943 government-sponsored remodeling by Malcolm Reynolds of the Cunningham Bros.' 1899 Alcatraz Masonic Hall. 1600 and 1720 7th are more straightforward, recognizable 20th century remodelings of 1880s stores, and 1684 and 1716 7th (both 1889-90) are reasonably intact Victorian commercial buildings. The

(see continuation page 7)



HISTORIC RESOURCES INVENTORY

CP

street or rural address: 7th Street Commercial ASI

19. Historical and/or Architectural Importance (continued from page 6)

early 20th century buildings in the group are reasonably intact, at least above storefront level, and include good examples of Mission Revival (1632 7th, 1906-07, designed by Thomas D. Newsom) and 1920s brick commercial (Lekos Bros. Market, 1674 7th, by James Plachek, and 1678 7th, by Theodore Bernardi, uncle of William Wurster's partner). The architect of the 1919 Lincoln Theatre (1620 7th) has not been identified, but it is a distinctive representative of its type.

Longtime district businesses in the existing buildings included Max Wolf's furniture store and warehouse (1558 7th; at various locations nearby from c.1924 to c.1967), A.J. Tait Real Estate (in business in West Oakland from the 1890s to the 1940s, operated by Mary Dearing at 1566 7th from about 1908), Edmond Flynn's saloon and son-in-law James McAllister's plumbing shop (sharing 1606-16 7th from the 1880s to the 1910s), the Lincoln Theater (successor to at least two storefront nickelodeons nearby, the neighborhood theater from 1919 to the 1950s), Fakoury's dry goods (at 1666 7th from 1913 to c.1946), Lekos Bros. Market (on 7th Street 1909-1947, at 1674 from 1921), and John Singer's bar and restaurant (1720, 1943 to the present). 1684-86 and 1716-18 7th and their occupants are discussed separately below.

1684-86 7th Street is not eligible for the National Register in its present condition. Were it restored, it might become eligible under Criterion A, patterns of history, and Criterion C, architecture, as a representative of the once-thriving 7th Street (Railroad Avenue) commercial district in West Oakland. It was built in 1889-90 by John C. Bullock to house his plumbing business and the West Oakland Free Reading Room, an early branch library. From about 1920 the library space was occupied by a billiard parlor, tying the building to the railroad-related services and black social and entertainment district along west 7th Street, now all but obliterated. The building is a good example of late Victorian semi-vernacular commercial architecture, and is one of the more prominent and better preserved structures in the fragmentary blocks that now remain of Seventh Street.

Tax records date this building 1889-90, original owner John C. Bullock. In an undated clipping in the Oakland Public Library's scrapbook for May 1890 to November 1895, the Reading Room Committee reports that "Mr. Bullock has agreed to erect a building for the purpose, 100 yards nearer Broadway than the present library, and to charge \$20 a month." The library was located at 1684 7th Street, and Bullock and Sons' plumbing shop downstairs at 1686, in time to be listed in the 1891 Oakland City Directory.

No reference to this building has been found in the limited 19th century sources for architects and builders (California Architect and Building News; contract notices in Edwards Transcripts), and it is conceivable that the Bullocks themselves designed or built the store. The building is good example of simple, functional, conservative, small-scale Victorian commercial design. Its stylistic features are loosely Italianate (the pipestem colonettes, tall windows, and cornice brackets) and Eastlake (the fluted pilasters), but it is

(see continuation page 8)



HISTORIC RESOURCES INVENTORY

CP

Street or rural address: 7th Street Commercial ASI

19. Historical and/or Architectural Importance (continued from page 7)

essentially a vernacular commercial type. The building is of structural interest for its wood-fronted brick construction; the Oakland survey has discovered only two others like it from the Victorian period. (Fire safety was probably a consideration, for the plumbing shop and the public assembly use above.) This is one of two reasonably intact Victorian commercial buildings still standing on 7th Street, and one of the anchors of this ghost of an 1870s-1940s commercial district.

The West Oakland Free Reading Room occupied the upper floor of the Bullock building from 1890 to 1901. The Library Annual Report for 1890 showed this to be the most heavily used of the three branches (245 patrons a day), and it subscribed to 52 daily newspapers - more than even the main library, and quite probably related to the traveling clientele. The same report described the new building, where "the owner offered to make special provisions for a reading room if the Board would establish the room there," as "lighted by electricity, well ventilated, and... one of the most pleasant reading rooms on the coast." The first West Oakland branch reading room was established in 1878. By 1890 there were 3 branches (the others were East and North), and 6 by 1906. Oakland's library system appears to have been a pioneer in establishing neighborhood branches, as well as "one of the first free public libraries in the state" (Bagwell, Oakland: The Story of a City, p.127).

Bullock's plumbing shop was here until about 1910. The 1911 Sanborn map shows the second floor as a billiard room - one of four on this block. As late as 1967 it was White's Pool Hall; in 1925 the proprietors were Andronis and Sirianos (and the building was owned by Gus Ponis), reflecting the strong European immigrant presence in West Oakland between the World Wars.

The building is now city-owned, apparently vacant and likely to be demolished for the Slim Jenkins project.

1716-18 7th Street is significant as a remnant of Victorian commercial development along 7th Street in West Oakland, and as the Pacific Coast headquarters for over 40 years of the International Brotherhood of Sleeping Car Porters. However, like 1684-86 7th Street, its present condition and prospects make National Register eligibility doubtful.

Tax assessor's block books date construction of this building between the assessment dates of 1889 (old improvement removed) and 1891 (part of a total of \$4,000 improvements); the 1889 Sanborn map shows the building "being built." The owner was James de la Montanya of San Francisco, importer of stoves and metals and manufacturer of tinware" (father and/or son - both James, and both in the family business). A brother Matthew was in the stove and tin business in downtown Oakland in the 1880s and 90s, but the 7th Street building seems to have been rental property only, not de la Montanya business premises. Sanborn maps just show the occupancy as "store," but the brick lower walls may suggest that it was designed for quasi-manufacturing uses like tinning. (The other surviving Victorian commercial building on this fragment

(see continuation page 9)



HISTORIC RESOURCES INVENTORY

CP

7th Street Commercial ASI

Street or rural address: _____

19. Historical and/or Architectural Importance (continued from page 8)

of 7th Street, the Bullock plumbing shop at 1684-86 7th, also has brick side and rear walls.) Neighboring uses on the block in 1901 were a carpenter, a glove factory, a wood, coal, and hay dealer, a drugstore, 3 restaurants, and a saloon, in addition to a dozen nonspecific "stores" (Sanborn map).

By 1911 the same block had two saloons, two billiard rooms, and a bathhouse - a change which could be described as an increase in uses serving the traveling (and waiting) railroad workers from the nearby yards. The Oakland yards, at the terminus of the transcontinental railroad, were the birthplace in the mid-1920s of the West Coast branch of the Pullman porters' union, the International Brotherhood of Sleeping Car Porters. The first all-black labor union chartered by the AF of L, the Brotherhood was organized in the east by A. Philip Randolph and in Oakland by Dad Moore and C.L. Dellums. After being fired by the railroad for union activity in 1927, Dellums went to work for the Brotherhood at its first Oakland office (517 Wood Street, no longer extant: see SHRI form in Ethnic Survey, 1980), and went on to serve for 40 years as Randolph's International Vice-President, and as President after Randolph's retirement in 1969. From 1934 to about 1978 the Brotherhood's Oakland Division (and sometimes West Coast, and sometimes national) headquarters was 1716 7th Street, upstairs from Dellums' pool hall at 1718. Dellums' 1973 oral history for the Bancroft Library includes a photo of the Brotherhood office here, and describes the union and civil rights activities that emanated from this office, and the 7th Street and railroad milieu.



HISTORIC RESOURCES INVENTORY

CP

Street or rural address: 7th Street Commercial ASI



Photo No: 501-26
Date: 09/24/87
Location: 7TH STREET ASI
VIEW EAST ON 7TH FROM 1726 7TH



Photo No: 501-20
Date: 09/24/87
Location: 7TH STREET ASI
VIEW EAST ON 7TH FROM 1686-98



HISTORIC RESOURCES INVENTORY

CP

Street or rural address: 7th Street Commercial ASI

21. Sources (continued from page 2)

Tax assessor's block books, 1877-1960
Sanborn insurance maps, 1889-1901, 1902-11, 1912-45
City directories and telephone books, 1870s-1970s
Property files, City of Oakland Inspectional Services Dept

C.L. Dellums, International President of the Brotherhood of Sleeping Car Porters and Civil Rights Leader, Bancroft Library Regional Oral History Office, Berkeley, 1973

International Brotherhood of Sleeping Car Porters, Silver Jubilee Anniversary and 7th Biennial Convention program, September 10-15, 1950

Mike McGrath, "Railroad Ties," The Express, March 2, 1979

Lee Hildebrand, "Where the Train Stopped," The Express, June 3, 1988

J.M. Guinn, History of the State of California and Biographical Record of Oakland and Environs, Los Angeles, c. 1908, v.2, pp.787-88 (de la Montanya)

The Bay of San Francisco, v.2, p.430 (de la Montanya)

Oakland Public Library, Annual Report, July 1, 1890; scrapbook, May 1890 - November 20, 1895; "Historical Data" file (West Oakland Reading Room)

"Picturesque A.E. King," Oakland Tribune, Jan. 11, 1942 (Lincoln Theatre)

Sallie Mae Bridges, oral history for Oakland Museum, c.1970 (Slim Jenkins and 7th Street businesses)

Beth Bagwell, Oakland: The Story of a City, Presidio Press, Novato CA, 1982

Eleanor Edwards, "Memories of West Oakland," The Montclarion, July 7, 1982

Ed. H. Anthony, "A Sightseeing Tour Along Seventh Street in the Late Eighties or Early Nineties," West of Market Boys Journal, September-December 1939

Charles F. Tilghman, Colored American Directory, Oakland, 1915

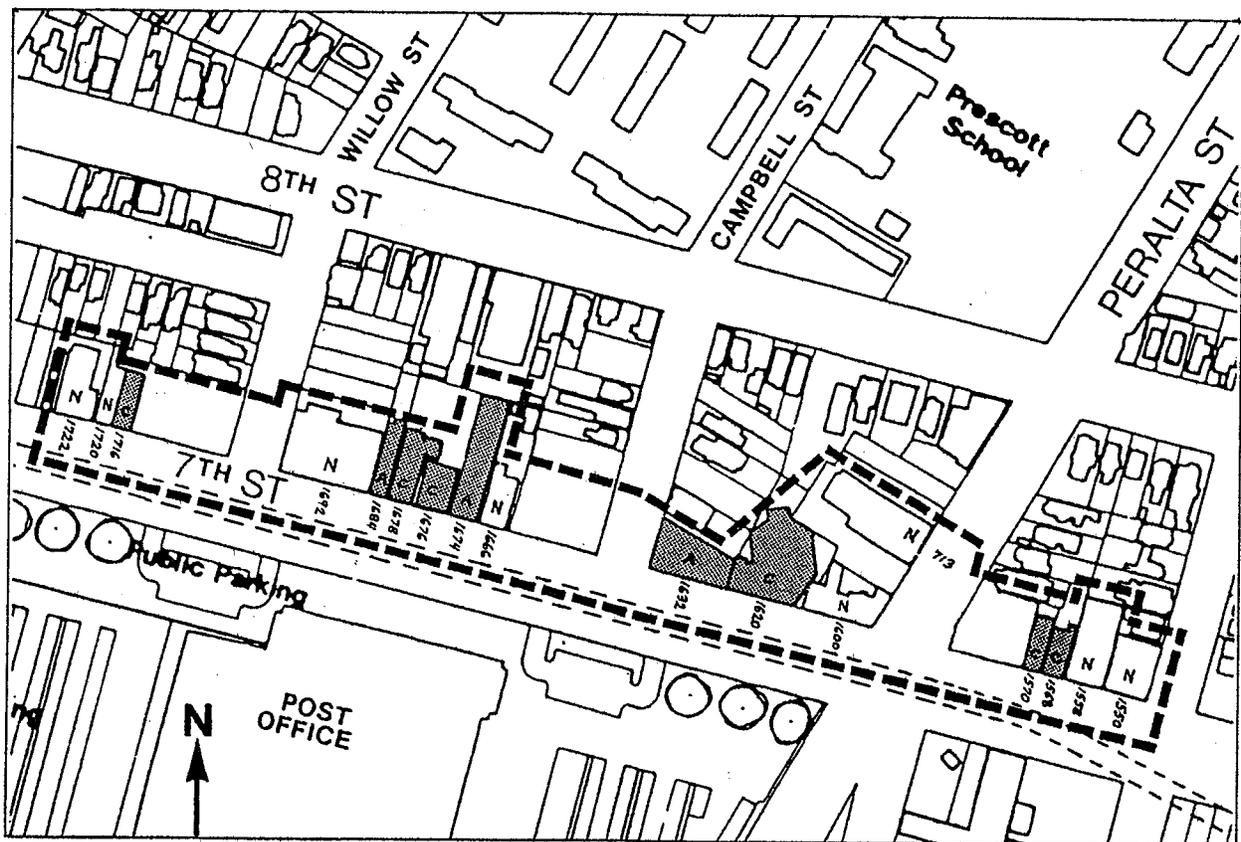
East Bay Colored Business Directory, 1930

The Official California Negro Directory & Classified Buyer's Guide, 1942-43 (Oakland listings, pp.156-163)

Diane Reinbolt Judd, "Gibbons Folly," University of California class paper, April 1976

Rachel Lorenz, "The Eiben & Nor Building," University of California class paper, December 1985

RANK	HISTORIC NAME	ADDRESS	DATE	STYLE
Ec/N	Alcatraz Masonic Hall	713 PERALTA ST	1899 rem.1943	Classical Revival
Dd/N	Gardiner (Wm) confectionery, Bank Buffet	1550 7TH ST	1878 add.1889	19c commercial
Ed/N	Wolf (Max) furniture warehouse	1558 7TH ST	1940	Mid 20c utilitarian
Cc/C	Tait (A.J.)-Dearing (Mary) office & res.	1568 7TH ST	1907-08 inc.1878-79?	Colonial Revival
Dd/C	Siedentopf paint shop-Aboumrard dry goods	1570 7TH ST	1920 inc.1878-89?	Colonial Revival
Ec/N	Flynn (Ed.) saloon-McAllister plumbing	1600 7TH ST	1885-86 add.1890ff	Italianate commerc'l
Cb+/C	Lincoln Theatre	1620 7TH ST	1919	Spanish Colonial
Db-/A	Arcadia Hotel; Isaccs & Schwartz Block	1632 7TH ST	1906-07	Mission Revival
Ed/N	Fakoury (Michael) dry goods store	1666 7TH ST	1913	Colonial commercial
Cb-/A	Lekos Bros. Market	1674 7TH ST	1921	Colonial commercial
Dd/C	Unknown	1676 7TH ST	1924	Early 20c utilitar'n
Dd/C	Unknown	1678 7TH ST	1928	Early 20c commercial
B-b+/A	Bullock plumbing; West Oak. Reading Room	1684 7TH ST	1889-90	Late 19c commercial
Ed/N	Unknown	1692 7TH ST	1915 inc.1877ff	Early 20c commercial
B-b+/C	Int'l. Brotherhood of Sleeping Car Porters	1716 7TH ST	1889-90	Stick-Queen Anne com
Ec/N	Smith (Jason) photo studio	1720 7TH ST	1889 rem. 1928ff	Late 19c commercial
Ed/N	Unknown, later Villa (Dewey) restaurant	1722 7TH ST	1870s rem.1944/64	Italianate commerc'l?



Individual RANK: A = Highest importance; B = Major importance; C = Secondary importance; D = Minor importance; E = Of no particular interest; * = Post-1945 -- lower case letter = Potential RANK if restored

District RANK: /A = Anchor; /C = Contributor; /N = Non-contributor (based on present condition)



Photo no: 467-23
Date: 07/29/87

AP#: 6- 3- 16- 0

Survey Rating: Ec
Non-Contributor
NR Status: 6/5D

Address: 713 PERALTA ST (formerly 861 Peralta St.)
Common Name: Booker Emery House
Historic Name: Alcatraz Masonic Hall

Construction Date: 1899 rem.1943
Architectural Style: Classical Revival

Designer: Cunningham Bros.
Builder: Grant, L.W.

Present Use: Domestic/multiple

Original Use: Social/meeting hall



Photo no: 468- 0
Date: 08/05/87

AP#: 4- 97- 9- 0

Survey Rating: Dd
Non-Contributor
NR Status: 6/5D

Address: 1550 7TH ST/NW COR HENRY
Common Name: None
Historic Name: Gardiner (Wm) confectionery, Bank Buffet

Construction Date: 1878 add.1889
Architectural Style: 19c commercial

Designer: Unknown
Builder: Unknown

Present Use: Commerce/Domestic/mult.

Original Use: Commerce/Domestic/mult.

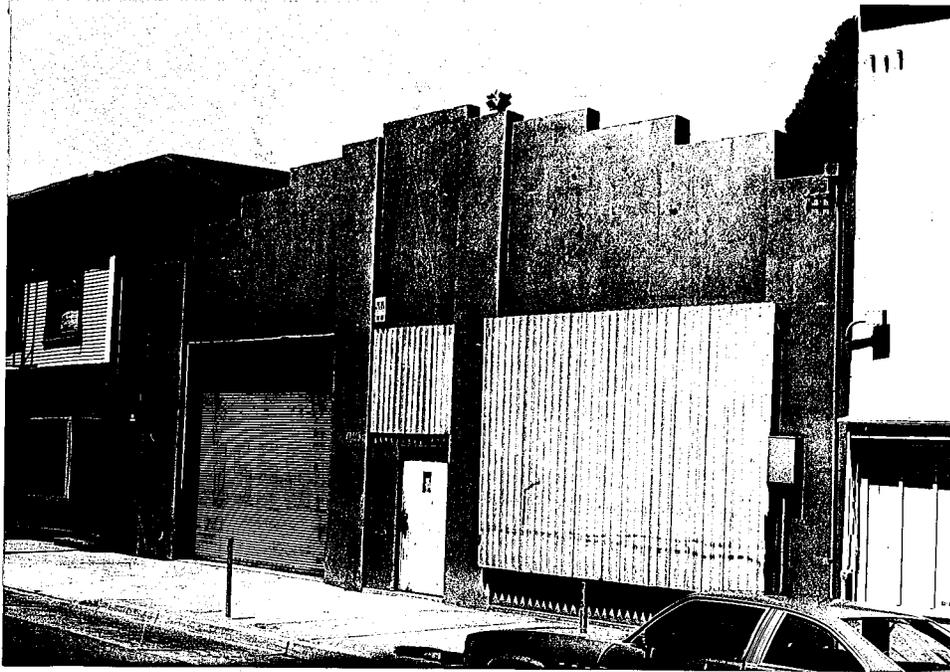


Photo no: 468- 2
Date: 08/05/87

AP#: 4- 97- 10- 0

Survey Rating: Ed
Non-Contributor
NR Status: 6/5D

Address: 1558 7TH ST (formerly 1558-60 7th St.)
Common Name: None
Historic Name: Wolf (Max) furniture warehouse

Construction Date: 1940 Designer: Rosene, A.L. (d.)
Architectural Style: Mid 20c utilitarian Builder: Richezza & Ferrari

Present Use: Commerce/warehouse Original Use: Commerce/warehouse



Photo no: 468- 3
Date: 08/05/87

AP#: 4- 97- 11- 0

Survey Rating: Cc
Contributor
NR Status: 6/5D

Address: 1568 7TH ST (formerly 1562 7th St.)
Common Name: Al's Shoe Repairing
Historic Name: Tait (A.J.)-Dearing (Mary) office & res.

Construction Date: 1907-08 inc.1878-79? Designer: Unknown
Architectural Style: Colonial Revival Builder: Unknown

Present Use: Commerce/Domestic/mult. Original Use: Comemrce/Domestic/mult.



Photo no: 468- 4
Date: 08/05/87

AP#: 4- 97- 12- 0

Survey Rating: Dd
Contributor
NR Status: 6/5D

Address: 1570 7TH ST (formerly 1564 7th St.)
Common Name: First Tabernacle M. B. Church
Historic Name: Siedentopf paint shop-Aboumrad dry goods

Construction Date: 1920 inc.1878-89? Designer: Unknown
Architectural Style: Colonial Revival Builder: Unknown

Present Use: Commerce/Domestic/mult. Original Use: Commerce/Domestic/mult.



Photo no: 468- 6
Date: 08/05/87

AP#: 6- 3- 18- 0

Survey Rating: Ec
Non-Contributor
NR Status: 6/5D

Address: 1600 7TH ST/701 PERALTA ST (fmrly 1600-8 7th/857 Peralta)
Common Name: None
Historic Name: Flynn (Ed.) saloon-McAllister plumbing

Construction Date: 1885-86 add.1890ff Designer: Unknown
Architectural Style: Italianate commerc'l Builder: Unknown

Present Use: Commerce/Domestic/mult. Original Use: Commerce/Domestic/mult.



Photo no: 501- 6
Date: 09/24/87

AP#: 6- 3- 19- 0

Survey Rating: Cb+
Contributor
NR Status: 4b/5D

Address: 1620 7TH ST
Common Name: Lincoln Theatre
Historic Name: Lincoln Theatre

Construction Date: 1919
Architectural Style: Spanish Colonial

Designer: Unknown
Builder: Vaughan, John

Present Use: Vacant

Original Use: Recreatn/theater/Commerce



Photo no: 468-11
Date: 08/05/87

AP#: 6- 3- 21- 0

Survey Rating: Db-
Anchor
NR Status: 6/5D

Address: 1632 7TH ST/700 CAMPBELL (formerly 1620-30 7th St.)
Common Name: None
Historic Name: Arcadia Hotel; Isaacs & Schwartz Block

Construction Date: 1906-07
Architectural Style: Mission Revival

Designer: Newsom, Thomas D.
Builder: Davis, Albert F.

Present Use: Commerce/Domestic/mult.

Original Use: Commerce/Domestic/mult.



Photo no: 468-14
Date: 08/05/87

AP#: 6- 17- 20- 0

Survey Rating: Ed
Non-Contributor
NR Status: 6/5D

Address: 1666 7TH ST
Common Name: California Homemakers Assocn.
Historic Name: Fakoury (Michael) dry goods store

Construction Date: 1913 Designer: Unknown
Architectural Style: Colonial commercial Builder: Moore, R.E.

Present Use: Commerce/organizational Original Use: Commerce/specialty store



Photo no: 468-13
Date: 08/05/87

AP#: 6- 17- 21- 0

Survey Rating: Cb-
Anchor
NR Status: 6/5D

Address: 1674 7TH ST
Common Name: None
Historic Name: Lekos Bros. Market

Construction Date: 1921 Designer: Plachek, James W.
Architectural Style: Colonial commercial Builder: Unknown

Present Use: Commerce/Domestic/mult. Original Use: Commerce/Domestic/mult.

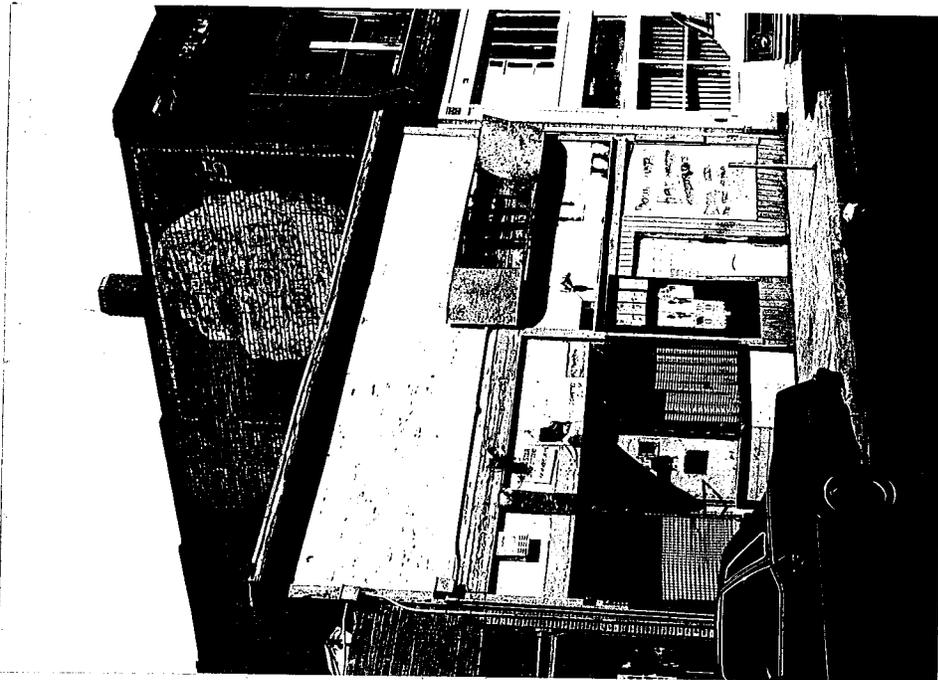


Photo no: 501-19
Date: 09/24/87

AP#: 6- 17- 22- 0

Survey Rating: Dd
Contributor
NR Status: 6/5D

Address: 1676 7TH ST
Common Name: None
Historic Name: Unknown

Construction Date: 1924 Designer: Unknown
Architectural Style: Early 20c utilitar'n Builder: Nettles & Randolph

Present Use: Commerce/vacant Original Use: Commerce/garage

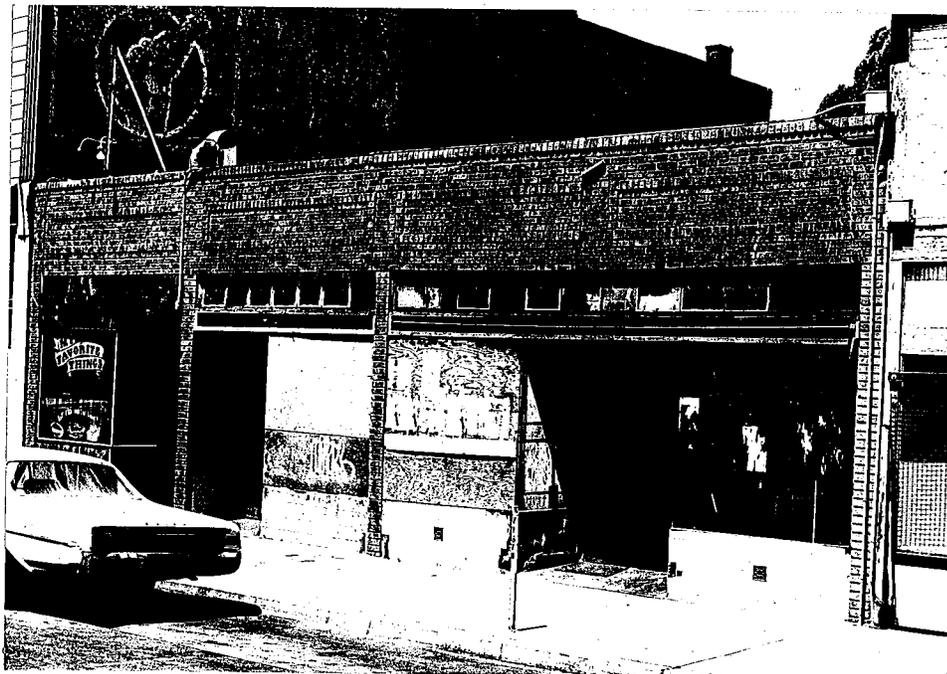


Photo no: 468-16
Date: 08/05/87

AP#: 6- 17- 23- 0

Survey Rating: Dd
Contributor
NR Status: 6/5D

Address: 1678 7TH ST
Common Name: None
Historic Name: Unknown

Construction Date: 1928 Designer: Unknown
Architectural Style: Early 20c commercial Builder: Bernardi, Theo.

Present Use: Commerce/vacant Original Use: Commerce



Photo no: 468-17
Date: 08/05/87

AP#: 6- 17- 24- 0

Survey Rating: B-b+
Anchor
NR Status: 4b/5D

Address: 1684 7TH ST
Common Name: None
Historic Name: Bullock plumbing; West Oak. Reading Room

Construction Date: 1889-90 Designer: Unknown
Architectural Style: Late 19c commercial Builder: Unknown

Present Use: Commerce/vacant/Domestic Original Use: Commerce/Educ./library



Photo no: 468-18
Date: 08/05/87

AP#: 6- 17- 25- 0

Survey Rating: Ed
Non-Contributor
NR Status: 6/5D

Address: 1692 7TH ST/700 WILLOW ST (formerly 1688-1700 7th St.)
Common Name: None
Historic Name: Unknown

Construction Date: 1915 inc.1877ff Designer: Unknown
Architectural Style: Early 20c commercial Builder: Bruecker, J.H.

Present Use: Commerce/liquor store Original Use: Commerce/stores



Photo no: 468-19
Date: 08/05/87

AP#: 6- 19- 23- 0

Survey Rating: B-b+
Contributor
NR Status: 4b/5D

Address: 1716 7TH ST (formerly 1714 7th St.)
Common Name: None
Historic Name: Intl. Brotherhood of Sleeping Car Porters

Construction Date: 1889-90 Designer: Unknown
Architectural Style: Stick-Queen Anne com Builder: Unknown

Present Use: Commerce/store/office Original Use: Commerce/store/office



Photo no: 468-20
Date: 08/05/87

AP#: 6- 19- 24- 0

Survey Rating: Ec
Non-Contributor
NR Status: 6/5D

Address: 1720 7TH ST (formerly 1716 7th St.)
Common Name: John Singer's
Historic Name: Smith (Jason) photo studio

Construction Date: 1889 rem. 1928ff Designer: Unknown
Architectural Style: Late 19c commercial Builder: Unknown

Present Use: Commerce/restaurant/Domst Original Use: Commerce/photo/Domestic



Photo no: 468-21
Date: 08/05/87

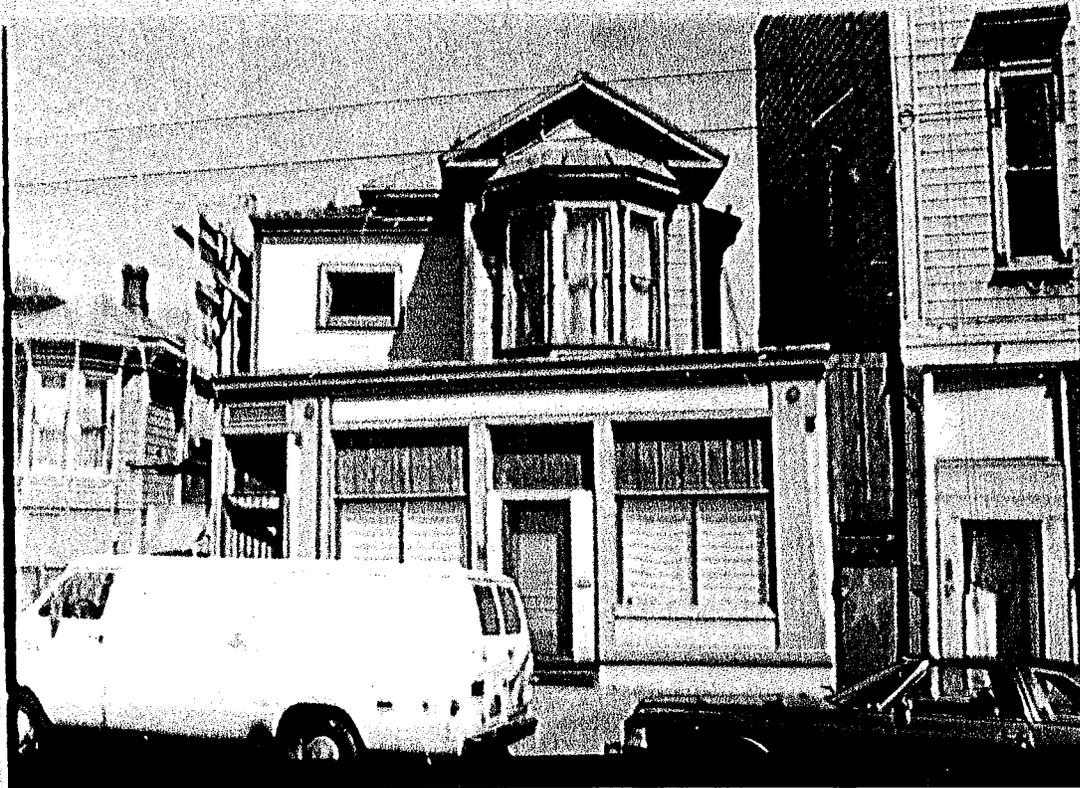
AP#: 6- 19- 25- 0

Survey Rating: Ed
Non-Contributor
NR Status: 6/5D

Address: 1722 7TH ST (formerly 1718-20 7th St.)
Common Name: Esther's Orbit Room
Historic Name: Unknown, later Villa (Dewey) restaurant

Construction Date: 1870s rem.1944/64 Designer: Unknown
Architectural Style: Italianate commercial? Builder: Unknown

Present Use: Recreation/music/Restaurt Original Use: Commerce/saloon, restaurt



not in original ASI but part of historic 7th Street business district:

Address: 712-14 Peralta Street
Eiben & Nor house-West Oakland Free Reading Room
1880-81, add. 1907 Italianate house & early 20th century commercial
Cb-1+ (National Register eligible as contributor to Oakland Point Residential District)

Attachment B

PaleoWest Archaeology

Cultural Resource Technical Report in Support of the 7th & Campbell Project, September 30, 2020



Cultural Resource Technical Report in Support
of the 7th and Campbell Project,
Oakland, Alameda County, California

Submitted to:

Lamphier-Gregory
1944 Embarcadero
Oakland, CA 94606

Technical Report 20-492

September 30, 2020

CULTURAL RESOURCE TECHNICAL REPORT IN SUPPORT OF THE 7TH AND CAMPBELL PROJECT, OAKLAND, ALAMEDA COUNTY, CALIFORNIA

Prepared by:

Christina Alonso, M.A., RPA, Justin Castells, M.A., RPA, Nathaniel Ramos, B.A.

Prepared for:

Lamphier-Gregory
1944 Embarcadero
Oakland, CA 94606

Technical Report No. 20-492

PaleoWest Archaeology

1870 Olympic Blvd
Walnut Creek, California 94596
(925)253-9070

September 30, 2020

Keywords: Section 106; Oakland; 7th and Campbell, Temporary No. 20-481-01 Lekos Brothers Market Foundation, Temporary No. 20-481-02 Subsurface Scatter 7th Street/West Oakland Commercial Area of Secondary Importance

CONTENTS

MANAGEMENT SUMMARY	IV
1.0 INTRODUCTION	1
1.1 PROJECT LOCATION AND DESCRIPTION.....	1
1.1 AREA OF POTENTIAL EFFECTS.....	1
1.2 REPORT ORGANIZATION	1
2.0 REGULATORY CONTEXT	5
2.1 NATIONAL HISTORIC PRESERVATION ACT	5
3.0 SETTING	7
3.1 ENVIRONMENTAL SETTING	7
3.2 PREHISTORIC SETTING.....	8
3.3 ETHNOGRAHIC SETTING.....	10
3.4 HISTORICAL SETTING.....	11
3.5 SITE SPECIFIC HISTORY	13
4.0 CULTURAL RESOURCES INVENTORY	15
4.1 PREVIOUS CULTURAL RESOURCE INVESTIGATIONS.....	15
4.2 PREVIOUSLY RECORDED CULTURAL RESOURCES.....	20
4.3 ADDITIONAL SOURCES	20
4.4 NATIVE AMERICAN COORDINATION.....	21
5.0 SURVEY METHODS AND RESULTS	22
5.1 SURVEY METHODS	22
5.2 SURVEY RESULTS	22
6.0 ARCHAEOLOGICAL TESTING.....	27
6.1 TESTING RESULTS.....	27
6.2 SITE 20-481-01 (LEKOS BROTHERS MARKET FOUNDATION)	31
6.3 SITE 20-481-012 (SUBSURFACE DEPOSIT).....	32
7.0 MANAGEMENT RECOMMENDATIONS	34
7.1 DATA RECOVERY FOR 20-481-02	34
7.2 ARCHAEOLOGICAL MONITORING	34
7.3 POST REVIEW DISCOVERY PROTOCOL.....	35
7.4 HUMAN REMAINS	35
7.0 REFERENCES	37

APPENDICES

Appendix A. Previous Cultural Resource Studies within ½-mile of the APE

Appendix B. Native American Coordination

Appendix C. Survey Photos

Appendix D. STP Photos

Appendix E. DPR Forms

FIGURES

Figure 1-1 Project Vicinity Map 2
Figure 1-2 Project Location Map 3
Figure 1-3 Area of Potential Effects 4
Figure 5-1 Scatter on 1899 Sanborn 23
Figure 5-2 Scatter on 1902 Sanborn 24
Figure 5-3 Scatter on 1912 Sanborn 25
Figure 6-1 STP Results 28

TABLES

Table 4--1 Previous Cultural Resource Studies Within the APE 15
Table 4--2 Previous Cultural Resource Studies Within ½-mile of the APE 17
Table 6--1 Previous Cultural Resource Studies Within the APE 29

MANAGEMENT SUMMARY

Oakland and the World Enterprises proposes the construction of a mixed-use development, the 7th and Campbell Project (Project), in Oakland, Alameda County, California. PaleoWest Archaeology (PaleoWest) was retained to conduct a desktop review and cultural sensitivity assessment of the Area of Potential Effects (APE) in compliance with Section 106 of the National Historic Preservation Act (NHPA). The Department of Housing and Urban Development (HUD) is the Lead Agency for the purpose of Section 106.

This report summarizes the methods and results of the cultural resource investigation of the Project APE. This investigation included background research, communication with the Native American Heritage Commission (NAHC) and interested Native American tribal groups, a field study, and management recommendations. The purpose of the investigation was to determine, in accordance with Section 106, the potential impacts to cultural resources.

A cultural resource records search and literature review was conducted on June 10, 2020, at the Northwest Information Center of the California Historical Resource Information System housed at Sonoma State University. The records search indicated that a total of 19 cultural resource studies have been conducted within the APE and an additional 37 cultural resource studies have been conducted within ½-mile of the APE. Two previously recorded cultural resources have been recorded within the APE (P-01-004847 and P-01-004856, both historic buildings); neither of the structures are extant. An additional 102 cultural resources have been recorded within ½-mile of the Project APE; two of these are prehistoric, 100 are historic in age.

As part of the cultural resource assessment of the Project APE, PaleoWest also requested a search of the Sacred Lands File (SLF) from the NAHC. The NAHC response dated May 18, 2020, stated that the results for the current Project were positive. The NAHC response also provided a list of Native American who may have more information regarding the area. PaleoWest contacted the Native American representatives by email on June 9, 2020, informing them of the Project. Follow up phone calls were made on August 29, 2019. Comments were received from Andrew Galvan of the Ohlone Indian Tribe requesting the results from the CHRIS literature search. A full record of the coordination efforts can be found in Appendix B.

On July 29, 2020, PaleoWest's staff archaeologist conducted a survey of the APE. A majority of the survey area was unpaved and undeveloped, with large areas of exposed ground surface. Rodent holes were examined to look for the potential for subsurface deposits. During the survey, numerous historic cultural materials were observed within and in the immediate vicinity of rodent holes. Various whiteware with and without transfer prints, glass bottle bases and finishes, sawn bone fragments, porcelain, and ceramics were identified within these areas. Based on the results of the survey, PaleoWest recommended additional subsurface testing to assist in making a recommendation about the integrity of any deposits, and the eligibility of resources on the site.

On September 23, and 25, 2020, PaleoWest staff conducted archaeological shovel testing within the APE identify deposits, establish the depth and extent of the site, and assess whether Project plans would adversely affect any potentially significant buried deposits. A total of nine shovel test pits (STPs) were placed throughout the site in areas where artifacts were found during the survey. Six STPs produced intact cultural deposits. PaleoWest recorded two sites within the Project APE, 20-481-01 the Lekos Brothers Market Foundation, and 20-481-02, a subsurface deposit associated with the historic block. 20-481-01 is recommended as not eligible for the NRHP, 20-481-02 is recommended as eligible for the NRHP under

Criterion D. Therefore, data recovery is recommended for 20-481-02 to help resolve adverse effects to the resource.

1.0 INTRODUCTION

The City of Oakland and World Enterprises proposes a mixed-use development, the 7th and Campbell Project (Project), in Oakland, Alameda County, California. PaleoWest Archaeology (PaleoWest) was retained to conduct a cultural resources assessment of the Project Area of Potential Effects (APE) in compliance with Section 106 of the National Historic Preservation Act (NHPA). The Department of Housing and Urban Development (HUD) is the Lead Agency for the purposes of Section 106.

1.1 PROJECT LOCATION AND DESCRIPTION

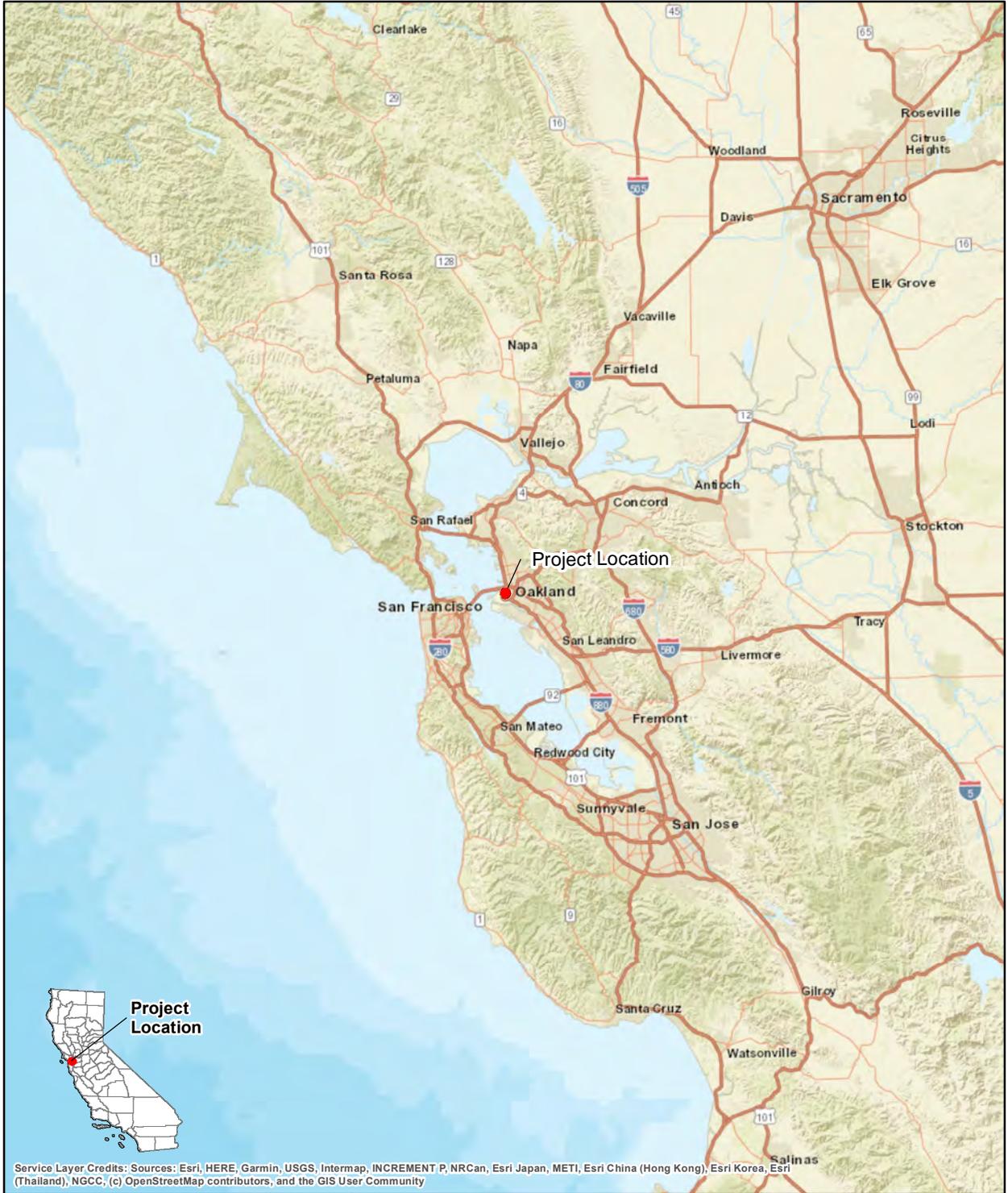
The Project involves the development of a 1.26-acre site located near the intersection of 7th Street and Campbell Street in West Oakland, Alameda County, California (Figure 1-1, 1-2). The Project development would include publicly accessible retail and commercial space as well as 79 residential units (including 23 studio units, 24 one-bedroom units, and 32 two-bedroom units) of affordable housing. The Project site is bounded by Campbell Street to the east, single-family residential to the north, mixed use commercial and residential to the west (Slim Jenkins Court), and 7th Street to the south. The site covers the southeast corner of the block bound by Willow Street, 8th Street, Campbell Street, and 7th Street, and is currently in temporary use as a productive urban farm, called West Oakland Farms, which sells organic produce to local restaurants. The site is identified as Opportunity Site 31 within Opportunity Area 2 (7th Street) in the West Oakland Specific Plan (WOSP) and evaluated in the WOSP EIR (certified June 2014).

1.1 AREA OF POTENTIAL EFFECTS

The 7th and Campbell Project is currently in the early phases of permitting and funding. As such, there are no subsurface plans available to construct a vertical Area of Potential Effects (APE). The APE for the Project is defined as the entire 1.26-acre Project APE (Figure 1-3). Current plans for ground disturbance include a 7-foot deep footing around the perimeter and at least 18 inches of re-engineered fill under the concrete slab. Once ground disturbing plans are completed, an updated APE can be created.

1.2 REPORT ORGANIZATION

This report documents the results of a cultural resource investigation conducted for the proposed Project. Chapter 1 has introduced the Project location and description. Chapter 2 states the regulatory context that for the Project. Chapter 3 synthesizes the natural and cultural setting of the Project APE and surrounding region. The results of the cultural resource literature and records search conducted at the Northwest Information Center (NWIC) and the Sacred Lands File (SLF) search, and a summary of the Native American communications is presented in Chapter 4. The field methods employed during this investigation and findings are outlined in Chapter 5, testing methods and results are described in Chapter 6, and management recommendations are provided in Chapter 7. This is followed by bibliographic references and appendices.



Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

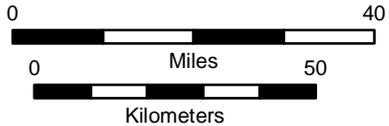


Figure 1-1
Project Vicinity Map
USGS 7.5' Quadrangle:
Oakland West, Ca (1981)
San Antonio-V & D
Peralta Land Grant
NAD 83 UTM Zone 10

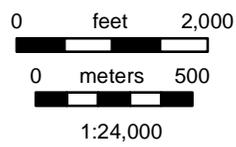
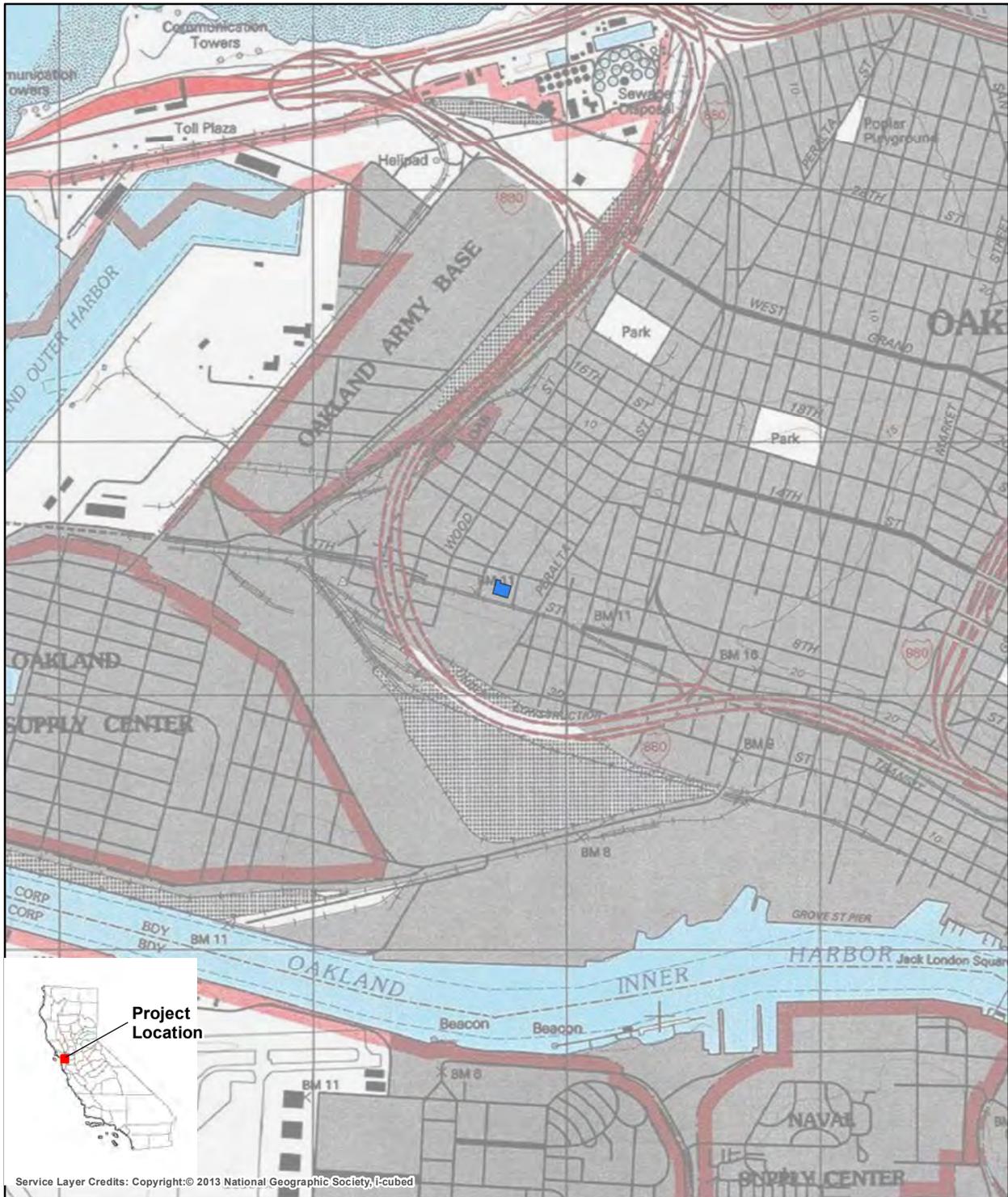
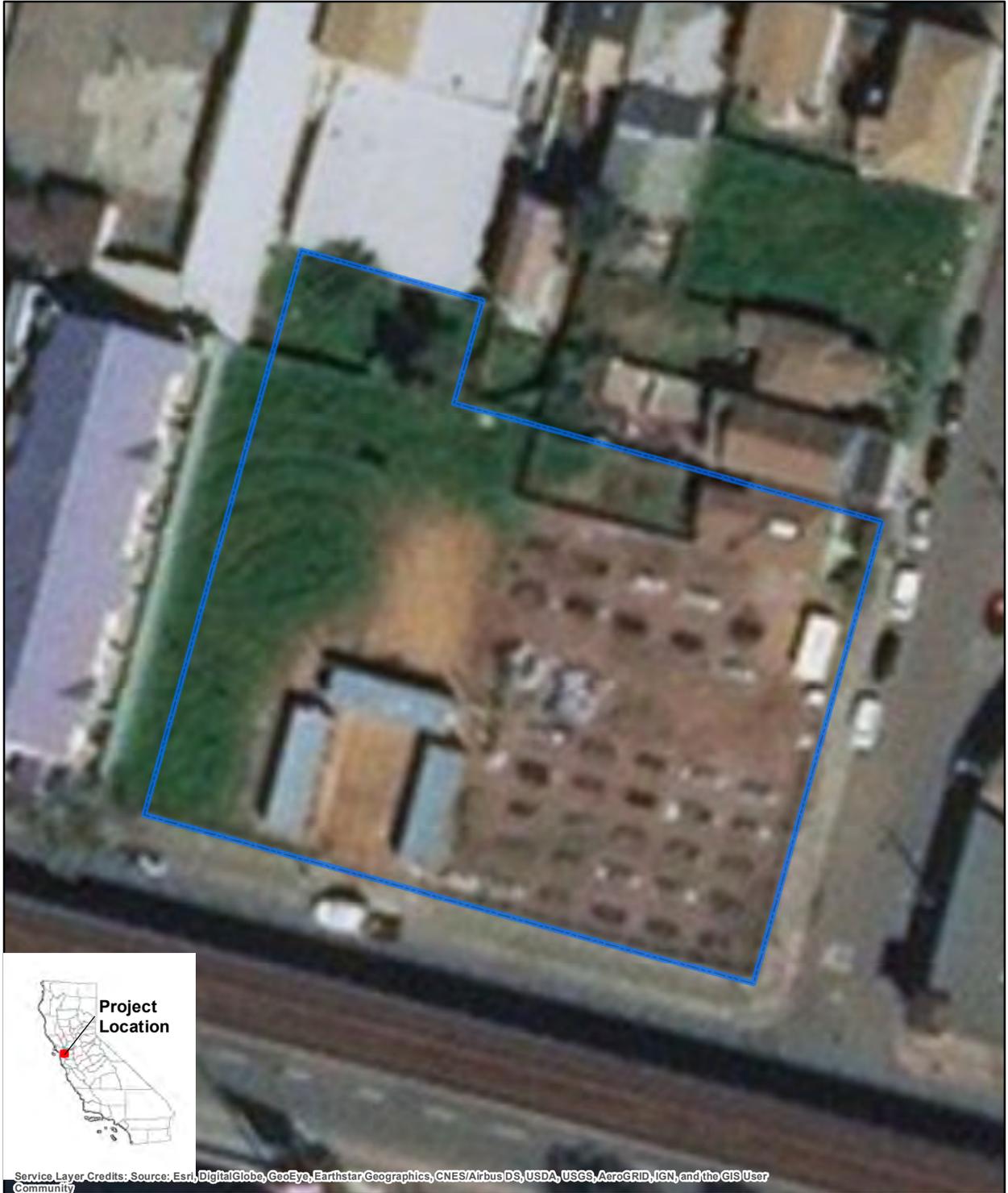


Figure 1-2
Project Location Map
 USGS 7.5' Quadrangle:
 Oakland West, Ca (1981)
 San Antonio-V & D
 Peralta Land Grant
 NAD 83 UTM Zone 10

 Project Area



Project Location

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

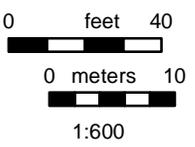


Figure 1-3
Area of Potential Effects
USGS 7.5' Quadrangle:
Oakland West, Ca (1981)
San Antonio-V & D
Peralta Land Grant
NAD 83 UTM Zone 10

Area of Potential Effects



2.0 REGULATORY CONTEXT

2.1 NATIONAL HISTORIC PRESERVATION ACT

The Department of Housing and Urban Development (HUD) is the lead federal agency and is responsible for preparing the environmental document in compliance with Section 106 of the NHPA. This technical report was prepared in compliance with the Section 106 to evaluate the potential eligibility of historic properties using NRHP eligibility criteria.

Under the National Environmental Policy Act (NEPA), federal agencies have the responsibility to “preserve important historic, cultural and natural aspects of our national heritage...” (Section 101(b)(4), 42 U.S.C. § 4331). The 1966 NHPA, as amended, requires Federal agencies to consider the effects of their undertakings on “historic properties” (i.e., cultural resources eligible for or listed on the National Register of Historic Places [NRHP]), which is done through the Section 106 process as established in 36 CFR Part 800. NEPA review and NHPA Section 106 compliance are typically coordinated, when a Federal action reviewed under NEPA constitutes an undertaking requiring NHPA Section 106 compliance.

The NRHP, created under the NHPA, is the federal list of historic, archaeological, and cultural resources worthy of preservation and is maintained and expanded by the National Park Service on behalf of the Secretary of the Interior. The Office of Historic Preservation in Sacramento, California, administers the local NRHP program under the direction of the State Historic Preservation Officer. Resources listed in the NRHP include districts, sites, buildings, structures, and objects that are significant in American history, prehistory, architecture, archaeology, engineering, and culture.

To guide the selection of properties included in the NRHP, the National Park Service has developed the NRHP Criteria for Evaluation. The criteria are standards by which every property that is nominated to the NRHP is judged. The quality of significance in American history, architecture, archaeology, and culture is possible in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, material, workmanship, feeling, and association and that meet one of the following criteria:

- **Criterion A:** A property is associated with events that have made a significant contribution to the broad patterns of our history; or
- **Criterion B:** A property is associated with the lives of persons significant in our past; or
- **Criterion C:** A property embodies the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possesses high artistic values, or that represents a significant and distinguishable entity whose components make lack individual distinction; or
- **Criterion D:** A property has yielded, or may be likely to yield, information important in prehistory or history (36 CFR Part 60).

In addition to meeting one or more of the four specific criteria listed above, a historic property or historic resource must possess “integrity” to qualify for listing in the NRHP. Integrity is generally evaluated with reference to qualities including location, design (i.e., site structure), materials, workmanship, setting, feeling, and association. A potentially eligible site must retain the integrity of the values that would make it significant. Typically, integrity is indicated by evidence of the preservation of the contextual association of artifacts, ecofacts, and features within the archaeological matrix (as would be required under Criterion D) or the retention of the features that maintain contextual association with historical developments or

personages that render them significant (Criteria A, B, or C). Evidence of the preservation of this context is typically determined by stratigraphic analysis and analysis of diagnostic artifacts and other temporal data (e.g., obsidian hydration, radiocarbon assay) to ascertain depositional integrity or by the level of preservation of historic and architectural features that associate a property with significant events, personages, or styles.

Integrity refers both to the authenticity of a property's historic identity, as shown by the survival of physical characteristics that existed during its historic period, and to the ability of the property to convey its significance. This is often not an all-or-nothing scenario (determinations can be subjective); however, the final judgment must be based on the relationship between a property's features and its significance.

3.0 SETTING

This section of the report summarizes information regarding the physical and cultural setting of the Project APE, including the prehistoric, ethnographic, and historic contexts of the general area. Several factors, including topography, available water sources, and biological resources, affect the nature and distribution of prehistoric, ethnographic, and historic-period human activities in an area. This background provides a context for understanding the nature of the cultural resources that may be identified within the region.

3.1 ENVIRONMENTAL SETTING

The San Francisco Bay region is defined by the San Francisco Peninsula on the southwest, the Marin Peninsula on the northwest, and the Berkeley Hills and the Diablo Range on the east. The heart of the region is the San Francisco Bay system, which occupies a late Pliocene trough that flooded repeatedly during the Pleistocene interglacial period, the last flooding occurring approximately 10,000 years ago. This trough extends to the south where it forms the Santa Clara and San Benito valleys and to the north where it forms the Petaluma, Napa, and Sonoma valleys (Moratto 1984:219). About 15,000 years ago the coastal shoreline extended more than 15 miles west of today's coastline. The California River flowed through the gorge that is now the Golden Gate and across what is today's submerged continental shelf, finally reaching the ocean far west of today's coastline (Moratto 1984:219).

Approximately 8,000 years ago, with the rising sea levels associated with the melting of continental glaciers, marine waters began to invade the San Francisco trough, creating a lush and bountiful marshland environment on the shores surrounding a newly created bay. Elk, deer, and waterfowl inhabited the marshlands and surrounding environs. The waters of the bay and ocean produced abalone, oyster, mussels, clams, salmon, sturgeon, seabass, shark, perch, and many other fish species. Tule and marsh grasses provided raw material for a variety of implements fashioned by the earliest inhabitants.

The flanks of the coastal mountain ranges provide the biotic zone of the coastal grasslands. These mountain ranges are the product of tectonic activity caused by the collision of the Pacific continental plate and the continent of North America. A variety of geological composition and soil variability are the result of this activity. The geologic foundation underlying the coastal grasslands is largely granite bedrock intermixed with large areas of sedimentary shales, sandstones and composites of igneous rock (Brown 1997:86). Mineral resources for both tool manufacture and trade were abundant. Obsidian, prized for projectile points and blades, was available to the north at Anadel and Napa's Glass Mountain. Franciscan chert was found locally in streambeds and rock outcroppings while banded Monterey chert could be found in coastal deposits to the south (Moratto 1984:221).

Native grasses covered the middle-elevation hillsides in the coastal areas prior to the late 18th century. The grasses now covering the coastal grassland region are not the same as those that would have been found in the area 250 years ago. Although the types of animals inhabiting the coastal regions before the influx of humans are largely known, the type of plants that may have occupied the coastal grassland is not as well defined.

Annual precipitation in the San Francisco Bay region varies from 20 to 40 in. with precipitation concentrated in the fall, winter, and spring months. This climate is much like that found in the Mediterranean: mild, rainy winters, and warm, dry summers. After the first rain at the end of October or early November, the vegetation becomes and remains green, but not growing, until late February, when it

begins to grow rapidly. By early May, grasses have usually changed to dry golden-colored and remain that way until fall (Brown 1985:86). Due to the cooling effects of the local Bay environment, temperatures in the Project APE are mild in the summer, usually averaging 55-65°F (Moratto 1984:223).

3.2 PREHISTORIC SETTING

Research into local prehistoric cultures began in the early 1900s with the work of N. C. Nelson of the University of California at Berkeley. Nelson documented 425 shellmounds along the Bay shore and adjacent coast when the Bay was still ringed by salt marshes three to five miles wide (Nelson 1909:322-331). He maintained that the intensive use of shellfish, a subsistence strategy reflected in both coastal and bay shoreline middens, indicated a general economic unity in the region during prehistoric times, and he introduced the idea of a distinct San Francisco Bay archaeological region (Moratto 1984:227). Three sites, in particular, provided the basis for the first model of cultural succession in Central California, the Emeryville Shellmound (CA-ALA-309), the Ellis Landing Site (CA-CCO-295), and the Fernandez Site (CA-CCO-259) (Moratto 1984:227).

Investigations into the prehistory of the Central Valley of California, presaged by early amateur excavations in the 1890s, began in earnest in the 1920s. In the early 20th century, Stockton-area amateur archaeologists J. A. Barr and E. J. Dawson separately excavated several sites in the Central Valley and made substantial collections. Based on artifact comparisons, Barr identified what he believed were two distinct cultural traditions, an early and a late. Dawson later refined his work and classified the Central Valley sites into three “age-groups” (Schenck and Dawson 1929:402).

Professional or academic-sponsored archaeological investigations in central California began in the 1930s, when J. Lillard and W. Purves of Sacramento Junior College formed a field school and conducted excavations throughout the Sacramento Delta area. By seriating artifacts and mortuary traditions, they identified a three-phase sequence similar to Dawson’s, including Early, Intermediate, and Recent cultures (Lillard and Purves 1936). This scheme went through several permutations (see Lillard et al. 1939; Heizer and Fenenga 1939). In 1948 and again in 1954, Richard Beardsley refined this system and extended it to include the region of San Francisco Bay (Beardsley 1948, 1954). The resulting scheme came to be known as the Central California Taxonomic System (CCTS) (Fredrickson 1973; Hughes 1994:1). Subsequently, the CCTS system of Early, Middle, and Late Horizons was applied widely to site dating and taxonomy throughout central California.

As more data were acquired through continued fieldwork, local exceptions to the CCTS were discovered. The accumulation of these exceptions, coupled with the development of radiocarbon dating in the 1950s and obsidian hydration analysis in the 1970s, opened the possibility of dating deposits more accurately. Much of the subsequent archaeological investigation in central California focused on the creation and refinement of local versions of the CCTS.

In the 1960s and 1970s, archaeologists including Ragir (1972) and Fredrickson (1973) revised existing classificatory schemes and suggested alternative ways of classifying the prehistory of California. Fredrickson (1973:113-114) proposed four “major chronological periods” in prehistoric California: the Early Lithic Period (described as hypothetical), a Paleoindian Period, an Archaic Period, and an Emergent Period. The Archaic and Emergent Periods were further divided into Upper and Lower periods. Subsequently, Fredrickson (1974, 1994) subdivided the Archaic into Lower, Middle, and Upper. Milliken et al. (2007) have recently updated and further refined this scheme.

A series of “patterns,” emphasizing culture rather than temporal periods, can be identified throughout California prehistory. Following Ragir, Fredrickson (1973:123) proposed that the nomenclature for each pattern relates to the location at which it was first identified, such as the Windmill, Berkeley, and Augustine Patterns.

Various modifications of the CCTS (e.g., Bennyhoff and Hughes 1987; Fredrickson 1973, 1974; Milliken and Bennyhoff 1993) sustain and extend the system’s usefulness for organizing our understanding of local and regional prehistory in terms of time and space. The cultural patterns identified in the Bay Area that in a general way correspond to the CCTS scheme are the Berkeley and Augustine patterns (for information on the Berkeley and Augustine Patterns see Fredrickson 1973, Milliken et al. 2007, Moratto 1984 and Wiberg 1997). Dating techniques such as obsidian hydration analysis or radiometric measurements can further increase the accuracy of these assignments.

Most recently, Milliken et al. (2007:99-123) developed what they term a “hybrid system” for the San Francisco Bay Area, combining the Early-Middle-Late Period temporal sequence with the pattern-aspect-phase cultural sequence. Dating of the cultural patterns, aspects, and phases was based on Dating Scheme D of the CCTS, developed by Groza (2002). Groza directly dated over 100 Olivella shell beads, obtaining a series of AMS radiocarbon dates representing shell bead horizons. The new chronology she developed has moved several shell bead horizons as much as 200 years forward in time.

Milliken et al.’s (2007) San Francisco Bay Area Cultural Sequence includes:

- Early Holocene (Lower Archaic) from 8000 to 3500 B.C.
- Early Period (Middle Archaic) from 3500 to 500 B.C.
- Lower Middle Period (Initial Upper Archaic) from 500 B.C. to A.D. 430
- Upper Middle Period (Late Upper Archaic) from A.D. 430 to 1050
- Initial Late Period (Lower Emergent) from A.D. 1050 to 1550
- Terminal Late Period, post-A.D. 1550

No archaeological evidence dating to pre-8000 B.C. has been found in the Bay Area. Milliken et al. (2007) posit that this dearth of archaeological material may be related to subsequent environmental changes that submerged sites, buried sites beneath alluvial deposits, or destroyed sites through stream erosion. A brief summary of the approach presented by Milliken et al. (2007) follows.

A “generalized mobile forager” pattern marked by the use of milling slabs and handstones and the manufacture of large, wide-stemmed and leaf-shaped projectile points emerged around the periphery of the Bay Area during the Early Holocene Period (8000 to 3500 B.C.). Beginning around 3500 B.C., evidence of sedentism, interpreted to signify a regional symbolic integration of peoples, and increased regional trade emerged. This Early Period lasted until ca. 500 B.C. (Milliken et al. 2007:114, 115).

Milliken et al. (2007:115) identify “a major disruption in symbolic integration systems” circa 500 B.C., marking the beginning of the Lower Middle Period (500 B.C. to A.D. 430). Bead Horizon M1, dating from 200 B.C. to A.D. 430, is described by Milliken et al. (2007:115) as marking a ‘cultural climax’ within the San Francisco Bay Area.

The Upper Middle Period (A.D. 430 to 1050) is marked by the collapse of the Olivella saucer bead trade in central California, abandonment of many Bead Horizon M1 sites, an increase in the occurrence of sea otter bones in those sites that were not abandoned, and the spread of the extended burial mortuary pattern characteristic of the Meganos complex into the interior East Bay. Bead Horizons M2 (A.D. 430 to 600),

M3 (A.D. 600 to 800), and M4 (A.D. 800 to 1050) were identified within this period (Milliken et al. 2007:116).

The Initial Late Period, dating from A.D. 1050 to 1550, is characterized by increased manufacture of status objects. In lowland central California during this period, Fredrickson (1973, 1994) noted evidence for increased sedentism, the development of ceremonial integration, and status ascription. The beginning of the Late Period (ca. A.D. 1000) is marked by the Middle/Late Transition bead horizon. The Terminal Late Period began circa A.D. 1550 and continued until European settlement of the area.

3.3 ETHNOGRAPHIC SETTING

This section provides a brief summary of the ethnography of the Project vicinity and is intended to provide a general background only. More extensive reviews of Ohlone ethnography are presented in Bocek (1986), Cambra et al. (1996), Kroeber (1970), Levy (1978), Milliken (1995), and Shoup et al. (1995).

The Project APE lies within the region occupied by the Ohlone or Costanoan group of Native Americans at the time of historic contact with Europeans (Kroeber 1970:462-473). Although the term Costanoan is derived from the Spanish word *Costaños*, or “coast people,” its application as a means of identifying this population is based in linguistics. The Costanoans spoke a language now considered one of the major subdivisions of the Miwok-Costanoan, which belonged to the Utian family within the Penutian language stock (Shipley 1978:82-84). The term “Costanoan” actually designates a family of eight languages.

Tribal groups occupying the area from the Pacific Coast to the Diablo Range and from San Francisco to Point Sur spoke the other seven languages of the Costanoan family. Modern descendants of the Costanoan prefer to be known as Ohlone. The name Ohlone is derived from the Oljon group, which occupied the San Gregorio watershed in San Mateo County (Bocek 1986:8). The two terms (Costanoan and Ohlone) are used interchangeably in much of the ethnographic literature.

Regarding linguistic evidence, it has been suggested that the ancestors of the Ohlone arrived in the San Francisco Bay area about A.D. 500, having moved south and west from the Sacramento-San Joaquin Delta. The ancestral Ohlone displaced speakers of a Hokan language and were probably the producers of the artifact assemblages that constitute the Augustine Pattern previously described (Levy 1978:486).

Although linguistically linked as a family, the eight Costanoan languages actually comprised a continuum in which neighboring groups could probably understand each other. However, beyond neighborhood boundaries, each group’s language was reportedly unrecognizable to the other. Each of the eight language groups was subdivided into smaller village complexes or tribal groups. These groups were independent political entities, each occupying specific territory defined by physiographic features. Each group-controlled access to the natural resources of its territory, which also included one or more permanent villages and numerous smaller campsites used as needed during a seasonal round of resource exploitation. Chochenyo or East Bay Costanoan was the language spoken by the estimated 2,000 people who occupied the “east shore of San Francisco Bay between Richmond and Mission San Jose, and probably also in the Livermore Valley” (Levy 1978:485).

A chief, who inherited the position patrilineally and could be either a woman or man, provided leadership. The chief and a council of elders served mainly as community advisers. Specific responsibility for feeding visitors, providing for the impoverished and directing ceremonies, hunting, fishing, and gathering fell to the chief. Only during warfare was the chief’s role as absolute leader recognized by group members (Levy 1978:487).

Extended families lived in domed structures thatched with tule, grass, wild alfalfa, or ferns (Levy 1978:492). Semi-subterranean sweathouses were built into pits excavated in stream banks and covered with a structure against the bank. The tule raft, propelled by double-bladed paddles, was used to navigate across San Francisco Bay (Kroeber 1970:468).

Mussels were an important staple in the Ohlone diet, as were acorns of the coast live oak, valley oak, tanbark oak, and California black oak. Seeds and berries, roots and grasses, and the meat of deer, elk, grizzly, rabbit, and squirrel formed the Ohlone diet. Careful management of the land through controlled burning served to ensure a plentiful, reliable source of all these foods (Levy 1978:491).

The Ohlone usually cremated a corpse immediately upon death but, if there were no relatives to gather wood for the funeral pyre, interment occurred. Mortuary goods comprised most of the personal belongings of the deceased (Levy 1978:490).

The arrival of the Spanish in 1775 led to a rapid and major reduction in native California populations. Diseases, declining birth rates, and the effects of the mission system served to largely eradicate the aboriginal life ways. Brought into the missions, the surviving Ohlone, along with the Esselen, Yokuts, and Miwok, were transformed from hunters and gatherers into agricultural laborers (Levy 1978; Shoup et al. 1995). Following secularization of the mission system in the 1830s, numerous ranchos were established in the 1840s. Generally, the few Indians who remained were then forced, by necessity, to work on the ranchos.

In the 1990s, some Ohlone groups (e.g., the Muwekma, Amah, and Esselen further south) submitted petitions for federal recognition (Esselen Nation 2007; Muwekma Ohlone Tribe 2007). Many Ohlone are active in preserving and reviving elements of their traditional culture and are active participants in the monitoring and excavation of archaeological sites.

3.4 HISTORICAL SETTING

The historic period in the eastern San Francisco Bay region began with the Fages-Crespi expedition of 1770. The Fages party explored the eastern shore of San Francisco Bay, eventually reaching the location of modern Fremont, where they traded with the local Costanoans. Members of the expedition eventually sighted the entrance to San Francisco Bay from the Oakland Hills. In 1772, a second Fages expedition traveled from Monterey through what are now Milpitas, San Lorenzo, Oakland, and Berkeley, finally reaching Pinole on March 28, 1772 (Cook 1957:131). From there they traveled through the locations of today's Rodeo and Crockett to Martinez, made a brief foray into the delta region of the Central Valley, and then camped somewhere near Pittsburg or Antioch. On March 31, the Fages party began the return journey to Monterey. They traveled to the vicinity of today's Walnut Creek, turned south, and then made their way to the Danville area, where they spent the night. On April 1st, they passed through today's San Ramon, Dublin, and Pleasanton, finally arriving back in the area of Milpitas on the following day.

In 1776, the Anza-Font expedition traveled through the same area and also traded with residents of native villages encountered along the way. The most significant impact of the European presence on the local California natives, however, was not felt until the Spanish missions were established in the region (Cook 1957:132).

In 1775, Captain Juan Manuel Ayala's expedition studied the San Francisco Bay and ventured up the Sacramento and San Joaquin rivers. The first mission in the region was established the following year with the completion of Mission San Francisco de Asis (Mission Dolores) in San Francisco. Mission Santa Clara followed in 1777, and Mission San Jose in 1797. The Mission era lasted approximately 60 years and proved

to be the downfall of the native inhabitants of the region, who were brought to the missions to be assimilated into a new culture as well as to provide labor for the missionaries. Diseases introduced by the early explorers and missionaries, and the contagions associated with the forced communal life at the missions killed many local peoples, while changes in land use made traditional hunting and gathering practices increasingly difficult. Cook (1976) estimates that by 1832, the Costanoan population had been reduced from a high of over 10,000 in 1770 to less than 2,000.

In 1820, Sergeant Luis Maria Peralta received a grant of “10 square leagues” of land in the East Bay in recognition of his long, faithful military service in California. Peralta named his grant Rancho San Antonio. It comprised the land that lay from the water's edge to the crest of the Oakland hills between San Leandro Creek to the south and El Cerrito Creek to the north (Hendry and Bowman 1940), completely encompassing modern-day Oakland, Berkeley, Emeryville, Piedmont, Albany, Alameda, and a portion of San Leandro (Sher 1994:9).

Following the U.S. takeover of Alta California from Mexico in 1848, rancho lands began to be divided up and generally overrun by Anglo immigration to the area that was coincident with the land boom following the Gold Rush of 1849. Rancho San Antonio suffered the fate of most Mexican land grants in northern California, with squatters taking quasi-legal title to lands, and the courts denying title to the original grantees (Hendry and Bowman 1940).

Early surveyors mapped parts of Oakland just after the time that Peralta's dominance began to give way to recently settled American interests. The 1856 Survey of the Coast of the United States depicts the area that would become known as downtown and West Oakland. Although streets had been laid out near Broadway, much of the dry land remained covered in groves of oaks and was relatively unpopulated. Marshland extended as far north as modern-day Fifth Street in several locations, and Gibbons Pier, located at the end of Seventh Street, was the only sign of the industry to come. Oakland's early growth was concentrated near the wharves and rail lines that eventually transformed the rural outpost into a transportation center for both passengers and goods.

The first growth period followed the completion of the San Francisco & Oakland Railroad (SF&ORR) along Seventh Street in 1863, connecting Oakland to San Francisco by way of San Jose and enticing real estate speculators who saw the area as ideal for development. Only six years after the local rail connection was completed, the Big Four (Collis Huntington, Leland Stanford, Charles Crocker and Mark Hopkins) made a decision that would shape Oakland's future. The Central Pacific Railroad would locate the western terminus of its transcontinental route at Oakland Point (Scott 1959:48). Buildings were clustered at the foot of Broadway as well as at the end of the alignment of Seventh Street, where wharves extended into the bay. The businesses and residents that would soon fill the area, however, did not yet surround the local and transcontinental rail lines. City streets had been surveyed, although many blocks remained wooded or had become home to only small numbers of people. The large lot size characteristic of a more rural settlement pattern was still present, and the northeastern portions of the city were growing far slower than downtown and West Oakland.

By the turn-of-the-century, electric railways connected the most densely populated areas of Oakland to the outlying suburbs. Some previously urban middle-class families now chose a suburban life in the relatively open spaces of the East Bay, and the 1906 earthquake further encouraged some urban residents to relocate to outlying areas.

The Oakland, Antioch & Eastern Railroad (OA&E) was also depicted on the 1915 USGS map along an alignment that ran southeast to northwest, ½-mile east of the Project APE. The OA&E, an interurban line, shared the Key system ferry terminal in Oakland and made travel between San Francisco and emerging

suburbs and recreation areas easier and more cost efficient. Lines between Oakland and Sacramento were operational by 1913 and eventually became part of the Sacramento Northern Railroad (Groff 2011; Western Railway Museum 2020).

World War I was a catalyst for the shipyards on the Oakland waterfront, as new workers were enticed to the area by increased economic activity. Beth Bagwell summarized the growth of Oakland's hillside neighborhoods.

After the earthquake, Oakland experienced a housing construction boom; bungalows replaced the remaining hayfields in Rockridge, Claremont, and the district north to the Berkeley border. In the 1920s, the demand continued, spurred by the post-war prosperity and by the opening of new real estate tracts made easily reachable by the automobile. Piedmont, Montclair, Trestle Glen, and the Lakeshore district were among neighborhoods that experienced their greatest growth at this time. In 1923, a graph in the Oakland Tribune Yearbook showed a 900 percent increase in the number of dwellings built over the previous five years (Bagwell 1982:200).

Oakland did not escape the consequences of the Great Depression. Although the Southern Pacific Railroad (which merged with the Central Pacific Railroad in 1885) remained solvent, large numbers of jobs were lost. The San Francisco Bay Bridge was constructed between 1933 and 1936 in the midst of the Great Depression, and although it may not have been evident at the time, the bridge would significantly change a community that had built itself around its transportation terminals.

World War II brought a degree of economic relief through another round of increased shipbuilding, and it also saw the construction of the Oakland Army Base and the Naval Supply Center. As the outlying areas of Oakland continued to fill with new immigrants and residents who had left the city center, the oldest areas of downtown struggled, as automobiles and trucks began to dominate the transportation market that had defined Oakland's early growth.

3.5 SITE SPECIFIC HISTORY

The 1889 Sanborn Fire Insurance map for Oakland lists three dwellings and associated outbuildings, a restaurant, a religious hall, a store, and a blacksmith shop, along with other ancillary buildings (Sanborn 1889). The dwellings located at 861 and 863 Campbell Street were listed as single-story, wood framed houses. The dwelling at 861 had two small outbuilding abutting each other along its rear fence line. The dwelling at 863 Campbell had one small outbuilding which abutted its rear fence line along with one of the outbuildings from the neighboring 861 Campbell Street location. The third dwelling that appears in the Project site on the 1889 Sanborn map was located at 1662 7th Street (Sanborn 1889). This was a two-story wood frame building with bay window and a one-story attachment in the rear.

Businesses within the Project site in 1889 included a blacksmith shop at 1666 7th Street with two stables in the rear yard and a two-story fancy goods and candies store at 1658-1660 with residence on second floor. A diner was located at 1652 7th Street at the intersection with Campbell Street (Sanborn 1889). This was a two-story wood frame structure with residence on the second floor. At 1654-1656 7th Street was a Gospel Hall, which was a two-story structure with residence on the second floor. The fancy goods store, Gospel Hall and restaurant were a contiguous structure called the Graffelman Block and attached one story structures were located behind the hall and the restaurant, along with outhouses and a two-story stable or carriage house.

The 1902 Sanborn Fire Insurance map indicates that two dwellings had been constructed within the Project site since 1889 (Sanborn 1902). The first was a small one-story dwelling attached to a large shed at 1676

7th Street and the second was a one-story frame dwelling at 1668 7th Street. Also, a portion of the restaurant that existed at the corner of 7th and Campbell had been divided, so that a new business was located at the new address of 857 Campbell Street. Between 1889 and 1902, one of the one-story attachments behind the Graffelman Block building was given the address of 1656 ½ 7th Street (Sanborn 1889, Sanborn 1902). A restaurant still existed within the Graffelman Block, but it was located at the 1658-1660 7th Street location while the former Gospel Hall and restaurant had become stores. The blacksmith remained the same from 1889 (Sanborn 1889).

By 1912, the Sanborn Fire Insurance maps shows that the addresses have all changed within the Project APE, and a large two story flat had been constructed at 711 and 713 Campbell Street just south of the two, one-story frame buildings that had been on Campbell Street since before 1889 (Sanborn 1912). These dwellings had the new addresses of 717 and 719 Campbell Streets. All of the buildings along 7th Street within the Project site were stores in 1912, except for the two-story dwelling at 1664 (formerly 1662) 7th Street, and the former blacksmith shop, that was vacant in 1912. The large shed attached to the single-story dwelling at 1676 7th Street in 1902 now shows its purpose as being a coal storage shed, which continued along much of the western edge of the Project site (Sanborn 1912).

All of the above structures appear to be visible on aerial photographs starting in 1931 and in 1946 (NETR 1931, NETR 1946). By 1958, the structures that composed the Graffelman Block on the corner of 7th Street and Campbell Street within the Project site had been demolished and a parking lot was its replacement (NETR 1958). Between 1968 and 1980, all structures within the Project APE had been razed except for the western-most three structures within the Project site from 1670-1676 7th Street (NETR 1968, NETR 1980). By 1993, all structures that were once on the site had been demolished, and the site remains vacant until the Oakland Food Pantry at 1672 7th Street appears on aerial photos starting in 2002 (NETR 1993, NETR 2002). Along with the Food Pantry, the eastern portion of the Project site appears to be in use as a community garden, and all other portions of the Project site are presently vacant.

4.0 CULTURAL RESOURCES INVENTORY

A literature review and records search were conducted at the NWIC, housed at California State University on June 10, 2020. This inventory effort included the Project APE and a 1/2 -mile radius around it, collectively termed the Project study area. The objective of this records search was to identify prehistoric or historical cultural resources that have been previously recorded within the study area during previous cultural resource investigations.

4.1 PREVIOUS CULTURAL RESOURCE INVESTIGATIONS

The records search indicated that 19 cultural resource studies have been conducted within the APE (Table 4-1). Additionally, 37 cultural resource studies have been conducted within ½-mile of the APE (Table 4-2).

Table 4--1
Previous Cultural Resource Studies Within the APE

Report No.	Authors	Year	Title	Publisher
S-026045	Richard Carrico, Theodore Cooley, and William Eckhardt	2000	Cultural Resources Reconnaissance Survey and Inventory Report for the Metromedia Fiberoptic Cable Project, San Francisco Bay Area and Los Angeles Basin Networks	Mooney & Associates
S-031997	David Stone and Karen Foster	2005	Historic Property Survey Report, BART Seismic Retrofit Project, Berkeley Hills Tunnel to Montgomery Street Station, Caltrans District 4, Alameda and San Francisco Counties, California	Science Applications International Corporation
S-031997a	Jami Layton	2005	Historical Resources Evaluation Report, BART Seismic Retrofit Project, Berkeley Hills Tunnel to Montgomery Street Station, Alameda and San Francisco Counties, California	Caltrans District 4
S-031997b		2005	Archaeological Survey Report, Bart Seismic Retrofit Project, Berkeley Hills Tunnel to Montgomery Street Station, Caltrans District 4, Alameda and San Francisco Counties, California	Caltrans District 4
S-031997c		2005	Finding of No Adverse Effect, BART Seismic Retrofit Project, Berkeley Hills Tunnel to Montgomery Street Station, Caltrans District 4, Alameda and San Francisco Counties, California	Caltrans District 4
S-031997d	Milford Wayne Donaldson	2005	FHWA050310A, Historic Properties Survey Report (HPSR) for the proposed San Francisco Bay Area Rapid Transit District (BART) Seismic Retrofit Project from the Berkeley Hills Tunnel (Alameda County) to the Montgomery Street	Office of Historic Preservation

			Station (San Francisco County), a Local Assistance project	
S-037362		1990	Historic Property Survey Report for the Proposed I-880 Reconstruction Project in the Cities of Oakland and Emeryville, Alameda County, ALA-880 32.12/34.31; ALA-580 45.99/46.95; ALA-80 1.99/3.39; 04195-190271 MEQ85001	California Department of Transportation, District 4
S-037362a	Donna M. Garaventa, Michael R. Fong, Sondra A. Jarvis, and Angela M. Banet	1990	Archaeological Survey Report, I-880/Cypress Replacement Project, 04-ALA-880 32.12/34.31, 04-ALA-580 45.99/46.95, 04-ALA-80 1.99/3.39, E.A. #04195-190271 MEQ 85001, Cities of Oakland and Emeryville, Alameda County, California	Basin Research Associates, Inc.
S-037362b		1990	Historic Architecture Survey Report for the Proposed Reconstruction of Interstate 880 Within the City Limits of Oakland and Emeryville, Alameda County, 04-ALA-880 32.12/34.31, 04-ALA-580 45.99/46.95, 04-ALA-80 1.99/3.79, 4195-190271 MEQ85001	California Department of Transportation
S-037362c	Gary Knecht, Alex G. Chiappetta, Michael R. Corbett, Miriam Liskin, Gail G. Lombardi, Betty Marvin, Woodruff C. Minor, Donnalyn Polito, Christine Winans, and Aicha S. Woods	1990	Historic Architecture Survey Report, Part VII. A, Subarea A: City of Oakland	Oakland Cultural Heritage Survey
S-037362d	Bonnie W. Parks, Denise O'Connor, and Stephen D. Mikesell	1990	Historic Architecture Survey Report Part VII. B, Subarea B: Emeryville and San Francisco-Oakland Bay Bridge Vicinity	California Department of Transportation
S-037362e	John W. Snyder	1990	Historic Architecture Survey Report Part VII. C, Subarea C: Southern Pacific Railroad Property and Interurban Railway Structures	Caltrans, District 4
S-037362f	Kathryn Gualtieri	1990	FHWA900927X; I-880 Cypress structure, ER-1404 (1)	Office of Historic Preservation
S-037362g		1990	First Addendum Historic Property Survey Report for the Proposed I-880 Reconstruction Project in the Cities of Oakland and Emeryville, Alameda County ALA-880 32.12/34.31; ALA-580 45.99/46.95; ALA-80 1.99/3.39 04195-190271 MEQ85001	California Department of Transportation

S-037362h	Donna M. Garaventa and Sondra A. Jarvis	1990	First Addendum Archaeological Survey Report, I-880/Cypress Replacement Project 04-ALA-880 32.12/34.31, 04-ALA-580 45.99/46.95, 04-ALA-80 1.99/3.39, E.A.#04195-190271 MEQ 85001, Cities of Oakland and Emeryville, Alameda County, California	Basin Research Associates, Inc.
S-037362i		1990	First Addendum Historic Architecture Survey Report for the Proposed Reconstruction of Interstate 880 within the City Limits of Oakland and Emeryville, Alameda County 04-ALA-880 32.12/34.31, 04-ALA-580 45.99/46.95, 04-ALA-80 1.99/3.79, 4195-19027 MEQ85001	California Department of Transportation
S-037362j	Gary Knecht, Alex G. Chiappetta, Michael R. Corbett, Miriam Liskin, Gail G. Lombardi, Betty Marvin, Woodruff C. Minor, Donnalynn Polito, Christine Winans, and Aicha S. Woods	1990	First Addendum Historic Architecture Survey Report Part VII, Subarea F: City of Oakland	California Department of Transportation
S-037362k		1991	Second Addendum Historic Property Survey Report for the Proposed Reconstruction of Interstate 880 within the City Limits of Oakland and Emeryville, Alameda County 04-ALA-880 32.12/34.31, 04-ALA-580 45.99/46.95, 04-ALA-80 1.99/3.79 4195-190270	California Department of Transportation
S-037362l	Gary Knecht, Miriam Liskin, Gail G. Lombardi, Betty Marvin, and Christine Winans	1991	Second Addendum Historic Architecture Survey Report Part VII Subarea G: City of Oakland	California Department of Transportation

**Table 4--2
Previous Cultural Resource Studies Within ½-mile of the APE**

Report No.	Authors	Year	Title	Publisher
S-012289	Donna M. Garaventa, Michael R. Fong, Sondra A. Jarvis, and Angela M. Banet	1990	Archaeological Survey Report, I-880/Cypress Replacement Project, 04-ALA-880 P.M. 32.4/34.3, E.A. #04195-190271 MEQ 85001, Cities of Oakland and Emeryville, Alameda County, California	Basin Research Associates, Inc.
S-018515	Grace H. Ziesing	1996	Historic Sensitivity Study for Proposed Parking Lot between 7th and 8th Sts. and Union and Cypress Sts., Oakland, California (letter report)	Sonoma State University Academic Foundation Inc.
S-021780	John Mc Ilroy	1999	Archaeological Monitoring at 1717 Chase Street, West Oakland, Alameda County, California, ASC# 50001-41/49 (letter report)	Anthropological Studies Center, Sonoma State University
S-022820	Wendy J. Nelson, Tammara Norton, Larry Chiea, and Eugenia Mitsanis	2000	Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project, Segment WS07: Oakland to San Jose	Far Western Anthropological Research Group, Inc.
S-022928	Richard S. Shepard, Roger D. Mason, and Ann M. Mums	2000	Cultural Resources Records Search and Survey Report for the WS02 Oakland Re-Route Fiber Optic Connection Corridor, City of Oakland, Alameda County, California	Chambers Group Inc.

S-023778	David Chavez and Jan M. Hupman	2000	Archaeological Resources Investigations for the EBMUD East Bayshore Recycled Water Project, Alameda County, California	David Chavez & Associates
S-023778	David Chavez	2002	Archaeological Resources Investigations for the EBMUD East Bayshore Recycled Water Project, Alameda County, California: Supplemental Report	David Chavez & Associates
S-023778	David Chavez and Jan M. Hupman	2002	Archaeological Resources Investigations for the EBMUD East Bayshore Recycled Water Project, Alameda County, California: Additional Pipeline Alignments	David Chavez & Associates
S-025526	Colin Busby, Melody Tannam, Donna Garaventa, Michael Corbett, and Woodruff Minor	1997	Historic Property Survey Report/Finding of Effect, 50-Foot Channel Navigation Improvements Project, Oakland Harbor, Alameda County	Basin Research Associates, Inc.; Corbett & Minor
S-025650	Mary Praetzelis, Erica Gibson, Sherri Gust, Virginia Hellman, Madeline Hirn, Jack Mc Ilroy, Michael Meyer, Adrian Praetzelis, Sunshine Psota, Maria Ribeiro, Peter Schulz, Margo Schur, Elaine-Maryse Solari, Suzanne Stewart, Michael Stoyka, and Rose White	2001	Block Technical Report: Historical Archaeology, I-880 Cypress Replacement Project, Blocks 19, 20, 21 and 37	Anthropological Studies Center, Sonoma State University
S-025651	Mary Praetzelis, Erica Gibson, Sherri Gust, Virginia Hellman, Madeline Hirn, Jack Mc Ilroy, Michael Meyer, Adrian Praetzelis, Sunshine Psota, Maria Ribeiro, and Peter Schulz	2001	Block Technical Report: Historical Archaeology, I-880 Cypress Replacement Project, Blocks 22, 24 and 29	Anthropological Studies Center, Sonoma State University
S-025652	Mary Praetzelis, Erica Gibson, Sherri Gust, Virginia Hellman, Madeline Hirn, Jack Mc Ilroy, Michael Meyer, Adrian Praetzelis, Sunshine Psota, Maria Ribeiro, and Peter Schulz	2001	Block Technical Report: Historical Archaeology, I-880 Cypress Replacement Project, Blocks 27, 28, and 31	Anthropological Studies Center, Sonoma State University
S-027364	Allen G. Pastron, Andrew Gottsfeld, Eric Wohlgemuth, Becky Johnson, Jason Claiborne, L. Dale Beevers, Matt Calder, and Jonathan Goodrich	2003	Final Archaeological Report, East Block of the Mandela Gateway Project, City of Oakland, Alameda County, California	Archeo-Tec
S-028040	JRP Historical Consulting Services	2000	Letter Report on the Impact of the Cypress Structure Project on the Oakland Army Base Historic District	JRP Historical Consulting Services
S-029028	Thad Van Bueren, Scott Baxter, Anmarie Medin, Linda S. Cummings, Christie Hunter, and Kathryn Puseman	2004	A Germanic Enclave in West Oakland: Archaeological Investigations for the Mandela Park and Ride Relocation Project in the City of Oakland, California, 04-ALA-880, K.P 51.6 (PM 32.1) EA 04-446801	Caltrans
S-032164	Harry Y. Yahata and Robert L. Gross	1999	Historic Property Survey Report and Findings of No Historic Properties Affected for the Mandela Parkway Corridor Improvement Project, City of Oakland, Alameda County, 04-Ala-880-KP, 52.5/54.9 (PM 32.6/34.1)	California Department of Transportation, District 4
S-032164	Jack McIlroy, Jack Meyer, Elaine-Maryse Solari, Grace H. Ziesing, Kimberly Esser, Maria Ribeiro, Adrian Praetzelis, and Mary Praetzelis	1999	Mandela Parkway Corridor Improvement Project: Archaeological Sensitivity Study and Survey Report, 04-Ala-880, KP 52.5/54.9 (PM 32.6/34.1), in the City of Oakland, California, Alameda County, EA No. 292360	Anthropological Studies Center, Sonoma State University

S-033061	Nancy Sikes, Cindy Arrington, Bryon Bass, Chris Corey, Kevin Hunt, Steve O'Neil, Catherine Pruett, Tony Sawyer, Michael Tuma, Leslie Wagner, and Alex Wesson	2006	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California	SWCA Environmental Consultants
S-033061	SWCA Environmental Consultants	2006	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California	SWCA Environmental Consultants
S-033061	Nancy E. Sikes	2007	Final Report of Monitoring and Findings for the Qwest Network Construction Project (letter report)	SWCA Environmental Consultants
S-034262	Sunshine Psota	2007	Results of Presence/Absence Archaeological Trenching at 14th Street Apartments, Oakland, Alameda County, California (letter report)	Holman & Associates Archaeological Consultants
S-034489	Lorna Billat	2008	Collocation ("CO") Submission Packet, FCC Form 621, AAT West Oakland, SF-19580A	Earth Touch, Inc.
S-034519	Denise M. Jurich	2008	Archaeological Survey of Approximately 6.0 Acres, between 14th and 16th Streets along Wood Street, City of Oakland, Alameda County, California (letter report)	PBS&J
S-035459	Archeo-Tec, Inc	2008	Archaeological Final Report 14th Street Apartments Project City of Oakland, Alameda County, California	Archeo-Tec, Inc
S-035927	Colin I. Busby	2008	Historic Properties Survey Report: West Oakland Transit Village - 7th Street Improvements, City of Oakland, Alameda County, California Project No. STPLER 5012 (082) FHWA 080806A	Basin Research Associates, Inc.
S-035927	Colin I. Busby	2008	Archaeological Survey Report, West Oakland Transit Village - 7th Street Improvements, City of Oakland, Alameda County, California Project No. STPLER 5012 (082)	Basin Research Associates, Inc.
S-039430	Allen G. Pastron	2008	Executive Summary of Results of On-site Archaeological Monitoring and Evaluation at the 14th Street Apartments at Central Station Project, City of Oakland, Alameda County, California (letter report)	Archeo-Tec
S-042712	Carolyn Losee	2013	Cultural Resources Investigation for AT&T Mobility CCU2795 "Bay Bridge DAS" 1712 - 13th Street, Oakland, Alameda County, California 94607(letter report)	Archaeological Resources Technology
S-046249	Mary Praetzellis, Adrian Praetzellis, Marta Gutman, Paul R. Mullins, Adrian Praetzellis, Mary Praetzellis, and Mark Walker	2004	Putting the "There" there: Historical Archaeologies of West Oakland, Cypress Replacement Project Interpretive Report No. 2, I-880 Cypress Freeway Replacement Project, Alameda County, California	Anthropological Studies Center, Sonoma State University
S-046249	Adrian Praetzellis and Mary Praetzellis	2004	Chapter 1: The Loma Prieta Earthquake and its Aftermath	Anthropological Studies Center
S-046249	Robert Douglass	2004	Chapter 2: A Brief History of West Oakland	Anthropological Studies Center
S-046249	Adrian Praetzellis	2004	Chapter 3: Consumerism, Living Conditions, and Material Well-Being	Anthropological Studies Center

S-046249	Paul R. Mullins	2004	Chapter 4: Consuming Aspirations: Bric-A-Brac and the Politics of Victorian Materialism in West Oakland	Anthropological Studies Center
S-048565	Heidi Koenig	2016	South Interceptor, 3rd Street Rehabilitation Project, East Bay Municipal Utility District, Oakland, Alameda County, Phase I Cultural Resources Survey Report	Environmental Science Associates
S-048581	Gregory King	1990	Historic Architecture Survey Report Part VII. D, Subarea D: Oakland Army Base	California Department of Transportation District 4
S-048689	Kyle Brudvik and Keving Hunt	2015	Results of an Archaeological Resources Assessment for the Stationhouse Project, 1401 Wood Street, Oakland, Alameda County, CA (letter report)	Rincon Consultants, Inc.
S-050531	Heidi Koenig	2018	South Interceptor Rehabilitation Project, East Bay Municipal Utility District, Oakland, Alameda County, Revised Phase I Cultural Resources Survey Report	Environmental Science Associates

4.2 PREVIOUSLY RECORDED CULTURAL RESOURCES

The records search indicates that there are two cultural resources that have been recorded within the APE. These resources include a building reported as Michael Fakoury Dry Goods Store, a historic element of the 7th Street / West Oakland Commercial District (P-41-004847), and a building group that is classified as a district in and of itself (P-41-004856). A total of 102 cultural resources have been recorded within ½-mile of the APE. Two of the resources are prehistoric and the remainder are historic in age. These resources are listed in Appendix A. Based on the results of the records search the history of the APE, there is a high probability to find subsurface deposits related to the historic districts listed above.

Table 4-4
Cultural Resources Within the APE

Primary No.	Trinomial	Type	Age	Description
P-41-004847		Building / Element of District	Historic	Building 36 / 1666 7 th St / Michael Fakoury Dry Goods Store
P-41-004856		Building / District	Historic	1550-1722 7 th St & 713 Peralta St

4.3 ADDITIONAL SOURCES

Additional sources consulted during the cultural resource literature review and records search include the National Register of Historic Places, the Office of Historic Preservation Archaeological Determinations of Eligibility, and the Office of Historic Preservation Directory of Properties in the Historic Property Data File. There are no listed historic properties, historical resources, or historic landmarks recorded within the APE.

The WOSP EIR identified the 7th Street S-7 Preservation Combining Zone as the best representation of the surviving fragment of historic 7th Street, West Oakland’s legendary commercial street of the 19th and early 20th centuries. The block consists of three parcels on the north side of 7th Street from Peralta Street on the east to Campbell Street on the west. The Flynn saloon/McAllister plumbing shop anchors the Peralta corner. The vacant middle parcel, 1620-24 7th Street, is the site of the former Lincoln Theater and its associated storefronts. At the Campbell Street corner is the Mission Revival-style Arcadia Hotel. The WOSP EIR

found that these properties embody the important themes of 7th Street – railroad-related businesses and lodgings, entertainment, and the ethnic and economic evolution of the neighborhood. This district is recorded in the State Historic Resources Inventory as an Area of Secondary importance (ASI). One block further west on 7th Street is the individually historic Brotherhood of Sleeping Car Porters headquarters, built in 1889-90 and occupied by C.L. Dellums' union from about 1934 to 1978, which has been formally nominated and determined eligible for City Landmark status.

4.4 NATIVE AMERICAN COORDINATION

PaleoWest contacted the NAHC, as part of the cultural resource assessment, on May 15, 2020, for a review of the SLF. The objective of the SLF search was to determine if the NAHC had any knowledge of Native American cultural resources (e.g., traditional use or gathering area, place of religious or sacred activity, etc.) within the immediate vicinity of the APE. The NAHC response dated May 18, 2020, stated that “a record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced Project. The results were positive.” The NAHC response also provided a list of Native American contacts (Valentin Lopez, Amah Mutsun Tribal Band; Irene Zwierlein, Amah/Mutsun Tribal Band; Tony Cerda, Costanoan Rumsen Carmel Tribe; Merlene Sanchez, Guidiville Indian Rancheria; Ann Marie Sayers, Chairperson, Indian Canyon Mutsun Band of Costanoan; Monica Arellano, Muwekma Ohlone Indian Tribe of the SF Bay Area; Timothy Perez, North Valley Yokuts Tribe; Katherine Perez, North Valley Yokuts Tribe; Andrew Galvan, The Ohlone Indian Tribe; and Corrina Gould, The Confederated Villages of Lisjan). PaleoWest contacted the Native American representatives by email on June 9, 2020, informing them of the Project. Follow up phone calls were made on August 29, 2019. Comments were received from Andrew Galvan requesting the results from the CHRIS literature search. A full record of the coordination efforts can be found in Appendix B.

5.0 SURVEY METHODS AND RESULTS

5.1 SURVEY METHODS

In accordance with Section 106 of the NHPA, and as a means of identifying previously unrecorded archaeological sites, PaleoWest archaeological field staff, under the supervision of PaleoWest's Principal Investigator, who meets or exceeds the Secretary of the Interior's Standards for Professional Qualifications in Archaeology, conducted a pedestrian survey of the APE, totaling 1.26 acres.

The pedestrian reconnaissance survey was conducted on July 29, 2020 by a one-person crew using survey transect spacing of not more than 10 meters. The survey area was recorded with digital photographs for use in the report. Photographs included general views of the topography and vegetation density, and other relevant images. A photo log was maintained to include, at a minimum, photo number, date, orientation, photo description, comments and photographer's name. A sample of survey photographs is included in Appendix C. Survey area maps depicting the APE, were provided to field staff prior to the survey.

Exposed ground surface within the APE was examined for the presence of historic or prehistoric site indicators. Historic site indicators include, but are not limited to foundations, fence lines, ditches, standing buildings, objects or structures such as sheds, or concentrations of materials at least 50 years in age, such as domestic refuse (glass bottles, ceramics, toys, buttons or leather shoes), or refuse from other pursuits such as agriculture (e.g., metal tanks, farm machinery parts, horse shoes) or structural materials (e.g., nails, glass window panes, corrugated metal, wood posts or planks, metal pipes and fittings, etc.). Prehistoric site indicators include, but are not limited to, areas of darker soil with concentrations of ash, charcoal, animal bone (burned or unburned), shell, flaked stone, ground stone, or even human bone.

5.2 SURVEY RESULTS

On July 29, 2020, PaleoWest staff archaeologist Nathaniel Ramos conducted a survey of the APE, located on a moderately sized, undeveloped lot in Oakland, CA (Appendix C, Figure 5-1, 5-2, and 5-3). Three vacant portable buildings previously used for the Oakland Food Pantry occupy a central portion along the southern edge of the Project APE, and a community garden occupies a large portion of the eastern side of the Project APE. The Project APE is bounded by occupied houses to the north, Campbell Avenue on the east, 7th Street to the south, and a cinderblock wall separating the lot from newer established condominium apartments to the west.

Much of the survey area was unpaved and undeveloped, with large areas of exposed ground surface. The area occupied by the community garden is crudely landscaped with cardboard and woodchips to prevent weed growth around raised garden-bed structures. Much of the land to the west was vacant and uncultivated with the exception of some portable buildings. Extra attention was paid to this area, as numerous instances of bioturbation caused by ground dwelling fauna allowed a look into potential subsurface artifact deposits.

The survey began on the eastern side of the Project APE. Photographs were taken facing west to detail the scale of the property being surveyed. The soils here are comprised of a loose, silty sand, with small rocks and gravels, covered in patches of crab-grass vegetation and a mixture of native California grasses and weeds. In the community garden, areas of exposed soils within the raised beds contained a mixture of composted material and native soils.

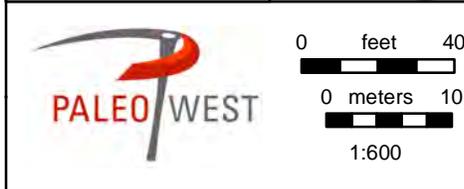
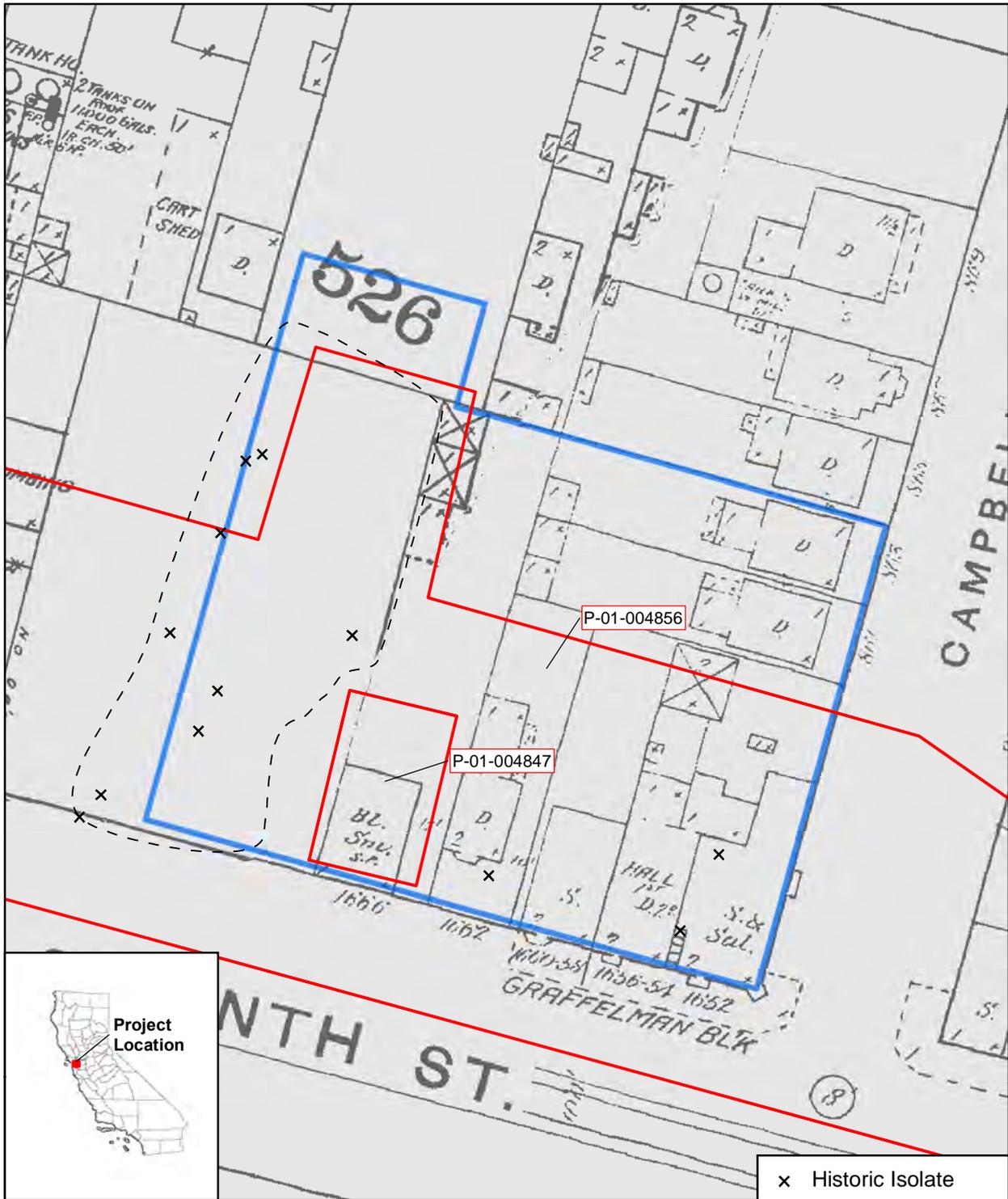
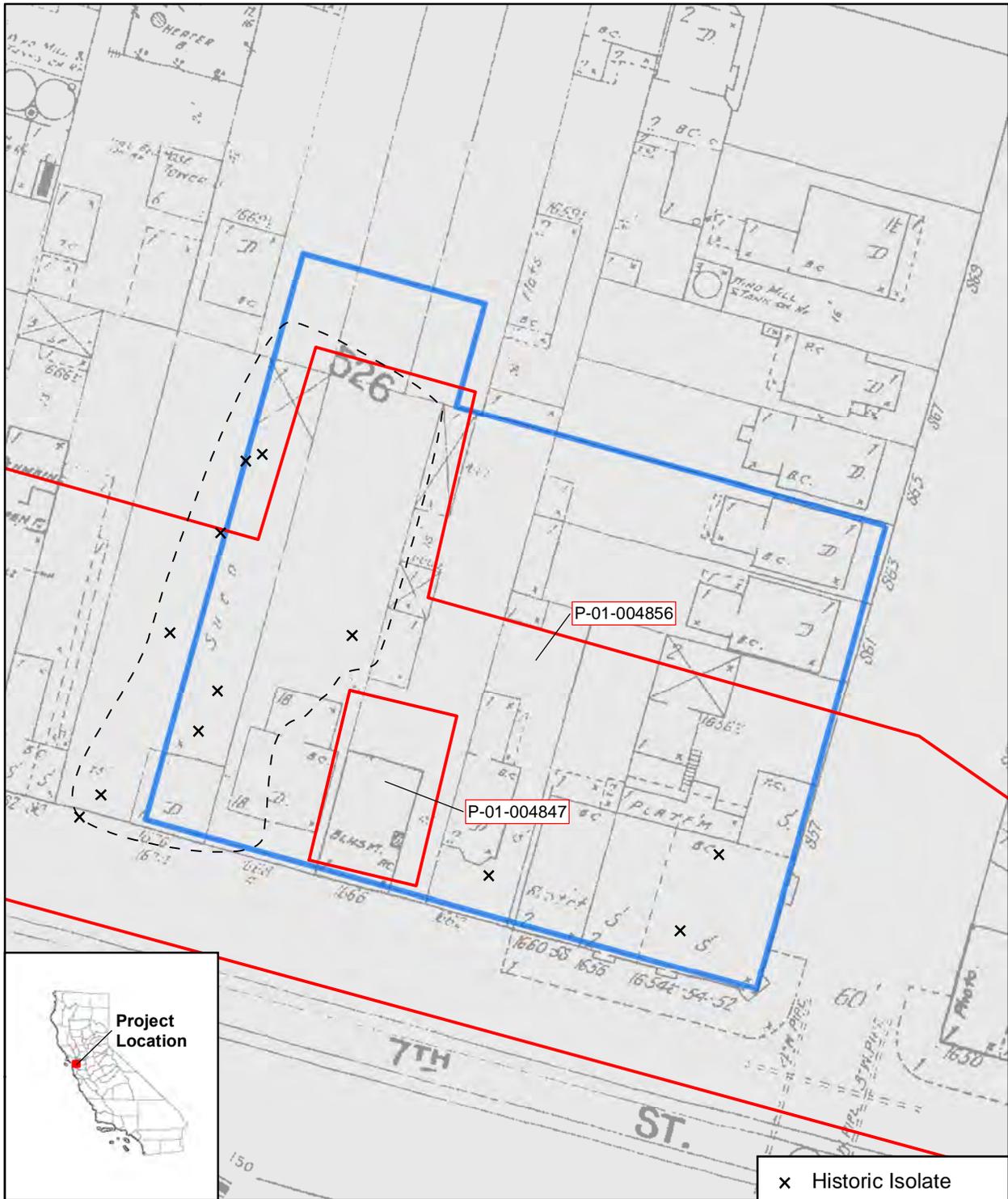


Figure 5-1
Historic Scatter
 1889 Sanborn
 Sanborn Fire Insurance
 Map 1889,
 Vol. 2 Sheet: 25b

- x Historic Isolate
- - - Historic Scatter
- Site
- Area of Potential Effects

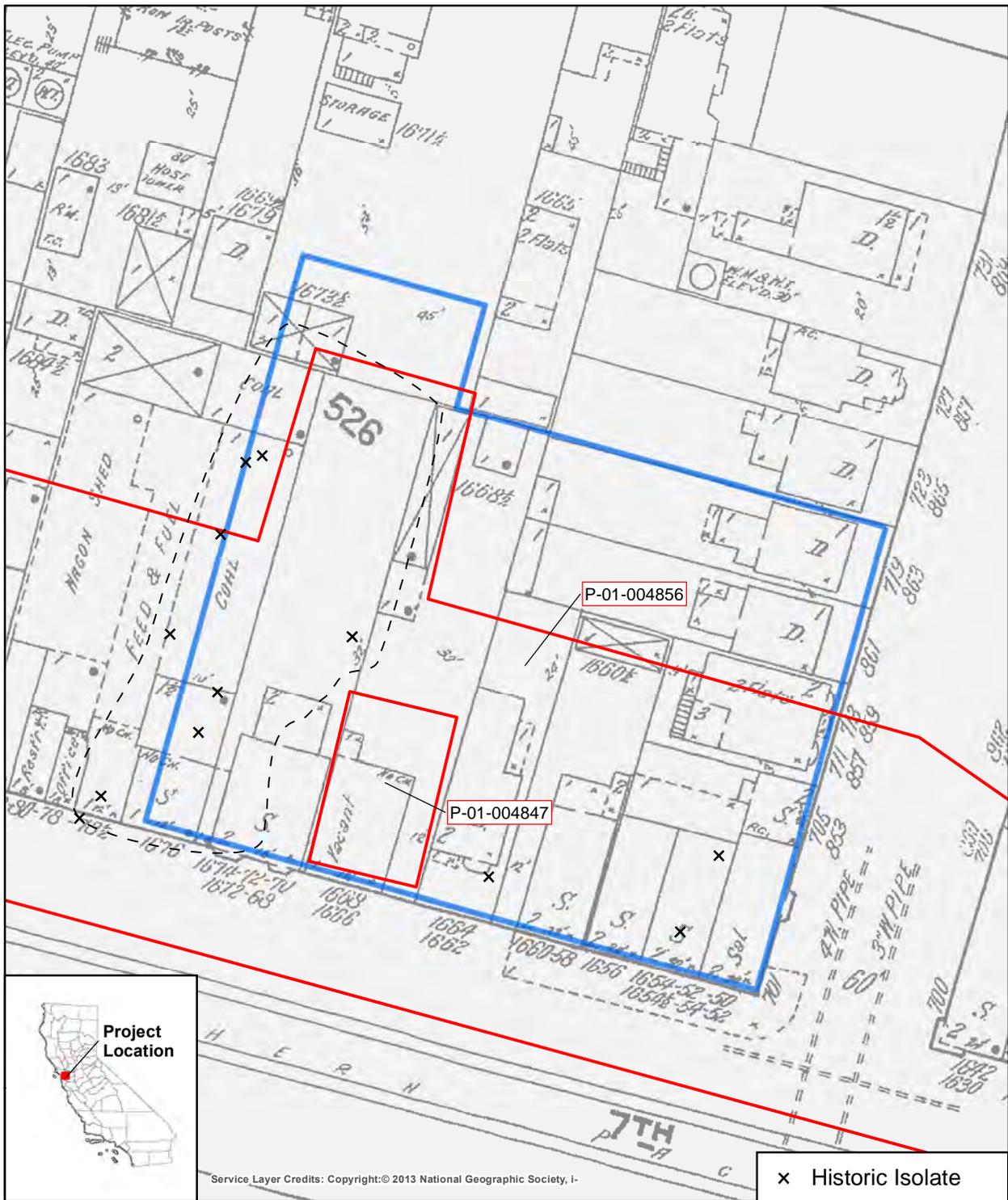


0 feet 40
 0 meters 10
 1:600



Figure 5-2
Historic Scatter
 1902 Sanborn
 Sanborn Fire Insurance
 Map 1902,
 Vol. 1 Sheet: 110

- x Historic Isolate
- - - Historic Scatter
- Site
- Area of Potential Effects



Service Layer Credits: Copyright: © 2013 National Geographic Society, I-

PALEO WEST

0 feet 40
0 meters 10

1:600



Figure 5-3
Historic Scatter
 1912 Sanborn
 Sanborn Fire Insurance
 Map 1912,
 Vol. 1 Sheet: 90

- × Historic Isolate
- Historic Scatter
- Site
- Area of Potential Effects

During the survey, numerous historic cultural materials were observed within and in the immediate vicinity of rodent holes. Various whiteware with and without transfer prints, glass bottle bases and finishes, sawn bone fragments, porcelain, and ceramics were identified within these areas. (Appendix C, Refer to Figure 5-1, 5-2, and 5-3).

The Project APE is almost entirely undeveloped, with overall ground visibility greater than 60 percent. While historic artifacts were observed during the archaeological survey, there was no evidence of prehistoric cultural soils (midden) observed during the archaeological survey. Based on the results of the field survey there is a high potential for subsurface historic deposits. Therefore PaleoWest recommended a testing plan to aid in making a recommendation regarding potential site eligibility.

6.0 ARCHAEOLOGICAL TESTING

On September 23, and 25, 2020, PaleoWest staff conducted archaeological shovel testing within the APE to identify deposits, establish the depth and extent of the site, and assess whether Project plans would adversely affect any potentially significant buried deposits.

Each shovel test (ST) measured 20-x-20 inches and was excavated in arbitrary 4-inch levels to a maximum depth of 16 inches below ground surface. All excavated soils were screened using 1/4-inch wire mesh. All soils and sediments encountered were recorded with regard to their color, compaction, texture, and composition. Munsell soil color charts were used to identify soil color. A UTM coordinate was recorded at the center of each ST. Digital photographs were taken of each ST. All results from the STs are provided in table for in Appendix C.

PaleoWest archaeologists looked for deposits from historic activities, including ceramics, glass, and faunal remains. The absence of such indicators, or the presence of isolated artifacts or cultural materials in disturbed deposits, would justify a conclusion that a substantial subsurface deposit is not present in the area being tested. The presence of such indicators in undisturbed subsurface deposits would justify a conclusion that an intact cultural deposit is present.

6.1 TESTING RESULTS

A total of nine STs were placed across the APE during the testing phase, five during the first field visit, and an additional four during the second visit (Appendix D, Figure 6-1). Due to hazardous material identified on site, STs were placed in locations which prevented exposure. Six of the STs were placed along the west edge of the Project APE to determine if there were subsurface concentrations that could be associated with known structures and dwellings identified on Sanborn Maps (Sanborn 1889, Sanborn 1902, Sanborn 1912). The STs were spaced at 40-foot intervals north-south and by 20 feet east-west in STs 1-5, and ST-9, in a grid pattern. STs 6-8 were spaced at 15-foot intervals in a line 23 feet from the eastern border of the Project APE along Campbell. Horizontal provenience for all cultural material was controlled by measurements taken off of landmarks outside of the Project APE, namely the boundaries of the Project APE itself with the large cinderblock wall along the west border, the sidewalk fence along 7th street, and the sidewalk fence along Campbell. Vertical provenience was controlled by measurements along the depth of each ST. PaleoWest collected no artifacts or sediments during the testing. Upon completion of the hand excavation, PaleoWest backfilled each ST location and returned any artifacts recovered from the screen to approximately the same depth during backfilling.

In much of the APE, surface visibility of historic-era glass is abundant, with numerous locations of bioturbation bringing up fragments from the subsurface. In the portion of the Project APE occupied by raised-bed planter boxes, ground visibility was not available, with upwards of six inches of shredded bark covering the ground surface. The border of the site boundary is unknown due to hazardous materials preventing excavation eastward of the western positive STs.

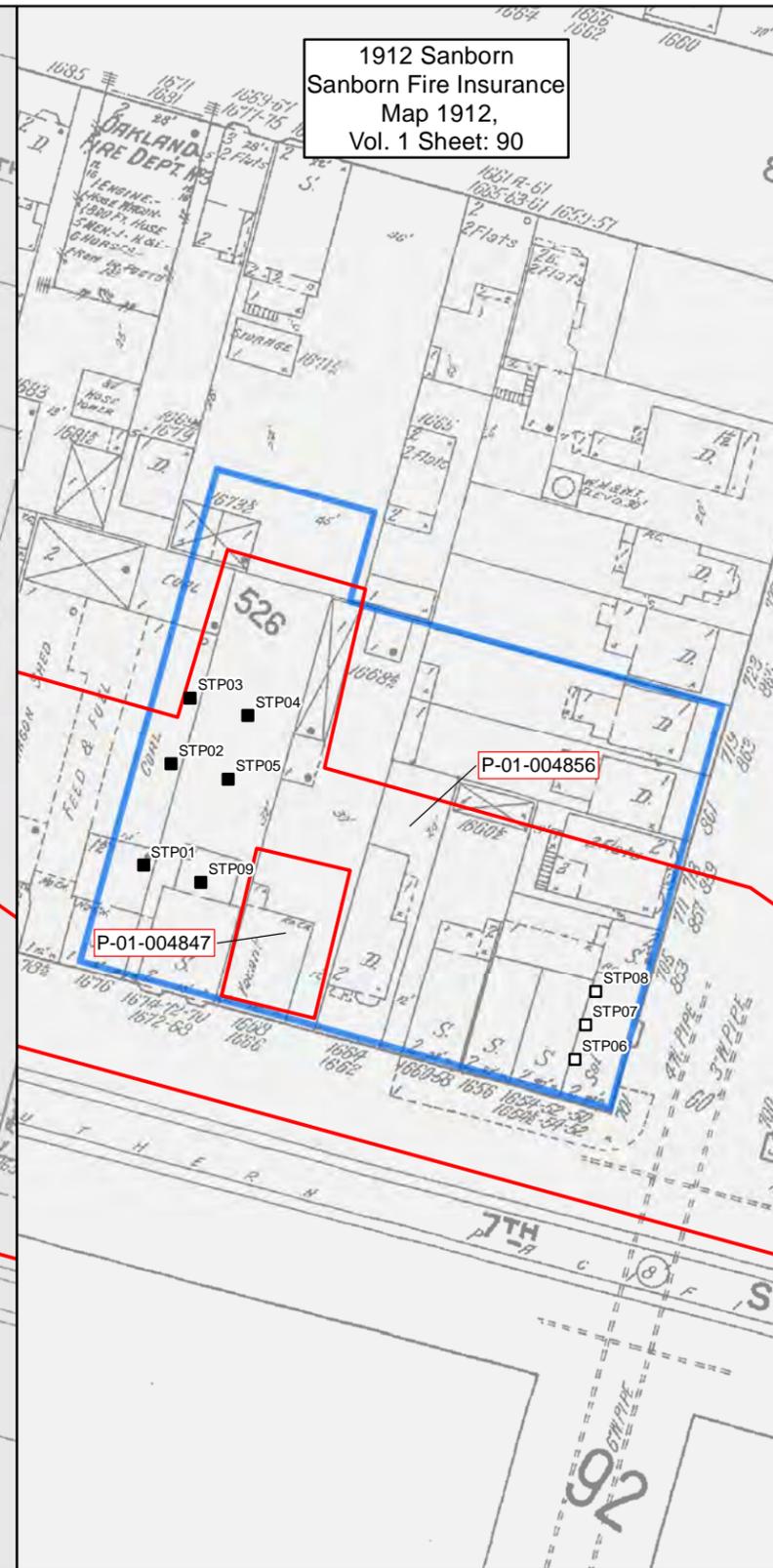
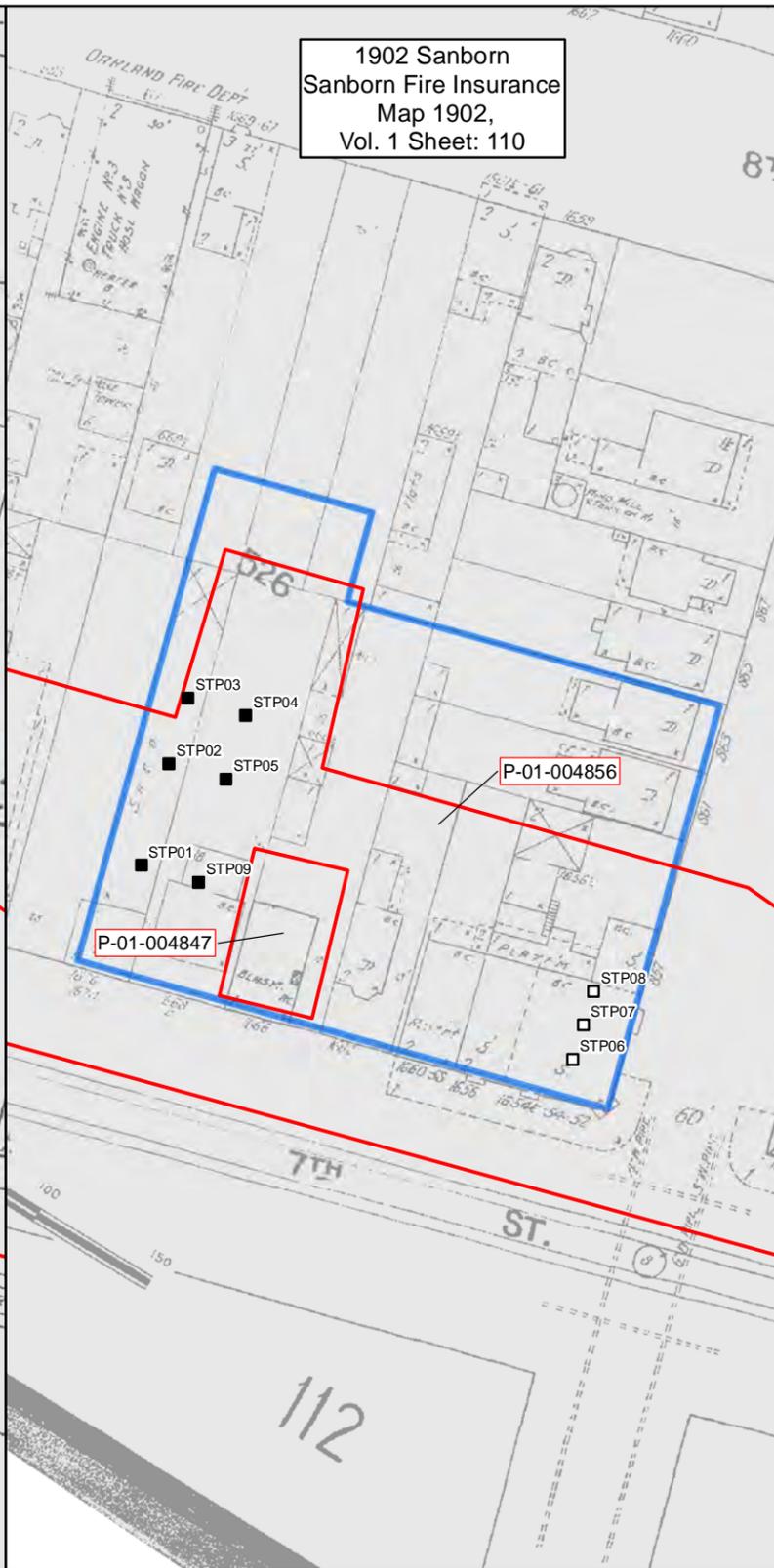
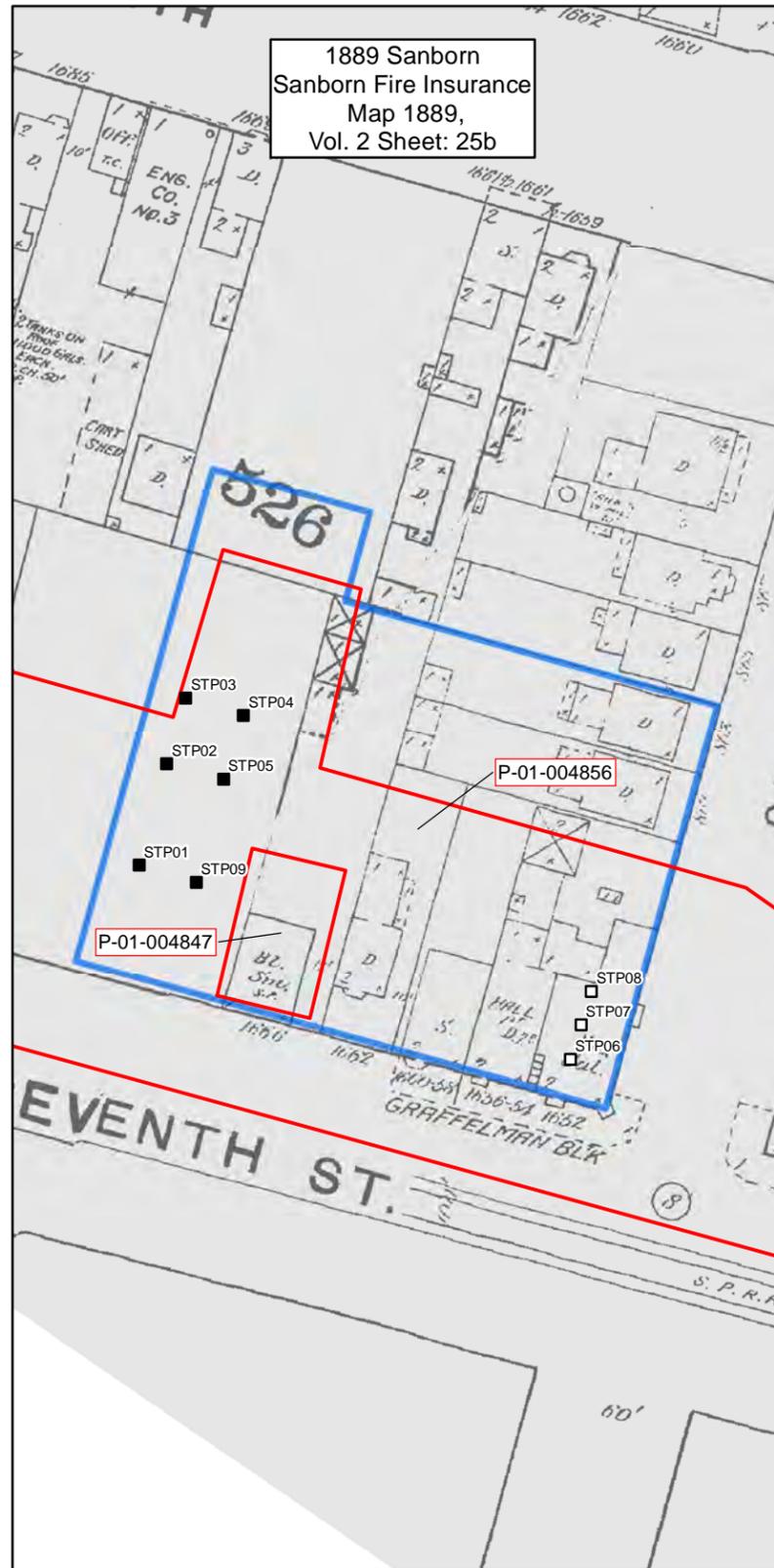
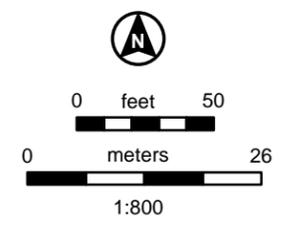


Figure 6-1
Shovel Test Pit Results
on 1889, 1902 and 1912
Sanborn Fire Insurance Maps

- Area of Potential Effects
- Site
- Shovel Test Pit
 - Negative
 - Positive

For Official Use Only.
Public Disclosure of Archaeological
Site Locations is Prohibited
(54 USC 307103)



Map Location



During the original round of testing, ST 1-5 were identified to contain historic cultural material, in the form of bottle fragments, metal pull tabs, nails, anthracite coal, and brick. In the upper levels of the nine STs (0-20cm), however, the context was determined to be disturbed due to the presence of modern plastics intermixed with the historic materials. Within levels below these disturbed contexts, various historic materials were identified and likely associated with the elements of the historic district (P-01-004856) located on the property. STP 1, 2, 3, 4, and 7 showed signs of intact cultural materials, the remaining STPs were disturbed or contained no cultural materials (Figure 6-1).

A large portion of the site within the Project APE has been disturbed due to the demolishing of buildings and leveling of the ground surface. Fragments of historic glass have been churned to the surface by bioturbation, and the lack of intact artifacts is likely a result of a combination of collection by property occupants, and vandalism by trespassers. The soils are primarily a greyish-brown color with a sandy loam composition. The portion of the site with the highest artifact density is located in the portion of the Project APE which contained STs 1-5 and ST-9. The other three STs (located on the eastern side of the Project APE) exhibited little evidence of historic deposition, and all levels contained an intermix of modern-era cultural materials. Surface density of glass fragments was abundant, with occurrence happening every 3-15 feet. In total, artifacts recorded at this site consisted almost solely of historic glass fragments, and brick fragments.

The soils encountered within the majority of the STs were homogenous, with colors consistently being a dark grey-brown and brown (10YR 4/2 and 10YR 4/3) and one ST yielding a yellowish-brown color (10YR 5/4). As the Project APE is occupied by a community garden, the majority of the area has a consistent weed management being conducted, which prevents much root material from extending further beyond ~2 in below ground surface. The soils in the eastern portion of the Project APE, were noted as having a higher sand content than the soils in the western portion of the Project APE.

Table 6--1
Previous Cultural Resource Studies Within the APE

Shovel Test (50-x-50cm)	UTM coordinates (NAD83 Zone 3)	Depth (in below surface)	Soil/Sediment Description	Munsell	Cultural Material	Disturbed
ST-1		0-4 inbs	Dark Greyish-Brown sandy loam	10YR 4/2	Yes	Yes
		4-8 inbs			Yes	Yes
		8-12 inbs			Yes	No
		12-16 inbs			Yes	No
ST-2		0-4 inbs	Dark Greyish-Brown sandy loam	10YR 4/2	Yes	Yes
		4-8 inbs			Yes	Yes

Shovel Test (50-x-50cm)	UTM coordinates (NAD83 Zone 3)	Depth (in below surface)	Soil/Sediment Description	Munsell	Cultural Material	Disturbed
		8-12 inbs			Yes	No
		12-16 inbs			Yes	No
		0-4 inbs			Yes	Yes
ST-3		4-8 inbs	Dark Greyish-Brown sandy loam	10YR 4/2	Yes	No
		8-12 inbs			Yes	No
		12-16 inbs			Yes	No
		0-4 inbs			Yes	Yes
ST-4		4-8 inbs	Dark Greyish-Brown sandy loam	10YR 4/2	Yes	Yes
		8-12 inbs			Yes	Yes
		12-16 inbs			Yes	No
		0-4 inbs			Yes	Yes
ST-5		4-8 inbs	Dark Greyish-Brown Sandy Loam	10YR 4/2	Yes	Yes
		0-4 inbs			Yes	Yes
ST-6		0-4 inbs	Brown Sandy Loam	10YR 4/3	Yes	Yes
		4-8 inbs			Yes	Yes
		8-12 inbs			No	No
ST-7		0-4 inbs	Yellowish-Brown Sand	10YR 5/4	Yes	Yes
		4-8 inbs			Yes	Yes
		8-12 inbs			Yes	No
		12-16 inbs			Yes	No
ST-8		0-4 inbs	Brown Sand	10YR 4/3	Yes	Yes

Shovel Test (50-x-50cm)	UTM coordinates (NAD83 Zone 3)	Depth (in below surface)	Soil/Sediment Description	Munsell	Cultural Material	Disturbed
		4-8 inbs			Yes	Yes
ST-9		0-4 inbs	Dark Greyish-Brown sandy loam	10YR 4/2	Yes	Yes
		4-8 inbs			Yes	Yes

ST-1 was excavated in the most southwestern location of shovel tests to a depth of 16 inches. The ST yielded numerous historic glass fragments and nails of various design. Within ST-2 and ST-3, it was noted that there was an abundance of anthracite coal fragments found throughout the entire ST at depths below 4 inches, continuing down to 16 inches. It is highly likely that this coal is associated with the Coal Yards and Blacksmith found on the 1912 Sanborn Insurance Fire Maps (Sanborn 1902, Sanborn 1912). ST-4 had an abundance of large brick fragments and cement inclusions, which caused difficulty in progressing with excavation forcing the excavator to terminate the excavation prematurely at a partial depth of 12-16 inches. Excavation of ST-5 was terminated at depths between 4 and 8 inches due to extensive cement and brick inclusions which prevent progression. ST-6 was excavated on the east side of the Project APE located just off the corner of 7th and Campbell; the testing revealed glass, brick, and metal fragments in a disturbed context. ST-6 was terminated at 12 inches depth due to heavy sand compaction which prevented further excavation. ST-7 was excavated north of ST-6, with excavation of the ST yielding glass, metal, brick, and asphalt fragments. ST-6 was terminated at 13.5 inches depth due to rock inclusions, with the final screening of material removed yielding no cultural materials. ST-8 was excavated north of ST-7, with the first 4 inches of excavation being determined as disturbed due to modern plastics. The following 4 inches of excavation for ST-8 was terminated at a depth of 8 inches due to asphalt inclusions preventing further progress.

An additional shovel test, (ST-9) was placed on the west side of the Project APE to provide further context for the subsurface deposits in that area. ST-9 was excavated to a depth of 8 inches. Cultural constituents included brick fragments, which gave way to a large high aggregate cement base. This high aggregate cement caused the excavation to be terminated at 8 inches depth, which led to four exploratory auger samples to be taken 20 inches away from the edge of the ST in north, south, east, and west directions. These samples revealed terminations at the same depth (8 inches) with concrete coming out in the tip of the sampling auger, leading the excavators to determine that the concrete was likely part of a larger foundational structure which is potentially associated with the building (1674 7th St.) previously occupying the property.

The testing revealed two resources on site, 20-481-01 the foundation of the Lekos Brothers Market, and 20-481-02 subsurface refuse associated with the historic block.

6.2 SITE 20-481-01 (LEKOS BROTHERS MARKET FOUNDATION)

20-481-01 is a foundation associated with the Lekos Brothers Market.

The Lekos Brothers Market foundation does not appear to be associated with events that have made a significant contribution to the broad patterns of our history. 1674 7th Street, the site of Lekos Brothers Market, was built in 1907 and provided services to the block until 1947. There is no indication that the Lekos Brothers Market is specifically associated with any events that have made a significant contribution to the broad patterns of our history. Therefore, the foundation is recommended not eligible for the NRHP under Criterion A.

The foundation does not appear to have any direct association with lives of significant persons in our past. Research has yielded no information to suggest that any persons of historic significance are specifically associated with the construction or continued operation of the block. Therefore, the foundation is recommended not eligible for the NRHP under Criterion B.

The foundation does not appear to embody the distinctive characteristics of a type, period, or method of construction; or as a representative work of a master; or for possessing high artistic values. The foundation is concrete and is indistinguishable from other examples of this property type. Its design and construction do not represent a departure from standard practices for this property type. Therefore, the foundation is recommended not eligible for the NRHP under Criterion C.

The foundation is unlikely to yield information important to prehistory or history. There is no indication that there are any subsurface elements associated with the foundation that will yield information regarding warehouse construction or the history of the region. It is unlikely that further study of the foundation will result in meaningful changes to our understanding of the past. Therefore, the coal warehouse foundation is recommended not eligible for the NRHP under Criterion D.

As 20-481-01 is recommended not eligible for the NRHP, no further management is required.

6.3 SITE 20-481-012 (SUBSURFACE DEPOSIT)

20-481-2 is a subsurface scatter associated with activities on the western portion of the block. Artifacts recovered include historic glass fragments, glass bottle bases, nails of various design, and coal fragments. This portion of the block was vacant in 1889, and by 1902 had two dwellings, and outbuilding, and a shed. The coal warehouse was not present on site until circa 1912, when it shows up on the Sanborn. Artifacts associated with this deposit date to the early to mid-20th century.

The subsurface deposit does not appear to be associated with events that have made a significant contribution to the broad patterns of our history. This block is part of an Area of Secondary Importance by the Oakland Cultural Heritage Survey. This block makes up one of the surviving elements of the 7th Street commercial district, West Oakland's main business street from the late 1860's to the 1960's. This area was also known as a melting pot of races and nations. The deposit does not appear to have been associated with any specific event that has made a significant contribution to the broad patterns of our history. Therefore, the deposit is recommended not eligible for the NRHP under Criterion A.

The subsurface deposit does not appear to have any direct association with lives of significant persons in our past. Research has yielded no information to suggest that any persons of historic significance are specifically associated with the construction or operation of the buildings. Therefore, the subsurface deposit is recommended not eligible for the NRHP under Criterion B.

The refuse scatter does not appear to embody the distinctive characteristics of a type, period, or method of construction; or as a representative work of a master; or for possessing high artistic values. Therefore, the refuse scatter is recommended not eligible for the NRHP under Criterion C.

The subsurface deposit is likely to yield additional information important to the history of the block. There are intact subsurface elements associated with the block that will yield information regarding the history of the region and its inhabitants. It is likely that further study of the deposit will result in meaningful changes to our understanding of the past. Therefore, the subsurface deposit is recommended as eligible for the NRHP under Criterion D.

As the subsurface refuse scatter is recommended as eligible under Criterion D, additional management recommendations are necessary and described in the following chapter.

7.0 MANAGEMENT RECOMMENDATIONS

The results of the cultural resources records search indicated that there were two historic built resources recorded within the APE. These resources include a building reported as Michael Fakoury Dry Goods Store a historic element of the 7th Street / West Oakland Commercial District (P-41-004847, Kim 2003), and a building group that is classified as a district in and of itself (P-41-004856, Oakland Cultural Heritage Group 1988). The Michael Fakoury Dry Goods Store is no longer extant. The elements of the historic district that fall within the Project APE are no longer extant. The results of the field survey indicated that numerous historic isolates were present due to bioturbation of the soil. Based on the records search results the field survey, and the archaeological testing, the historic sensitivity of the APE is high.

Testing revealed two resources on site, 20-481-01 the foundation of the Lekos Brothers Market, and 20-481-02 subsurface refuse associated with the historic block. As 20-481-01 is recommended not eligible for the NRHP, no further management is required. 20-481-02 the subsurface deposit associated with the historic block is recommended eligible and therefore will need additional management recommendations to

In order to resolve adverse effects of the Project on known or potentially significant archaeological resources, the following management recommendations are provided. All management recommendations below apply to the resources located within the Project APE only.

7.1 DATA RECOVERY FOR 20-481-02

Impact 1. An adverse effect would occur if ground-disturbing activities (e.g., grading, excavation, drilling, etc.) associated with Project construction disturb, damage, or destroy historic or prehistoric features and deposits that could be considered significant resources. An adverse effect would occur if ground-clearing activities (e.g., grading, brush-hogging, mowing, etc.) exposed to erosion, inadvertent damage, or vandalism those buried archaeological features and deposits that could be reconsidered historical resources.

Recommendation. Based on the presence of a known eligible site within the Project APE, 20-481-02, PaleoWest recommends data recovery for the portions of the site that will be impacted by Project activities. PaleoWest recommends that an Archaeological Data Recovery Plan (ADRP) be prepared providing contextual information and outlining methods for data recovery and excavation prior to construction. This plan would include the environmental context, the prehistoric and historic context of the area, expected resource and feature types, expanded research themes and questions, the methods and locations for data recovery, and archaeological monitoring intended to mitigate adverse impacts to the resource. The data recovery resolves adverse effects to the resource.

7.2 ARCHAEOLOGICAL MONITORING

Due to the historic sensitivity of the block, PaleoWest recommends that an archaeological monitoring program be implemented during ground disturbing activities associated with the Project. The archaeological monitoring program (AMP) shall minimally include the following provisions:

- The archaeological consultant shall advise all Project contractors to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected resource(s), and of the appropriate protocol in the event of apparent discovery of an archaeological resource;

- In conjunction with this, PaleoWest recommends that all construction crew workers attend a training session led by a qualified archaeologist that discusses (1) the reasons for archaeological resource monitoring; (2) regulatory policies protecting resources and human remains; (3) basic identification of archaeological resources; and (4) the protocol to follow in case of a discovery of such resources;
- Due to the high sensitivity of historic deposits, monitoring of the entire vertical APE will be required;
- An archaeological monitor(s) shall be present on the Project site during all ground disturbing activity within the vertical APE;
- The Project archaeologist, in consultation with the on-site archaeological monitor, will make recommendations about reducing monitoring to part-time or spot-checks if it is determined that the probability of encountering archaeological deposits has dropped below an acceptable level. Therefore, the frequency of the on-site monitoring will be determined by construction activities and as deemed necessary by the Project Archaeologist in consultation with the SHPO. In specific cases, it may also be determined, by the Project Archaeologist in consultation with the SHPO, that monitoring is no longer necessary. Written concurrence with SHPO will be required in order to change existing monitoring recommendations;
- The archaeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis;
- If an archaeological deposit is encountered, all soils-disturbing activities within 30-feet of the discovery shall cease. The archaeological monitor shall be empowered to temporarily redirect demolition, excavation, or other construction activities and equipment until the deposit is evaluated. The archaeological consultant shall immediately notify the client of the encountered archaeological deposit. The archaeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological deposit; and
- If the archaeological monitor determines that the cultural resources are potentially significant archaeological resources and avoidance of the resource is not possible, data recovery may be necessary. Data recovery would require consultation and concurrence from the SHPO.

7.3 POST REVIEW DISCOVERY PROTOCOL

In the event that potentially significant archaeological materials are encountered during Project-related ground-disturbing activities, all work should be halted in the vicinity of the archaeological discovery until a qualified archaeologist can visit the site of discovery and assess the significance of the archaeological resource. In addition, Health and Safety Code 7050.5, and Public Resources Code 5097.98 mandate the process to be followed in the unlikely event of an accidental discovery of any human remains in a location other than a dedicated cemetery. Finally, should additional actions be proposed outside the currently defined APE that have the potential for additional subsurface disturbance, further cultural resource management may be required.

7.4 HUMAN REMAINS

In the event that Native American human remains or funerary objects are discovered, the provisions of Section 7050.5(b) of the California Health and Safety Code should be followed.

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.94 of the Public Resources Code.

The County Coroner, upon recognizing the remains as being of Native American origin, is responsible to contact the Native American Heritage Commission within 24 hours. The Commission has various powers and duties to provide for the ultimate disposition of any Native American remains, as does the assigned Most Likely Descendant. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to State law, then the remains would be reinterred with the items associated with the Native American burial on the property in a location not subject to further disturbance.

7.0 REFERENCES

Bagwell, Beth

1982 *Oakland the Story of a City*. Oakland Heritage Alliance.

Beardsley, Richard K.

1948 Cultural Sequences in Central California Archaeology. *American Antiquity* 14(1):1-29.

1954 Temporal and Areal Relationships in Central California Archaeology. *University of California Archaeological Survey Reports* 24-25. University of California, Berkeley.

Bennyhoff, James A. and Richard E. Hughes

1987 Shell Bead Ornament Exchange Networks Between California and the Western Great Basin. In *Anthropological Papers of the American Museum of Natural History*, 64:79-175. American Museum of Natural History, Washington, D.C.

Brown, Lauren

1985 Grasslands. National Audubon Society Nature Guides. Alfred A. Knopf, New York, NY.

Bocek, Barbara R.

1986a Hunter Gatherer Ecology and Settlement Mobility Along San Francisquito Creek. Doctoral dissertation. Department of Anthropology, Stanford University, Palo Alto, CA.

Cambra, Rosemary, A. Leventhal, Laura Jones, L. Field and N. Sanchez

1996 Archaeological Investigations at Kaphan Umux (Three Wolves) Site, CA-SCL-732: A Middle Period Prehistoric Cemetery on Coyote Creek in Southern San Jose, Santa Clara County, California. Report on file at Caltrans District 4 Offices, Oakland, California.

Cook, Sherburne F.

1957 The Aboriginal Populations of Alameda and Contra Costa Counties, California, Anthropological Records of the University of California Anthropological Survey, Berkeley, CA.

1976 *The Conflict Between the California Indian and White Civilization*. University of California Press. Berkeley and Los Angeles, California.

Esselen Nation

2007 Ohlone/Costanoan Esselen Nation Today.

<http://www.esselnation.com/OCENToday.html>

Fredrickson, David A.

1973 Early Cultures of the North Coast Ranges. PhD Dissertation. Department of Anthropology. University of California, Davis.

1974 Cultural Diversity in Early Central California: A View of the North Coast Ranges. *The Journal of California Anthropology*.

- 1994 Spatial and Cultural Units in Central California Archaeology. In *Toward a New Taxonomic Framework for Central California: Essays by James A. Bennyhoff and David A. Fredrickson*, R. Hughes editor, Contributions of the University of California Archaeological Research Facility 15. Berkeley.
- Groff, Garth G.
2011 A Brief History of the Sacramento Northern. Sacramento Northern On-Line. <<http://www.wplives.org/sn/history.html>>. Accessed November 2014.
- Groza, R.G.
2002 An AMS chronology for central California *Olivella* shell beads. Unpublished Master's thesis. Department of Anthropology, San Francisco State University, San Francisco, CA.
- Heizer, Robert F. and Fenenga, Franklin
1939 Archaeological Horizons in Central California. Postprints from Department of Anthropology. *American Anthropologist*. University of California Berkeley.
- Hendry, G.W. and J.M. Bowman
1940 The Spanish and Mexican Adobe and Other Buildings in the Nine San Francisco Bay Counties, 1776 to about 1850.
- Hughes, Richard E.
1994 Toward a New Taxonomic Framework for Central California Archaeology. Contributions of the University of California Archaeological Research Facility, Berkeley. Number 52.
- Kroeber, Alfred L.
1970 *Handbook of the Indians of California*. The Filmer Brothers Press, Taylor & Taylor, San Francisco, CA.
- Levy, Richard S.
1978 Costanoan. In *Handbook of North American Indians*, Volume 8, California, Robert F. Heizer editor, pp. 485-495. Smithsonian Institution, Washington, D.C.
- Lillard, Jeremiah Beverly and William K. Purves
1936 The Archaeology of The Deer-Creek-Consumnes Area, Sacramento Co., California. Sacramento Junior College Department of Anthropology. Bulletin 1.
- Lillard, Jeremiah B., Robert F. Heizer and Franklin Fenenga
1939 An Introduction to the Archeology of Central California. Sacramento Junior College Department of Anthropology Bulletin 2. Sacramento, CA.
- Milliken, Randall
1995 *A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area 1769-1810*. Ballena Press Anthropological Papers No. 43, Menlo Park, CA.

Milliken, Randall and James A. Bennyhoff

1993 Temporal Changes in Beads as Prehistoric Grave Goods. In *There Grows a Green Tree: Papers in Honor of David A. Fredrickson*, edited by G. White, P. Mikkelsen, W. R. Hildebrandt and M. E. Basgall. vol. 11. Center for Archaeological Research at Davis.

Milliken, Randall, Richard T. Fitzgerald, Mark G. Hylkema, Randy Groza, Tom Origer, David G. Bieling, Alan Leventhal, Randy S. Wiberg, Andrew Gottsfield, Donna Gillette, Viviana Bellifemine, Eric Strother, Robert Cartier, and David A. Fredrickson

2007 Punctuated Culture Change in the San Francisco Bay Area. In *California Prehistory: Colonization, Culture, and Complexity*, Terry L. Jones and Kathryn A. Klar, editors, pp. 99-123. Altamira Press, Lanham, MD.

Monte, Kim

2003 Primary Record for P-01-004847 on file at the Northwest Information Center, Rohnert Park CA.

Moratto, Michael J.

1984 *California Archaeology*. New World Archaeological Record, Academic Press. San Diego.

Muwekma Ohlone Tribe

2007 *The Muwekma Ohlone Tribe: A Brief History and the Recognition Process*. The Muwekma Ohlone-News. <http://www.muwekma.org/news/index.html>. Accessed July 6, 2020

Nelson, Nels C.

1909 Shellmounds of the San Francisco Bay Region. University of California Publications in American Archaeology and Ethnology 7(4):310-357. University of California, Berkeley.

NETR

1931 Historic Aerials. <https://www.historicaerials.com/viewer>

1946 Historic Aerials. <https://www.historicaerials.com/viewer>

1958 Historic Aerials. <https://www.historicaerials.com/viewer>

1980 Historic Aerials. <https://www.historicaerials.com/viewer>

1993 Historic Aerials. <https://www.historicaerials.com/viewer>

2002 Historic Aerials. <https://www.historicaerials.com/viewer>

Oakland Cultural Heritage Survey

1988 primary record for P-01-004856 on file at the Northwest Information Center, Rohnert Park CA.

Ragir, Sonia

1972 The Early Horizon in Central California Prehistory. *Contributions of the University of California Archaeological Research Facility*. Number 15. University of California, Berkeley.

Sanborn Fire Insurance Maps

1889 *Sanborn Fire Insurance Map, San Francisco County, California*. Sanborn-Perris Map Company Ltd.

1902 *Sanborn Fire Insurance Map, San Francisco County, California*. Sanborn-Perris Map Company Ltd.

1912 *Sanborn Fire Insurance Map, San Francisco County, California*. Sanborn-Perris Map Company Ltd.

Schenck, W. Egbert and Elmer J. Dawson

1929 *Archaeology of the Northern San Joaquin Valley*. University of California Publications in American Archaeology and Ethnology. Vol. 25, Number 4.

Scott, Mel

1959 *The San Francisco Bay Area: A Metropolis in Perspective*. University of California Press. Berkeley and Los Angeles.

Sher, Sandra

1994 *The Native Legacy of Emeryville*. Journal of Emeryville Historical Society. Vol. 5, Number 2.

Shoup, Laurence, Randall Milliken, and Alan Brown.

1995 *Inigo of Rancho Posolmi: The Life and Times of a Mission Indian and his Land*. Archaeological/Historical Consultants, Oakland, CA.

Shipley, William F.

1978 *Native Languages of California*. *Handbook of North American Indians*. Smithsonian Institution, Washington.

U.S. Geological Survey, Washington, D.C. (USGS)

1953 Palo Alto, California (1:24,000) topographic quadrangle.

1961 Palo Alto, California (1:24,000) topographic quadrangle.

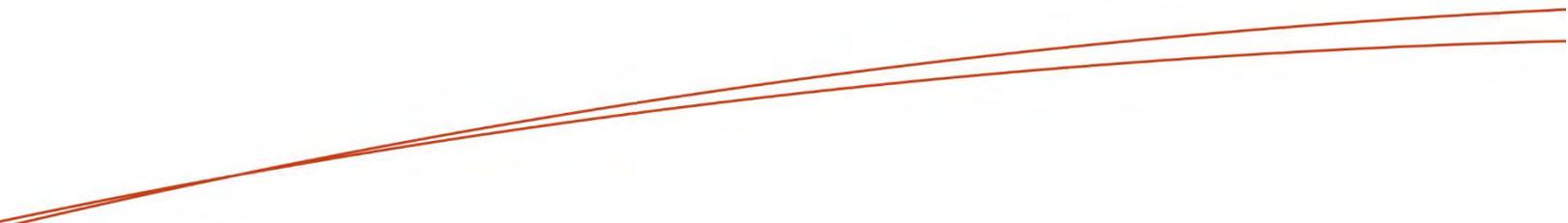
1991 Palo Alto, California (1:24,000) topographic quadrangle.

Western Railway Museum

2020 *Sacramento Northern Railway*. Western Railway Museum-Railroad History. wrm.org/about/railroad-history/sacramento-northern-railway.

Wiberg, Randy S.

1997 *Archaeological Investigations at Site CA-ALA-42*. Alameda County, California: Final Report.



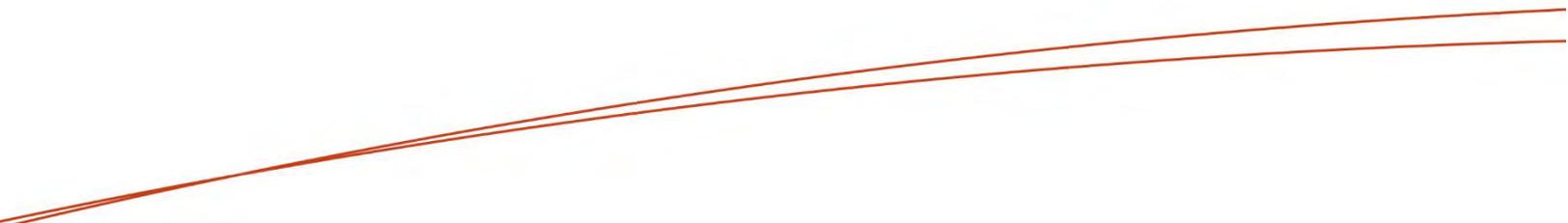
***Appendix A.
Previous Cultural Resource Studies
within 1/2-mile of the APE***

Primary Number	Resource Name	Age	Recorder
P-01-000017	Block 11, Cypress I-880 Replacement Project	Historic	1994 (Jack Mc Ilroy, Anthropological Studies Center (SSU))
P-01-000018	Block 18, Cypress I-880 Replacement Project	Historic	1994 (Jack Mc Ilroy, Anthropological Studies Center (SSU))
P-01-000019	Block 24, Cypress I-880 Replacement Project	Historic	1994 (Jack Mc Ilroy, Anthropological Studies Center (SSU))
P-01-000020	Block 36, Cypress I-880 Replacement Project	Historic	1994 (Jack Mc Ilroy, Anthropological Studies Center (SSU))
P-01-000021	Block 37, Cypress I-880 Replacement Project	Historic	1994 (Jack Mc Ilroy, Anthropological Studies Center (SSU))
P-01-000245	Block 33, Cypress I-880 Replacement Project	Historic	1995 (Anmarie Medin, Anthropological Studies Center (SSU))
P-01-000246	Block 31, Cypress I-880 Replacement Project	Historic	1995 (Anmarie Medin, Anthropological Studies Center (SSU))
P-01-000248	Block 27, Cypress I-880 Replacement Project	Historic	1995 (Anmarie Medin, Anthropological Studies Center (SSU))
P-01-000259	Block 22, Cypress I-880 Replacement Project	Historic	1995 (Anmarie Medin, ASC SSU)
P-01-000260	Block 28, Cypress I-880 Replacement Project	Historic	1995 (Anmarie Medin, Anthropological Studies Center (SSU))
P-01-000261	Block 29, Cypress I-880 Replacement Project	Historic	1995 (Anmarie Medin, Anthropological Studies Center (SSU))
P-01-000864	Gellitch (Pierre) Garage	Historic	1994 ([none], Oakland Cultural Heritage Survey)
P-01-001092	Building 29/Nor(Chris) Garage	Historic	2003 (Monte Kim, Scinece Applications International Corp)
P-01-001764	Block 25, Cypress I-880 Replacement Project	Historic	1996 (Rose White, ASC, SSU)
P-01-001789	Block 19, Cypress I-880 Replacement Project	Historic	1996 (Anmarie Medin, Anthropological Studies Center, SSU)
P-01-001790	Block 21, Cypress I-880 Replacement Project	Historic	1996 (Anmarie Medin, Anthropological Studies Center, SSU)
P-01-001812	DeLa Montanya - Mousalemas rental house	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-001813	DeLa Montanya - Mousalemas Rental House	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-002151	Block 20, Cypress I-880 Replacement Project	Historic	1996 (Jack McIlroy, Anthropological Studies Center)
P-01-004666	Liberty Hall; Western Market Building; Father Divine's Peace Mission	Historic	1988 (Gary Knecht, Knecht & Knecht); 1988 ([none], Oakland Cultural Heritage Survey); 1988 ([none], City of Oakland)
P-01-004708	Building 18/Dempsey(Patrick)-Pacheco(Frank) House	Historic	2003 (Monte Kim, Science Applications International Corp.)
P-01-004709	Building 17/MICHAEL COYNE HOUSE	Historic	2003 (Monter Kim, Scinece Applications International Corp.)
P-01-004736	Building 21/JOHN FANNON PETER MARKET HOUSE	Historic	2003 (Monte Kim, Science Applications International Corp.)
P-01-004739	Building 20/JOHN CLONEN RENTAL HOUSE	Historic	2003 (Monte Kim, Scinece Applications International corp.)

P-01-004740	Ida Newman August Franks House	Historic	2003 (Monte Kim, Science Applications International Corp.)
P-01-004748	George W. Frasher - John & Rose Tully House	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-004758	Patrick Flynn Domingo Silvera House	Historic	2003 (Monte Kim, Science Applications International Science Corp.)
P-01-004819	Bay View Homestead Tract (historic name); South Prescott Neighborhood	Historic	1988 ([none], Oakland Cultural Heritage Survey); 1990 ([none], Oakland Cultural Heritage Survey)
P-01-004839	Alcatraz Masonic Hall, Booker Emery House	Historic	1988 ([none], [none]); 2003 (Monte Kim, Science Applications International Cojrp.)
P-01-004840	Gardiner, William, Confectionary / Bank Buffet	Historic	1988 ([none], [none]); 2003 (Monte Kim, Science Applications International Corp.)
P-01-004841	Wolf, Max, Furniture Warehouse	Historic	1988 ([none], [none]); 2003 (Monte Kim, Science Applications International Corp.)
P-01-004842	A J Tait and Mary Dearing Off & Res, Al's Shoe Repairing	Historic	2003 (Monte Kim, Science Applications International Corp.)
P-01-004843	1st Tabernacle M. B. Church / Aboumrad (Merced) Dry Goods Store	Historic	1995 ([none], [none]); 2003 (Monte Kim, Science Applications International Corp.)
P-01-004844	Flynn (Ed.) Saloon-McAllister Plumbing	Historic	1988 ([none], Oakland Cultural Heritage Survey); 2003 (Monte Kim, Science Applications International corp.)
P-01-004845	Lincoln Theatre	Historic	2003 (Monte Kim, Science Applications International Corp.)
P-01-004846	Arcadia Hotel Isaacs & Schwartz Block	Historic	2003 (Monte Kim, Science Applicatioins International Corp.)
P-01-004853	International Brotherhood of Sleeping Car Porters	Historic	1991 ([none], Oakland Cultural Heritage Survey); 2003 (Monte Kim, Science Applications International Corp.)
P-01-004854	Jason Smith Photo Studio, John Singer's Arcade and Café	Historic	1991 ([none], Oakland Cultural Heritage Survey); 2003 (Monte Kim, Science Applications International Coop.)
P-01-004855	Esthers Orbit Room / Dewey Vila Restaurant	Historic	1991 ([none], Oakland Cultural Heritage Survey); 2003 (Monte Kim, Science Applications International Corp.)
P-01-005887	Peralta Villa	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-005891	Oakland Army Base Historic District	Historic	1990 (Gregory King, Caltrans)
P-01-005962	Oakland Point District	Historic	1989 ([none], Oakland Cultural Heritage Survey); 1990 ([none], Oakland Cultural Heritage Survey); 2003 (Monte Kim, Science Applications International Corp.)
P-01-006013	Building 16	Historic	2003 (Monte Kim, Science Applications International Corp.)
P-01-006105	Olsen (Rasmus) - (Zulim (Jakov) House	Historic	1991 ([none], Oakland Cultural Heritage Survey)
P-01-006107	Bair (Wm. R.) flats	Historic	1991 ([none], Oakland Cultural Heritage Survey)
P-01-006108	Chiesa (Luigi) flats	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006109	Russell (James) - Winters (John) House	Historic	1991 ([none], Oakland Cultural heritage Survey)
P-01-006110	Wilson (W. J.) house-Lichat (Mary) rental	Historic	1991 ([none], Oakland Cultural Heritage Survey)
P-01-006112	Building 22	Historic	2006 (Monte Kim, Science Applications International Corp.)

P-01-006113	Carle (Silas) - Lagorio (A.) house	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006114	Building 23	Historic	2006 (Monte Kim, Science Applications International Corp.)
P-01-006115	Carle (Silas) - Connolly (Martin) house	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006117	Hoppe (John) - Fuchs (Philip) house	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006119	Fuchs (Philip) - Maggio (E&F) flats	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006121	Wells Fargo stable - Rossi Cigar factory	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006266	Grist (Wm.H.) garage	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006302	Sandelin (Elias Fred) rental house	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006304	Freese (Johanna and Frederick) house	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006305	Fitzgerald store/flat-Hirota(M) cleaners	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006306	Boscacci (Pietro) rental house	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006307	Schulze (F.) rental-Gereich (E.) house	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006308	Schirmer (August H.T.) house	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006309	Catera (Luca) store and restaurant	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006310	Wells Fargo-Railway Express wagon shed	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006311	True Light Missionary Baptist	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006312	Maggio (Elena/Fortunato) rental cottage	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006313	Maggio (Elena/Fortunato) rental cottage	Historic	1990 ([none], Oakland Cultural Heritage Survey)
P-01-006521	Cullen (Thomas) - Fackory (Fred A.) house	Historic	1991 ([none], Oakland Cultural Heritage Survey)
P-01-006524	Cullen (Thomas) house	Historic	1991 ([none], Oakland Cultural Heritage Survey)
P-01-006525	Winslow-Hagen House	Historic	1991 ([none], Oakland Cultural Heritage Survey)
P-01-006526	Winslow-Dickinson House	Historic	1991 ([none], Oakland Cultural Heritage Survey)
P-01-006528	Winslow-Jenkins House	Historic	1991 ([none], Oakland Cultural Heritage Survey)
P-01-007034	Building 37	Historic	1991 ([none], Oakland Cultural Heritage Survey); 2003 (Monte Kim, Science Applications International Corp.)
P-01-007035	Building 38	Historic	1991 ([none], Oakland Cultural Heritage Survey); 2003 (Monte Kim, Science Applications International Corp.)
P-01-007036	DeLa Montanya-Mouselemas Rental House	Historic	1991 ([none], Oakland Cultural Heritage Survey)
P-01-007037	DeLa Montanya-Mouselemas Rental House	Historic	1991 ([none], Oakland Cultural Heritage Survey)
P-01-007149	Standard Oil / Spears-Wells Company Warehouse	Historic	1990 ([none], Oakland Cultural Heritage Survey)

P-01-007195	Building 15	Historic	1990 ([none], Oakland Cultural Heritage Survey); 2003 (Monte Kim, Scinece Applications International Corp.)
P-01-007364	Southern Pacific Railroad West Oakland Shops Historic District	Historic	1990 (John W. Snyder, Caltrans)
P-01-007365	Southern Pacific Telephone Exchange	Historic	1990 (John W. Snyder, Caltrans)
P-01-007366	Oakland, Alameda & Berkeley Railway Substation No. 2	Historic	1990 (John W. Snyder, Caltrans)
P-01-007367	Southern Pacific Signal Shop	Historic	1990 (John W. Snyder, Caltrans)
P-01-007368	Southern Pacific Freight Office; Southern Pacific Stationery [sic] Stores	Historic	1990 (John W. Snyder, Caltrans)
P-01-007369	Signal Tower; Cedar Street Tower	Historic	1990 (John W. Snyder, Caltrans)
P-01-007370	Paint Shop/Diesel Shop; Car Painting Shop	Historic	1990 (John W. Snyder, Caltrans)
P-01-007371	Drop Pit Building	Historic	1990 (John W. Snyder, Caltrans)
P-01-007373	Mill; Car Department Planning Mill	Historic	1990 (John W. Snyder, Caltrans)
P-01-007374	Lumber Shed	Historic	1990 (John W. Snyder, Caltrans)
P-01-007377	Car Lighting Shop	Historic	1990 (John W. Snyder, Caltrans)
P-01-007378	Service Building; Pullman Building	Historic	1990 (John W. Snyder, Caltrans)
P-01-007381	Service Building Addition; Commissary Building	Historic	1990 (John W. Snyder, Caltrans)
P-01-007382	Commissary Building Store Room; Laundry	Historic	1990 (John W. Snyder, Caltrans)
P-01-007383	Master Mechanic Store Room; Master Mechanic/Master Car Repair Office	Historic	1990 (John W. Snyder, Caltrans)
P-01-010509/CA-ALA-000604	Mandela-1	Prehistoric	2002 (Dale Beevers and Jason Claiborne, Archeo-Tec)
P-01-010521	Oakland Block 532	Historic	2002 (Thad M. Van Buren, Caltrans, District 4)
P-01-010522	Oakland Block 533	Historic	2002 (Thad M. Van Bueren, Caltrans, District 4)
P-01-010814	Whitland (William)-Teague (William) House	Historic	2003 (Monte Kim, Science Applications International Corp.)
P-01-010881	16th St Shell Mound	Prehistoric	2008 (Richard Schwartz, [none])
P-01-010917/CA-ALA-000629H	Block 40	Historic	2008 (Janet Pape, Caltrans District 4)
P-01-010918/CA-ALA-000630H	Block 41	Historic	2008 (Janet Pape, Caltrans District 4)
P-01-011412	1712 13th Street Warehouse	Historic	2013 (Dana E. Supernowicz, Historic Resource Associates)
P-01-011925/CA-ALA-000693H	South Interceptor 3rd Street Alignment	Historic	2016 (Heidi Koenig, ESA)



Appendix B.
Native American Coordination

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd, Suite 100
West Sacramento, CA 95501
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: _____

County: _____

USGS Quadrangle

Name: _____

Township: _____ Range: _____ Section(s): _____

Company/Firm/Agency:

Contact Person: _____

Street Address: _____

City: _____ Zip: _____

Phone: _____ Extension: _____

Fax: _____

Email: _____

Project Description:

____ Project Location Map is attached

NATIVE AMERICAN HERITAGE COMMISSION

May 18, 2020

Christina Alonso
PaleoWest Archaeology

Via Email to: calonso@paleowest.com
Cc to: canutes@verizon.net
chochenyo@aol.com

Re: 20-481 7th and Campbell Survey Project, Alameda County

Dear Ms. Alonso:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were positive. Please contact the North Valley Yokuts Tribe and They Ohlone Indian Tribe on the attached list for more information. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Sarah.Fonseca@nahc.ca.gov.

Sincerely,



Sarah Fonseca
Cultural Resources Analyst

Attachment



CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
Marshall McKay
Wintun

COMMISSIONER
William Mungary
Paiute/White Mountain
Apache

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

**Native American Heritage Commission
Native American Contact List
Alameda County
5/18/2020**

Amah Mutsun Tribal Band

Valentin Lopez, Chairperson
P.O. Box 5272
Galt, CA, 95632
Phone: (916) 743 - 5833
vlopez@amahmutsun.org

Costanoan
Northern Valley
Yokut

North Valley Yokuts Tribe

Katherine Perez, Chairperson
P.O. Box 717
Linden, CA, 95236
Phone: (209) 887 - 3415
canutes@verizon.net

Costanoan
Northern Valley
Yokut

Amah Mutsun Tribal Band of Mission San Juan Bautista

Irenne Zwierlein, Chairperson
789 Canada Road
Woodside, CA, 94062
Phone: (650) 851 - 7489
Fax: (650) 332-1526
amahmutsuntribal@gmail.com

Costanoan

North Valley Yokuts Tribe

Timothy Perez, MLD Contact
P.O. Box 717
Linden, CA, 95236
Phone: (209) 662 - 2788
huskanam@gmail.com

Costanoan
Northern Valley
Yokut

Costanoan Rumsen Carmel Tribe

Tony Cerda, Chairperson
244 E. 1st Street
Pomona, CA, 91766
Phone: (909) 629 - 6081
Fax: (909) 524-8041
rumsen@aol.com

Costanoan

The Ohlone Indian Tribe

Andrew Galvan,
P.O. Box 3388
Fremont, CA, 94539
Phone: (510) 882 - 0527
Fax: (510) 687-9393
chochenyo@AOL.com

Bay Miwok
Ohlone
Patwin
Plains Miwok

The Confederated Villages of Lisjan

Corrina Gould, Chairperson
10926 Edes Avenue
Oakland, CA, 94603
Phone: (510) 575 - 8408
cvltribe@gmail.com

Bay Miwok
Ohlone
Delta Yokut

Guidiville Indian Rancheria

Merlene Sanchez, Chairperson
P.O. Box 339
Talmage, CA, 95481
Phone: (707) 462 - 3682
Fax: (707) 462-9183
admin@guidiville.net

Pomo

Indian Canyon Mutsun Band of Costanoan

Ann Marie Sayers, Chairperson
P.O. Box 28
Hollister, CA, 95024
Phone: (831) 637 - 4238
ams@indiancanyon.org

Costanoan

Muwekma Ohlone Indian Tribe of the SF Bay Area

Monica Arellano,
20885 Redwood Road, Suite 232
Castro Valley, CA, 94546
Phone: (408) 205 - 9714
marellano@muwekma.org

Costanoan

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 20-481 7th and Campbell Survey Project, Alameda County.



September 30, 2020

The Ohlone Indian Tribe
Andrew Galvan
P.O. Box 3388
Fremont, CA 94539

RE: 7th and Campbell Survey, Alameda County, California

Dear Andrew Galvan,

PaleoWest has been contracted by Lampher-Gregory to prepare a Cultural Resources Technical Report for the 7th and Campbell Survey, located in Oakland, Alameda County. The Project area is shown on the attached map.

PaleoWest has conducted a Records Search with the Northwest Information Center (NWIC) of the ~0.95-acre proposed project area and a 1/2-mile radius to identify known cultural resource sites and previous surveys in or near the project area.

PaleoWest contacted the NAHC on May 15, 2020 with a request that they search their Sacred Lands File for the project vicinity. The May 18, 2020 response from Sara Fonseca of the NAHC states, "A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were Positive."

We would appreciate receiving any comments, concerns, or information you wish to share regarding cultural resources or sacred sites within the immediate project area. If you could provide your response in writing, at your earliest convenience, we will make sure the relevant information is considered in preparing our report. Should you have any questions, I can be reached at calonso@paleowest.com or by phone at (925) 399-9220.

Thank you again for your assistance.

Sincerely,

Christina Alonso, MA, RPA
Supervisory Archaeologist/Project Manager



September 30, 2020

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
P.O. Box 28
Hollister, CA 95024

RE: 7th and Campbell Survey, Alameda County, California

Dear Ann Marie Sayers,

PaleoWest has been contracted by Lampher-Gregory to prepare a Cultural Resources Technical Report for the 7th and Campbell Survey, located in Oakland, Alameda County. The Project area is shown on the attached map.

PaleoWest has conducted a Records Search with the Northwest Information Center (NWIC) of the ~0.95-acre proposed project area and a 1/2-mile radius to identify known cultural resource sites and previous surveys in or near the project area.

PaleoWest contacted the NAHC on May 15, 2020 with a request that they search their Sacred Lands File for the project vicinity. The May 18, 2020 response from Sara Fonseca of the NAHC states, "A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were Positive."

We would appreciate receiving any comments, concerns, or information you wish to share regarding cultural resources or sacred sites within the immediate project area. If you could provide your response in writing, at your earliest convenience, we will make sure the relevant information is considered in preparing our report. Should you have any questions, I can be reached at calonso@paleowest.com or by phone at (925) 399-9220.

Thank you again for your assistance.

Sincerely,

Christina Alonso, MA, RPA
Supervisory Archaeologist/Project Manager



September 30, 2020

The Confederated Villages of Lisjan
Corrina Gould, Chairperson
10926 Edes Avenue
Oakland, CA 94603

RE: 7th and Campbell Survey, Alameda County, California

Dear Corrina Gould,

PaleoWest has been contracted by Lampher-Gregory to prepare a Cultural Resources Technical Report for the 7th and Campbell Survey, located in Oakland, Alameda County. The Project area is shown on the attached map.

PaleoWest has conducted a Records Search with the Northwest Information Center (NWIC) of the ~0.95-acre proposed project area and a 1/2-mile radius to identify known cultural resource sites and previous surveys in or near the project area.

PaleoWest contacted the NAHC on May 15, 2020 with a request that they search their Sacred Lands File for the project vicinity. The May 18, 2020 response from Sara Fonseca of the NAHC states, "A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were Positive."

We would appreciate receiving any comments, concerns, or information you wish to share regarding cultural resources or sacred sites within the immediate project area. If you could provide your response in writing, at your earliest convenience, we will make sure the relevant information is considered in preparing our report. Should you have any questions, I can be reached at calonso@paleowest.com or by phone at (925) 399-9220.

Thank you again for your assistance.

Sincerely,

Christina Alonso, MA, RPA
Supervisory Archaeologist/Project Manager



September 30, 2020

Amah Mutsun Tribal Band of Mission San Juan Bautista
Irenne Zwierlein, Chairperson
789 Canada Road
Woodside, CA 94062

RE: 7th and Campbell Survey, Alameda County, California

Dear Irenne Zwierlein,

PaleoWest has been contracted by Lampher-Gregory to prepare a Cultural Resources Technical Report for the 7th and Campbell Survey, located in Oakland, Alameda County. The Project area is shown on the attached map.

PaleoWest has conducted a Records Search with the Northwest Information Center (NWIC) of the ~0.95-acre proposed project area and a 1/2-mile radius to identify known cultural resource sites and previous surveys in or near the project area.

PaleoWest contacted the NAHC on May 15, 2020 with a request that they search their Sacred Lands File for the project vicinity. The May 18, 2020 response from Sara Fonseca of the NAHC states, "A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were Positive."

We would appreciate receiving any comments, concerns, or information you wish to share regarding cultural resources or sacred sites within the immediate project area. If you could provide your response in writing, at your earliest convenience, we will make sure the relevant information is considered in preparing our report. Should you have any questions, I can be reached at calonso@paleowest.com or by phone at (925) 399-9220.

Thank you again for your assistance.

Sincerely,

Christina Alonso, MA, RPA
Supervisory Archaeologist/Project Manager



September 30, 2020

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717
Linden, CA 95236

RE: 7th and Campbell Survey, Alameda County, California

Dear Katherine Erolinda Perez,

PaleoWest has been contracted by Lampher-Gregory to prepare a Cultural Resources Technical Report for the 7th and Campbell Survey, located in Oakland, Alameda County. The Project area is shown on the attached map.

PaleoWest has conducted a Records Search with the Northwest Information Center (NWIC) of the ~0.95-acre proposed project area and a 1/2-mile radius to identify known cultural resource sites and previous surveys in or near the project area.

PaleoWest contacted the NAHC on May 15, 2020 with a request that they search their Sacred Lands File for the project vicinity. The May 18, 2020 response from Sara Fonseca of the NAHC states, "A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were Positive."

We would appreciate receiving any comments, concerns, or information you wish to share regarding cultural resources or sacred sites within the immediate project area. If you could provide your response in writing, at your earliest convenience, we will make sure the relevant information is considered in preparing our report. Should you have any questions, I can be reached at calonso@paleowest.com or by phone at (925) 399-9220.

Thank you again for your assistance.

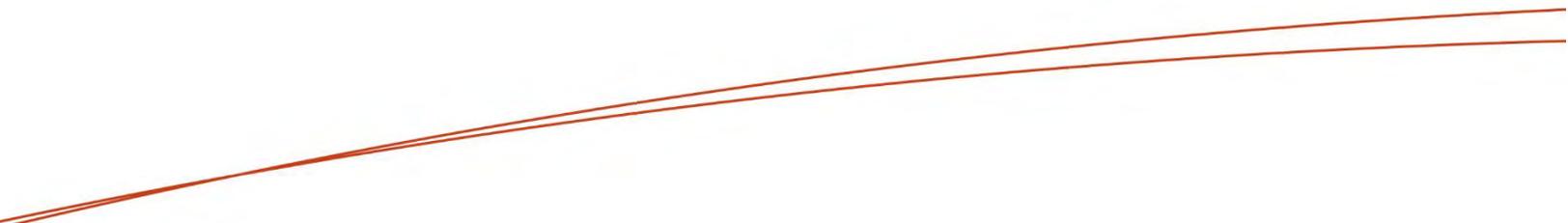
Sincerely,

Christina Alonso, MA, RPA
Supervisory Archaeologist/Project Manager

Native American Correspondence – (20-481 // 7th and Campbell)

Name/Affiliation	Date Email Sent	Comments	Date of Follow Up Phone Call	Comments
Andrew Galvan / The Ohlone Indian Tribe	6/13/20	Requested any literature located during NWIC records search.	N/A	Emails received with comments regarding literature search. Awaiting literature to send to Andrew.
Anne Sayers / Indian Canyon Mutsun Band of Costanoan	6/13/20	No Response.	6/30/20	Attempted Call, No answer.
Corrina Gould / Confederated Villages of Lisjan	6/13/20	No Response.	6/30/20	No Answer. Left Message.
Irenne Zweirlein / Amah Mutsun Tribal Band of Mission San Juan Bautista	6/13/20	No Response.	6/30/20	Attempted Call, "Cannot be completed as dialed"
Katherine Perez / North Valley Yokuts Tribe	6/13/20	No Response.	6/30/20	Attempted Call. Left Message.
Merlene Sanchez / Guidiville Indian Rancheria	6/13/20	No Response.	6/30/20	Left Message. Received call back that information was passed onto their EPA director and Historian, when the initial email was sent out. Was told that if there was not a response in email from them, that they had no comment towards this project.
Monica Arellano / Muwekma Ohlone Indian Tribe of the SF Bay Area	6/13/20	No Response.	6/30/20	Called. "Mailbox Full".
Timothy Perez / North Valley Yokuts	6/13/20	Email Received 6/13/20: "After reviewing the information you provided, the tribe is recommending Native American monitoring. One of the reasons being that the NAHC letter resulted in positive findings. I would also love to schedule a site visit if possible. Please fill free to contact me if you have any questions."	6/30/20	Made contact, was told again that tribe would like to schedule a site visit to look at area.

Name/Affiliation	Date Email Sent	Comments	Date of Follow Up Phone Call	Comments
Valentin Lopez / Amah Mutsun Tribal Band	6/13/20	No Response.	6/30/20	Made Contact. Was told: "Project is outside of traditional territory, therefore we will have no comment on the projects".
Tony Cerda / Costanoan Rumsen Carmel Tribe	6/13/20	No Response.	6/30/20	Attempted Call, "Disconnected or not in service"



***Appendix C.
Survey Photos***



Fig.1 - West facing photograph along south edge of survey area.



Fig. 2 - West facing photograph taken from entry gate on Campbell.



Fig. 3 - West facing photograph along north edge of survey area.



Fig. 4 - South facing photograph of eastern edge of survey area.
Campbell entry gate can be seen along fence line.



Fig. 5 - South facing photograph of survey area facing 7th street.



Fig. 8 - South facing photograph of survey area taken from northern most edge of survey area.



Fig. 7 - South facing photograph of survey area along western border.



Fig. 8 - Surface deposit of historic bottle glass (base).



Fig. 9 - Bottle necks located approximately 13' east of bottle base.



Fig. 10 - West facing photograph of historic scatter.



Fig. 11 - Green transfer print whiteware and historic glass located on surface atop gopher mound. Likely brought up by bioturbation.

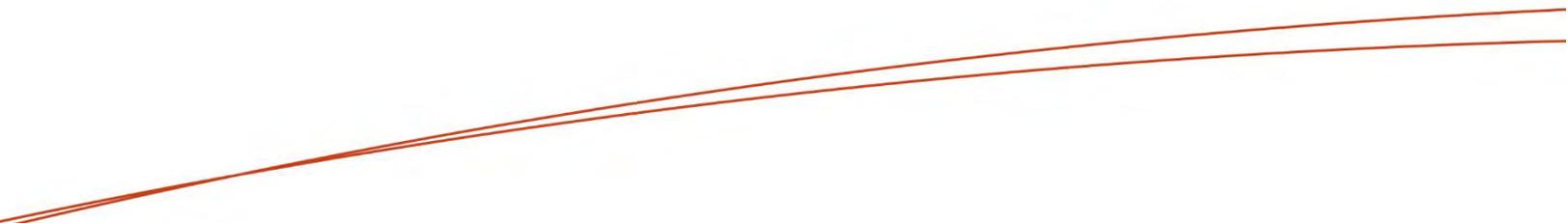
\



Fig. 12 - Blue transfer print whiteware, plate glass and bone fragment laying in soil from gopher mound.



Fig. 13 - Red floral transfer print whiteware fragment and bottle glass brought up by gophers.



***Appendix D.
STP Photos***

STP 1:



0-4 inches



4-8 inches



8-12 inches

STP02:



4-8 inches



8-12 inches

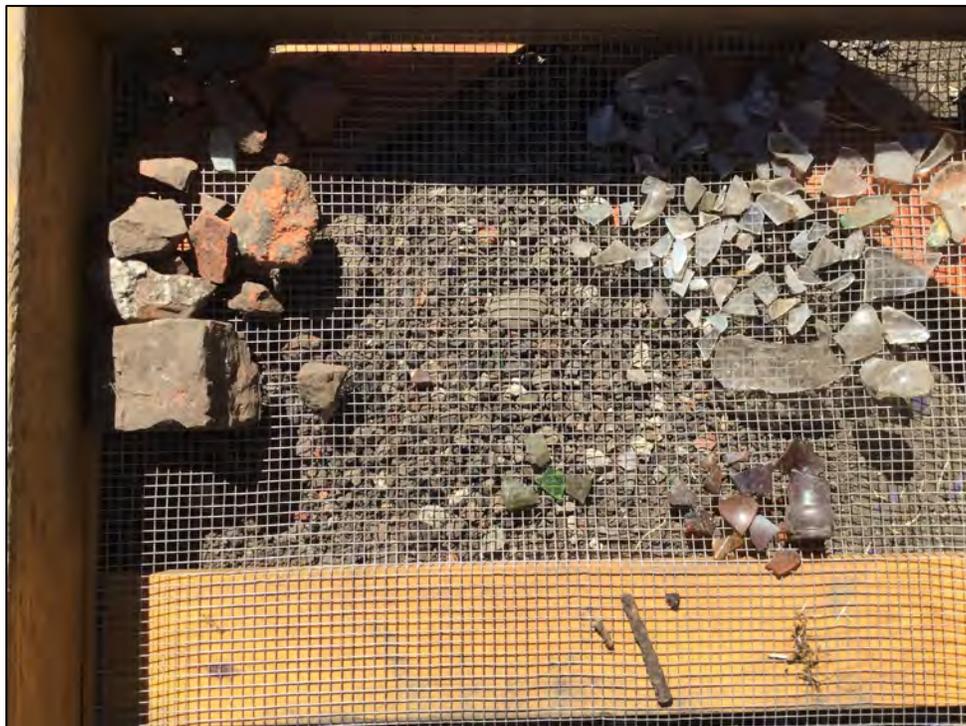


12-16 inches

STP03:



0-4 inches



4-8 inches



8-12 inches

STP04:



4-8 inches



8-12 inches

STP 05:



0-4

inches

STP 06:



0-4 inches



4-8 inches



8-12 inches

STP 07:



0-4 inches



4-8 inches



12-16 inches

STP 08:



0-4 inches



4-8 inches

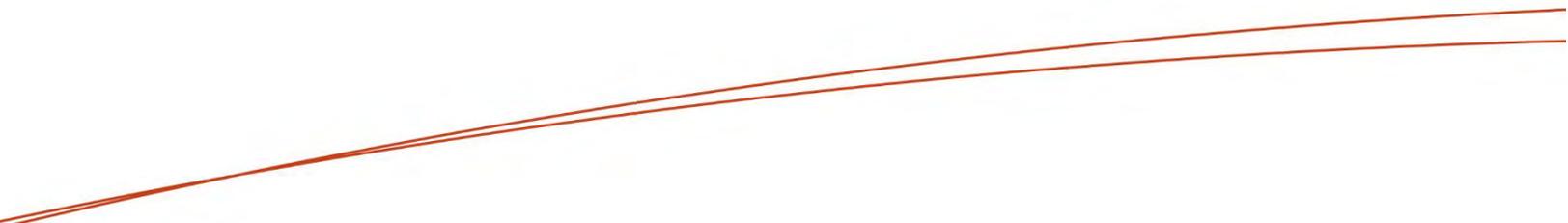
STP 09:



0-4 inches



4-8 inches



Appendix E.
DPR Forms

State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
 HRI#
 Trinomial
 NRHP Status Code

Other Listings _____
 Review Code _____ Reviewer _____ Date _____

Page 1 of 2 * Resource Name or #: 20-481-01

P1. Other Identifier:

*P2. Location: Not for Publication Unrestricted

*a. County Alameda and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad West Oakland 7.5' Date 2015 T N/A R N/A ; 1/4 of 1/4 of Sec ; M.D. B.M.

c. Address City Zip 1674 7th Street Oakland 94615

d. UTM: Zone 10 561624 mE; 4184598 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

APN: 6-17-21

*P3a. Description: 20-481-001 is an aggregate concrete foundational structure found during subsurface testing after a survey of the area. Associated with the Lekos Brothers Market which was established in 1907, it provided services to the area until 1947. Numerous Shovel Tests were excavated during testing of the subsurface, and the foundational structure was identified 8 inches below the ground surface (See Continuation Sheet). 20-481-01 is located in the southern portion of APN 6-17-21 along the eastern border abutting APN 6-17-20. Due to analysis of the findings, the associated site is not meet the requirements for eligibility under the NRHP criteria A, B, C, and D

*P3b. Resource Attributes: AH2. Foundations/structure pads

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo:

*P6. Date Constructed/Age and Source:
 Historic Prehistoric Both
 Sanborn Fire Insurance Maps.

*P7. Owner and Address:

*P8. Recorded by: Nathaniel Ramos
 PaleoWest
 1870 Olympic Boulevard, Suite 100
 Walnut Creek, CA 94596

*P9. Date Recorded: 9/29/2020

*P10. Survey Type: Subsurface Testing

*P11. Report Citation: Alonso, Christina, Justin Castellis, and Nathaniel Ramos
 2020 Cultural Resource Technical Report In Support of the 7th and Campbell Project, Oakland, Alameda County, California. PaleoWest, Walnut Creek, California.

* Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record
 Archaeological Record Photograph Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record District Record Other (List):



Foundation found in ST-9. Associated with Lekos Bros. Market. An element of historic district.



cultural materials removed from ST-9 during subsurface testing. Located above foundational structure found at base of ST.

Page of *Resource Name or #: 20-481-01

*A1. **Dimensions:** a. Length: () x b. Width: ()
Method of Measurement: Paced Taped Visual Estimate GPS GIS Other: GIS
Method of Determination: Artifacts Features Soil Vegetation Topography Cut Bank
 Animal Burrow Excavation Property Boundary Other: Artifacts
Reliability of Determination: High Medium Low Explain:
Limitations: Restricted Access Paved/built over Site limits incompletely defined Disturbances Vegeta
Other: Site limits incompletely defined

A2. Depth: .16 None Unknown Method of Determination: Subsurface Testing.

*A3. **Human Remains:** Present Absent Possible Unknown Method of Determination: Subsurface Testing.

*A4. **Features:** None.

*A5. **Cultural Constituents:** 20 clear glass fragments, 6 aqua glass fragments, 2 green glass fragments, 2 brown glass fragments, 60 brick fragments, 23 concrete fragments, 2 ceramic tile fragments, 1 porcelain fragment, 4 white ware fragments, 1 brown glazed ceramic fragment.

*A6. **Were Specimens Collected?:** Yes No

*A7. **Site Condition:** Good Fair Poor (Describe disturbances.): 0-20cm BGS is considered a disturbed context due to testing done in surrounding areas. Surrounding areas revealed disturbances of materials such as modern plastics intermixed within

*A8. **Nearest Water:** Oakland Estuary, .85 miles, South

*A9. **Elevation:** 11ft

A10. **Environmental Setting:** A large portion of the site within the project area has been disturbed due to the demolishing of buildings and leveling of the ground surface.

A11. **Historical Information:**

*A12 **Age:** Prehistoric Protohistoric 1542-1769 769-1848 1848-1880 1914-1945 Post 1945 Undetermined
P-01-004856 describes the building which the foundation is associated with is dated 1921.

A13. Interpretations: NR-H-001 is associated with a building in the recorded historic district P-01-004856. Its location relative to maps of the location suggest that the foundations found subsurface are part of the building occupied by the Lekos Brothers Market at 1674 7th Street.

A14. Remarks:

A15. References:

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.):

Original Media/Negatives Kept at:

*A17. **Form Prepared by:** Nathaniel Ramos

Date: 9/29/2020

Affiliation and Address: PaleoWest - 1870 Olympic Boulevard, Suite 100 Walnut Creek, CA 94596

Page of *Resource Name: 20-481-001

*Recorded by: Nathaniel Ramos

*Date: 9/29/2020

Continuation

Update

P2a. Contd: A shovel test with diameter of 20 inches was excavated during testing to determine the possibility of any subsurface cultural resources, with the constituents being removed from the Shovel Test (ST) and screened through 1/4-inch mesh. Excavation revealed historic brick and glass fragments, which gave way to a large high aggregate cement base. This high aggregate cement caused the excavation to be terminated at a depth of 16 inches, leading to four exploratory auger samples to be taken 20 inches away from the edge of the ST in north, south, east, and west directions. These samples revealed terminations at the same depth with concrete coming out in the tip of the sampling auger, leading the excavators to determine that the concrete was likely part of a larger foundational structure which is likely associated with the building previously occupying the property.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI#
Trinomial
NRHP Status Code

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 8 *Resource Name or #: 20-481-02

P1. Other Identifier:

*P2. Location: Not for Publication Unrestricted

*a. County Alameda and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad West Oakland 7.5' Date 2015 T R ; 1/4 of 1/4 of Sec ; M.D.B.M.

c. Address City Zip Oakland 94615

d. UTM: Zone 10 561622 mE; 4184608 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

APN: 6-17-22 and 6-17-21

*P3a. Description: 20-481-02 is an approximately 3,600 square foot subsurface sheet refuse scatter. Initially encountered during pedestrian survey by Nathaniel Ramos after identifying bioturbation spoils that revealed artifacts being brought up from the subsurface. In much of the site location, surface visibility of historic-era glass is abundant, with numerous locations of bioturbation bringing up fragments from the subsurface. A large portion of the site within the project area has been disturbed due to the demolition of buildings and leveling of the ground surface. Fragments of historic glass have been churned to the surface by bioturbation, and the lack of intact artifacts is likely a result of a combination of collection by property occupants, and vandalism by trespassers. Subsequent testing of the area via systematic Shovel Testing (ST) confirmed suspicions that a large sheet refuse scatter was located within the survey area. The STs were spaced at 40-foot intervals north-south and by 20 feet east-west in a grid pattern. (See Continuation Sheet).

*P3b. Resource Attributes: AH4. Privies/Dumps/Trash Scatters

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: 20-481-02 Site location overview.; west ,

*P6. Date Constructed/Age and Source:
 Historic Prehistoric Both

*P7. Owner and Address:

*P8. Recorded by: Nathaniel Ramos

PaleoWest 1870 Olympic Boulevard, Suite 100
Walnut Creek, CA 94596

*P9. Date Recorded: 9/29/2020

*P10. Survey Type: Pedestrian , Subsurface
Testing

*P11. Report Citation: Alonso, Christina, Justin Castellis, and Nathaniel Ramos
2020 Cultural Resource Technical Report In Support of the 7th and Campbell Project, Oakland, Alameda
County, California. PaleoWest, Walnut Creek, California.

* Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List):



20-481-02 Site location overview.



Example of historic bottle finishes found on surface of site.



Owens-Illinois Bottle Base. Embossment indicates 1929 or earlier.



Knob and Tube Insulator, ca. 1930's



Bottle Bases found subsurface testing in ST-02. Whiskey bottle base: (Unknown Mfr) ca. early 1900's, Wine base: Gallo Flavor Guard Bottle ca. 1920's-1964, Clear Square Bottle Base: (Likely a Gordon's Gin Bottle)



Assemblage of artifact remnants found during subsurface testing. Square headed nail, brick fragments, numerous clear glass fragments, blue glazed ceramic, white ware ceramic, aluminum pull tab



Cultural materials encountered during subsurface testing at 8-12 inches bgs. Likely associated with the coal yards found on early 1900's Sanborn maps.

- *A1. **Dimensions:** a. Length: 80 ft (N/S) x b. Width: 40 ft (E/W)
Method of Measurement: Paced Taped Visual Estimate GPS GIS Other: GIS
Method of Determination: Artifacts Features Soil Vegetation Topography Cut Bank
 Animal Burrow Excavation Property Boundary Other: Artifacts
Reliability of Determination: High Medium Low Explain: Through pedestrian survey, and subsurface testing, numerous concentrations of historic era artifacts were encountered.
Limitations: Restricted Access Paved/built over Site limits incompletely defined Disturbances Vegeta
Other: Hazardous Materials
A2. Depth: .4m None Unknown Method of Determination: Subsurface Testing
*A3. **Human Remains:** Present Absent Possible Unknown Method of Determination: Subsurface Testing
*A4. **Features:** All potential features of the site are located subsurface, and were not revealed during testing.

*A5. **Cultural Constituents:** Hundreds of fragments of bottle glass, ceramic, and brick fragments were encountered during subsurface testing.

*A6. **Were Specimens Collected?:** Yes No

*A7. **Site Condition:** Good Fair Poor (Describe disturbances.): Bioturbation and modern ground disturbance from the existing community garden has caused an intermix of modern material to occur at levels between 0-8 inches bgs.

*A8. **Nearest Water:** Oakland Estuary, .85 mi, South

*A9. **Elevation:** 10ft

A10. Environmental Setting: Munsell reading of soils revealed a sandy-loam consistency with coloration readings of 10YR 4/2 and 10YR 4/3.

A11. Historical Information:

*A12 **Age:** Prehistoric Protohistoric 1542-1769 1769-1848 1848-1880 1914-1945 Post 1945 Undetermined
Sanborn Fire Insurance Maps for 1902 and 1912, as well as P-01-004856 indicate subsurface scatters would be associated with the findings.

A13. Interpretations: Due to site disturbances, a visual survey of the area provided little contextual understanding of the area.

A14. Remarks: During subsurface testing, five Shovel Tests (ST) spaced at regular intervals were performed across the visible area of the refuse scatter.

A15. References:

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.):

Original Media/Negatives Kept at:

*A17. **Form Prepared by:** Nathaniel Ramos

Date: 9/29/2020

Affiliation and Address: PaleoWest 1870 Olympic Boulevard, Suite 100 Walnut Creek, CA 94596

P3a. Contd: Excavation of the STs confirmed that the vertical provenience continues to a minimum of 16 inches below ground surface. Artifact analysis of those encountered within the deposit yielded dating between the early to mid 20th century. Artifacts recovered include historic glass fragments, glass bottle bases, nails of various design, aluminum can pull-tabs, and coal fragments. Due to analysis of the findings, the subsurface scatter does not meet eligibility requirements A, B, and C of the NRHP listing criteria. However, the findings would qualify as eligible under criterion D of the NRHP as it is likely that further study of the deposit will result in meaningful changes to our understanding of the past.

A12 Contd: During subsurface testing, five Shovel Tests (ST) spaced at regular intervals were performed across the visible area of the refuse scatter. All STs 1-5 were identified to contain historic cultural material, in the form of bottle fragments, metal pull tabs, nails, anthracite coal, and brick. PaleoWest reviewed the historic maps and surveys pertaining to the Project area and associated the STs conducted with their historic counterparts regarding location. STs 1-3 were placed in a position which allowed testing in an area historically occupied by storage facilities designated as "Shed" (Sanborn 1902), and "Coal" (Sanborn 1912). ST-5 and ST-6 were placed in an area which was to the rear of what P-01-004856 indicates as the Lekos Bros. Market (1674 7th St.), seemingly in an area which would have been open yard.

CONTINUATION SHEET

Property Name: _____
Page ____ of ____

This resource was originally recorded in by Kim Monte of Science Applications International Corp. as a 1-3 story building which was an element of the district assigned to West Oakland's main commercial street of the 1860's to the 1960's (P-01-004856), built in 1913. The district was recommended ineligible to the CRHR in 2004. During a survey in September, 2020 for the 7th and Campbell Project, PaleoWest noted that these resources have been demolished and all that remains at the site is subsurface deposits of building remains. The structure is no longer extant.



South View of East Side of Project Area



South View of Center of Project Area



South View of West Side of Project Area

CONTINUATION SHEET

Property Name: _____
Page ____ of ____

This resource was originally recorded in 1988 by Staff of the Oakland Cultural Heritage Survey as a fragment of West Oakland's main commercial street of the 1860's to the 1960's. Consisting of six buildings (Fakoury (Michael) Dry Goods Store, Lekos Bros. Market, two Un-Named Buildings, Bullock Plumbing & West Oakland Reading Room, and an Un-Named Building located at 1666, 1674, 1676, 1678, 1682, 1694 respectively) built in 1889 - 1915. The district was recommended ineligible to the CRHR in 2004. During a survey in July, 2020 for the 7th and Campbell Project, PaleoWest noted that these resources have been demolished and all that remains at the site is subsurface deposits of building remains.



South Facing Photograph of East side of Survey Area



South Facing Photograph of Center of Survey Area



South Facing Photograph of West Side of Survey Area

Attachment C

City of Oakland

Letter from Neil Gray, Planner IV, City of Oakland – to Elain Brown, West Oakland and the World Enterprises, Inc., July 21, 2020 - Approval of Minor Modification to the Original Design for the 7th and Campbell Mixed Use Project, with attached Conditions of Approval

CITY OF OAKLAND



DALZIEL BUILDING • 250 FRANK H. OGAWA PLAZA • SUITE 3315 • OAKLAND, CALIFORNIA 94612

Planning and Building Department
Bureau of Planning

(510) 238-3941
FAX (510) 238-6538
TDD (510) 238-3254

July 21, 2020

Elaine Brown
Oakland and the World Enterprises, Inc.
1111 Broadway, 24th Floor
Oakland, CA 94607

RE: PLN16056; 0 7th Street; APNs: 006 0017017, 006 0017018, 006 0017019, 006 0017020, 006 0017021, 006 001702200

Dear Ms. Brown:

Your proposal to revise the above application to construct a five-story building instead of six, build the podium 10 feet from the rear property line, and change the window patterns on the facades has been **approved** by the Zoning Manager. The revised plans are attached. This project is in the 7th Street Opportunity Area and an area designated for transit oriented development in the West Oakland Specific Plan. The rear setback requirement is 15 feet, while the revised project proposes 10 feet. This setback reduction is considered a waiver under the California State Density Bonus Law.

The following table summarizes the proposed project:

Proposal:	To construct a five-story residential and commercial facility. The project includes 79 affordable housing units and 16,750 square feet of commercial floor area. The project includes an affordable housing density bonus of 35 percent and affordable housing waivers for number of parking spaces, building height and setback in the RM-2 zone. The project includes job training services and an urban farm.
Planning Permits Required:	Regular Design Review for new construction of a building.
General Plan:	Community Commercial
Zoning:	CC-2
Environmental Determination:	A detailed CEQA Analysis was prepared for this project that concluded that the project satisfies CEQA (Public Resources Code 21166) and CEQA Guidelines: A CEQA Checklist demonstrates that the potential project-specific environmental effects of the Project were adequately covered by the WOSP EIR, such that CEQA exemptions and streamlining provisions apply to the Project. The Project satisfies the CEQA provisions that provide for no further environmental review as a Project Consistent with a Community Plan and Zoning (CEQA Guidelines Section 15183), for CEQA streamlining as a qualified Infill Project (CEQA Guidelines 15183.3), and for an exemption from CEQA as an Urban Infill project (CEQA Guidelines Section 15332). No exceptions preclude these CEQA exemptions and streamlining provisions, based on the evidence presented in a completed CEQA Checklist
Historic Status:	ASI: 7th Street Commercial, OCHS Rating: Dc2*
City Council District:	3

The project is subject to the attached Conditions of Approval.

If you have any questions, please contact the case planner, **Neil Gray, Planner IV** at **(510) 238-3878** or **ngray@oaklandca.gov**.

Very Truly Yours,

A handwritten signature in cursive script that reads "Neil Gray".

Neil Gray
Planner IV

Cc: Ali Kashani

Attachments:

- A. Conditions of approval
- B. Revised Plans

ATTACHMENT A: CONDITIONS OF APPROVAL

The proposal is hereby approved subject to the following Conditions of Approval

Part 1: Standard Conditions of Approval – General Administrative Conditions

1. **Approved Use**

The project shall be constructed and operated in accordance with the authorized use as described in the approved application materials, and the approved plans dated May 5, 2016, as amended by the revised plans shown in Attachment B and the following conditions of approval, if applicable (“Conditions of Approval” or “Conditions”).

2. **Effective Date, Expiration, Extensions and Extinguishment**

This Approval shall become effective immediately, unless the Approval is appealable, in which case the Approval shall become effective in ten calendar days unless an appeal is filed. Unless a different termination date is prescribed, this Approval shall expire **September 15, 2020**, unless within such period all necessary permits for construction or alteration have been issued, or the authorized activities have commenced in the case of a permit not involving construction or alteration. Upon written request and payment of appropriate fees submitted no later than the expiration date of this Approval, the Director of City Planning or designee may grant a one-year extension of this date, with additional extensions subject to approval by the approving body. Expiration of any necessary building permit or other construction-related permit for this project may invalidate this Approval if said Approval has also expired. If litigation is filed challenging this Approval, or its implementation, then the time period stated above for obtaining necessary permits for construction or alteration and/or commencement of authorized activities is automatically extended for the duration of the litigation.

3. **Compliance with Other Requirements**

The project applicant shall comply with all other applicable federal, state, regional, and local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City’s Bureau of Building, Fire Marshal, and Public Works Department. Compliance with other applicable requirements may require changes to the approved use and/or plans. These changes shall be processed in accordance with the procedures contained in Condition #4.

4. **Minor and Major Changes**

- a. Minor changes to the approved project, plans, Conditions, facilities, or use may be approved administratively by the Director of City Planning
- b. Major changes to the approved project, plans, Conditions, facilities, or use shall be reviewed by the Director of City Planning to determine whether such changes require submittal and approval of a revision to the Approval by the original approving body or a new independent permit/approval. Major revisions shall be reviewed in accordance with the procedures required for the original permit/approval. A new independent permit/approval shall be reviewed in accordance with the procedures required for the new permit/approval.

5. Compliance with Conditions of Approval

- a. The project applicant and property owner, including successors, (collectively referred to hereafter as the “project applicant” or “applicant”) shall be responsible for compliance with all the Conditions of Approval and any recommendations contained in any submitted and approved technical report at his/her sole cost and expense, subject to review and approval by the City of Oakland.
- b. The City of Oakland reserves the right at any time during construction to require certification by a licensed professional at the project applicant’s expense that the as-built project conforms to all applicable requirements, including but not limited to, approved maximum heights and minimum setbacks. Failure to construct the project in accordance with the Approval may result in remedial reconstruction, permit revocation, permit modification, stop work, permit suspension, or other corrective action.
- c. Violation of any term, Condition, or project description relating to the Approval is unlawful, prohibited, and a violation of the Oakland Municipal Code. The City of Oakland reserves the right to initiate civil and/or criminal enforcement and/or abatement proceedings, or after notice and public hearing, to revoke the Approval or alter these Conditions if it is found that there is violation of any of the Conditions or the provisions of the Planning Code or Municipal Code, or the project operates as or causes a public nuisance. This provision is not intended to, nor does it, limit in any manner whatsoever the ability of the City to take appropriate enforcement actions. The project applicant shall be responsible for paying fees in accordance with the City’s Master Fee Schedule for inspections conducted by the City or a City-designated third-party to investigate alleged violations of the Approval or Conditions.

6. Signed Copy of the Approval/Conditions

A copy of the Approval letter and Conditions shall be signed by the project applicant, attached to each set of permit plans submitted to the appropriate City agency for the project, and made available for review at the project job site at all times.

7. Blight/Nuisances

The project site shall be kept in a blight/nuisance-free condition. Any existing blight or nuisance shall be abated within 60 days of approval, unless an earlier date is specified elsewhere.

8. Indemnification

- a. To the maximum extent permitted by law, the project applicant shall defend (with counsel acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the Oakland Redevelopment Successor Agency, the Oakland City Planning Commission, and their respective agents, officers, employees, and volunteers (hereafter collectively called “City”) from any liability, damages, claim, judgment, loss (direct or indirect), action, causes of action, or proceeding (including legal costs, attorneys’ fees, expert witness or consultant fees, City Attorney or staff time, expenses or costs) (collectively called “Action”) against the City to attack, set aside, void or annul this Approval or implementation of this Approval. The City may elect, in its sole discretion, to participate in the defense of said Action and the project applicant shall reimburse the City for its reasonable legal costs and attorneys’ fees.
- b. Within ten (10) calendar days of the filing of any Action as specified in subsection (a) above, the project applicant shall execute a Joint Defense Letter of Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and the Joint Defense Letter of Agreement shall survive termination, extinguishment, or invalidation of the

Approval. Failure to timely execute the Letter of Agreement does not relieve the project applicant of any of the obligations contained in this Condition or other requirements or Conditions of Approval that may be imposed by the City.

9. Severability

The Approval would not have been granted but for the applicability and validity of each and every one of the specified Conditions, and if one or more of such Conditions is found to be invalid by a court of competent jurisdiction this Approval would not have been granted without requiring other valid Conditions consistent with achieving the same purpose and intent of such Approval.

10. Special Inspector/Inspections, Independent Technical Review, Project Coordination and Monitoring

The project applicant may be required to cover the full costs of independent third-party technical review and City monitoring and inspection, including without limitation, special inspector(s)/inspection(s) during times of extensive or specialized plan-check review or construction, and inspections of potential violations of the Conditions of Approval. The project applicant shall establish a deposit with the Bureau of Building, if directed by the Building Official, Director of City Planning, or designee, prior to the issuance of a construction-related permit and on an ongoing as-needed basis.

11. Public Improvements

The project applicant shall obtain all necessary permits/approvals, such as encroachment permits, obstruction permits, curb/gutter/sidewalk permits, and public improvement (“p-job”) permits from the City for work in the public right-of-way, including but not limited to, streets, curbs, gutters, sidewalks, utilities, and fire hydrants. Prior to any work in the public right-of-way, the applicant shall submit plans for review and approval by the Bureau of Planning, the Bureau of Building, and other City departments as required. Public improvements shall be designed and installed to the satisfaction of the City.

12. Compliance Matrix

The project applicant shall submit a Compliance Matrix, in both written and electronic form, for review and approval by the Bureau of Planning and the Bureau of Building that lists each Condition of Approval (including each mitigation measure if applicable) in a sortable spreadsheet. The Compliance Matrix shall contain, at a minimum, each required Condition of Approval, when compliance with the Condition is required, and the status of compliance with each Condition. For multi-phased projects, the Compliance Matrix shall indicate which Condition applies to each phase. The project applicant shall submit the initial Compliance Matrix prior to the issuance of the first construction-related permit and shall submit an updated matrix upon request by the City.

13. Construction Management Plan

Prior to the issuance of the first construction-related permit, the project applicant and his/her general contractor shall submit a Construction Management Plan (CMP) for review and approval by the Bureau of Planning, Bureau of Building, and other relevant City departments such as the Fire Department and the Public Works Department as directed. The CMP shall contain measures to minimize potential construction impacts including measures to comply with all construction-related Conditions of Approval (and mitigation measures if applicable) such as dust control, construction emissions, hazardous materials, construction days/hours, construction traffic control, waste reduction and recycling, stormwater pollution prevention, noise control, complaint management, and cultural resource management (see applicable Conditions below). The CMP shall provide project-specific information including descriptive procedures, approval documentation, and drawings (such as a site logistics plan, fire safety plan, construction phasing plan, proposed truck routes, traffic control plan, complaint management plan, construction worker parking

plan, and litter/debris clean-up plan) that specify how potential construction impacts will be minimized and how each construction-related requirement will be satisfied throughout construction of the project.

Part 2: Standard Conditions of Approval – Environmental Protection Measures

GENERAL

14. Regulatory Permits and Authorizations from Other Agencies

Requirement: The project applicant shall obtain all necessary regulatory permits and authorizations from applicable resource/regulatory agencies including, but not limited to, the Regional Water Quality Control Board, Bay Area Air Quality Management District, Bay Conservation and Development Commission, California Department of Fish and Wildlife, U. S. Fish and Wildlife Service, and Army Corps of Engineers and shall comply with all requirements and conditions of the permits/authorizations. The project applicant shall submit evidence of the approved permits/authorizations to the City, along with evidence demonstrating compliance with any regulatory permit/authorization conditions of approval.

When Required: Prior to activity requiring permit/authorization from regulatory agency

Initial Approval: Approval by applicable regulatory agency with jurisdiction; evidence of approval submitted to Bureau of Planning

Monitoring/Inspection: Applicable regulatory agency with jurisdiction

AESTHETICS

15. Graffiti Control

Requirement:

- a. During construction and operation of the project, the project applicant shall incorporate best management practices reasonably related to the control of graffiti and/or the mitigation of the impacts of graffiti. Such best management practices may include, without limitation:
 - i. Installation and maintenance of landscaping to discourage defacement of and/or protect likely graffiti-attracting surfaces.
 - ii. Installation and maintenance of lighting to protect likely graffiti-attracting surfaces.
 - iii. Use of paint with anti-graffiti coating.
 - iv. Incorporation of architectural or design elements or features to discourage graffiti defacement in accordance with the principles of Crime Prevention Through Environmental Design (CPTED).
 - v. Other practices approved by the City to deter, protect, or reduce the potential for graffiti defacement.
- b. The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include 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).

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

16. **Landscape Plan**

a. Landscape Plan Required

Requirement: 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: N/A

b. Landscape Installation

Requirement: 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.

When Required: Prior to building permit final

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

c. Landscape Maintenance

Requirement: 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.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

17. **Lighting**

Requirement: Proposed new exterior lighting fixtures shall be adequately shielded to a point below the light bulb and reflector to prevent unnecessary glare onto adjacent properties.

When Required: Prior to building permit final

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

AIR QUALITY

18. **Construction-Related Air Pollution Controls (Dust and Equipment Emissions)**

Requirement: The project applicant shall implement all of the following applicable air pollution control measures during construction of the project:

- a. Water all exposed surfaces of active construction areas at least twice daily. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever feasible.
- b. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
- c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- d. Pave all roadways, driveways, sidewalks, etc. within one month of site grading or as soon as feasible. In addition, building pads should be laid within one month of grading or as soon as feasible unless seeding or soil binders are used.
- e. Enclose, cover, water twice daily, or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).
- f. Limit vehicle speeds on unpaved roads to 15 miles per hour.
- g. Idling times on all diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations). Clear signage to this effect shall be provided for construction workers at all access points.
- h. Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes and fleet operators must develop a written policy as required by Title 23, Section 2449, of the California Code of Regulations (“California Air Resources Board Off-Road Diesel Regulations”).
- i. All construction equipment shall be maintained and properly tuned in accordance with the manufacturer’s specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- j. Portable equipment shall be powered by electricity if available. If electricity is not available, propane or natural gas shall be used if feasible. Diesel engines shall only be used if electricity is not available and it is not feasible to use propane or natural gas.
- k. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
- l. All excavation, grading, and demolition activities shall be suspended when average wind speeds exceed 20 mph.
- m. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- n. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more).
- o. Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust 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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

19. 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-16 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 poplar (*Populus deltoids X trichocarpa*), and Redwood (*Sequoia sempervirens*).
- 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

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.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

20. Stationary Sources of Air Pollution (Toxic Air Contaminants)

Requirement: The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to on-site stationary sources of toxic air contaminants. The project applicant shall choose one of the following methods:

a. 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 associated with proposed stationary sources of pollution in the project. 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 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 -

b. 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:

- i. Installation of non-diesel fueled generators, if feasible, or;
- ii. Installation of diesel generators with an EPA-certified Tier 4 engine or engines that are retrofitted with a CARB Level 3 Verified Diesel Emissions Control Strategy, if feasible.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

21. 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Applicable regulatory agency with jurisdiction

Monitoring/Inspection: Applicable regulatory agency with jurisdiction

CULTURAL RESOURCES

22. 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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

23. Archaeologically Sensitive Areas – Pre-Construction Measures

Requirement: The project applicant shall implement either Provision A (Intensive Pre-Construction Study) or Provision B (Construction ALERT Sheet) concerning archaeological resources.

Provision A: Intensive Pre-Construction Study.

The project applicant shall retain a qualified archaeologist to conduct a site-specific, intensive archaeological resources study for review and approval by the City prior to soil-disturbing activities occurring on the project site. The purpose of the site-specific, intensive archaeological resources study is to identify early the potential presence of history-period archaeological resources on the project site. At a minimum, the study shall include:

- a. Subsurface presence/absence studies of the project site. Field studies may include, but are not limited to, auguring and other common methods used to identify the presence of archaeological resources.
- b. A report disseminating the results of this research.
- c. Recommendations for any additional measures that could be necessary to mitigate any adverse impacts to recorded and/or inadvertently discovered cultural resources.

If the results of the study indicate a high potential presence of historic-period archaeological resources on the project site, or a potential resource is discovered, the project applicant shall hire a qualified archaeologist to monitor any ground disturbing activities on the project site during construction and

prepare an ALERT sheet pursuant to Provision B below that details what could potentially be found at the project site. Archaeological monitoring would include briefing construction personnel about the type of artifacts that may be present (as referenced in the ALERT sheet, required per Provision B below) and the procedures to follow if any artifacts are encountered, field recording and sampling in accordance with the Secretary of Interior's Standards and Guidelines for Archaeological Documentation, notifying the appropriate officials if human remains or cultural resources are discovered, and preparing a report to document negative findings after construction is completed if no archaeological resources are discovered during construction.

Provision B: Construction ALERT Sheet.

The project applicant shall prepare a construction "ALERT" sheet developed by a qualified archaeologist for review and approval by the City prior to soil-disturbing activities occurring on the project site. The ALERT sheet shall contain, at a minimum, visuals that depict each type of artifact that could be encountered on the project site. Training by the qualified archaeologist shall be provided to the project's prime contractor, any project subcontractor firms (including demolition, excavation, grading, foundation, and pile driving), and utility firms involved in soil-disturbing activities within the project site.

The ALERT sheet shall state, in addition to the basic archaeological resource protection measures contained in other standard conditions of approval, all work must stop and the City's Environmental Review Officer contacted in the event of discovery of the following cultural materials: concentrations of shellfish remains; evidence of fire (ashes, charcoal, burnt earth, fire-cracked rocks); concentrations of bones; recognizable Native American artifacts (arrowheads, shell beads, stone mortars [bowls], humanly shaped rock); building foundation remains; trash pits, privies (outhouse holes); floor remains; wells; concentrations of bottles, broken dishes, shoes, buttons, cut animal bones, hardware, household items, barrels, etc.; thick layers of burned building debris (charcoal, nails, fused glass, burned plaster, burned dishes); wood structural remains (building, ship, wharf); clay roof/floor tiles; stone walls or footings; or gravestones. Prior to any soil-disturbing activities, each contractor shall be responsible for ensuring that the ALERT sheet is circulated to all field personnel, including machine operators, field crew, pile drivers, and supervisory personnel. The ALERT sheet shall also be posted in a visible location at the project site.

When Required: Prior to approval of construction-related permit; during construction

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

24. 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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

GEOLOGY AND SOILS

25. 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

26. 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

HAZARDS AND HAZARDOUS MATERIALS

27. Hazardous 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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

28. **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.

When Required: Prior to approval of demolition, grading, or building permits

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

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.

When Required: Prior to approval of construction-related permit

Initial Approval: Applicable regulatory agency with jurisdiction

Monitoring/Inspection: Applicable regulatory agency with jurisdiction

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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

HYDROLOGY AND WATER QUALITY

29. Erosion and Sedimentation Control Measures for Construction

Requirement: The project applicant shall implement Best Management Practices (BMPs) to reduce erosion, sedimentation, and water quality impacts during construction to the maximum extent practicable. At a minimum, the project applicant shall provide filter materials deemed acceptable to the City at nearby catch basins to prevent any debris and dirt from flowing into the City's storm drain system and creeks.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

30. 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, 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

31. 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning; Bureau of Building

Monitoring/Inspection: Bureau of Building

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.

When Required: Prior to building permit final

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

NOISE

32. 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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

33. 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.
- b. Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.
- c. Applicant shall use temporary power poles instead of generators where feasible.

- d. Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction.
- e. The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

34. 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;
- 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

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.

When Required: During construction

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

35. 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

36. 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.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

37. Exposure to Vibration

Requirement: The project applicant shall submit a Vibration Reduction Plan prepared by a qualified acoustical consultant for City review and approval that contains vibration reduction measures to reduce groundborne vibration to acceptable levels per Federal Transit Administration (FTA) standards. The applicant shall implement the approved Plan during construction. Potential vibration reduction measures include, but are not limited to, the following:

- a. Isolation of foundation and footings using resilient elements such as rubber bearing pads or springs, such as a "spring isolation" system that consists of resilient spring supports that can support the podium or residential foundations. The specific system shall be selected so that it can properly support the structural loads, and provide adequate filtering of groundborne vibration to the residences above.
- b. Trenching, which involves excavating soil between the railway and the project so that the vibration path is interrupted, thereby reducing the vibration levels before they enter the project's structures. Since the reduction in vibration level is based on a ratio between trench depth and vibration wavelength, additional measurements shall be conducted to determine the vibration wavelengths affecting the project. Based on the resulting measurement findings, an adequate trench depth and, if required, suitable fill shall be identified (such as foamed styrene packing pellets [i.e., Styrofoam] or low-density polyethylene).

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

TRANSPORTATION/TRAFFIC

38. 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

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.

When Required: Prior to approval of construction-related permit

Initial Approval: Public Works Department, Transportation Services Division

Monitoring/Inspection: Bureau of Building

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.

When Required: Prior to building permit final

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

39. 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

40. 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.
 - 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: N/A

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.

When Required: Prior to building permit final

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

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 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.

When Required: Ongoing

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Planning

UTILITY AND SERVICE SYSTEMS

41. 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Public Works Department, Environmental Services Division

Monitoring/Inspection: Public Works Department, Environmental Services Division

42. 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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

43. 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

44. 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.
 - Green Point Checklist Requirement: 23 points per the appropriate checklist approved during the Planning entitlement process.
 - All green building points identified on the checklist approved during review of the Planning and Zoning permit, unless a Request for Revision Plan-check application is submitted and approved by the Bureau of Planning that shows the previously approved points that will be eliminated or substituted.
 - The required green building point minimums in the appropriate credit categories.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

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 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.

When Required: After project completion as specified

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

45. Green Building Requirements – Small Projects

a. *Compliance with Green Building Requirements During Plan-Check*

The project applicant shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures and the applicable requirements of the City of Oakland Green Building Ordinance (Chapter 18.02 of the Oakland Municipal Code) for projects using the Small Commercial Checklist.

- i. The following information shall be submitted to the City for review and approval with 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 green building checklist approved during the review of a 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 (b) below.
 - Other documentation to prove compliance.
- ii. The set of plans in subsection (a) shall demonstrate compliance with the following:
 - CALGreen mandatory measures.
 - All applicable green building measures identified on the checklist approved during the review of a Planning and Zoning permit, or submittal of a Request for Revision Plan-check application that shows the previously approved points that will be eliminated or substituted.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

b. *Compliance with Green Building Requirements During Construction*

Requirement: The project applicant shall comply with the applicable requirements of CALGreen and the Green Building Ordinance during construction.

The following information shall be submitted to the City for review and approval:

- i. Completed copy of the green building checklists approved during review of the Planning and Zoning permit and during the review of the Building permit.
- ii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

46. 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Public Works Department, Department of Engineering and Construction

Monitoring/Inspection: N/A

47. 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

Project-Specific Condition of Approval

48. Material Board

Requirement: The applicant shall submit, for review and approval of the Planning Director, a material board showing all exterior materials on the building. These materials should also be depicted in the set of plans submitted with the Building Permit application.

When Required: Prior to issuance of the Building Permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

49. Storefront Design

Requirement: The applicant shall submit, for review and approval of the Planning Director, plans that show the following:

- A. The ground floor facing 7th Street having 55 percent transparency between two (2) feet and nine (9) feet in height. This area shall be comprised of clear, non-reflective windows that allow views in and out of indoor space.
- B. A bulkhead and the base of the ground floor, including the storefront windows.

When Required: Prior to issuance of the Building Permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

50. Affordable Residential Ownership Units - Agreement and Monitoring

- a. Requirement #1: Pursuant to Section 17.107 of the Oakland Planning Code and the State Density Bonus Law California Government Code Section 65915 et seq. (“State Density Bonus Law”), the proposed project shall provide a minimum of 79 target dwelling units available at very low, low, or moderate income for receiving a density bonus, concession and/or waiver of development standards.
- b. Requirement #2: Prior to submittal of a construction-related permit, the applicant shall contact the Housing and Community Development Department (Housing Development Services Division) to enter into an Affordability Agreement based on the City’s model documents, as may be amended from time to time, governing the target dwelling units. The Affordability Agreement shall provide that target dwelling units are offered at an affordable housing cost and that only households that (i) meet the eligibility standards for the target dwelling units, and (ii) agree to execute an equity share agreement with the City are eligible to occupy the target dwelling units.
- c. The Affordability Agreement shall be recorded with the Alameda County Recorder’s Office as an encumbrance against the property, and a copy of the recorded agreement shall be provided to and retained by the City. The Affordability Agreement may not be subordinated in priority to any other lien interest in the property.
- d. Requirement #3 The restricted target dwelling units must comply with the City of Oakland Affordable Homeownership Development Program Guidelines. The applicant shall ensure that the initial occupant of all for-sale target dwelling units are Very Low-, Low, or Moderate-Income Households, as required, and that the units are offered at an Affordable Housing Cost in accordance with California Health and Safety Code Section 50052.5 and its implementing regulations.
- e. Requirement #4: For-sale target living units require a one-time fee to determine the eligibility of the initial homebuyer. The City’s fee is \$250 per unit currently per the Master Fee Schedule, which is updated annually and available from the Budget Office of the City Oakland’s Finance Department: <https://www.oaklandca.gov/departments/finance-department>.
- f. Requirement #5: The owner of a for-sale affordable unit may not rent out the unit. The unit must remain owner occupied.
- g. Requirement #6: The applicant shall provide for initial homebuyer education to apprise buyers of the long-term affordability restrictions applicable to the targeted dwelling units, and shall submit information regarding the initial homebuyer’s income, household size and other funding sources to

City staff in the Housing and Community Development Division, for their review and approval. If a potential initial homebuyer does not meet the City's underwriting requirements, then the proposed homebuyer will not be allowed to purchase the home, and the applicant will be required to find qualified substitute buyer.

- h.* Requirement #7: The applicant shall submit for review and approval by the City Attorney, Bureau of Planning and any other relevant City departments as determined by the City, proof that all initial homebuyers of for-sale target dwelling units have entered into a density bonus equity share agreement, consistent with State Density Bonus Law, with the City prior to purchasing the unit or property, and the grant deed conveying title to the unit to the initial homebuyer shall reference the equity share agreement.
- i.* The equity share agreement shall specify that the title to the subject property or unit may not be transferred without prior approval of the City. Following City approval, the applicant shall record the equity share agreement against the parcel containing the target dwelling unit, as well as a Deed of Trust and Request for Notice in the event of default, sale, or refinancing, with the Alameda County Recorder's Office, and shall provide a copy of the recorded equity share agreement to the City. The equity share agreement shall further provide that upon future resale of a target dwelling unit, the initial homebuyer must notify the Housing and Community Development Division of its intent to sell the unit. Upon resale, the initial homebuyer may recoup the value of its own down payment, any improvements to the target dwelling unit, and the initial homebuyer's proportionate share of appreciation. The initial homebuyer shall repay to the City the City's initial subsidy and the City's proportionate share of appreciation. The City's initial subsidy is to be equal to the difference between the fair market value of the target dwelling unit at the time of initial sale and the initial sale price to the initial homebuyer, plus the amount of down payment assistance or mortgage assistance, if any. If upon resale the fair market value of the target dwelling unit is lower than the initial fair market value, then the value at the time of the resale shall be used as the initial fair market value. The City's proportionate share of appreciation is equal to the ratio of the local government's initial subsidy to the fair market value of the target dwelling unit at the time of the initial sale. The City will apply these repayment proceeds to the promotion of low to moderate income homeownership opportunities within five years of its receipt.
- j.* Requirement #8: The floor area, number of bedrooms, and amenities (such as fixtures, appliances, location and utilities) of the affordable units shall be substantially equal in size and quality to those of the market rate units. Further, the proportion of unit types (i.e. three-bedroom and four-bedroom, etc.) of the affordable units shall be roughly the same as the project's market rate units.
- k.* Requirement #9: Households in affordable units must have equal access to the project's services and facilities as households in all other units within the project.
- l.* Requirement #10: Affordable units must be evenly distributed throughout the project.
- m.* Requirement #11: The applicant shall comply with the requirements of Section 65915(c)(3)(A) of the State Density Bonus Law requiring, without limitation, replacement units in those circumstances where the parcel subject to the density bonus contains or contained affordable units within the last five years.
- n.* Requirement #12: The applicant shall comply with all applicable provisions of State Density Bonus Law and all provisions of the City's density bonus law that are not preempted by state law.

- o.* Requirement #13: Affordable units shall be constructed prior to or concurrent with the construction of the market rate units in each phase of the project.
- p.* Requirement #14: The City will not issue final certificates of occupancy for more than fifty percent (50%) of the market rate units in any phase of development until final certificates of occupancy are issued for all of the affordable units in that phase.

When Required: First Construction Related Permit Application and Ongoing

Initial Approval: Housing and Community Development Department and Ongoing

Ongoing Monitoring and Inspections: Housing and Community Development, Housing Development Services Division

51. Affordable Residential Rental Units - Agreement and Monitoring

- a.* Requirement #1: Pursuant to Section 17.107 of the Oakland Planning Code and the State Density Bonus Law California Government Code Section 65915 et seq. (“State Density Bonus Law”), the proposed project shall provide a minimum of 79 target dwelling units available at very low, low, and/or moderate income for receiving a density bonus, concession and/or waiver of development standards.
- b.* Requirement #2: The approved residential affordable units that are part of this approval shall remain and continue to be affordable at the specified level in accordance with California Health and Safety Code Section 50053 and its implementing regulations for a term of not less than 55 years or a longer period of time if required by the construction or mortgage finance assistance program, mortgage insurance program, or rental subsidy program. This Condition of Approval must also be in compliance with Section 65915(c)(1) of the State Density Bonus Law specifically, as well as all other applicable provisions of the State Density Bonus Law.
- c.* Requirement #3: Prior to submittal of a construction-related permit, the applicant shall contact the Housing and Community Development Department (Housing Development Services Division) to enter into a Regulatory Agreement based on the City’s model documents, as may be amended from time to time, governing the target dwelling units. The Agreement shall contain restrictive covenants to ensure the continued affordability of the target dwelling units at the specified rent levels for a period of not less than fifty-five (55) years pursuant Section 65915 (c)(1) of the State Density Bonus Law, and restrict the occupancy of those units only to residents who satisfy the affordability requirement as approved for this project. Only households meeting the eligibility standards for the target dwelling units shall be eligible to occupy the target dwelling units.

If the property has an approved condominium map and the developer chooses to rent the affordable units at initial occupancy, the units cannot convert to ownership during the term of the Agreement, even if the market rate units in the development convert to ownership.

The Regulatory Agreement shall be recorded with the Alameda County Recorder’s Office as an encumbrance against the property, and a copy of the recorded agreement shall be provided to and retained by the City. The Regulatory Agreement may not be subordinated in priority to any other lien interest in the property.

- d.* Requirement #4: Rental target dwelling units shall be managed / operated by the developer or developer's agent or the developer's successor. The developer of rental target dwelling units shall submit for review and approval by the Housing and Community Development Department and any other relevant City departments, an annual report identifying which units are target dwelling units, the monthly rent, vacancy information, monthly income for tenants of each target rental dwelling unit throughout the prior year, and other information required by the City. Said agreement shall maintain the tenants' privacy. The applicant shall pay to the Housing and Community Development Department an annual monitoring fee pursuant to the Master Fee Schedule (updated annually and available from the Budget Office of the City Oakland's Finance Department: <https://www.oaklandca.gov/departments/finance-department>) for City monitoring of target dwelling units.
- e.* Requirement #5: The floor area, number of bedrooms, and amenities (such as fixtures, appliances, location and utilities) of the affordable units shall be substantially equal in size and quality to those of the market rate units. Further, the proportion of unit types (i.e. three-bedroom and four-bedroom, etc.) of the affordable units shall be roughly the same as the project's market rate units.
- f.* Requirement #6: Tenant households in affordable units must have equal access to the project's services and facilities as tenant households in all other units within the project.
- g.* Requirement #7: Affordable units must be evenly distributed throughout the project.
- h.* Requirement #8: Applicant shall comply with the requirements of Section 65915(c)(3)(A) of the State Density Bonus Law requiring, without limitation, replacement units in those circumstances where the parcel subject to the density bonus requests contains or contained affordable units within the last five years.
- i.* Requirement #9: Applicants shall comply with all applicable provisions of State Density Bonus Law and all provisions of the City's density bonus law that are not preempted by state law.
- j.* Requirement #10: Affordable units shall be constructed concurrent with the construction of the market rate units in each phase of the project.
- k.* Requirement #11: The City will not issue final certificates of occupancy for more than fifty percent (50%) of the market rate units in any phase of development until final certificates of occupancy are issued for all of the affordable units in that phase.

When Required: First Construction-Related Permit Application and Ongoing

Initial Approval: Housing and Community Development Department – Housing Development Services Division

Ongoing Monitoring/Inspections: Housing Development Services Division

Attachment D

City of Oakland

Tribal Notification Letter, June 15, 2020



CITY OF OAKLAND

DALZIEL BUILDING • 250 FRANK H. OGAWA PLAZA • SUITE 3315 • OAKLAND, CALIFORNIA
94612

Planning and Building Department
Bureau of Planning

(510) 238-3941
FAX (510) 238-6538
TDD (510) 238-3254

June 15, 2020

Silvia Burley
California Valley Miwok Tribe
4620 Shippee Lane,
Stockton, CA 95212

Re: 7th and Campbell Project, Oakland, Alameda County, California

Dear Ms. Burley,

The City of Oakland (City) is reviewing the proposed 7th and Campbell Project (Project) located within the City of Oakland, in Alameda County, California. The Project applicant intends to pursue federal funding assistance from the U.S. Department of Housing and Urban Development (HUD). Therefore, the City is reviewing the Project as the local HUD Responsible Entity, pursuant to HUD regulations 24 CFR Part 50 and Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR Part 800) for possible impacts on historic properties. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

The City of Oakland will conduct a review of this project to comply with Section 106 of the NHPA and its implementing regulations 36 CFR Part 800. We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the Project might affect them. If the Project has the potential to have an adverse effect, we would like to discuss possible ways to avoid, minimize or mitigate potential adverse effects.

The prior 2014 West Oakland Specific Plan Environmental Impact Report identified the 7th Street S-7 Preservation Combining Zone as the best surviving fragment of the historic 7th Street,

a legendary commercial street of the 19th and early 20th centuries. Numerous historic buildings exist in the area surrounding the Project site. In addition, the Project area is located on the margins of the historic San Francisco Bay Shoreline and near intermittent and perennial water sources. While there are no known resources within the Project area, there is a moderate to high potential for the presence of unrecorded Native American resources within the Planning Area.

To meet Project timeframes, if you would like to be a consulting party to this Project, please let us know of your interest within 30 days. If you have any initial concerns with impacts of the Project on religious or cultural properties, please note them in your response.

Enclosed is a map that shows the Project site and an additional area of potential indirect effects. The Project consists of the development of a site consisting of several separate small parcels (including Assessor Parcel Numbers 6-17-17,-18,-19,-20,-21 and-22) with addresses at 1662 through 1676 7th Street. Oakland and the World Enterprises (the applicant) has proposed construction of a six-story residential and commercial facility (see attached rendering). The Project includes 79 affordable housing units and 24,000 square feet of commercial floor area. The Project includes an affordable housing density bonus of 35 percent, and affordable housing waivers for number of parking spaces, building height and setbacks. The project includes job training services and an urban farm.

If you do not wish to consult on this Project, please inform us of that decision. If you do wish to consult, please include in your reply the name and contact information for the tribe's principal representative in the consultation.

Thank you very much. We value your assistance and look forward to consulting further if there are historic properties of religious and cultural significance to your tribe that may be affected by this Project.

Sincerely,

A handwritten signature in black ink, appearing to read "Heather Klein", with a stylized, flowing script.

Heather Klein, Planner IV, Zoning Area Supervisor
City of Oakland
Email: HKlein@oaklandca.gov
Phone: 510-238-3659

Attachments: Project Site (Area of Potential Effect) and project rendering

January 6, 2021

The Ohlone Indian Tribe
Andrew Galvan
P.O. Box 3388
Fremont, CA 94539
via email at: chochenyo@AOL.com



RE: 7th and Campbell Project, Alameda County, California

Dear Andrew Galvan,

On September 30, 2020, PaleoWest contacted you regarding the preparation of a Cultural Resources Technical Report for the 7th and Campbell project in Oakland, Alameda County. In response to their request for any comments, concerns or information that you might wish to share regarding cultural resources or sacred sites within the immediate project area, you requested a copy of any literature obtained as part of the NWIC records search.

In response to your request, please find the attached list of 19 cultural resource studies that have been conducted within the 7th and Campbell Area of Potential Effect, and 37 cultural resource studies that have been conducted within ½-mile of the Area of Potential Effect, as obtained by PaleoWest pursuant to their NWIC records search. I hope this information is responsive to your request. If you would like any further information, please contact me at: sgregory@lamphier-gregory.com or by phone at 510-530-9930 (home office number).

Thank you again for your assistance.

Respectfully,

Scott Gregory

Scott Gregory, President
LAMPHER-GREGORY

encl:

Chapter 4.0: Cultural Resources Inventory, from PaleoWest, *Cultural Resource Technical Report In Support of the 7th and Campbell Project*

4.0 CULTURAL RESOURCES INVENTORY

A literature review and records search were conducted at the NWIC, housed at California State University on June 10, 2020. This inventory effort included the Project APE and a 1/2 -mile radius around it, collectively termed the Project study area. The objective of this records search was to identify prehistoric or historical cultural resources that have been previously recorded within the study area during previous cultural resource investigations.

4.1 PREVIOUS CULTURAL RESOURCE INVESTIGATIONS

The records search indicated that 19 cultural resource studies have been conducted within the APE (Table 4-1). Additionally, 37 cultural resource studies have been conducted within 1/2-mile of the APE (Table 4-2).

**Table 4--1
Previous Cultural Resource Studies Within the APE**

Report No.	Authors	Year	Title	Publisher
S-026045	Richard Carrico, Theodore Cooley, and William Eckhardt	2000	Cultural Resources Reconnaissance Survey and Inventory Report for the Metromedia Fiberoptic Cable Project, San Francisco Bay Area and Los Angeles Basin Networks	Mooney & Associates
S-031997	David Stone and Karen Foster	2005	Historic Property Survey Report, BART Seismic Retrofit Project, Berkeley Hills Tunnel to Montgomery Street Station, Caltrans District 4, Alameda and San Francisco Counties, California	Science Applications International Corporation
S-031997a	Jami Layton	2005	Historical Resources Evaluation Report, BART Seismic Retrofit Project, Berkeley Hills Tunnel to Montgomery Street Station, Alameda and San Francisco Counties, California	Caltrans District 4
S-031997b		2005	Archaeological Survey Report, Bart Seismic Retrofit Project, Berkeley Hills Tunnel to Montgomery Street Station, Caltrans District 4, Alameda and San Francisco Counties, California	Caltrans District 4
S-031997c		2005	Finding of No Adverse Effect, BART Seismic Retrofit Project, Berkeley Hills Tunnel to Montgomery Street Station, Caltrans District 4, Alameda and San Francisco Counties, California	Caltrans District 4
S-031997d	Milford Wayne Donaldson	2005	FHWA050310A, Historic Properties Survey Report (HPSR) for the proposed San Francisco Bay Area Rapid Transit District (BART) Seismic Retrofit Project from the Berkeley Hills Tunnel (Alameda County) to the Montgomery Street	Office of Historic Preservation

			Station (San Francisco County), a Local Assistance project	
S-037362		1990	Historic Property Survey Report for the Proposed I-880 Reconstruction Project in the Cities of Oakland and Emeryville, Alameda County, ALA-880 32.12/34.31; ALA-580 45.99/46.95; ALA-80 1.99/3.39; 04195-190271 MEQ85001	California Department of Transportation, District 4
S-037362a	Donna M. Garaventa, Michael R. Fong, Sondra A. Jarvis, and Angela M. Banet	1990	Archaeological Survey Report, I-880/Cypress Replacement Project, 04-ALA-880 32.12/34.31, 04-ALA-580 45.99/46.95, 04-ALA-80 1.99/3.39, E.A. #04195-190271 MEQ 85001, Cities of Oakland and Emeryville, Alameda County, California	Basin Research Associates, Inc.
S-037362b		1990	Historic Architecture Survey Report for the Proposed Reconstruction of Interstate 880 Within the City Limits of Oakland and Emeryville, Alameda County, 04-ALA-880 32.12/34.31, 04-ALA-580 45.99/46.95, 04-ALA-80 1.99/3.79, 4195-190271 MEQ85001	California Department of Transportation
S-037362c	Gary Knecht, Alex G. Chiappetta, Michael R. Corbett, Miriam Liskin, Gail G. Lombardi, Betty Marvin, Woodruff C. Minor, Donnalyn Polito, Christine Winans, and Aicha S. Woods	1990	Historic Architecture Survey Report, Part VII. A, Subarea A: City of Oakland	Oakland Cultural Heritage Survey
S-037362d	Bonnie W. Parks, Denise O'Connor, and Stephen D. Mikesell	1990	Historic Architecture Survey Report Part VII. B, Subarea B: Emeryville and San Francisco-Oakland Bay Bridge Vicinity	California Department of Transportation
S-037362e	John W. Snyder	1990	Historic Architecture Survey Report Part VII. C, Subarea C: Southern Pacific Railroad Property and Interurban Railway Structures	Caltrans, District 4
S-037362f	Kathryn Gualtieri	1990	FHWA900927X; I-880 Cypress structure, ER-1404 (1)	Office of Historic Preservation
S-037362g		1990	First Addendum Historic Property Survey Report for the Proposed I-880 Reconstruction Project in the Cities of Oakland and Emeryville, Alameda County ALA-880 32.12/34.31; ALA-580 45.99/46.95; ALA-80 1.99/3.39 04195-190271 MEQ85001	California Department of Transportation

S-037362h	Donna M. Garaventa and Sondra A. Jarvis	1990	First Addendum Archaeological Survey Report, I-880/Cypress Replacement Project 04-ALA-880 32.12/34.31, 04-ALA-580 45.99/46.95, 04-ALA-80 1.99/3.39, E.A.#04195-190271 MEQ 85001, Cities of Oakland and Emeryville, Alameda County, California	Basin Research Associates, Inc.
S-037362i		1990	First Addendum Historic Architecture Survey Report for the Proposed Reconstruction of Interstate 880 within the City Limits of Oakland and Emeryville, Alameda County 04-ALA-880 32.12/34.31, 04-ALA-580 45.99/46.95, 04-ALA-80 1.99/3.79, 4195-19027 MEQ85001	California Department of Transportation
S-037362j	Gary Knecht, Alex G. Chiappetta, Michael R. Corbett, Miriam Liskin, Gail G. Lombardi, Betty Marvin, Woodruff C. Minor, Donnalynn Polito, Christine Winans, and Aicha S. Woods	1990	First Addendum Historic Architecture Survey Report Part VII, Subarea F: City of Oakland	California Department of Transportation
S-037362k		1991	Second Addendum Historic Property Survey Report for the Proposed Reconstruction of Interstate 880 within the City Limits of Oakland and Emeryville, Alameda County 04-ALA-880 32.12/34.31, 04-ALA-580 45.99/46.95, 04-ALA-80 1.99/3.79 4195-190270	California Department of Transportation
S-037362l	Gary Knecht, Miriam Liskin, Gail G. Lombardi, Betty Marvin, and Christine Winans	1991	Second Addendum Historic Architecture Survey Report Part VII Subarea G: City of Oakland	California Department of Transportation

**Table 4--2
Previous Cultural Resource Studies Within ½-mile of the APE**

Report No.	Authors	Year	Title	Publisher
S-012289	Donna M. Garaventa, Michael R. Fong, Sondra A. Jarvis, and Angela M. Banet	1990	Archaeological Survey Report, I-880/Cypress Replacement Project, 04-ALA-880 P.M. 32.4/34.3, E.A. #04195-190271 MEQ 85001, Cities of Oakland and Emeryville, Alameda County, California	Basin Research Associates, Inc.
S-018515	Grace H. Ziesing	1996	Historic Sensitivity Study for Proposed Parking Lot between 7th and 8th Sts. and Union and Cypress Sts., Oakland, California (letter report)	Sonoma State University Academic Foundation Inc.
S-021780	John Mc Ilroy	1999	Archaeological Monitoring at 1717 Chase Street, West Oakland, Alameda County, California, ASC# 50001-41/49 (letter report)	Anthropological Studies Center, Sonoma State University
S-022820	Wendy J. Nelson, Tammara Norton, Larry Chiea, and Eugenia Mitsanis	2000	Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project, Segment WS07: Oakland to San Jose	Far Western Anthropological Research Group, Inc.
S-022928	Richard S. Shepard, Roger D. Mason, and Ann M. Mums	2000	Cultural Resources Records Search and Survey Report for the WS02 Oakland Re-Route Fiber Optic Connection Corridor, City of Oakland, Alameda County, California	Chambers Group Inc.

S-023778	David Chavez and Jan M. Hupman	2000	Archaeological Resources Investigations for the EBMUD East Bayshore Recycled Water Project, Alameda County, California	David Chavez & Associates
S-023778	David Chavez	2002	Archaeological Resources Investigations for the EBMUD East Bayshore Recycled Water Project, Alameda County, California: Supplemental Report	David Chavez & Associates
S-023778	David Chavez and Jan M. Hupman	2002	Archaeological Resources Investigations for the EBMUD East Bayshore Recycled Water Project, Alameda County, California: Additional Pipeline Alignments	David Chavez & Associates
S-025526	Colin Busby, Melody Tannam, Donna Garaventa, Michael Corbett, and Woodruff Minor	1997	Historic Property Survey Report/Finding of Effect, 50-Foot Channel Navigation Improvements Project, Oakland Harbor, Alameda County	Basin Research Associates, Inc.; Corbett & Minor
S-025650	Mary Praetzelis, Erica Gibson, Sherri Gust, Virginia Hellman, Madeline Hirn, Jack Mc Ilroy, Michael Meyer, Adrian Praetzelis, Sunshine Psota, Maria Ribeiro, Peter Schulz, Margo Schur, Elaine-Maryse Solari, Suzanne Stewart, Michael Stoyka, and Rose White	2001	Block Technical Report: Historical Archaeology, I-880 Cypress Replacement Project, Blocks 19, 20, 21 and 37	Anthropological Studies Center, Sonoma State University
S-025651	Mary Praetzelis, Erica Gibson, Sherri Gust, Virginia Hellman, Madeline Hirn, Jack Mc Ilroy, Michael Meyer, Adrian Praetzelis, Sunshine Psota, Maria Ribeiro, and Peter Schulz	2001	Block Technical Report: Historical Archaeology, I-880 Cypress Replacement Project, Blocks 22, 24 and 29	Anthropological Studies Center, Sonoma State University
S-025652	Mary Praetzelis, Erica Gibson, Sherri Gust, Virginia Hellman, Madeline Hirn, Jack Mc Ilroy, Michael Meyer, Adrian Praetzelis, Sunshine Psota, Maria Ribeiro, and Peter Schulz	2001	Block Technical Report: Historical Archaeology, I-880 Cypress Replacement Project, Blocks 27, 28, and 31	Anthropological Studies Center, Sonoma State University
S-027364	Allen G. Pastron, Andrew Gottsfeld, Eric Wohlgemuth, Becky Johnson, Jason Claiborne, L. Dale Beevers, Matt Calder, and Jonathan Goodrich	2003	Final Archaeological Report, East Block of the Mandela Gateway Project, City of Oakland, Alameda County, California	Archeo-Tec
S-028040	JRP Historical Consulting Services	2000	Letter Report on the Impact of the Cypress Structure Project on the Oakland Army Base Historic District	JRP Historical Consulting Services
S-029028	Thad Van Bueren, Scott Baxter, Anmarie Medin, Linda S. Cummings, Christie Hunter, and Kathryn Puseman	2004	A Germanic Enclave in West Oakland: Archaeological Investigations for the Mandela Park and Ride Relocation Project in the City of Oakland, California, 04-ALA-880, K.P 51.6 (PM 32.1) EA 04-446801	Caltrans
S-032164	Harry Y. Yahata and Robert L. Gross	1999	Historic Property Survey Report and Findings of No Historic Properties Affected for the Mandela Parkway Corridor Improvement Project, City of Oakland, Alameda County, 04-Ala-880-KP, 52.5/54.9 (PM 32.6/34.1)	California Department of Transportation, District 4
S-032164	Jack McIlroy, Jack Meyer, Elaine-Maryse Solari, Grace H. Ziesing, Kimberly Esser, Maria Ribeiro, Adrian Praetzelis, and Mary Praetzelis	1999	Mandela Parkway Corridor Improvement Project: Archaeological Sensitivity Study and Survey Report, 04-Ala-880, KP 52.5/54.9 (PM 32.6/34.1), in the City of Oakland, California, Alameda County, EA No. 292360	Anthropological Studies Center, Sonoma State University

S-033061	Nancy Sikes, Cindy Arrington, Bryon Bass, Chris Corey, Kevin Hunt, Steve O'Neil, Catherine Pruett, Tony Sawyer, Michael Tuma, Leslie Wagner, and Alex Wesson	2006	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California	SWCA Environmental Consultants
S-033061	SWCA Environmental Consultants	2006	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California	SWCA Environmental Consultants
S-033061	Nancy E. Sikes	2007	Final Report of Monitoring and Findings for the Qwest Network Construction Project (letter report)	SWCA Environmental Consultants
S-034262	Sunshine Psota	2007	Results of Presence/Absence Archaeological Trenching at 14th Street Apartments, Oakland, Alameda County, California (letter report)	Holman & Associates Archaeological Consultants
S-034489	Lorna Billat	2008	Collocation ("CO") Submission Packet, FCC Form 621, AAT West Oakland, SF-19580A	Earth Touch, Inc.
S-034519	Denise M. Jurich	2008	Archaeological Survey of Approximately 6.0 Acres, between 14th and 16th Streets along Wood Street, City of Oakland, Alameda County, California (letter report)	PBS&J
S-035459	Archeo-Tec, Inc	2008	Archaeological Final Report 14th Street Apartments Project City of Oakland, Alameda County, California	Archeo-Tec, Inc
S-035927	Colin I. Busby	2008	Historic Properties Survey Report: West Oakland Transit Village - 7th Street Improvements, City of Oakland, Alameda County, California Project No. STPLER 5012 (082) FHWA 080806A	Basin Research Associates, Inc.
S-035927	Colin I. Busby	2008	Archaeological Survey Report, West Oakland Transit Village - 7th Street Improvements, City of Oakland, Alameda County, California Project No. STPLER 5012 (082)	Basin Research Associates, Inc.
S-039430	Allen G. Pastron	2008	Executive Summary of Results of On-site Archaeological Monitoring and Evaluation at the 14th Street Apartments at Central Station Project, City of Oakland, Alameda County, California (letter report)	Archeo-Tec
S-042712	Carolyn Losee	2013	Cultural Resources Investigation for AT&T Mobility CCU2795 "Bay Bridge DAS" 1712 - 13th Street, Oakland, Alameda County, California 94607(letter report)	Archaeological Resources Technology
S-046249	Mary Praetzellis, Adrian Praetzellis, Marta Gutman, Paul R. Mullins, Adrian Praetzellis, Mary Praetzellis, and Mark Walker	2004	Putting the "There" there: Historical Archaeologies of West Oakland, Cypress Replacement Project Interpretive Report No. 2, I-880 Cypress Freeway Replacement Project, Alameda County, California	Anthropological Studies Center, Sonoma State University
S-046249	Adrian Praetzellis and Mary Praetzellis	2004	Chapter 1: The Loma Prieta Earthquake and its Aftermath	Anthropological Studies Center
S-046249	Robert Douglass	2004	Chapter 2: A Brief History of West Oakland	Anthropological Studies Center
S-046249	Adrian Praetzellis	2004	Chapter 3: Consumerism, Living Conditions, and Material Well-Being	Anthropological Studies Center

S-046249	Paul R. Mullins	2004	Chapter 4: Consuming Aspirations: Bric-A-Brac and the Politics of Victorian Materialism in West Oakland	Anthropological Studies Center
S-048565	Heidi Koenig	2016	South Interceptor, 3rd Street Rehabilitation Project, East Bay Municipal Utility District, Oakland, Alameda County, Phase I Cultural Resources Survey Report	Environmental Science Associates
S-048581	Gregory King	1990	Historic Architecture Survey Report Part VII. D, Subarea D: Oakland Army Base	California Department of Transportation District 4
S-048689	Kyle Brudvik and Keving Hunt	2015	Results of an Archaeological Resources Assessment for the Stationhouse Project, 1401 Wood Street, Oakland, Alameda County, CA (letter report)	Rincon Consultants, Inc.
S-050531	Heidi Koenig	2018	South Interceptor Rehabilitation Project, East Bay Municipal Utility District, Oakland, Alameda County, Revised Phase I Cultural Resources Survey Report	Environmental Science Associates

4.2 PREVIOUSLY RECORDED CULTURAL RESOURCES

The records search indicates that there are two cultural resources that have been recorded within the APE. These resources include a building reported as Michael Fakoury Dry Goods Store, a historic element of the 7th Street / West Oakland Commercial District (P-41-004847), and a building group that is classified as a district in and of itself (P-41-004856). A total of 102 cultural resources have been recorded within ½-mile of the APE. Two of the resources are prehistoric and the remainder are historic in age. These resources are listed in Appendix A. Based on the results of the records search the history of the APE, there is a high probability to find subsurface deposits related to the historic districts listed above.

Table 4-4
Cultural Resources Within the APE

Primary No.	Trinomial	Type	Age	Description
P-41-004847		Building / Element of District	Historic	Building 36 / 1666 7 th St / Michael Fakoury Dry Goods Store
P-41-004856		Building / District	Historic	1550-1722 7 th St & 713 Peralta St

4.3 ADDITIONAL SOURCES

Additional sources consulted during the cultural resource literature review and records search include the National Register of Historic Places, the Office of Historic Preservation Archaeological Determinations of Eligibility, and the Office of Historic Preservation Directory of Properties in the Historic Property Data File. There are no listed historic properties, historical resources, or historic landmarks recorded within the APE.

The WOSP EIR identified the 7th Street S-7 Preservation Combining Zone as the best representation of the surviving fragment of historic 7th Street, West Oakland’s legendary commercial street of the 19th and early 20th centuries. The block consists of three parcels on the north side of 7th Street from Peralta Street on the east to Campbell Street on the west. The Flynn saloon/McAllister plumbing shop anchors the Peralta corner. The vacant middle parcel, 1620-24 7th Street, is the site of the former Lincoln Theater and its associated storefronts. At the Campbell Street corner is the Mission Revival-style Arcadia Hotel. The WOSP EIR

found that these properties embody the important themes of 7th Street – railroad-related businesses and lodgings, entertainment, and the ethnic and economic evolution of the neighborhood. This district is recorded in the State Historic Resources Inventory as an Area of Secondary importance (ASI). One block further west on 7th Street is the individually historic Brotherhood of Sleeping Car Porters headquarters, built in 1889-90 and occupied by C.L. Dellums’ union from about 1934 to 1978, which has been formally nominated and determined eligible for City Landmark status.

4.4 NATIVE AMERICAN COORDINATION

PaleoWest contacted the NAHC, as part of the cultural resource assessment, on May 15, 2020, for a review of the SLF. The objective of the SLF search was to determine if the NAHC had any knowledge of Native American cultural resources (e.g., traditional use or gathering area, place of religious or sacred activity, etc.) within the immediate vicinity of the APE. The NAHC response dated May 18, 2020, stated that “a record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced Project. The results were positive.” The NAHC response also provided a list of Native American contacts (Valentin Lopez, Amah Mutsun Tribal Band; Irene Zwierlein, Amah/Mutsun Tribal Band; Tony Cerda, Costanoan Rumsen Carmel Tribe; Merlene Sanchez, Guidiville Indian Rancheria; Ann Marie Sayers, Chairperson, Indian Canyon Mutsun Band of Costanoan; Monica Arellano, Muwekma Ohlone Indian Tribe of the SF Bay Area; Timothy Perez, North Valley Yokuts Tribe; Katherine Perez, North Valley Yokuts Tribe; Andrew Galvan, The Ohlone Indian Tribe; and Corrina Gould, The Confederated Villages of Lisjan). PaleoWest contacted the Native American representatives by email on June 9, 2020, informing them of the Project. Follow up phone calls were made on August 29, 2019. Comments were received from Andrew Galvan requesting the results from the CHRIS literature search. A full record of the coordination efforts can be found in Appendix B.

Appendix M

**Langan Engineering and Environmental Services, Inc.
Geotechnical Investigation for 1666 7th Street, July 28, 2020**

GEOTECHNICAL INVESTIGATION
1666 7th Street
Oakland, California

Prepared For:

7th and Campbell, LP
2625 Alcatraz Avenue #501
Berkeley, California 94705

Prepared By:

Langan Engineering and Environmental Services, Inc.
501 14th Street, 3rd Floor
Oakland, California 94612



Ron E. Noche, PE
Project Engineer



Scott A. Walker, PE, GE
Senior Associate/ Vice President

28 July 2020
750664801

LANGAN

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	SCOPE OF SERVICES	1
3.0	FIELD EXPLORATION AND LABORATORY TESTING	2
3.1	Borings	2
3.2	Cone Penetration Tests	3
3.3	Laboratory Testing	4
3.4	Soil Corrosivity Testing	4
4.0	SITE AND SUBSURFACE CONDITIONS	4
4.1	Site Conditions	4
4.2	Subsurface Conditions	5
5.0	REGIONAL SEISMICITY	6
6.0	GEOLOGIC HAZARDS	8
6.1	Fault Rupture	9
6.2	Liquefaction and Associated Hazards	9
6.3	Lateral Spreading	10
6.4	Cyclic Densification	11
7.0	DISCUSSION AND CONCLUSIONS	11
7.1	Foundations and Settlement	11
7.2	Floor Slabs	12
7.3	Groundwater	12
7.4	Soil Corrosivity	13
7.5	Excavations	13
7.6	Construction Considerations	14
8.0	RECOMMENDATIONS	14
8.1	Earthwork	14
8.1.1	Site Preparation	14
8.1.2	Temporary Excavations	15
8.1.3	Overexcavation and Subgrade Preparation	15
8.1.4	Engineered Fill Placement and Compaction	16
8.1.5	Utilities and Utility Trenches	17
8.1.6	Shoring	18
8.2	Foundations	18
8.3	Floor Slabs	19
8.5	Seismic Design	20
9.0	ADDITIONAL SERVICES DURING DESIGN, CONSTRUCTION DOCUMENTS, AND CONSTRUCTION QUALITY ASSURANCE	21
10.0	CONTRACTOR RESPONSIBILITIES	22
11.0	LIMITATIONS	22

REFERENCES

FIGURES

APPENDIX A – Geotechnical Boring Logs

APPENDIX B – Environmental Boring Logs

APPENDIX C – Cone Penetration Test Logs

APPENDIX D – Laboratory Test Results

APPENDIX E – Corrosivity Analysis with Brief Evaluation

LIST OF FIGURES

- Figure 1 Site Location Map
- Figure 2 Site Plan
- Figure 3 Map of Major Faults and Earthquake Epicenters in the
San Francisco Bay Area
- Figure 4 Modified Mercalli Intensity Scale

GEOTECHNICAL INVESTIGATION
1666 7th Street
Oakland, California

1.0 INTRODUCTION

This report presents the results of our geotechnical investigation for the proposed development at 1666 7th Street in Oakland, California. The project site is located in the West Oakland neighborhood; the location of the site is shown on the Site Location Map, Figure 1. The site is bordered by 7th Street to the south, Campbell Street to the east, one-story residential buildings to the north, and two- to three-story mixed-use apartment buildings to the west of the site. The site is approximately 130 by 220 feet in plan dimensions.

We understand the proposed development includes a five- to six-story mixed-use residential building. The proposed building will be constructed at grade (i.e. no basements are planned). The building will consist of about 79 planned residential units, areas designated for commercial use, and parking planned on the ground floor. The approximate height of the proposed building is about 59 feet above street grades.

2.0 SCOPE OF SERVICES

Our geotechnical investigation was performed in accordance with the scope of services included in our proposal dated 18 May 2020. Our services also included performing a Phase II environmental site assessment. The results of our environmental study are presented under separate cover.

Our geotechnical scope of services consisted of performing a subsurface exploration at the site and performing engineering studies to develop conclusions and design-level recommendations for the proposed development regarding:

- soil and groundwater conditions at the site
- site seismicity and seismic hazards, including liquefaction potential
- most appropriate foundation type(s) for the structure
- design criteria for the recommended foundation type(s), including allowable bearing pressure and resistance to lateral loads

- site grading and excavation, including criteria for fill quality and compaction
- subgrade preparation for floor slabs
- 2019 California Building Code (CBC) seismic parameters
- soil corrosivity
- construction considerations.

3.0 FIELD EXPLORATION AND LABORATORY TESTING

To evaluate the subsurface at the site, we drilled two borings and advanced four Cone Penetration Tests (CPTs) across the site. The approximate locations of the borings and CPTs are shown on Figure 2. Prior to performing our field investigation, we obtained a permit from the Alameda County Public Works Agency (ACPWA), contacted Underground Service Alert (USA), and contracted a private utility locator to check for underground utilities in the vicinity of the borings and CPTs. Details of the field investigation activities and laboratory testing are described in the remainder of this section.

3.1 Borings

During the investigations of the site, two soil borings, designated B-1 and B-2, were drilled on 29 May 2020 using a truck-mounted, hollow-stem auger drill rig operated by Gregg Drilling LLC. The borings were drilled to depths of between about 51.5 and 53 feet below the existing ground surface (bgs). Our field engineer logged the borings and obtained samples of the material encountered for visual classification and laboratory testing. Logs of the borings are presented on Figures A-1 through A-2 in Appendix A. The soils encountered in the borings were classified in accordance with the Classification Chart presented on Figures A-3.

Soil samples were obtained using a Standard Penetration Test (SPT) split-barrel sampler with a 2.0-inch outside diameter and 1.5-inch inside diameter, used without liners. The SPT sampler was used to evaluate the relative density of the soil.

The SPT samplers were driven with an automatic hammer. The hammer was 140 pounds and was dropped 30 inches to cause a hammer blow on the sampler. The samplers were driven up to 18 inches, and the hammer blows required to drive the samplers every six inches of penetration were recorded and are presented on the boring logs. A “blow count” is defined as the number of hammer blows per six inches of penetration. The blows required to drive the SPT sampler 12 inches were converted to approximate SPT N-values using a factor of 1.2 to account

for sampler type and hammer energy. The N-values are shown on the boring logs. The blow counts used for this conversion were the last two blow counts.

Upon completion, the boreholes were backfilled with grout per the Alameda County Public Works Agency drilling permit. The soil cuttings from the borings were collected in 55-gallon drums, which were stored temporarily at the site, tested, and eventually transported off-site for disposal.

In addition to the geotechnical borings drilled at the site, our environmental services on the project included drilling eight soil borings, designated EB-1 through EB-8. Upon completion of the environmental borings, EB-1 and EB-6 were converted to groundwater monitoring wells and renamed MW-1 and MB-2, respectfully. Logs of the environmental borings are presented in Appendix B. The approximate locations of the environmental borings are shown on Figure 2. Recommendations and conclusions regarding our environmental investigation can be found in our companion environmental report.

3.2 Cone Penetration Tests

Four CPTs, designated CPT-1 through CPT-4, were advanced at the site on 29 May 2020 by Gregg Drilling LLC. (Gregg Drilling) with a truck-mounted CPT rig. The CPTs were advanced to depths of between 47 and 50 feet bgs at the approximate locations shown on Figure 2.

The CPTs were performed by hydraulically pushing a 1.4-inch-diameter, cone-tipped probe, with a projected area of 15 square centimeters, into the ground. The cone tip measured tip resistance, and the friction sleeve behind the cone tip measured frictional resistance. Electrical strain gauges or load cells within the cone continuously measured the cone tip resistance and frictional resistance during the entire depth of each probing. Accumulated data was processed by computer to provide engineering information, such as the types and approximate strength characteristics of the soil encountered. The CPT logs from Gregg Drilling are included in Appendix C.

While advancing CPT-4 a seismic velocity survey was performed. The survey consisted of measuring the travel time of shear waves propagating from a seismic energy source on the surface to a detector within the CPT instrument, as the CPT was at various depths. The recorded shear wave velocities were then processed to estimate the shear wave velocity for each discrete layer. A profile of the shear wave velocities for each layer is presented on Figure C-9 in Appendix C.

Upon completion of the field investigation, the CPT holes were backfilled with grout in accordance with the requirements of the Alameda County Public Works Agency drilling permit.

3.3 Laboratory Testing

The soil recovered from our investigation was re-examined in the office for soil classification, and representative samples were selected for laboratory testing. The laboratory testing program was designed to correlate and evaluate engineering properties of the soil at the site. Samples were tested to measure moisture content, fines content, and plasticity (Atterberg limits). Results of the laboratory tests are included on the boring logs and presented in Appendix D.

3.4 Soil Corrosivity Testing

Corrosivity testing was performed on a composite soil sample collected from 0.5 to 5 feet bgs in Boring B-2. The soil samples were tested in accordance with Caltrans and ASTM protocols by CERCO Analytical, Inc. of Concord, California (CERCO). The corrosivity test results and summary report are presented in Appendix E.

4.0 SITE AND SUBSURFACE CONDITIONS

Based on the review of the environmental documents provided, the site has been mainly occupied by mixed-use buildings from 1889 until the late 1970's, when the many of the structures were demolished. However, the western portion of the site retained a few mixed-use structures until the early 2010s, with the last building reportedly removed between 2012 and 2015. Based on aerial imagery, the modular buildings currently present at the site, were added to the site between 2015 and 2016.

4.1 Site Conditions

The site is relatively level, with the ground surface elevations ranging from about +8.5 feet¹ in the southwestern portion of the site to about 10.5 feet along the northern portion of the site. Three modular buildings are present in the southern portion of the site at the approximate locations shown on Figure 2. . Three modular buildings are present in the southern portion of the site with a concrete pavement slab between the buildings. The remainder of the site is relatively level and is being used as a community garden/urban farm.

¹ Elevations referenced herein are from a topographic map titled "Boundary & Topographic Survey" dated June 2016 and prepared by Bay Area Land Survey Inc., City of Oakland Datum.

4.2 Subsurface Conditions

The subsurface conditions encountered at the site during our investigation are as follows:

Fill: Where explored, the site is blanketed by approximately 5 to 7 feet of undocumented fill. The undocumented fill is predominately composed of sand with varying amounts of clay, silt, gravel, brick fragments and organics. At the locations explored, the fill is loose and does not appear to have been compacted during its placement.

Corrosivity analyses indicate the fill is classified as mildly corrosive to corrosive; see Appendix E for more detail.

Merritt sand: Native silty/clayey sand (locally referred to as Merritt sand) underlines the fill. In general, the Merritt sand is medium dense at the surface of the unit and generally increases in relative density with depth; becoming dense at a depth of 10 to 15 feet beneath the existing ground surface. However, within the Merritt sand, we encountered a 3- to 5-foot-thick layer that is loose to medium dense across the site at depths ranging from about 20 to 25 feet bgs. The Merritt sand encountered beneath this loose to medium dense zone is dense to very dense. Merritt sand extends to the depth explored.

In boring B-2, at a depth of about 45 feet bgs, heaving sands were encountered during drilling. When the center rod used as part of the hollow-stem auger drilling was retracted (to allow us to take a sample) a mixture of sand and water infiltrated the hollow stem augers coming up from the auger tip. This condition is common when drilling in relatively clean sand beneath the water table when using hollow-stem auger drilling equipment. As a result, blow counts collected at a depth of 45 feet bgs in B-2 show the material as medium dense. However, based on the nearby borings and CPTs we conclude the sand at this depth is dense to very dense. We conclude that the blow counts recorded at depths of 45 feet bgs and greater in B-2 are not representative of the density of sands at that depths.

Our borings and CPTs terminated in the Merritt sand deposit. Based on available geologic maps and our understanding of the site vicinity, we conclude the Merritt sand is underlain by interbedded stiff to hard clays and dense sand of

the Alameda formation, which extend to bedrock. Bedrock is likely on the order of 250 feet bgs.

Groundwater: Groundwater was encountered during our field investigation and the level was measured in each of the boreholes. The groundwater level was encountered at approximately 10 and 8 feet bgs in Borings B-1 and B-2, corresponding to about elevations zero and +1 foot.

In the CPTs, pore water dissipation tests (PPDT) were conducted at each location to measure the equilibrium water pressure within the sand. The equilibrium water pressure can be used to approximate the depth of the water table. After reviewing the PPDT results, we estimated the groundwater level to be between 9.3 and 13.2 feet bgs at the time of the CPTs, corresponding to about elevations of +1 to -3 feet.

In the environmental borings, static water level readings were observed between 7.5 to 8.5 feet bgs, corresponding to elevations of +1.5 to +1.6 feet at the time of drilling. Stabilized water levels observed in monitoring wells, approximately five days after installation, range from 8.2 to 9.1 feet bgs, corresponding to elevations between +1.1 and +1.2 feet.

5.0 REGIONAL SEISMICITY

The major active faults in the area are the San Andreas, Hayward, and Calaveras Faults. These and other faults of the region are shown on Figure 3. For each of the active faults within approximately 100 kilometers (km) of the site, the distance from the site and estimated mean characteristic Moment magnitude² [2007 Working Group on California Earthquake Probabilities (WGCEP) (2008) and Cao et al. (2003)] are summarized in Table 1.

² Moment magnitude is an energy-based scale and provides a physically meaningful measure of the size of a faulting event. Moment magnitude is directly related to average slip and fault rupture area.

TABLE 1
Regional Faults and Seismicity

Fault Name	Distance (km)	Direction from Site	Mean Characteristic Moment Magnitude
Total Hayward	7.6	East	7.0
Total Hayward-Rogers Creek	7.6	East	7.3
N. San Andreas (1906 event)	21	West	8.05
N. San Andreas - Peninsula	21	West	7.2
Mount Diablo Thrust	24	East	6.7
N. San Andreas - North Coast	24	West	7.5
Total Calaveras	26	East	7.0
San Gregorio Connected	28	West	7.5
Green Valley Connected	29	East	6.8
Rogers Creek	33	North	7.1
West Napa	40	North	6.7
Monte Vista-Shannon	41	South	6.5
Greenville Connected	42	East	7.0
Great Valley 5, Pittsburg Kirby Hills	46	East	6.7
Point Reyes	49	West	6.9

Figure 3 also shows the earthquake epicenters for events with magnitude greater than 5.0 from January 1800 through December 2014. Since 1800, four major earthquakes have been recorded on the San Andreas Fault. In 1836 an earthquake with an estimated maximum intensity of VII on the Modified Mercalli (MM) scale (Figure 4) occurred east of Monterey Bay on the San Andreas Fault (Toppozada and Borchardt 1998). The estimated Moment magnitude, M_w , for this earthquake is about 6.25. In 1838, an earthquake occurred with an estimated intensity of about VIII-IX (MM), corresponding to an M_w of about 7.5. The San Francisco Earthquake of 1906 caused the most significant damage in the history of the Bay Area in terms of loss of lives and property damage. This earthquake created a surface rupture along the San Andreas Fault from Shelter Cove to San Juan Bautista approximately 470 kilometers in length. It had a maximum intensity of XI (MM), a M_w of about 7.9, and was felt 560 kilometers away in Oregon, Nevada, and Los Angeles. The Loma Prieta Earthquake occurred on 17 October 1989, in the Santa Cruz Mountains with a M_w of 6.9, approximately 51 km from the site. The most recent earthquake to affect the Bay Area occurred on 24 August 2014 and was located on the West Napa fault, approximately 93 kilometers from the site, with an M_w of 6.0.

In 1868 an earthquake with an estimated maximum intensity of X on the MM scale occurred on the southern segment (between San Leandro and Fremont) of the Hayward Fault. The estimated M_w for the earthquake is 7.0. In 1861, an earthquake of unknown magnitude (probably an M_w of about 6.5) was reported on the Calaveras Fault. The most recent significant earthquake on this fault was the 1984 Morgan Hill earthquake ($M_w = 6.2$).

The 2014 Working Group for California Earthquake Probabilities (WGCEP) at the U.S. Geologic Survey (USGS) predicted a 72 percent chance of a magnitude 6.7 or greater earthquake occurring in the San Francisco Bay Area in 30 years (WGCEP 2015). More specific estimates of the probabilities for different faults in the Bay Area are presented in Table 2.

TABLE 2
WGCEP (2015) Estimates of 30-Year Probability (2014 to 2043)
of a Magnitude 6.7 or Greater Earthquake

Fault	Probability (percent)
Hayward-Rogers Creek	32
N. San Andreas	33
Calaveras	25
San Gregorio	6
Greenville	6
Mount Diablo Thrust	4

6.0 GEOLOGIC HAZARDS

During a major earthquake, strong to violent ground shaking is expected to occur at the project site. Strong ground shaking during an earthquake can result in ground failure such as that

associated with soil liquefaction,³ lateral spreading,⁴ and seismic densification⁵. Each of these conditions has been evaluated based on our literature review, field investigation and analysis, and is discussed in this section.

6.1 Fault Rupture

Historically, ground surface displacements closely follow the trace of geologically young faults. The site is not within an Earthquake Fault Zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act, and no known active or potentially active faults exist on the site. In a seismically active area, a remote possibility exists for future faulting in areas where no faults previously existed; however, we conclude the risk of surface faulting and consequent secondary ground failure is low.

6.2 Liquefaction and Associated Hazards

The entire site is in an area designated by the California Geological Survey (CGS), as a zone of potential liquefaction (CGS 2003).

When a saturated, cohesionless soil liquefies during a major earthquake, it experiences a temporary loss of shear strength due to a transient rise in excess pore water pressure generated by strong ground motions. Flow failure, lateral spreading, differential settlement, loss of bearing strength, ground fissures, and sand boils are evidence of excess pore pressure generation and liquefaction.

The level of ground shaking used in our liquefaction evaluation was based on the Risk-Targeted Maximum Considered Earthquake (MCE_R) mapped values. A peak geometric mean ground acceleration (PGA_M) of 0.70 times gravity (g) was used in our analyses. The PGA_M was obtained from the mapped values specified in the 2016 California Building Code (CBC), using site class D. We assumed an earthquake magnitude of 7.33 in our analyses, which is the maximum Moment magnitude for the Total Hayward-Rogers Creek fault, as shown on Table 1. In addition, we used

³ Liquefaction is a phenomenon in which saturated (submerged), cohesionless soil experiences a temporary loss of strength because of the buildup of excess pore water pressure, especially during cyclic loading such as those induced by earthquake. Soils most susceptible to liquefaction are loose, clean, saturated, uniformly graded, fine-grained sand.

⁴ Lateral spreading is a phenomenon in which surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. Upon reaching mobilization, the surficial blocks are transported downslope or in the direction of a free face by earthquake and gravitational forces.

⁵ Seismic densification (also referred to as Differential Compaction) is a phenomenon in which non-saturated, cohesionless soil is densified by earthquake vibrations, causing ground-surface settlement.

a groundwater level of 7 feet beneath existing grades, consistent with our observations during our investigation.

We analyzed liquefaction potential in accordance with the State of California Special Publication 117A, Guidelines for Evaluation and Mitigation of Seismic Hazards in California and following the procedures presented in the 1996 NCEER and the 1998 NCEER/NSF workshops on the Evaluation of Liquefaction Resistance of Soils (Youd and Idriss 2001). The NCEER methods are updates of the simplified procedures developed by Seed et al. (1971). To estimate volumetric strain and associated liquefaction-induced settlement, we used the procedures developed by Tokimatsu and Seed (1987).

Based on the results of our liquefaction analyses the majority of the soils at the site have sufficient relative density to resist liquefaction and significant strength loss during an earthquake. However, the 3- to 5-foot-thick loose to medium dense sand layer encountered at a depth of about 20 to 23 feet bgs in the borings and CPTs is susceptible to liquefaction during a major earthquake on a nearby fault. We compute liquefaction-induced settlement of up to one inch that could occur at the site as a result of liquefaction during a major earthquake. This settlement could be somewhat erratic; we conclude differential liquefaction induced settlement could be on the order of 1/3 inch over a horizontal distance of 30 feet.

6.3 Lateral Spreading

Lateral spreading is a phenomenon in which the surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. The surficial blocks are transported downslope or in the direction of a free face or down a slope, by earthquake and gravitational forces. Lateral spreading is generally the most pervasive and damaging type of liquefaction-induced ground failure generated by earthquakes.

According to Youd et al. (1999), for significant lateral spreading displacements to occur, the soils should consist of saturated cohesionless sandy sediments with $(N_1)_{60}$ less than 15, where liquefaction of the soils is likely to occur based on standard liquefaction analysis. The layers susceptible to liquefaction at the site generally have sufficient plasticity such that they are not cohesionless. In addition, the site is relatively flat and more than 4,500 feet from a free face (Oakland Inner Harbor). We therefore conclude the potential for lateral spreading at the site is low.

6.4 Cyclic Densification

Cyclic densification can occur during strong ground shaking in loose, clean granular deposits above the water table, resulting in ground surface settlement. We used the approach developed by Pradel (1998) to evaluate the potential for cyclic densification of the loose to medium dense clayey sand encountered in the fill above the anticipated water level. In its current condition, we estimate the earthquake-induced ground settlement from cyclic densification at the site will be up to 1 inch.

7.0 DISCUSSION AND CONCLUSIONS

Based on the results of our subsurface investigation, laboratory testing, and engineering analyses, we conclude the proposed project improvements are feasible from a geotechnical engineering standpoint provided the recommendations outlined in this report are incorporated in design and construction. The primary geotechnical issues associated with the proposed improvements include:

- loose undocumented fill in the upper 5 to 7 feet
- adequate foundation support for the building
- seismically-induced settlements
- soil corrosivity.

Our discussion and conclusions regarding these issues and other geotechnical items at the project site and their impact on the design and construction of the site improvements are discussed in the following sections.

7.1 Foundations and Settlement

As previously discussed, the site in general has a five- to seven-foot-thick layer of undocumented fill across the site. The fill is underlain by medium dense to very dense Merritt sand that is capable of supporting foundation loads. However, the undocumented fill, in its current condition is not capable of providing adequate foundation support; excessive total and differential settlement could occur. In addition, we estimate an additional one inch of cyclic densification in the loose fill could occur during a large earthquake on a nearby fault. These factors influence the selection of a safe, economical foundation system.

Considering the potential for settlement within the undocumented fill, we recommend the building be supported on spread footings that gain support either directly in the native Merritt sand or on engineered fill that extends to the top of the Merritt sand. Any loose fill encountered below the proposed foundation bottom elevation should be overexcavated to a depth at which competent Merritt sand is encountered. The removed material should be replaced with compacted engineered fill or lean concrete as detailed in Section 8.1.4. Structural concrete used to cast the footings may also be used to replace overexcavated material. Based on the borings and CPTs, footing overexcavations will need to extend as much as 7 feet below the existing ground surface.

If the proposed building will be supported on spread footings bearing on native Merritt sand or engineered fill and designed for the allowable bearing pressures presented in Section 8.2, we estimate total static settlement of foundations will be less than about 1 inch; differential settlement due to static loads could be on the order of ½ inch across 30 feet. This settlement is in addition to the 1 inch of liquefaction-induced settlements discussed in Section 6.2. Supporting the building on foundations gaining support on the Merritt sand as described herein will mitigate the effects of cyclic densification.

Settlement may be evident at the entrances and will affect utilities entering the structure. Settlements of up to 2 inches could occur outside the building footprint where undocumented fill has not been improved; therefore, there could be up to 2 inches of differential settlement between the building and surrounding grades during an earthquake. Where utilities enter and exit the building this settlement should be accommodated over a relatively short span.

7.2 Floor Slabs

We anticipate that the material found at the subgrade elevation of floor slabs will consist of loose, undocumented fill. This material is not appropriate for slab support. Floor slabs may be supported on grade, provided the subgrade is prepared as discussed in Section 8.1.3.

7.3 Groundwater

Groundwater was encountered during our field investigation in the hollow-stem augered borings and in the CPTs. The groundwater level was measured at depths from 8 and 13 feet bgs (Elevation -3 to +1.6) in the borings, CPT dissipation tests, and environmental groundwater monitoring wells show the groundwater is between 8 and 9 feet bgs. Published maps indicate

the historic high groundwater level is about 5 feet beneath existing grades. The groundwater elevation could be influenced by seasonal rainfall, wet and dry seasons, or climate change.

Based on this information, we conclude a design high groundwater level equal to about 5 feet beneath existing site grades is appropriate. This depth corresponds to elevations of about +5.5 along the northern site boundary and +3.5 along the southern site boundary along 7th street. The design groundwater level can be assumed to slope linearly across the site from north to south.

Dewatering in footing excavations and utility trenches will likely be necessary and should be anticipated by the contractor.

7.4 Soil Corrosivity

Corrosivity testing of the fill was performed by CERCO, and the results are presented in Appendix E. The results of the CERCO analysis indicate the fill at the site is classified as “mildly corrosive” to buried iron, steel, cast iron, ductile iron, galvanized steel and dielectric coated steel or iron. A corrosion expert should be consulted during the design phase for the most economical and effective corrosion protection for below-grade utilities, structures and other buried elements, if necessary.

7.5 Excavations

We anticipate excavations for new footings will extend about seven feet below the existing ground surface. The fill at the site consists of loose sandy soils which can cave or slough into excavations. In portions of the site with sufficient space, these excavations can be sloped or benched. Recommendations for sloped excavations are discussed in Section 8.1.2. As an alternative to sloping or benching excavations, a properly designed shoring system may be used to support the footing excavations.

The current design of the proposed building indicates the building footprint extends to the property line on the north and west sides of the site, adjacent to neighboring buildings. If the proposed excavations extend below an imaginary 30-degree line (from the horizontal) projected down from the bottom of the neighboring footings then these excavations should be shored and the shoring should be designed for a surcharge pressure to account for the load on the neighboring foundations. We should be consulted for specific recommendations if these conditions apply.

Based on the depth of the Merritt sand below the fill, the bottom of footings may encounter groundwater, particularly if the excavations are performed during the winter months. The contractor should be prepared to dewater, as necessary.

7.6 Construction Considerations

The fill at the site consists mainly of sand that can be excavated with conventional earth-moving equipment such as loaders and backhoes. The granular nature of the fill will likely make it difficult to maintain neat vertical cuts for utilities and foundation elements, and prepared subgrade for foundations will likely become disturbed with construction traffic. In general, site preparation and grading may be difficult if performed during the rainy season.

Although only trace amounts of concrete and brick debris were encountered in our borings, greater amounts and larger pieces of brick, concrete, and other rubble may be encountered in the fill from former on-site improvements or debris in the fill. In addition, there may be buried materials in the fill or old foundations that may be encountered, use of a hoe ram or similar equipment may be required for removal of these obstructions.

8.0 RECOMMENDATIONS

From a geotechnical standpoint, we conclude the development can be constructed as planned, provided the recommendations presented in this section of the report are incorporated into the design and are implemented during construction. Criteria for foundation design, together with recommendations for site preparation, grading, and seismic design are presented in this section of the report.

8.1 Earthwork

8.1.1 Site Preparation

Following demolition or removal of existing structures, all areas to receive fill and improvements should be stripped of pavement, vegetation and organic topsoil. The stripped organic soil can be stockpiled for later use in landscaped areas, if approved by the architect; organic topsoil should not be used as compacted fill. Where existing utility lines will not interfere with the planned construction, they may be abandoned in place, provided the lines are filled with lean concrete or cement grout to the limits of the project. Voids resulting from demolition activities should be properly backfilled with engineered fill, as recommended in Section 8.1.4, or lean concrete. The existing fill below the proposed building and extending at least 5 feet horizontally beyond the limits of the building footprint should be removed and compacted as discussed in Section 8.1.4.

Foundation elements should bear on native soil as described in Section 7.1, and the building slab on engineered fill.

8.1.2 Temporary Excavations

Excavations deeper than five feet that will be entered by workers should be shored or sloped for safety in accordance with the Occupational Safety and Health Administration (OSHA) standards (29 CFR Part 1926). Inclinations of temporary slopes should not exceed those specified in local, state or federal safety regulations. As a minimum, the requirements of the current OSHA Health and Safety Standards for Excavations (29 CFR Part 1926) should be followed. The contractor should determine temporary slope inclinations based on the subsurface conditions exposed at the time of construction.

Temporary slopes that do not extend below the groundwater level should be no steeper than 1½:1 (horizontal to vertical) in accordance with OSHA standards for Type C soils; where there is insufficient space for a sloped excavation the cuts should be shored as discussed in Section 8.1.5.

Temporary slopes should not be open for an extended period of time. If temporary slopes are open for extended periods of time, exposure to weathering and rain could result in sloughing and erosion.

All vehicles and other surcharge loads should be kept at least 10 feet away from the top of temporary slopes. During construction, the slopes should be protected from excessive saturation by rain or other external causes.

8.1.3 Overexcavation and Subgrade Preparation

Due to presence of loose undocumented fill and the potential for erratic settlements, at least 18 inches of engineered fill should be provided beneath the floor slabs. At least 12 inches of engineered fill should be provided beneath exterior flatwork or hardscape improvements. In addition, engineered fill may be placed beneath shallow foundations, after the undocumented fill has been removed from beneath foundations. The overexcavation for engineered fill should extend at least five feet beyond the building footprint, 5 feet beyond the footings, and three feet beyond the edges of exterior flatwork and hardscape areas, unless constrained by the site boundaries.

Prior to placing engineered fill, the soil exposed beneath building slabs or exterior flatwork/hardscape should be scarified a minimum depth of 8 inches, moisture-conditioned near

the optimum moisture content, and compacted to at least 90 percent relative compaction⁶. If the exposed soil is clean (relatively free of fines) it should be compacted to at least 95 percent relative compaction.

If the subgrade for flatwork, floor slabs, or pavement sections is disturbed during utility and/or footing construction, it should be re-rolled or recompacted, as necessary, prior to flatwork or slab construction.

8.1.4 Engineered Fill Placement and Compaction

We anticipate earthwork will consist cuts for the required placement of engineered fill, fill placement and compaction, and utility trench backfill. Excavated on-site soil is generally suitable from a geotechnical perspective for reuse as engineered fill or backfill provided it meets the following requirements:

- is free of organic material
- contains no rocks or lumps larger than four inches in greatest dimension
- has a low expansion potential (defined by a liquid limit of less than 40 and a plasticity index lower than 12)
- is non-corrosive and non-hazardous
- is acceptable to the environmental consultant.

Based on the results from our investigation, the existing onsite fill will generally meet the requirement of engineered fill and can be used as such. We can evaluate the appropriate use of the existing fill on site during construction. During construction, we should check that the on-site and any proposed import materials are suitable for use as fill.

Prior to placement of engineered fill, the subgrade or excavation surface should be prepared in accordance with Section 8.1.3. Fill should be placed in lifts not exceeding eight inches in loose thickness and compacted to at least 90 percent relative compaction. Fill thicker than five feet or

⁶ Relative compaction refers to the in-place dry density of soil expressed as a percentage of the maximum dry density of the same material, as determined by the ASTM D1557 laboratory compaction procedure.

clean sand (defined as soil with less than 10 percent fines) should be compacted to at least 95 percent relative compaction.

Where engineered fill is placed beneath new footings (following the removal of undocumented fill), we recommend the fill be compacted to at least 95 percent relative compaction. Fill beneath footings should extend at least five feet beyond the edge of footings. In lieu of soil, lean concrete may be used as fill, but should be approved on a case-by-case basis. The lean concrete should have an unconfined compressive strength sufficient to provide a factor of safety of at least 2 for the footing bearing pressures.

The Geotechnical Engineer should approve all sources of fill at least three days before use at the site. The grading contractor should provide analytical test results or other suitable environmental documentation indicating the imported fill is free of hazardous materials at least three days before use at the site. If data are not available, up to two weeks should be allowed to perform analytical testing on the proposed import material to be reviewed and approved by the project environmental consultant. A bulk sample of approved fill should be provided to Langan at least three working days before use at the site so a compaction curve can be prepared.

8.1.5 Utilities and Utility Trenches

Excavations in soil for utility trenches can likely be made with conventional earth-moving equipment. Backfill for utility trenches and other excavations is also considered fill, and should be compacted according to the recommendations presented in Section 8.1.4. Jetting of trench backfill should not be permitted. Special care should be taken when backfilling utility trenches in pavement areas. Poor compaction may cause excessive settlements, resulting in damage to any overlying pavement sections.

Utility trenches should be excavated at least four inches below the bottom of pipes or conduits and have clearances of at least four inches on both sides. To provide uniform support, pipes or conduits should be bedded on a minimum of four inches of sand or fine gravel. After pipes and conduits are tested, inspected (if required), and approved, they should be covered to a depth of six inches with sand or fine gravel, which should then be mechanically tamped.

Utilities should be designed to accommodate one inch of differential settlement, where the ground outside of the building may settle as much as 2 inches but the building will settle 1/3 inch or less due to an earthquake.

8.1.6 Shoring

For temporary excavations where there is insufficient space for a sloped excavation the cuts should be shored. Cantilevered shoring, if required, can be designed using an active earth pressure equal to an equivalent fluid weight of 40 pounds per cubic foot (pcf). Passive resistance on the toe of cantilever shoring may be calculated using lateral pressures corresponding to an equivalent fluid weight (triangular distribution) of 295 and 150 pounds per cubic foot (pcf), in soil above and below the water table, respectively. This passive resistance can be applied to three pier diameters, or the pier spacing, whichever is less.

If the proposed excavations extend below an imaginary 30-degree line (from the horizontal) projected down from the bottom of the neighboring footings then these excavations should be shored and the shoring should be designed for a surcharge pressure to account for the load on the neighboring foundations. We should be consulted for specific recommendations if these conditions apply.

8.2 Foundations

The planned structure can be supported on spread footings bearing directly the medium dense to very dense sand (Merritt sand) below the undocumented fill, or on engineered fill or lean concrete that extends down to the Merritt sand. Accordingly, shallow foundations bearing on the Merritt sand, engineered fill, or lean concrete or engineered fill can be designed using an allowable bearing pressure of 4,000 pounds per square foot (psf) for dead plus live loads. Allowable bearing pressures can be increased by 1/3 for total loads, including wind and/or seismic loads. The bottom of the footings should be embedded at least 24 inches below the lowest adjacent soil subgrade and should be at least 24 inches wide for isolated spread footings. Footings adjacent to utility trenches or other footings should bear below an imaginary 1.5:1 (horizontal to vertical) plane projected upward from the bottom edge of the utility trench or adjacent footings.

Lateral loads on foundations can be resisted by a combination of passive resistance acting against the vertical faces of the foundation and friction along the bases of the foundation. Passive resistance may be calculated using lateral pressures corresponding to an equivalent fluid weight (triangular distribution) of 295 and 150 pounds per cubic foot (pcf), in soil above and below the water table respectively. The upper foot of soil should be ignored unless confined by a concrete slab or pavement. Frictional resistance should be computed using a base friction coefficient of 0.31, assuming the foundation bears on native soil, engineered fill, or lean concrete. The passive resistance and base friction values include a factor of safety of about 1.5 and may be used in

combination without reduction. If any type of membrane is placed under the foundation, the friction coefficient will likely be lower and will depend on the type of membrane.

We should check foundation excavations prior to placement of reinforcing steel. Foundation excavations should be free of standing water, debris, and disturbed materials prior to placing concrete. The bottoms and sides of the foundation excavations should be wetted following excavation and maintained in a moist condition until concrete is placed. If weak soil is encountered in the bottom of footing excavations the material should be removed to a depth at which competent soil is encountered. The overexcavation should be backfilled with engineered fill, lean concrete, or structural concrete.

8.3 Floor Slabs

Floor slabs should be supported on at least 18 inches of engineered fill as recommended in Section 8.1.3 and may be designed to bear on grade.

Moisture is likely to condense on the underside of the slabs, even though they will likely be above the design high groundwater table. Consequently, a moisture barrier should be installed beneath the slabs if movement of water vapor through the slabs would be detrimental to its intended use. A typical moisture barrier consists of a capillary moisture break and a water vapor retarder. A capillary moisture break consists of at least four inches of clean, free-draining gravel or crushed rock. The vapor retarder should meet the requirements for Class C vapor retarders stated in ASTM E1745. The vapor retarder should be placed in accordance with the requirements of ASTM E1643. These requirements include overlapping seams by six inches, taping seams, and sealing penetrations in the vapor retarder. The particle size of the gravel/crushed rock and sand should meet the gradation requirements presented in Table 3.

TABLE 3
Gradation Requirements for Capillary Moisture Break

Sieve Size	Percentage Passing Sieve
<i>Gravel or Crushed Rock</i>	
1 inch	90 – 100
3/4 inch	30 – 100
1/2 inch	5 – 25
3/8 inch	0 – 6

If a vapor mitigation system (VMS) is required for the building, the vapor retarder noted below can be replaced with a waterproofing membrane that can also serve the needs of the VMS design.

Concrete mixes with high water/cement (w/c) ratios result in excess water in the concrete, which increases the cure time and results in excessive vapor transmission through the slab. Therefore, concrete for the floor slab should have a low w/c ratio - less than 0.45. The slab should be properly cured. Before the floor covering is placed, the contractor should check that the concrete surface and the moisture emission levels (if emission testing is required) meet the manufacturer's requirements.

Building entrances should be designed to one inch of differential settlement where the ground outside of the building may settle as much as 2 inches but the building will settle 1/3 inch or less due to an earthquake.

8.5 Seismic Design

On the basis of the results of our subsurface investigation, we conclude the site is classified as a stiff soil site. However, based on our analyses, we judge that there is potential for a thin layer of soil at a depth of about 20 feet to liquefy beneath the planned foundations during a major earthquake. Typically the presence of potentially liquefiable soils would require a Site Class F designation. However, we evaluated the average shear wave velocities within the upper soils at the site taking into account the approximate shear wave velocities of the liquefied soil layers and found that the average shear wave velocities across the site fell within the range of a site class D site.

The provisions of 2019 CBC/ASCE 7-16 require a site response analysis for structures on Site Class D where S_s is greater than 1.0 or S_1 is greater than 0.2.

2019 CBC/ASCE 7-16 has several exceptions where site response is not required. Specifically, for structures on Site Class D sites with S_1 greater than or equal to 0.2, provided the value of the seismic response coefficient C_s is determined by Equation 12.8-2 for values of $T \leq 1.5T_s$.

For seismic design in accordance with the provisions of 2019 CBC/ASCE 7-16, assuming the building period is greater than or equal to 0.2 we recommend the proposed improvements be designed with the following parameters:

Site Class D

- Risk Targeted Maximum Considered Earthquake (MCE_R) S_s and S_1 of 1.511 g and 0.6 g, respectively.
- Site Coefficient F_A of 1.0
- MCE_R spectral response acceleration parameters at short periods, S_{MS} , of 1.5 g. Design Earthquake (DE) spectral response acceleration parameters at short period, S_{DS} , of 1.0 g.

If the proposed development does not meet the exceptions provided above, we should be consulted to provide a site response analysis for the site.

9.0 ADDITIONAL SERVICES DURING DESIGN, CONSTRUCTION DOCUMENTS, AND CONSTRUCTION QUALITY ASSURANCE

Langan should be retained to consult with the design team as geotechnical questions arise during final design. Technical specifications and design drawings should incorporate Langan's recommendations. Langan will assist the design team in preparing specification sections related to geotechnical issues such as foundation design and backfill, as applicable. Langan will also review the project plans, as well as Contractor submittals relating to materials and construction procedures for geotechnical work, to check that the designs incorporate the intent of our recommendations.

Langan has investigated and interpreted the site subsurface conditions and developed the foundation design recommendations contained herein, and is therefore best suited to perform

quality assurance observation and testing of geotechnical-related work during construction. The work requiring quality assurance confirmation and/or special inspections per the building code includes, but is not limited to, earthwork, footing excavations, and compaction of backfill, as applicable. In fulfillment of these services, our engineer should observe and test, where applicable, subgrade preparation, the overexcavation and placement of engineered fill beneath footings and slabs, and observation and testing of fill and backfill.

Recognizing that construction observation is the final stage of geotechnical design, quality assurance observation during construction by Langan is necessary to confirm the design assumptions and design elements, to maintain our continuity of responsibility on this project, and allow us to make changes to our recommendations, as necessary. The foundation system and general geotechnical construction methods recommended herein are predicated upon Langan reviewing the final design and providing construction observation services for the owner. Should Langan not be retained for construction observation services, we cannot assume the role of geotechnical engineer of record during construction operations, and the entity providing the construction observation services must serve as the engineer of record instead.

10.0 CONTRACTOR RESPONSIBILITIES

Construction activities that can alter the existing ground conditions such as excavation, fill placement, foundation construction, etc. can also induce stresses, vibrations, and movements in nearby structures and utilities, and disturb occupants. Contractors should be responsible to ensure that their activities will not adversely affect the structures and utilities. Contractors should also take all necessary measures to protect the existing structures, utilities, etc. during construction.

11.0 LIMITATIONS

The conclusions and recommendations provided in this report result from our interpretation of the geotechnical conditions existing at the site inferred from a limited number of Borings and CPTs as well as information provided by the project team. Actual subsurface conditions may vary. Recommendations provided are dependent upon one another and no recommendation should be followed independent of the others. Any proposed changes in structures or their locations should be brought to Langan's attention as soon as possible so that we can determine whether such changes affect our recommendations. Information on subsurface strata and groundwater levels shown on the logs represent conditions encountered only at the locations indicated and at the time of investigation. If different conditions are encountered during construction, they should

immediately be brought to Langan's attention for evaluation, as they may affect our recommendations.

This report has been prepared to assist the Owner, architect, and structural engineer in the design process and is only applicable to the design of the specific project identified. The information in this report cannot be utilized or depended on by engineers or contractors who are involved in evaluations or designs of facilities on adjacent properties which are beyond the limits of that which is the specific subject of this report.

Environmental issues (such as permitting or potentially contaminated soil and groundwater) are outside the scope of this study and are provided under a separate cover.

REFERENCES

2014 Working Group on California Earthquake Probabilities, (2015). "UCERF3: A new earthquake forecast for California's complex fault system," U.S. Geological Survey 2015-3009, 6 p., <http://dx.doi.org/10.3133/fs20153009>.

ASCE/SEI 7-16 (2016). Minimum Design Loads for Buildings and Other Structures.

ACC Environmental Consultants. "Phase I – Environmental Site Assessment" April 2003

California Building Standards Commission, 2019 California Building Code.

California Division of Mines and Geology (1996). "Probabilistic seismic hazard assessment for the State of California." DMG Open-File Report 96-08.

California Division of Mines and Geology (1997). "Geologic and Engineering Aspect of San Francisco Bay Fill." Special Report 97.

California Division of Mines and Geology (2008). "Guidelines for Evaluating and Mitigating Seismic Hazards in California." Special Publication 117A.

California Geological Survey (2003). "Seismic Hazard Zone Report for the Oakland West 7.5 – Minute Quadrangle, Alameda County, California."

Cao, T., Bryant, W. A., Rowshandel, B., Branum D. and Wills, C. J. (2003). "The Revised 2002 California Probabilistic Seismic Hazard Maps June 2003," California Geological Survey.

FHWA (2007). "Geotechnical Engineering Circular (GEC) No. 8, Design and Construction of Continuous Flight Auger Piles, Final, April 2007."

Geotechnical Engineering Inc. "Phase I – Preliminary Environmental Site Assessment" January 1995.

Idriss, I.M. and R.W. Boulanger (2008). "Soil Liquefaction During Earthquakes," EERI, MNO-12.

Lienkaemper, J. J. (1992). "Map of recently active traces of the Hayward Fault, Alameda and Contra Costa counties, California." Miscellaneous Field Studies Map MF-2196.

MWA Architects. "7th and Campbell – Comparison of 2017 and 2020 Design" June 2020

MWA Architects. "7th and Campbell – Draft Entitlements Package" May 2016

Pradel, Daniel (1998), "Procedure to Evaluate Earthquake-Induced Settlements in Dry Sand," Journal of Geotechnical and Geoenvironmental Engineering, April 1998 and errata October 1998 pg. 1048.

Sitar, N., Mikola, R. G. and Candia, G. (2012). "Seismically Induced Lateral Earth Pressures on Retaining Structures and Basement Walls." Geotechnical Engineering State of the Art and Practice, Keynote Lectures from GeoCongress 2012, Geotechnical Special Publication No. 226, ASCE.

REFERENCES (Continued)

Tokimatsu, K. and Seed H. B. (1987). "Evaluation of Settlements in Sand due to Earthquake Shaking." *Journal of Geotechnical Engineering*, Vol. 113, No. 8, pp. 861-878.

Topozada, T. R. and Borchardt G. (1998). "Re-Evaluation of the 1836 "Hayward Fault" and the 1838 San Andreas Fault earthquakes." *Bulletin of Seismological Society of America*, 88(1), 140-159.

Townley, S. D. and Allen, M. W. (1939). "Descriptive catalog of earthquakes of the Pacific coast of the United States 1769 to 1928." *Bulletin of the Seismological Society of America*, 29(1).

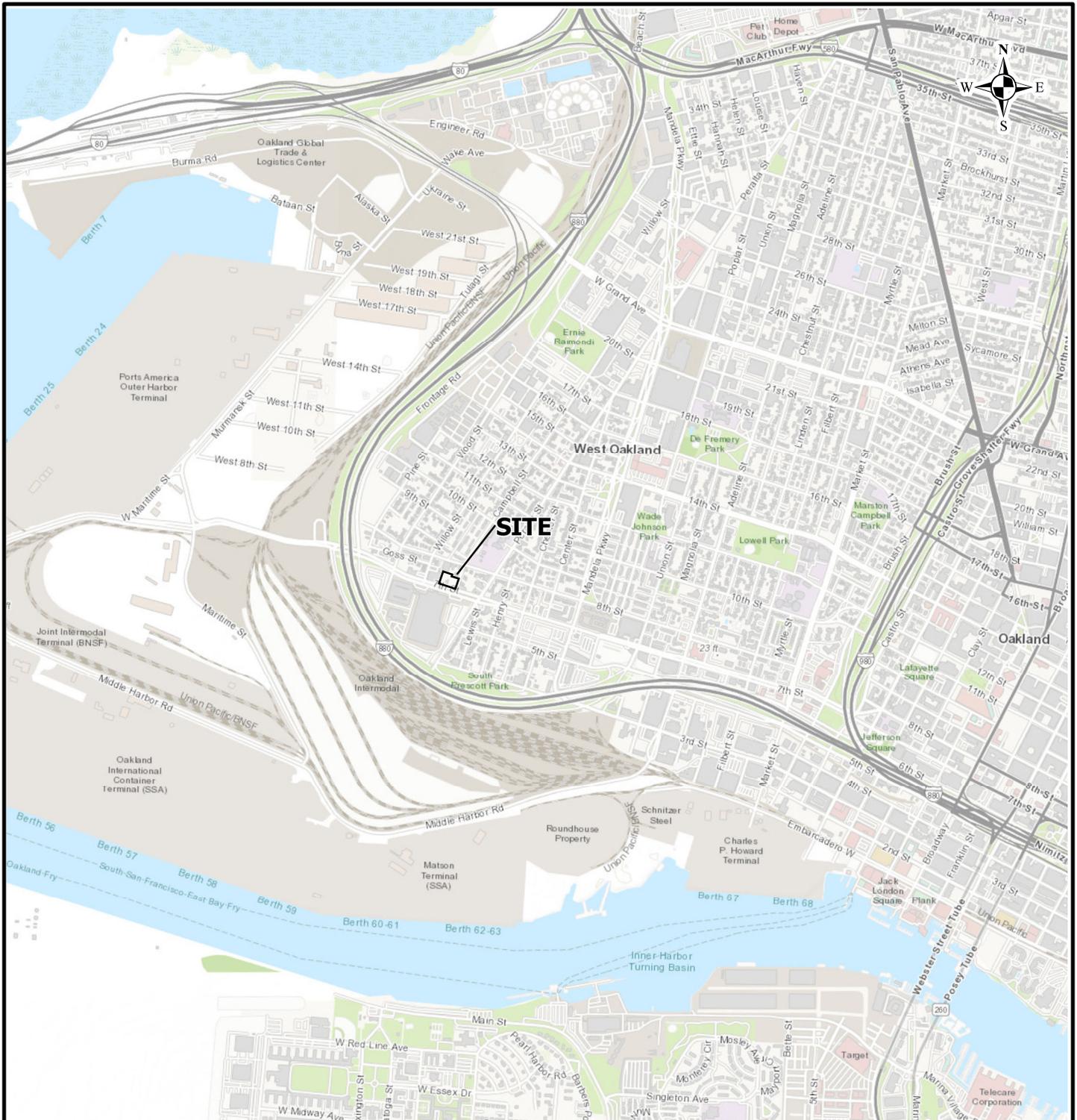
Wesnousky, S. G. (1986). "Earthquakes, Quaternary Faults, and Seismic Hazards in California." *Journal of Geophysical Research*, 91(1312).

Working Group on California Earthquake Probabilities (WGCEP) (2003). "Summary of Earthquake Probabilities in the San Francisco Bay Region: 2002 to 2031." Open File Report 03-214.

Youd et al. (2001). Liquefaction Resistance Soils: Summary Report from the 1996 NCEER and 1998 NCEER/NSF Workshops on Evaluation of Liquefaction Resistance of Soils, *Journal of Geotechnical and Geoenvironmental Engineering*, October.

Youngs, R. R., and Coppersmith, K. J. (1985). "Implications of fault slip rates and earthquake recurrence models to probabilistic seismic hazard estimates." *Bulletin of the Seismological Society of America*, 75(), 939-964.

FIGURES



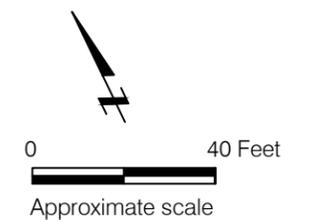
- Notes:
1. Site located in the San Francisco North USGS Quadrangle.
 2. Topographic basemap is provided through Langan's Esri ArcGIS software licensing and ArcGIS online, National Geographic Society, i-cubed.



 501 14th Street, 3rd Floor Oakland, CA 94612-1420 T: 510.874.7000 F: 510.874.7001 www.langan.com	Project	Drawing Title	Project No.	Figure
	1666 7th street OAKLAND ALAMEDA COUNTY CALIFORNIA	1666 7th street OAKLAND ALAMEDA COUNTY CALIFORNIA	SITE LOCATION MAP	750664801 Date: 7/9/2020 Scale: 1" = 2,000' Drawn By: AG

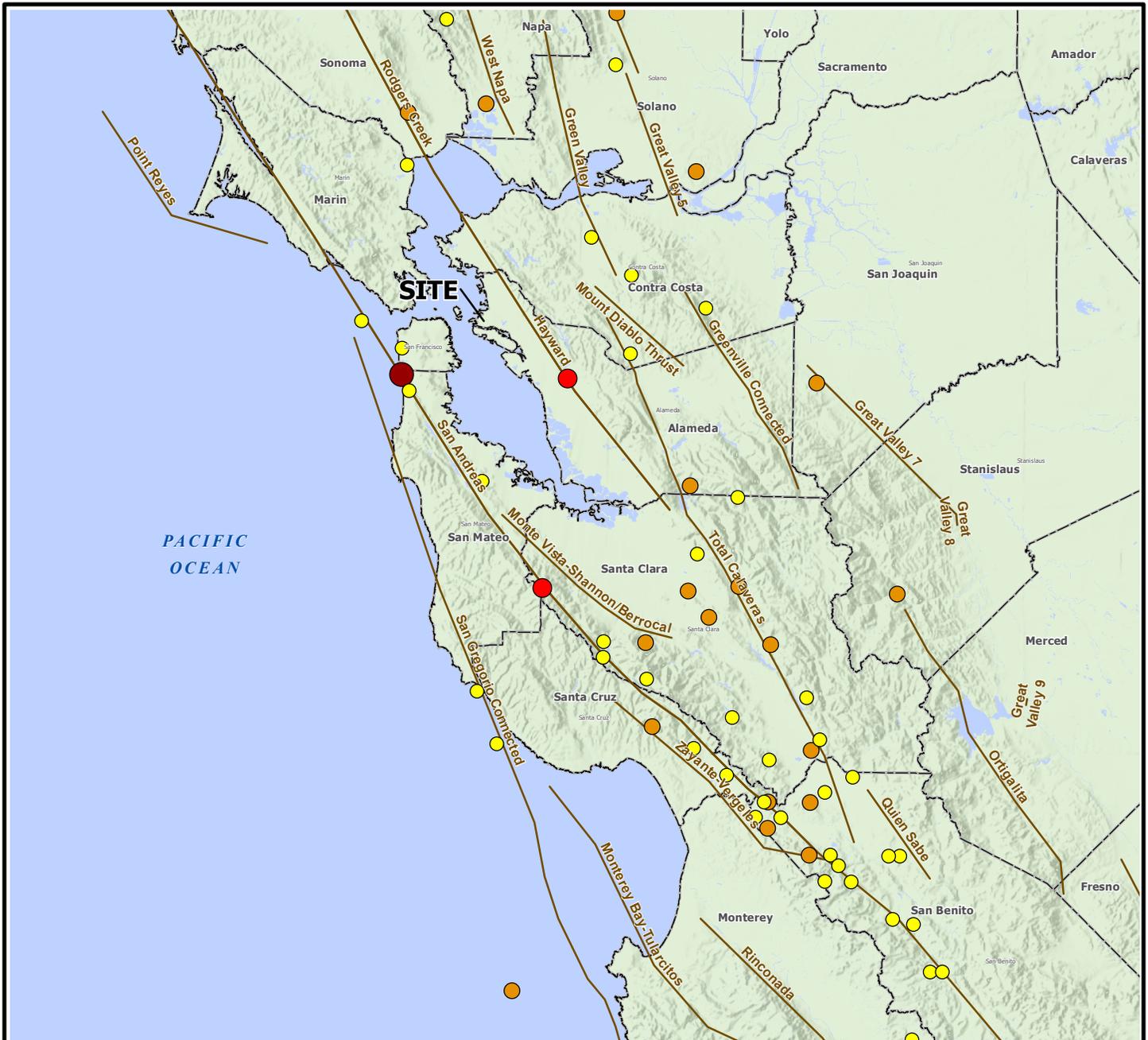


EXPLANATION	
B-1	Approximate location of boring by Langan, May 2020
CPT-1	Approximate location of cone penetration test by Langan, May 2020
CPT-4	Approximate location of seismic cone penetration test by Langan, May 2020
EB-2	Approximate location of environmental boring by Langan, June 2020
EB-1/MW/1	Approximate location of environmental boring/well by Langan, June 2020
---	Site boundary



Reference: Aerial by nearmaps 2020.

LANGAN Langan Engineering and Environmental Services, Inc. 501 14th Street, 3rd Floor Oakland, CA 94612 T: 510.874.7000 F: 510.874.7001 www.Langan.com	Project	Drawing Title	Project No.	Figure
	1666 7TH STREET	SITE PLAN	750664801	2
	OAKLAND		Date	
	ALAMEDA COUNTY CALIFORNIA		7/9/2020	
			Drawn By	
			AG	
			Checked By	
			RN	



Legend

- Site Location
- County Boundary
- Fault
- Earthquake Epicenter
- Magnitude 5 to 5.9
- Magnitude 6 to 6.9
- Magnitude 7 to 7.4
- Magnitude 7.5 to 8



Notes:

1. Quaternary fault data displayed are based on a generalized version of USGS Quaternary Fault and fold database, 2010. For cartographic purposes only.
2. The Earthquake Epicenter (Magnitude) data is provided by the U.S Geological Survey (USGS) and is current through 08/26/2014.
3. Basemap hillshade and County boundaries provided by USGS and California Department of Transportation.
4. Map displayed in California State Coordinate System, California (Teale) Albers, North American Datum of 1983 (NAD83), Meters.

<p>501 14th Street, 3rd Floor Oakland, CA 94612-1420 T: 510.874.7000 F: 510.874.7001 www.langan.com</p> <p>Langan Engineering & Environmental Services, Inc. Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. Langan International LLC Collectively known as Langan</p>	<p>Project</p> <p>1666 7TH STREET</p> <p>OAKLAND</p> <p>ALAMEDA COUNTY CALIFORNIA</p>	<p>Drawing Title</p> <p>MAP OF MAJOR FAULTS AND EARTHQUAKE EPICENTERS IN THE SAN FRANCISCO BAY AREA</p>	<p>Project No. 750664801</p> <p>Date 7/9/2020</p> <p>Scale 1" = 20 miles</p> <p>Drawn By AG</p>	<p>Figure</p> <p>3</p>
	<p>© 2019 Langan</p>			

- I **Not felt by people, except under especially favorable circumstances. However, dizziness or nausea may be experienced.**
Sometimes birds and animals are uneasy or disturbed. Trees, structures, liquids, bodies of water may sway gently, and doors may swing very slowly.
- II **Felt indoors by a few people, especially on upper floors of multi-story buildings, and by sensitive or nervous persons.**
As in Grade I, birds and animals are disturbed, and trees, structures, liquids and bodies of water may sway. Hanging objects swing, especially if they are delicately suspended.
- III **Felt indoors by several people, usually as a rapid vibration that may not be recognized as an earthquake at first. Vibration is similar to that of a light, or lightly loaded trucks, or heavy trucks some distance away. Duration may be estimated in some cases.**
Movements may be appreciable on upper levels of tall structures. Standing motor cars may rock slightly.
- IV **Felt indoors by many, outdoors by a few. Awakens a few individuals, particularly light sleepers, but frightens no one except those apprehensive from previous experience. Vibration like that due to passing of heavy, or heavily loaded trucks. Sensation like a heavy body striking building, or the falling of heavy objects inside.**
Dishes, windows and doors rattle; glassware and crockery clink and clash. Walls and house frames creak, especially if intensity is in the upper range of this grade. Hanging objects often swing. Liquids in open vessels are disturbed slightly. Stationary automobiles rock noticeably.
- V **Felt indoors by practically everyone, outdoors by most people. Direction can often be estimated by those outdoors. Awakens many, or most sleepers. Frightens a few people, with slight excitement; some persons run outdoors.**
Buildings tremble throughout. Dishes and glassware break to some extent. Windows crack in some cases, but not generally. Vases and small or unstable objects overturn in many instances, and a few fall. Hanging objects and doors swing generally or considerably. Pictures knock against walls, or swing out of place. Doors and shutters open or close abruptly. Pendulum clocks stop, or run fast or slow. Small objects move, and furnishings may shift to a slight extent. Small amounts of liquids spill from well-filled open containers. Trees and bushes shake slightly.
- VI **Felt by everyone, indoors and outdoors. Awakens all sleepers. Frightens many people; general excitement, and some persons run outdoors.**
Persons move unsteadily. Trees and bushes shake slightly to moderately. Liquids are set in strong motion. Small bells in churches and schools ring. Poorly built buildings may be damaged. Plaster falls in small amounts. Other plaster cracks somewhat. Many dishes and glasses, and a few windows break. Knickknacks, books and pictures fall. Furniture overturns in many instances. Heavy furnishings move.
- VII **Frightens everyone. General alarm, and everyone runs outdoors.**
People find it difficult to stand. Persons driving cars notice shaking. Trees and bushes shake moderately to strongly. Waves form on ponds, lakes and streams. Water is muddied. Gravel or sand stream banks cave in. Large church bells ring. Suspended objects quiver. Damage is negligible in buildings of good design and construction; slight to moderate in well-built ordinary buildings; considerable in poorly built or badly designed buildings, adobe houses, old walls (especially where laid up without mortar), spires, etc. Plaster and some stucco fall. Many windows and some furniture break. Loosened brickwork and tiles shake down. Weak chimneys break at the roofline. Cornices fall from towers and high buildings. Bricks and stones are dislodged. Heavy furniture overturns. Concrete irrigation ditches are considerably damaged.
- VIII **General fright, and alarm approaches panic.**
Persons driving cars are disturbed. Trees shake strongly, and branches and trunks break off (especially palm trees). Sand and mud erupts in small amounts. Flow of springs and wells is temporarily and sometimes permanently changed. Dry wells renew flow. Temperatures of spring and well waters varies. Damage slight in brick structures built especially to withstand earthquakes; considerable in ordinary substantial buildings, with some partial collapse; heavy in some wooden houses, with some tumbling down. Panel walls break away in frame structures. Decayed pilings break off. Walls fall. Solid stone walls crack and break seriously. Wet grounds and steep slopes crack to some extent. Chimneys, columns, monuments and factory stacks and towers twist and fall. Very heavy furniture moves conspicuously or overturns.
- IX **Panic is general.**
Ground cracks conspicuously. Damage is considerable in masonry structures built especially to withstand earthquakes; great in other masonry buildings - some collapse in large part. Some wood frame houses built especially to withstand earthquakes are thrown out of plumb, others are shifted wholly off foundations. Reservoirs are seriously damaged and underground pipes sometimes break.
- X **Panic is general.**
Ground, especially when loose and wet, cracks up to widths of several inches; fissures up to a yard in width run parallel to canal and stream banks. Landsliding is considerable from river banks and steep coasts. Sand and mud shifts horizontally on beaches and flat land. Water level changes in wells. Water is thrown on banks of canals, lakes, rivers, etc. Dams, dikes, embankments are seriously damaged. Well-built wooden structures and bridges are severely damaged, and some collapse. Dangerous cracks develop in excellent brick walls. Most masonry and frame structures, and their foundations are destroyed. Railroad rails bend slightly. Pipe lines buried in earth tear apart or are crushed endwise. Open cracks and broad wavy folds open in cement pavements and asphalt road surfaces.
- XI **Panic is general.**
Disturbances in ground are many and widespread, varying with the ground material. Broad fissures, earth slumps, and land slips develop in soft, wet ground. Water charged with sand and mud is ejected in large amounts. Sea waves of significant magnitude may develop. Damage is severe to wood frame structures, especially near shock centers, great to dams, dikes and embankments, even at long distances. Few if any masonry structures remain standing. Supporting piers or pillars of large, well-built bridges are wrecked. Wooden bridges that "give" are less affected. Railroad rails bend greatly and some thrust endwise. Pipe lines buried in earth are put completely out of service.
- XII **Panic is general.**
Damage is total, and practically all works of construction are damaged greatly or destroyed. Disturbances in the ground are great and varied, and numerous shearing cracks develop. Landslides, rock falls, and slumps in river banks are numerous and extensive. Large rock masses are wrenched loose and torn off. Fault slips develop in firm rock, and horizontal and vertical offset displacements are notable. Water channels, both surface and underground, are disturbed and modified greatly. Lakes are dammed, new waterfalls are produced, rivers are deflected, etc. Surface waves are seen on ground surfaces. Lines of sight and level are distorted. Objects are thrown upward into the air.

 <p>501 14th Street, 3rd Floor Oakland, CA 94612-1420 T: 510.874.7000 F: 510.874.7001 www.langan.com</p> <p>Langan Engineering & Environmental Services, Inc. Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. Langan International, LLC Collectively known as Langan</p>	Project	Drawing Title	Project No.	Figure
	1666 7TH STREET	MODIFIED MERCALLI INTENSITY SCALE	750664801	4
	OAKLAND		Date 7/9/2020	
	ALAMEDA COUNTY CALIFORNIA		DRAWN BY AG	

APPENDIX A
GEOTECHNICAL BORING LOGS

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring B-1

Boring location: See Site Plan, Figure 2

Logged by: N. Jose
Drilled By: Gregg Drilling

Date started: 5/29/20

Date finished: 5/29/20

Drilling method: Hollow Stem Auger

Hammer weight/drop: 140 lbs./30 inches

Hammer type: Automatic Safety

Samplers: Standard Penetration Test (SPT)

LABORATORY TEST DATA

DEPTH (feet)	SAMPLES			LITHOLOGY	MATERIAL DESCRIPTION	Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft
	Sampler Type	Sample	Blows/ 6"								
					Ground Surface Elevation: 10.1 feet ²						
1	HA				8 inches topsoil						
2	HA			SM	SILTY SAND with GRAVEL (SM) dark brown, loose, dry, fine- to coarse-grained, fine to coarse subangular to subrounded gravel, organic odor [FILL]						
3	HA										
4	HA			SC	CLAYEY SAND (SC) brown, loose, dry to moist, fine- to medium-grained, brick fragments, trace organics [FILL]						
5					yellow-brown to dark brown, trace fine subrounded gravel				20	17.5	
6	SPT		1 2 2	5	SILTY SAND (SM) light-brown with gray and yellow-brown mottling, loose, moist, fine- to medium-grained [FILL]						
7											
8	SPT		3 7 10	20	SILTY SAND (SM) yellow-brown to brown, medium dense increased silt content					22	18.4
9											
10					▽ brown with gray mottling, wet (5/29/20, 8:30 a.m.)						
11	SPT		3 9 11	24							
12											
13											
14											
15											
16	SPT		7 16 16	38	SM gray-brown to yellow-brown, dense, wet						19.0
17											
18											
19											
20											
21	SPT		12 20 20	48	SM fine- to medium-grained						18.1
22											
23											
24											
25											
26	SPT		2 4 4	10	SC-SM CLAYEY SILTY SAND (SC-SM) yellow-brown, loose to medium dense, wet, fine- to medium-grained LL = 19, PI = 6, See Figure D-1					26.1	16.5
27											
28											
29					SM SILTY SAND (SM) yellow-brown, dense, wet, fine- to medium-grained, trace clay						
30											

TEST GEOTECH LOG 750664801-1666 7TH ST. GEO.GPJ TEMPLATE_CA-MODIFIED.GDT 7/27/20

LANGAN

Project No.: 750664801

Figure: A-1a

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring B-1

DEPTH (feet)	SAMPLES				LITHOLOGY	MATERIAL DESCRIPTION	LABORATORY TEST DATA						
	Sampler Type	Sample	Blows/6"	SPT N-Value ¹			Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft	
31	SPT		3 19 22	49		SILTY SAND (SM) (continued)							
32													
33													
34													
35													
36													
37													
38													
39													
40													
41	SPT		5 13 20	40	SM								
42													
43													
44													
45													
46													
47													
48													
49													
50													
51	SPT		7 14 32	55		very dense							
52													
53													
54													
55													
56													
57													
58													
59													
60													

TEST GEOTECH LOG 750664801-1666 7TH ST.GEO.GPJ TEMPLATE_CA-MODIFIED.GDT 7/27/20

Boring terminated at a depth of 51.5 feet below ground surface.
Boring backfilled with cement grout.
Groundwater encountered at 10 feet below ground surface during drilling.
HA = Hand Auger.

¹ SPT blow counts were converted to SPT N-Values using a correction factors of 1.2, respectively to account for sampler type and hammer energy.
² Elevations based on 'Boundary & Topographic Survey' by Bay Area Land Survey Inc. dated June 2016, Oakland City Datum.



Project No.:
750664801

Figure:
A-1b

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring B-2

PAGE 1 OF 2

Boring location: See Site Plan, Figure 2

Logged by: N. Jose
Drilled By: Gregg Drilling

Date started: 5/29/20

Date finished: 5/29/20

Drilling method: Hollow Stem Auger

Hammer weight/drop: 140 lbs./30 inches

Hammer type: Automatic Safety

Samplers: Standard Penetration Test (SPT)

LABORATORY TEST DATA

DEPTH (feet)	SAMPLES				LITHOLOGY	MATERIAL DESCRIPTION	Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft
	Sampler Type	Sample	Blows/ 6"	SPT N-Value ¹								
Ground Surface Elevation: 9.2 feet ²												
1	HA				SM	6 inches topsoil						
2	HA					SILTY SAND with GRAVEL (SM) red-brown to brown, loose, moist, fine- to medium-grained, fine subangular to subrounded gravel, wood debris [FILL]					8.5	
3	HA					yellow-brown						
4	HA											
5	SPT		5 9	26	SM	SILTY SAND (SM) gray-brown to yellow-brown with orange mottling, medium dense, moist, fine- to medium-grained			29.5	19.0		
6	SPT		5 9	24		yellow-brown with gray-brown mottling (5/29/20, 12:13 p.m.)						
7	SPT		5 9	24		medium dense to dense						
8	SPT		6 11	30								
9												
10	SPT		6 11	30	SM	yellow-brown with orange and gray-brown mottling, medium dense			14	19.8		
11	SPT		6 11	30								
12												
13												
14												
15	SPT		6 8	26	SC- SM	yellow-brown with orange and gray-brown mottling, medium dense						
16	SPT		8 14	26								
17												
18												
19												
20	SPT		3 4	10	SC- SM	CLAYEY SILTY SAND (SC - SM) yellow-brown with orange and gray-brown mottling, loose to medium dense, wet, fine- to medium-grained LL = 18, PI = 6, See Figure D-1			35.1	17.1		
21	SPT		4 4	10								
22					SP- SM	SAND with SILT (SP-SM) yellow-brown with orange mottling, loose, wet, fine- to medium grained PI = Non Plastic, See Figure D-1			8.6	20.3		
23	SPT		0 0	4								
24	SPT		0 3	4								
25	SPT		6 9	35	SM	SILTY SAND (SM) gray-brown, dense, wet, fine- to medium-grained						
26	SPT		9 20	35								
27	SPT		6 9	35								
28	SPT		11 23	60		very dense						
29												
30												

LANGANProject No.:
750664801Figure:
A-2a

TEST GEOTECH LOG 750664801-1666 7TH ST. GEO.GPJ TEMPLATE_CA-MODIFIED.GDT 7/27/20

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring B-2

DEPTH (feet)	SAMPLES				LITHOLOGY	MATERIAL DESCRIPTION	LABORATORY TEST DATA							
	Sampler Type	Sample	Blows/6"	SPT N-Value ¹			Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft		
31	SPT		10 13 25	46	SM	SILTY SAND (SM) (continued)								
32						yellow-brown to gray-brown, dense, wet, fine- to medium-grained								
33														
34														
35														
36														
37														
38														
39														
40	SPT		11 15 25	48										
41														
42														
43														
44														
45	SPT		5 9 14	28*		PI = Non Plastic, See Figure D-1				17.1	20.5			
46														
47						At 45 feet bgs, driller encountered heaving sands entering the hollow stem auger. SPT sampler could not be driven at the target depth of 50 feet bgs.								
48														
49						Driller drilled to a depth of 53 feet bgs, but soil samples could not be collected due to the presence of heaving sands.								
50														
51														
52														
53														
54														
55														
56														
57														
58														
59														
60														

TEST GEOTECH LOG 750664801-1666 7TH ST.GEO.GPJ TEMPLATE CA-MODIFIED.GDT 7/27/20

Boring terminated at a depth of 53 feet below ground surface.
Boring backfilled with cement grout.
Groundwater encountered at 10 feet below ground surface during drilling.
HA = Hand Auger.

¹ SPT blow counts were converted to SPT N-Values using a correction factors of 1.2, respectively to account for sampler type and hammer energy.
² Elevations based on 'Boundary & Topographic Survey' by Bay Area Land Survey Inc. dated June 2016, Oakland City Datum.
^{*} Blow Count may be disturbed - heaving sands likely present in the hollow stem auger.



Project No.:
750664801

Figure:
A-2b

UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions		Symbols	Typical Names
Coarse-Grained Soils (more than half of soil > no. 200 sieve size)	Gravels (More than half of coarse fraction > no. 4 sieve size)	GW	Well-graded gravels or gravel-sand mixtures, little or no fines
		GP	Poorly-graded gravels or gravel-sand mixtures, little or no fines
		GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
	Sands (More than half of coarse fraction < no. 4 sieve size)	SW	Well-graded sands or gravelly sands, little or no fines
		SP	Poorly-graded sands or gravelly sands, little or no fines
		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
Fine-Grained Soils (more than half of soil < no. 200 sieve size)	Silts and Clays LL = < 50	ML	Inorganic silts and clayey silts of low plasticity, sandy silts, gravelly silts
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, lean clays
		OL	Organic silts and organic silt-clays of low plasticity
	Silts and Clays LL = > 50	MH	Inorganic silts of high plasticity
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic silts and clays of high plasticity
Highly Organic Soils		PT	Peat and other highly organic soils

SAMPLE DESIGNATIONS/SYMBOLS

GRAIN SIZE CHART		
Classification	Range of Grain Sizes	
	U.S. Standard Sieve Size	Grain Size in Millimeters
Boulders	Above 12"	Above 305
Cobbles	12" to 3"	305 to 76.2
Gravel coarse fine	3" to No. 4 3" to 3/4" 3/4" to No. 4	76.2 to 4.76 76.2 to 19.1 19.1 to 4.76
Sand coarse medium fine	No. 4 to No. 200 No. 4 to No. 10 No. 10 to No. 40 No. 40 to No. 200	4.76 to 0.075 4.76 to 2.00 2.00 to 0.420 0.420 to 0.075
Silt and Clay	Below No. 200	Below 0.075

- Sample taken with Sprague & Henwood split-barrel sampler with a 3.0-inch outside diameter and a 2.43-inch inside diameter. Darkened area indicates soil recovered
- Classification sample taken with Standard Penetration Test sampler
- Undisturbed sample taken with thin-walled tube
- Disturbed sample
- Sampling attempted with no recovery
- Core sample
- Analytical laboratory sample
- Sample taken with Direct Push or Drive sampler
- Sonic

- Unstabilized groundwater level
- Stabilized groundwater level

SAMPLER TYPE

- C Core barrel
- CA California split-barrel sampler with 2.5-inch outside diameter and a 1.93-inch inside diameter
- D&M Dames & Moore piston sampler using 2.5-inch outside diameter, thin-walled tube
- O Osterberg piston sampler using 3.0-inch outside diameter, thin-walled Shelby tube
- PT Pitcher tube sampler using 3.0-inch outside diameter, thin-walled Shelby tube
- S&H Sprague & Henwood split-barrel sampler with a 3.0-inch outside diameter and a 2.43-inch inside diameter
- SPT Standard Penetration Test (SPT) split-barrel sampler with a 2.0-inch outside diameter and a 1.5-inch inside diameter
- ST Shelby Tube (3.0-inch outside diameter, thin-walled tube) advanced with hydraulic pressure

LANGAN

Langan Engineering and
Environmental Services, Inc.
501 14th Street, 3rd Floor
Oakland, CA 94612

T: 510.874.7000 F: 510.874.7001 www.langan.com

Project

1666 7TH STREET

OAKLAND

ALAMEDA COUNTY CALIFORNIA

Drawing Title

SOIL CLASSIFICATION CHART

Project No.

750664801

Date

06/15/2020

Drawn By

AG

Checked By

RN

Figure

A-3

APPENDIX B
ENVIRONMENTAL BORING LOGS

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring EB-1/MW-1

PAGE 1 OF 1

Boring location: See Site Plan, Figure 2

Logged by: B. Hayward

Date started: 6/10/20

Date finished: 6/10/20

Drilling method: Direct Push Technology/Hollow-stem Auger

Hammer weight/drop:

Hammer type: Automatic

Sampler: 4' Continuous

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION	Well Completion Details
	Sample Number	Sample	Blow Count	Recovery (inches)				
1					0.0	SP-SM	<p>SAND with SILT (SP-SM) 90% sand, 10% fines, loose, dry, poorly graded, no odor</p>	<p>Flush mounted completion</p> <p>Blank Casing From 0 To 5 Feet</p> <p>Grout From 0 To 3 Feet</p> <p>Bentonite From 3 To 4 Feet</p> <p>5 to 15 Feet Sch 40 PVC screen</p>
2	EB-1-1.5	•		20/48"				
3	EB-1-3.0	•			0.0			
4						SC	<p>CLAYEY SAND (SC) 70% sand, 30% fines, tan, dense, moist, poorly graded, no odor wet at 7 feet</p>	<p>4 to 15 Feet #2/12 sand</p>
5	EB-1-5.0	•		34/48"	0.0			
6					0.0			
7					0.0			
8								
9						▼	clay lens at 9 feet	
10					48/48"			
11					0.0	▼		
12					0.0			
13					48/48"			
14					0.0			
15					0.0			
16					0.0			

TEST ENVIRONMENTAL WELL REV1 750664801-1666 7TH ST. ENV.GPJ TEMPLATE_CA-MODIFIED.GDT 7/9/20

Boring terminated at a depth of 16 feet below ground surface.
Boring completed as Monitoring well MW-1.
Initial groundwater level at 11.6 feet bgs and static groundwater level at 8.6 feet below ground surface.
Boring initially advanced using direct push and then the monitoring well installed using hollow-stem augers.

LANGAN

Project No.:
750664801

Figure:
A-1

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring EB-2

PAGE 1 OF 1

Boring location: See Site Plan, Figure 2

Logged by: B. Hayward

Date started: 6/11/20

Date finished: 6/11/20

Drilling method: Direct Push Technology

Hammer weight/drop:

Hammer type: Automatic

Sampler: 4' Continuous

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (Inches)			
1					0.0	SP-SM	SAND with SILT (SP-SM) 90% sand, 10% fines, brown, loose, moist, poorly graded, no odor, brick fragments [FILL]
2	EB-2-1.5	•		36/48"	0.0	SP-SC	
3	EB-2-3.0	•					SAND with CLAY (SP-SC) 85% sand, 15% fines, light brown, medium dense, moist, poorly graded, no odor
4					0.0		
5	EB-2-5.0	•			0.1	CLAYEY SAND (SC)	medium dense, moist, poorly graded, no odor
6				42/48"	0.0	SC	
7	EB-2-7.0	•			0.0		▽ wet at 7 to 8 feet
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

Boring terminated at a depth of 8 feet below ground surface.
Boring backfilled with cement grout.
Groundwater encountered at 7 to 8 feet below ground surface.



Project No.: 750664801

Figure: A-2

TEST ENVIRONMENTAL INCHES 750664801-1666 7TH ST ENV.GPJ TEMPLATE CA-MODIFIED.GDT 7/9/20

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring EB-3

PAGE 1 OF 1

Boring location: See Site Plan, Figure 2

Logged by: B. Hayward

Date started: 6/11/20

Date finished: 6/11/20

Drilling method: Direct Push Technology

Hammer weight/drop:

Hammer type: Automatic

Sampler: 4' Continuous

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (Inches)			
1					0.2	SP-SM	SAND with SILT (SP-SM) 90% sand, 10% fines, dark brown, loose, dry, poorly graded, no odor [FILL] asphalt at 1 foot
2	EB-3-1.5	•		33/ 48"	0.1	SP-SC	SAND with CLAY (SP-SC) 85% sand, 15% fines, brown, medium dense, moist, poorly graded, no odor
3	EB-3-3.0	•					
4					0.0	SC	CLAYEY SAND (SC) tan, medium dense, moist to wet, no odor water
5	EB-3-5.0	•		0.4			
6				42/ 48"	0.5	SC	
7	EB-3-7.0	•			0.0		
8					0.1		
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

Boring terminated at a depth of 8 feet below ground surface.
Boring backfilled with cement grout.
Groundwater encountered at 6.5 feet.



Project No.:
750664801

Figure:
A-3

TEST ENVIRONMENTAL INCHES 750664801-1666 7TH ST ENV.GPJ TEMPLATE CA-MODIFIED.GDT 7/9/20

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring EB-4

PAGE 1 OF 1

Boring location: See Site Plan, Figure 2

Logged by: B. Hayward

Date started: 6/11/20

Date finished: 6/11/20

Drilling method: Direct Push Technology

Hammer weight/drop:

Hammer type: Automatic

Sampler: 4' Continuous

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (Inches)			
1					0.0	SP-SM	SAND with SILT (SP-SM) 90% sand, 10% fines, dark brown [FILL]
2	EB-4-1.5	•		24/48"	0.1		brick and mortar debris
3	EB-4-3.0	•			0.0		SAND with CLAY (SP-SC) 85% sand, 15% fines, tan, moist, poorly graded, no odor
4					0.1		increasing moisture with depth
5	EB-4-5.0	•		48/48"	0.0	SP-SC	
6					0.2		
7					0.2		
8					0.1		
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

Boring terminated at a depth of 8 feet below ground surface.
Boring backfilled with cement grout.

LANGAN

Project No.:
750664801

Figure:
A-4

TEST ENVIRONMENTAL INCHES 750664801-1666 7TH ST ENV.GPJ TEMPLATE CA-MODIFIED.GDT 7/9/20

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring EB-5

PAGE 1 OF 1

Boring location: See Site Plan, Figure 2

Logged by: B. Hayward

Date started: 6/11/20

Date finished: 6/11/20

Drilling method: Direct Push Technology

Hammer weight/drop:

Hammer type: Automatic

Sampler: 4' Continuous

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (Inches)			
1						SP-SM	SAND with SILT (SP-SM) 90% sand, 10% fines, brown, dry, no odor, trace brick, mortar fragments [FILL]
2	EB-5-1.5	•		38/ 48"	0.1	SP-SM	SAND with CLAY (SP-SC) tan, medium dense, moist, no odor
3	EB-5-3.0	•			0.0		
4					0.0	SP-SC	increasing moisture with depth
5	EB-5-5.0	•		44/ 48"	0.1		
6					0.2		
7					0.0		
8					0.0		
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

Boring terminated at a depth of 8 feet below ground surface.
Boring backfilled with cement grout.

LANGAN

Project No.:
750664801

Figure:
A-5

TEST ENVIRONMENTAL INCHES 750664801-1666 7TH ST ENV.GPJ TEMPLATE CA-MODIFIED.GDT 7/9/20

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring EB-6/MW-2

PAGE 1 OF 1

Boring location: See Site Plan, Figure 2

Logged by: B. Hayward

Date started: 6/10/20

Date finished: 6/10/20

Drilling method: Direct Push Technology

Hammer weight/drop:

Hammer type: Automatic

Sampler: 4' Continuous

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION	Well Completion Details
	Sample Number	Sample	Blow Count	Recovery (inches)				
1					0.0	SP-SM	SAND with SILT (SP-SM) 90% sand, 10% fines, brown, loose, dry, poorly graded, no odor, trace brick, gravel [FILL]	
2	EB-6-1.5	•		33/48"	0.2			
3	EB-6-3.0	•			0.1			
4					0.0	SP-SC	SAND with CLAY (SP-SC) tan, medium dense, poorly graded, no odor	
5	EB-6-5.0	•		48/48"	0.1			
6					0.0	SC	CLAYEY SAND (SC) 70% sand, 30% fines, tan, medium dense, moist, poorly graded, no odor	
7					0.0			
8					0.0			
9					0.0			
10					0.2			
11					0.1		moist, appear saturated	
12					0.1			
13					0.2			
14					0.2			
15					0.1			

TEST ENVIRONMENTAL WELL REV1 750664801-1666 7TH ST. ENV.GPJ TEMPLATE_CA-MODIFIED.GDT 7/9/20

Boring terminated at a depth of 15 feet below ground surface.
Boring completed as Monitoring well MW-2
Initial groundwater level at 11.2 feet bgs and static groundwater level at 7.75 feet below ground surface.
Boring initially advanced using direct push and then the monitoring well installed using hollow-stem augers.



Project No.:
750664801

Figure:
A-6

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring EB-7

PAGE 1 OF 1

Boring location: See Site Plan, Figure 2

Logged by: B. Hayward

Date started: 6/11/20

Date finished: 6/11/20

Drilling method: Direct Push Technology

Hammer weight/drop:

Hammer type: Automatic

Sampler: 4' Continuous

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (Inches)			
1						SP-SM	SAND with SILT (SP-SM) 90% sand, 10% fines, tan, loose, dry, no odor, some brick debris, mortar, concrete glass [FILL]
2	EB-7-1.5	•		32/48"	0.1	SP-SC	SAND with CLAY (SP-SC) 85% sand, 15% fines, tan, moist, medium density, no odor
3	EB-7-3.0	•			0.0		
4					0.2		
5	EB-7-5.0	•			0.0	SC	increasing density and moisture with depth, trace oxidized gravel, laminations starting at 7 feet CLAYEY SAND (SC) 75% sand, 25% fines, tan with gray lensing (organics), dense, moist, some organics and roots visible
6				38/48"	0.1		
7					0.0		
8					0.0		
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

Boring terminated at a depth of 8 feet below ground surface.
Boring backfilled with cement grout.

LANGAN

Project No.:
750664801

Figure:
A-7

TEST ENVIRONMENTAL INCHES 750664801-1666 7TH ST ENV.GPJ TEMPLATE CA-MODIFIED.GDT 7/9/20

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring EB-8

PAGE 1 OF 1

Boring location: See Site Plan, Figure 2

Logged by: B. Hayward

Date started: 6/11/20

Date finished: 6/11/20

Drilling method: Direct Push Technology

Hammer weight/drop:

Hammer type: Automatic

Sampler: 4' Continuous

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1					0.0		SAND with SILT (SP-SM) 90% sand, 10% fines, brown, loose, dry, no odor, brick, glass, concrete debris [FILL]
2	EB-8-1.5	•		20/48"		SP-SM	
3	EB-8-3.0	•					
4					0.1		
5	EB-8-5.0	•		38/48"	0.1	SP-SC	SAND with CLAY (SP-SC) 85% sand, 15% fines, tan, medium dense, moist, no odor, some lensing with black sand/clay, oxidized black gravel
6							
7					0.0		
8					0.0	SC	CLAYEY SAND (SC) 75% sand, 25% fines, tan, dense, wet, no odor wet at 7 feet
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

Boring terminated at a depth of 8 feet below ground surface.
Boring backfilled with cement grout.
Groundwater encountered at 7 feet below ground surface.



Project No.: 750664801

Figure: A-8

TEST ENVIRONMENTAL INCHES 750664801-1666 7TH ST ENV.GPJ TEMPLATE CA-MODIFIED.GDT 7/9/20

APPENDIX C
CONE PENETRATION TEST LOGS



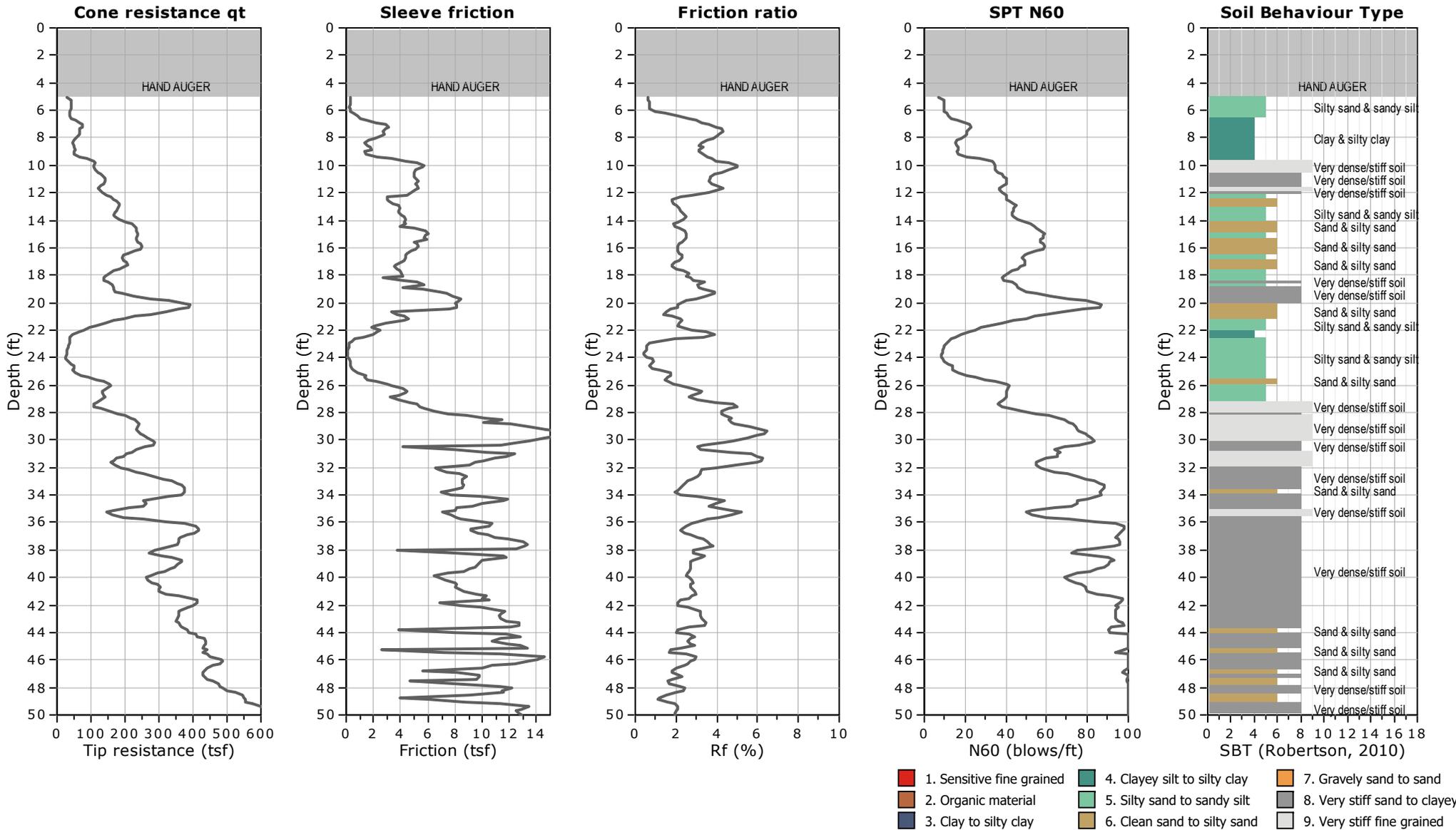
CLIENT: LANGAN

SITE: 1666 & 7TH ST., OAKLAND, CA

ELEV: +10.6

FIELD REP: NOEL JOSE

Total depth: 50.03 ft, Date: 5/29/2020





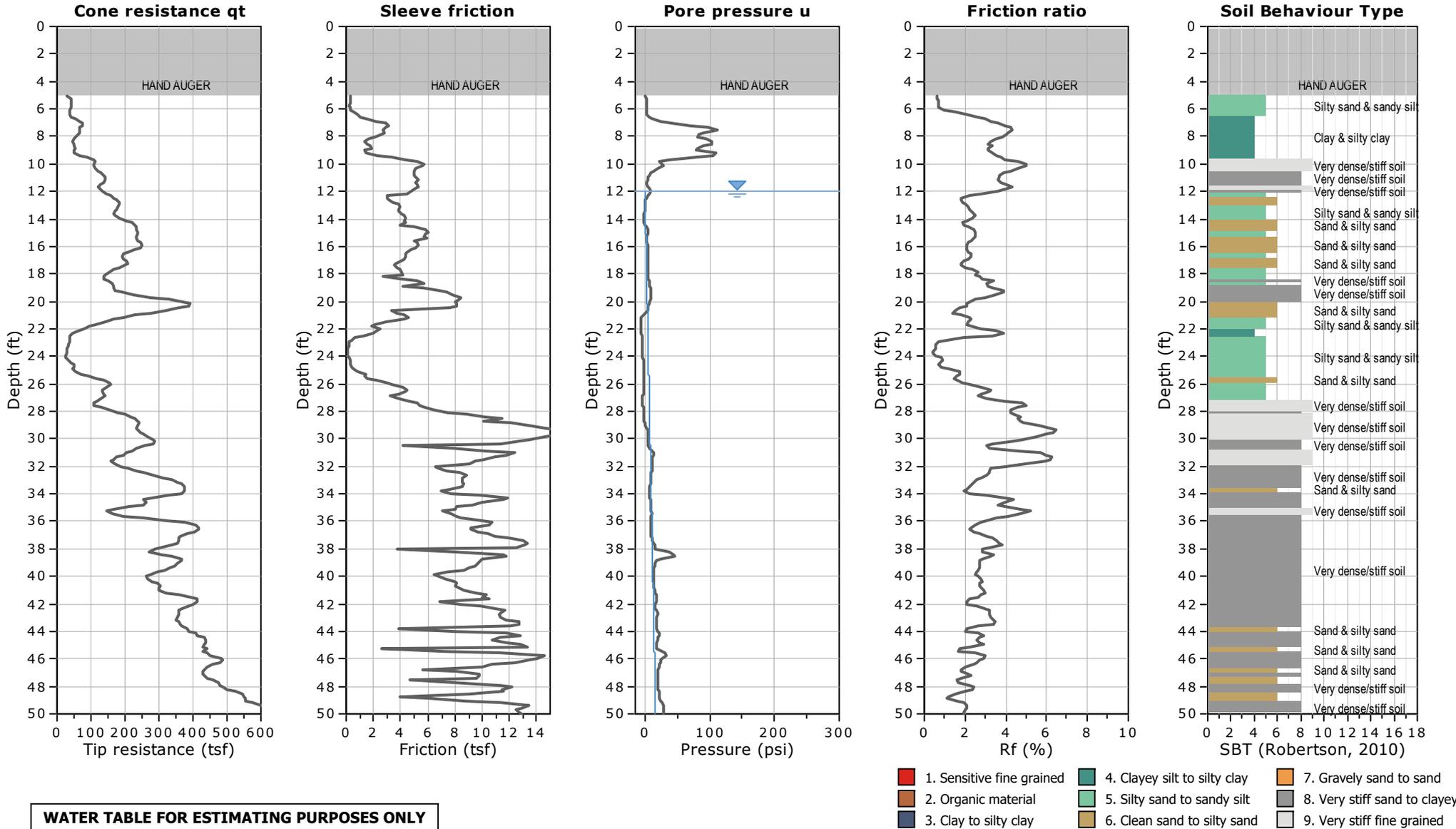
CLIENT: LANGAN

SITE: 1666 & 7TH ST., OAKLAND, CA

ELEV: +10.6

FIELD REP: NOEL JOSE

Total depth: 50.03 ft, Date: 5/29/2020





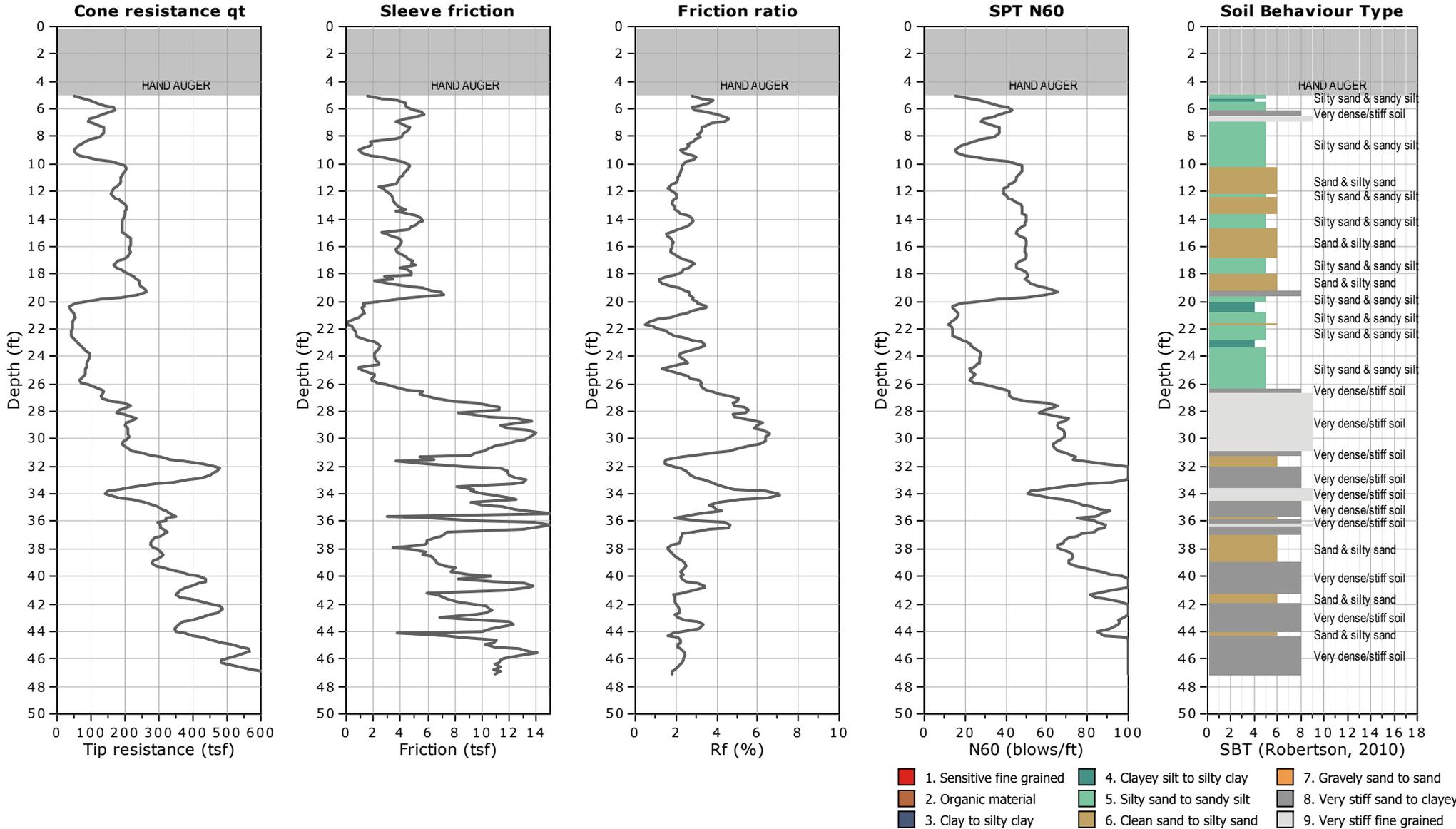
CLIENT: LANGAN

SITE: 1666 & 7TH ST., OAKLAND, CA

ELEV: +10.2

FIELD REP: NOEL JOSE

Total depth: 47.08 ft, Date: 5/29/2020





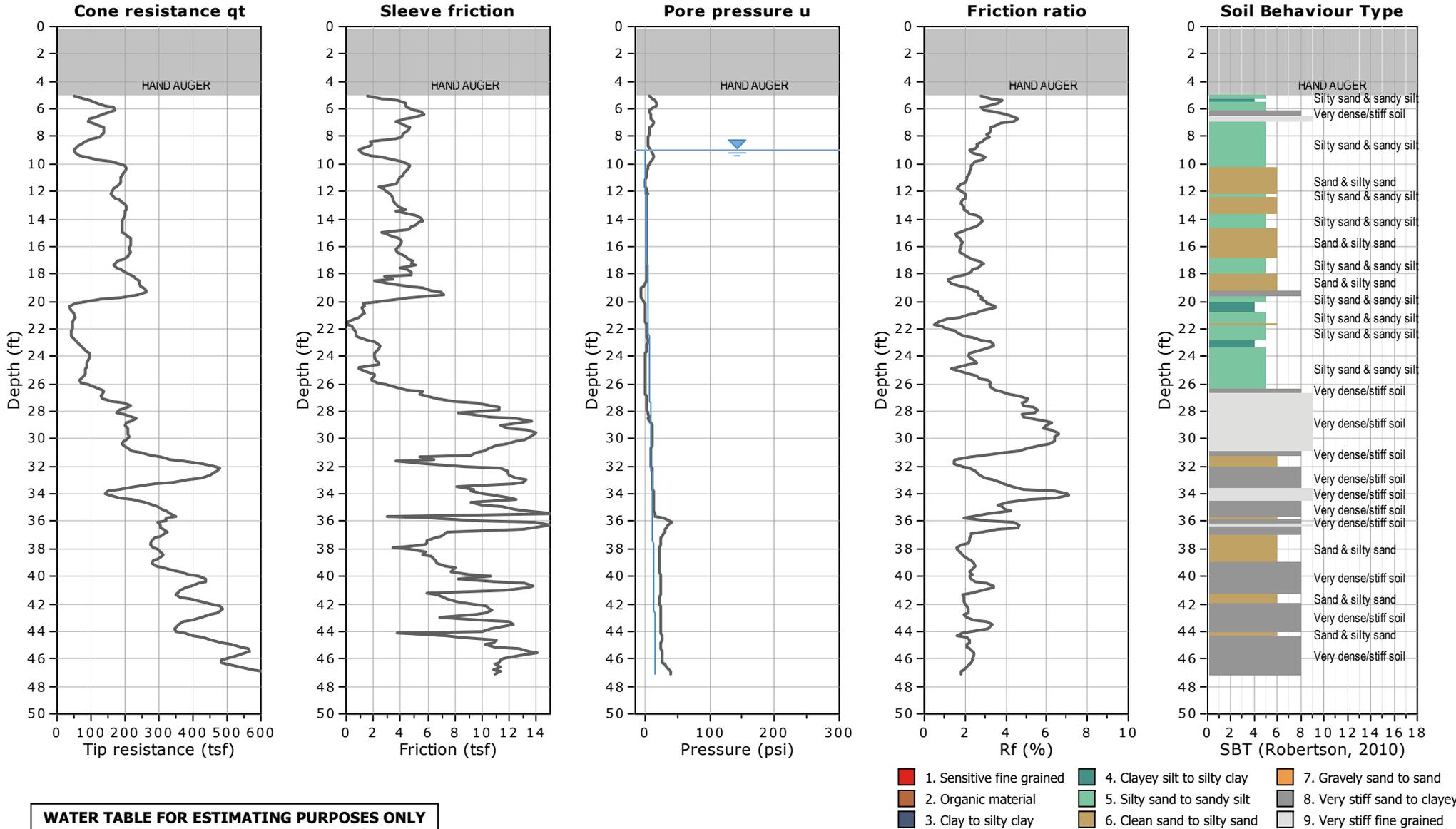
CLIENT: LANGAN

SITE: 1666 & 7TH ST., OAKLAND, CA

ELEV: +10.2

FIELD REP: NOEL JOSE

Total depth: 47.08 ft, Date: 5/29/2020





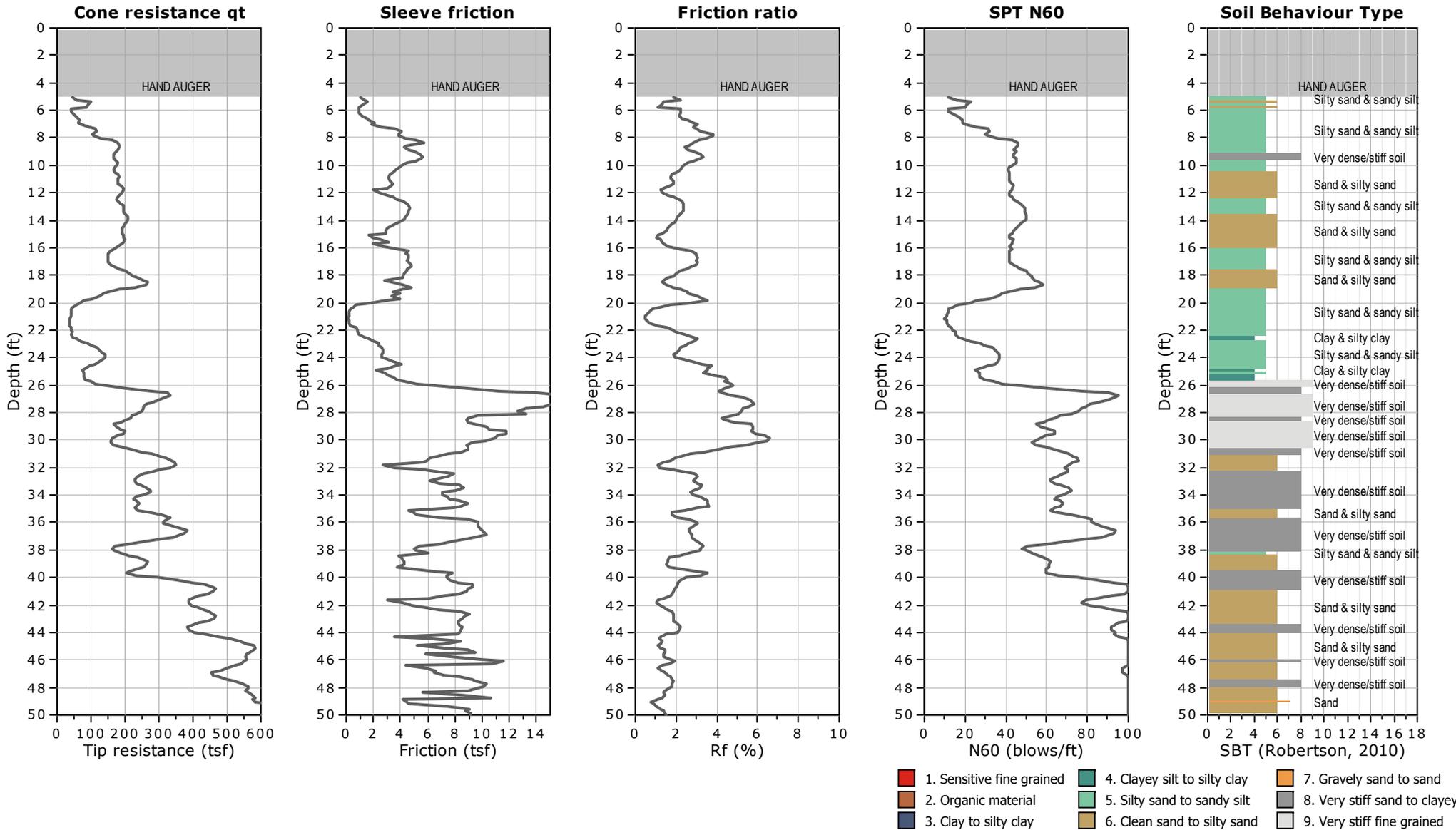
CLIENT: LANGAN

SITE: 1666 & 7TH ST., OAKLAND, CA

ELEV: +8.5

FIELD REP: NOEL JOSE

Total depth: 50.03 ft, Date: 5/29/2020





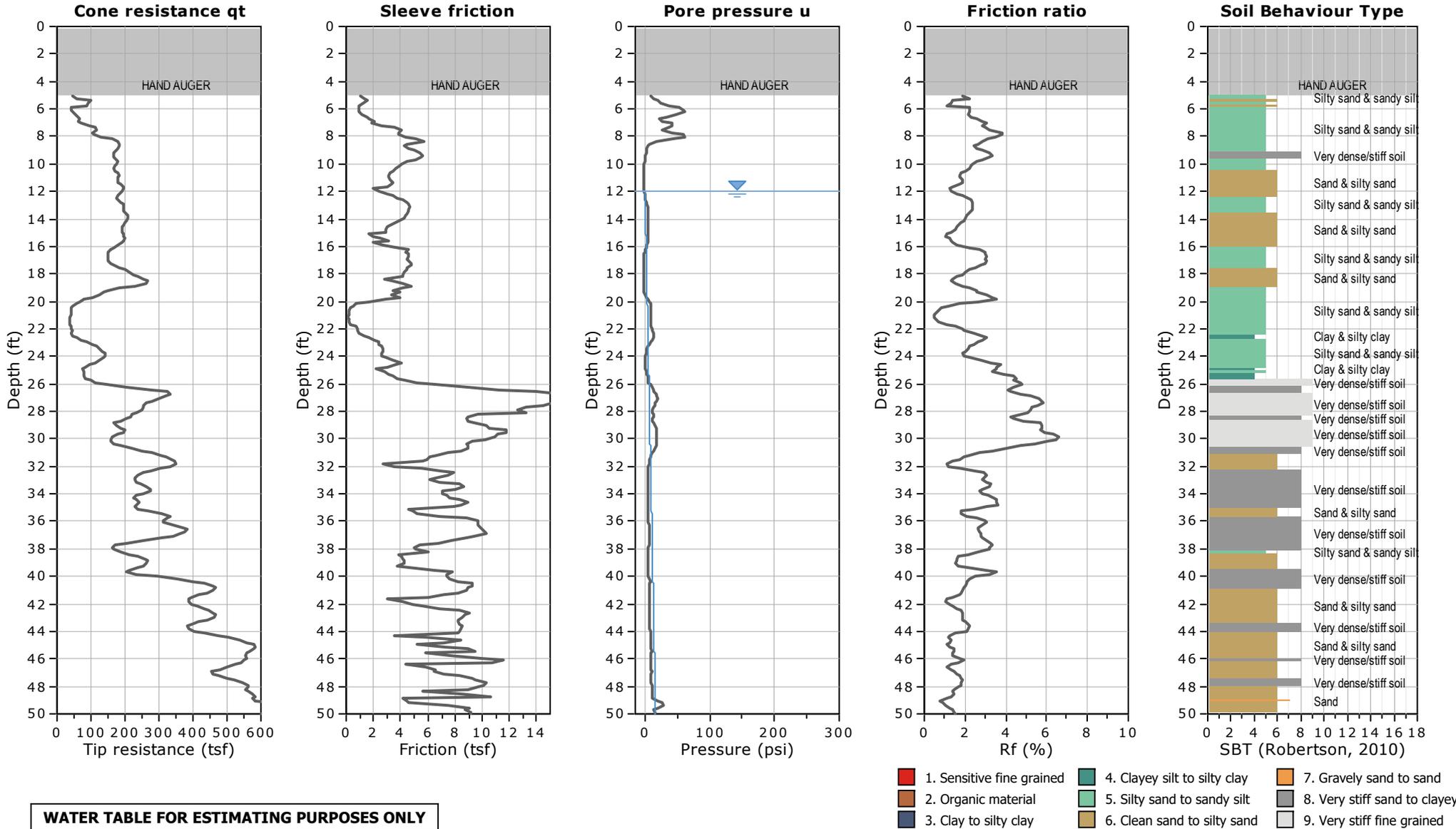
CLIENT: LANGAN

SITE: 1666 & 7TH ST., OAKLAND, CA

ELEV: +8.5

FIELD REP: NOEL JOSE

Total depth: 50.03 ft, Date: 5/29/2020





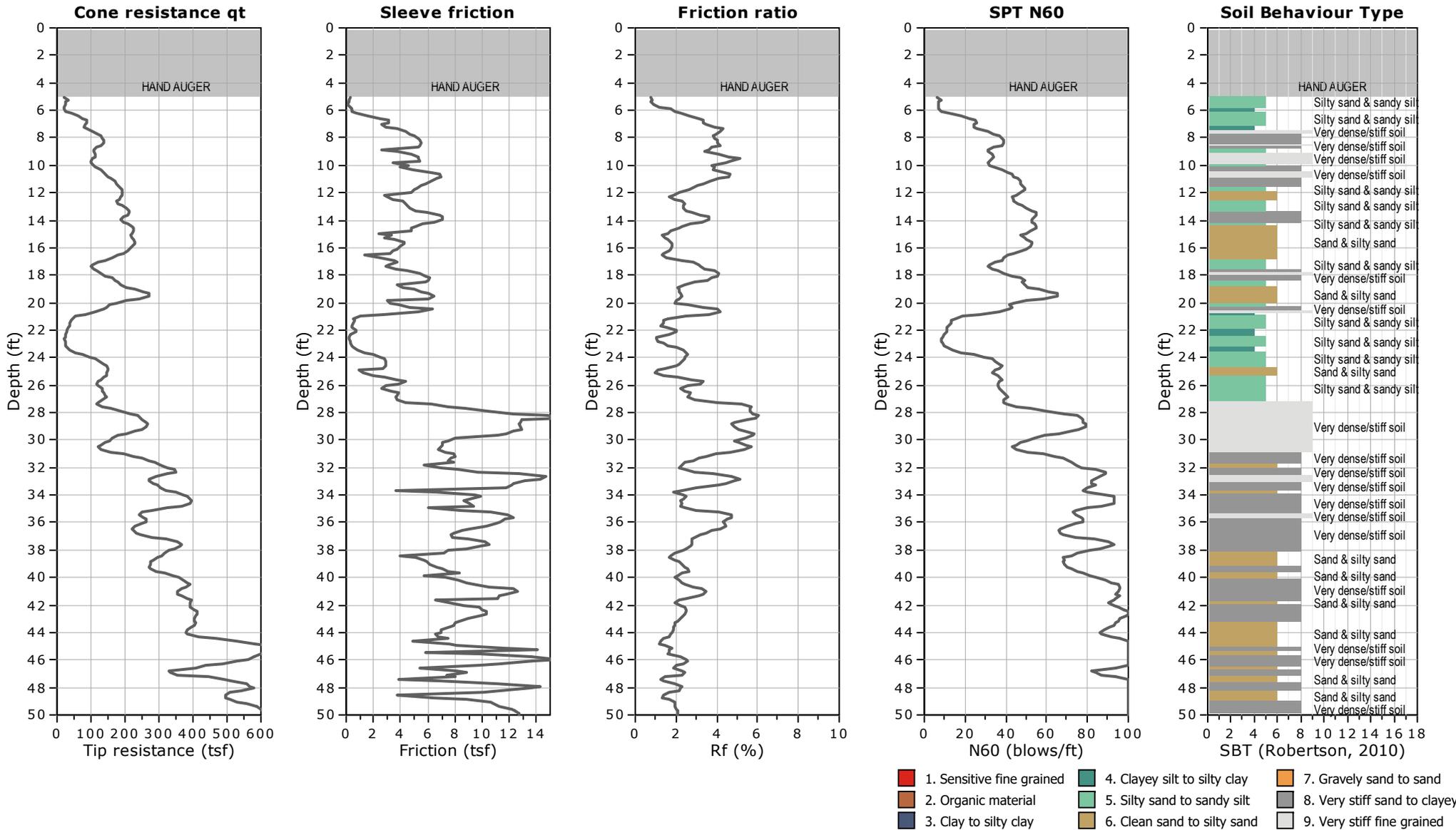
CLIENT: LANGAN

SITE: 1666 & 7TH ST., OAKLAND, CA

ELEV: +9.8

FIELD REP: NOEL JOSE

Total depth: 50.03 ft, Date: 5/29/2020





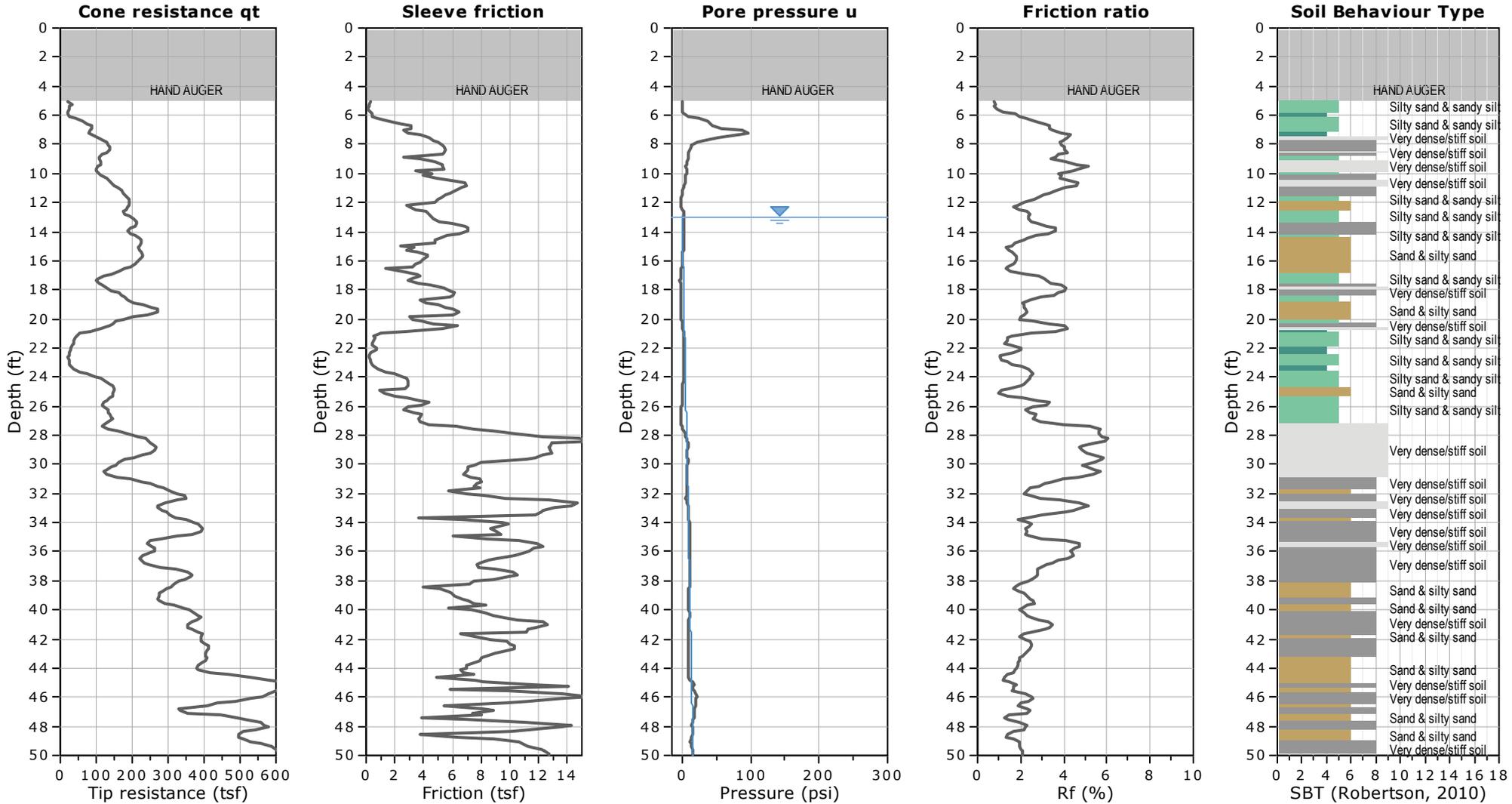
CLIENT: LANGAN

SITE: 1666 & 7TH ST., OAKLAND, CA

ELEV: +9.8

FIELD REP: NOEL JOSE

Total depth: 50.03 ft, Date: 5/29/2020



WATER TABLE FOR ESTIMATING PURPOSES ONLY



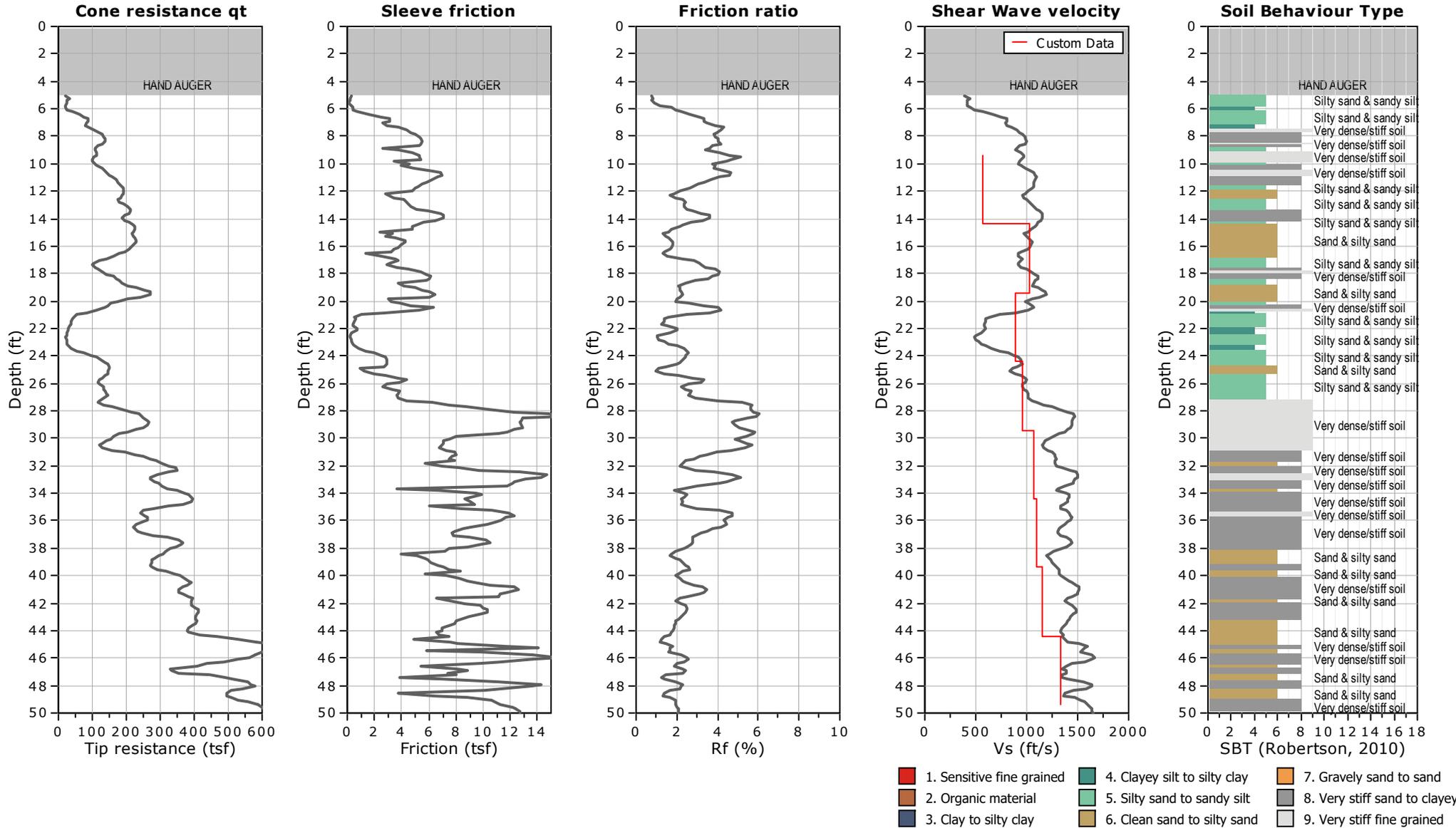
CLIENT: LANGAN

SITE: 1666 & 7TH ST., OAKLAND, CA

ELEV: +9.8

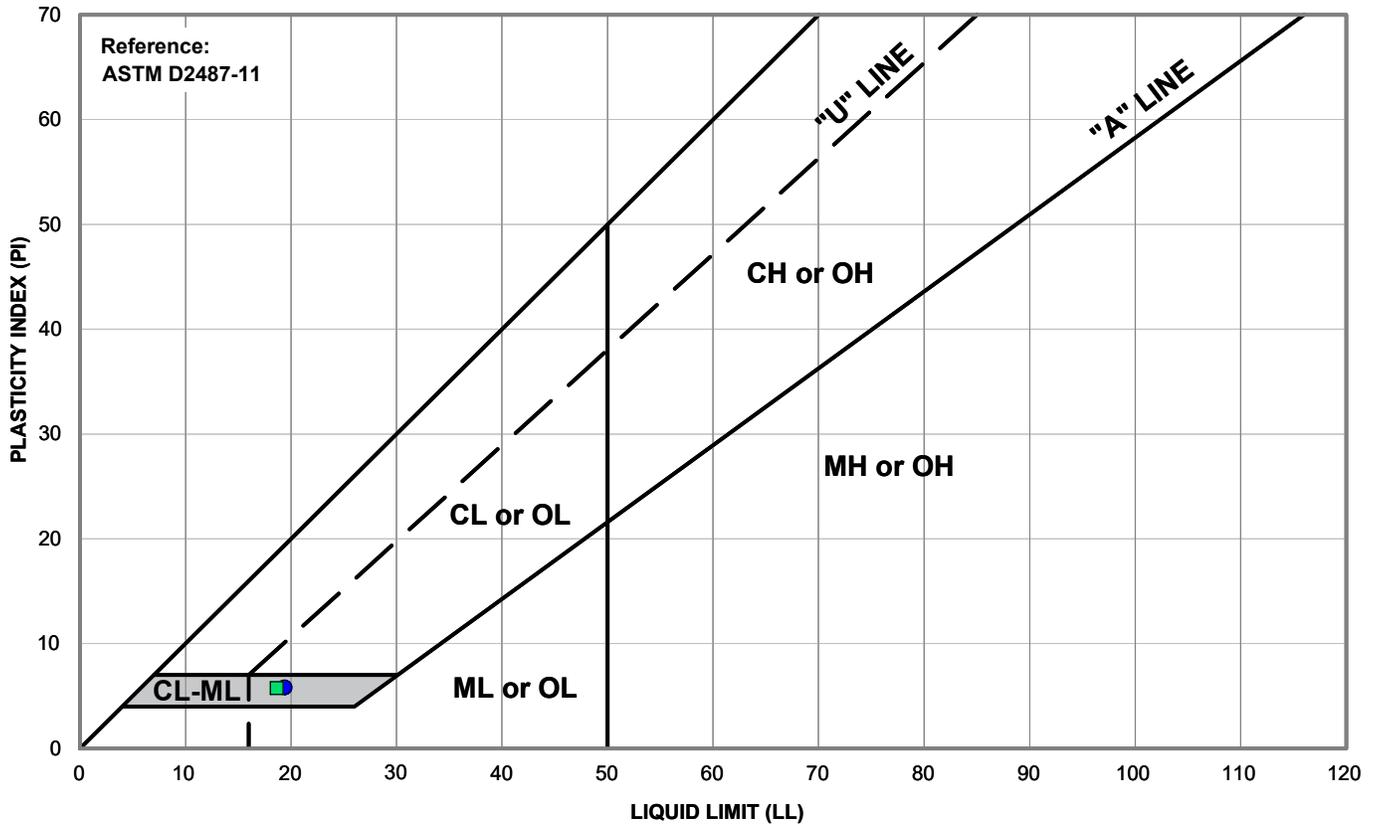
FIELD REP: NOEL JOSE

Total depth: 50.03 ft, Date: 5/29/2020



APPENDIX D
LABORATORY TEST RESULTS

PLASTICITY CHART



Symbol	Source	Description and Classification	Natural M.C. (%)	Liquid Limit (%)	Plasticity Index (%)	% Passing #200 Sieve
●	B-1 at 25 feet	CLAYEY SILTY SAND (SC-SM), yellow-brown	16.5	19	6	26.1
■	B-2 at 20 feet	CLAYEY SILTY SAND (SC-SM), yellow-brown with orange and gray-brown mottling	17.1	18	6	35.1
■	B-2 at 23 feet	SAND with SILT (SP-SM), yellow-brown with orange mottling	20.3	NP	NP	8.6
●	B-2 at 45 feet	SILTY SAND (SM), yellow-brown to gray-brown	20.5	NP	NP	17.1

 Langan Engineering and Environmental Services, Inc. 501 14th Street, 3rd Floor Oakland, CA 94612 T: 510.874.7000 F: 510.874.7001 www.langan.com	Project	Drawing Title	Project No. 750664801	Figure D-1
	1666 7TH STREET	PLASTICITY CHART	Date 06/15/2020	
	OAKLAND		Drawn By AG	
	ALAMEDA COUNTY CALIFORNIA		Checked By RN	

APPENDIX E
CORROSIVITY ANALYSIS WITH BRIEF EVALUATION



1100 Willow Pass Court, Suite A
Concord, CA 94520-1006
925 462 2771 Fax. 925 462 2775
www.cercoanalytical.com

23 June, 2020

Job No. 2006032
Cust. No. 11308

Mr. Ron Noche
Langan
501 14th Street, 3rd Floor
Oakland, CA 94612

Subject: Project No.: 750664801.700.004.0
Project Name: 1666 7th Street, Oakland
Corrosivity Analysis – ASTM Test Methods

Dear Mr. Noche:

Pursuant to your request, CERCO Analytical has analyzed the soil sample submitted on June 05, 2020. Based on the analytical results, a brief corrosivity evaluation is enclosed for your consideration.

Based upon the resistivity measurement, this sample is classified as “mildly corrosive”. All buried iron, steel, cast iron, ductile iron, galvanized steel and dielectric coated steel or iron should be properly protected against corrosion depending upon the critical nature of the structure. All buried metallic pressure piping such as ductile iron firewater pipelines should be protected against corrosion.

The chloride ion concentration is none detected with a reporting limit of 15 mg/kg.

The sulfate ion concentration is none detected with a reporting limit of 15 mg/kg.

The pH of the soil is 7.89, which does not present corrosion problems for buried iron, steel, mortar-coated steel and reinforced concrete structures.

The redox potential is 240-mV which is indicative of potentially “slightly corrosive” soils resulting from anaerobic soil conditions.

This corrosivity evaluation is based on general corrosion engineering standards and is non-specific in nature. For specific long-term corrosion control design recommendations or consultation, please call JDH Corrosion Consultants, Inc. at (925) 927-6630.

We appreciate the opportunity of working with you on this project. If you have any questions, or if you require further information, please do not hesitate to contact us.

Very truly yours,
CERCO ANALYTICAL, INC.


J. Darby Howard, Jr., P.E.
President

JDH/jdl
Enclosure

DISTRIBUTION

1 electronic copy: Mr. Ali Kashani
7th and Campbell, LP
2625 Alcatraz Avenue #501
Berkeley, California 94705

QUALITY CONTROL REVIEWER:



Lori A. Simpson, PE, GE
Senior Principal/ Senior Vice President

Appendix N

Illingworth & Rodkin, Inc.

7th and Campbell Mixed-Use Project, NEPA Noise Assessment, June 17, 2020

7TH AND CAMPBELL STREET AFFORDABLE HOUSING PROJECT NEPA NOISE ASSESSMENT

Oakland, California

June 17, 2020

Prepared for:

**Scott Gregory
LAMPHIER-GREGORY
1944 Embarcadero
Oakland, CA 94606**

Prepared by:

Dana M. Lodico, PE, INCE Bd. Cert.

ILLINGWORTH & RODKIN, INC.
//// Acoustics • Air Quality ///
429 East Cotati Avenue
Cotati, CA 94931
(707) 794-0400

I&R Job #: 20-094

INTRODUCTION

Oakland and the World Enterprises, Inc. intends to develop an approximate 0.7 acre site consisting of several separate small parcels with addresses at 1662 through 1676 7th Street in Oakland, California. The Project site would be developed with approximately 19,400 square feet of space for future business enterprises on the first and second floors, and 79 units of affordable housing on the third through sixth floors of the proposed building.

The project's potential to result in adverse effects with respect to applicable National Environmental Policy Act (NEPA) guidelines is assessed in this report. The report is divided into two sections. The Setting Section provides a brief description of the fundamentals of environmental noise, summarizes applicable regulatory criteria, and discusses the results of the ambient noise monitoring survey completed to document existing noise conditions. The NEPA Noise Assessment Section evaluates noise effects resulting from the project. Noise insulation is recommended to avoid the potential for adverse effects on the interiors of proposed residential units.

SETTING

Fundamentals of Environmental Noise

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its *pitch* or its *loudness*. *Pitch* is the height or depth of a tone or sound, depending on the relative rapidity (*frequency*) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. *Loudness* is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. A *decibel (dB)* is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table 1.

There are several methods of characterizing sound. The most common in California is the *A-weighted sound level (dBA)*. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table 2. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events.

This *energy-equivalent sound/noise* descriptor is called L_{eq} . The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

The scientific instrument used to measure noise is the *sound level meter*. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Community Noise Equivalent Level (CNEL)* is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm - 10:00 pm) and a 10 dB addition to nocturnal (10:00 pm - 7:00 am) noise levels. The *Day/Night Average Sound Level (L_{dn} or DNL)* is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

TABLE 1 Definition of Acoustical Terms Used in this Report

Term	Definition
Decibel, dB	A unit describing, the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L_{eq}	The average A-weighted noise level during the measurement period.
L_{max} , L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
L_{01} , L_{10} , L_{50} , L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level, L_{dn} or DNL	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after addition of 10 decibels to sound levels measured in the night between 10:00 pm and 7:00 am.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Handbook of Acoustical Measurements and Noise Control, Harris, 1998.

TABLE 2 Typical Noise Levels in the Environment

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110 dBA	Rock band
Jet fly-over at 1,000 feet		
	100 dBA	
Gas lawn mower at 3 feet		
	90 dBA	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80 dBA	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	70 dBA	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60 dBA	
		Large business office
Quiet urban daytime	50 dBA	Dishwasher in next room
Quiet urban nighttime	40 dBA	Theater, large conference room
Quiet suburban nighttime		
	30 dBA	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20 dBA	
	10 dBA	Broadcast/recording studio
	0 dBA	

Source: Technical Noise Supplement (TeNS), California Department of Transportation, September 2013.

Regulatory Background

The U.S. Department of Housing and Urban Development (HUD) environmental noise regulations are set forth in 24CFR Part 51B (Code of Federal Regulations). The following exterior noise standards for new housing construction would be applicable to this project:

- 65 dBA DNL or less – acceptable.
- Exceeding 65 dBA DNL but not exceeding 75 dBA DNL – normally unacceptable (appropriate sound attenuation measures must provide an additional 5 decibels of attenuation over that typically provided by standard construction in the 65 dBA DNL to 70 dBA DNL zone; 10 decibels additional attenuation in the 70 dBA DNL to 75 dBA DNL zone).
- Exceeding 75 dBA DNL – unacceptable.

These noise standards also apply, “... at a location 2 meters from the building housing noise sensitive activities in the direction of the predominant noise source...” and “...at other locations where it is determined that quiet outdoor space is required in an area ancillary to the principal use on the site.”

A goal of 45 dBA DNL is set forth for interior noise levels and attenuation requirements are geared toward achieving that goal. It is assumed that with standard construction any building will provide sufficient attenuation to achieve an interior level of 45 dBA DNL or less if the exterior level is 65 dBA DNL or less. Where exterior noise levels range from 65 dBA DNL to 70 dBA DNL, the project must provide a minimum of 25 decibels of attenuation, and a minimum of 30 decibels of attenuation is required in the 70 dBA DNL to 75 dBA DNL zone. Where exterior noise levels range from 75 dBA DNL to 80 dBA DNL, the project must provide a minimum of 35 decibels of attenuation to achieve an interior level of 45 dBA DNL or less.

Existing Noise Environment

The project site is located north of 7th Street and BART and west of Campbell Street. From aerial review of the site, the primary noise generating elements are anticipated to be BART and vehicular traffic on 7th Street. Due to the COVID-19 pandemic and shelter in place orders, traffic volumes and BART headways have decreased, resulting in non-representative noise levels in the area. As a result, the ambient noise environment at the site is characterized through compilation of existing data and noise modeling.

As noted previously, BART is currently running on a reduced schedule. However, according to the Oakland General Plan (2004), BART trains typically run at a combined rate of about 40 trains per hour on all lines during the daytime on weekdays and about 20 trains per hour during the early morning and evening on weekdays and during the weekend and holidays. Based on the Oakland General Plan, a typical BART train produces a noise level of 85 dBA at 100 feet (noise levels are lower near the stations due to the slower speeds of approaching and departing trains). The West Oakland Specific Plan Draft EIR (2014) states that grinding of the track has resulted in a noise reduction of about 2 dBA along straight ballasted track in the area. However, since this reduction

would be temporary, this reduction was not accounted for in the noise analysis. A measurement in the West Oakland Specific Plan Draft EIR (2014) measured daytime noise levels of 70 dBA L_{eq} and a DNL of 74 dBA resulting from BART train movements and activities at the BART parking lot at Mandela Parkway and 5th Street, about 1,500 feet southeast of the site. The distance from the BART tracks is not given for this measurement. A measurement conducted for the Oakland General Plan at a distance of about 60 feet from the center of the elevated BART line resulted in hourly average daytime noise levels of 72 to 74 dBA L_{eq} . The Oakland General Plan calculated a distance of 130 feet to the 75 dBA DNL contour, 280 feet to the 70 dBA DNL contour, 600 feet to the 65 dBA DNL contour, and 1,290 feet to the 60 dBA DNL contour. These noise levels are higher than those given by the West Oakland Specific Plan EIR measurement, possibly due to a reduction in train speed at the measurement location near the station for the West Oakland Specific Plan EIR measurement. The HUD DNL Calculator yielded a BART noise level of 80 dBA DNL at the setback of the site. This level is consistent with the level calculated based on the West Oakland Specific Plan EIR and the Oakland General Plan.

The West Oakland Specific Plan EIR also included a noise measurement location along 7th Street which would be applicable to the project site. Noise levels at a distance of 50 feet from the centerline of 7th Street at Mandela Parkway were 68 dBA L_{eq} during daytime hours, resulting in a DNL of 72 dBA. This noise level includes both vehicular traffic and BART train movements. BART is located about 240 feet south of 7th Street at this location. Based on the discussion above, BART is calculated to generate a DNL of 71 dBA at a distance of 240 feet. Therefore, 7th Street traffic is calculated to generate a DNL of 65 dBA. The HUD DNL Calculator yielded a 7th Street traffic noise level of 66 dBA DNL at the setback of the site, similar to the level calculated based on data from the West Oakland Specific Plan EIR.

Traffic noise levels for Campbell Street are not given in either document, nor are traffic volumes available from the City of Oakland, indicating that noise levels are below 60 dBA DNL at distances of 50 feet or greater from the center of the roadway.

NEPA NOISE ASSESSMENT

Significance Criteria

An adverse effect would result if noise levels at the project site would exceed HUD Guidelines for acceptability. Exterior noise levels exceeding 65 dBA DNL or interior noise levels exceeding 45 dBA DNL would exceed HUD's noise compatibility criteria.

Future Exterior Noise Environment

The primary noise sources affecting the project site are BART and vehicular traffic along 7th Street. Noise levels were modeled in the HUD DNL Calculator and in SoundPLAN, a three-dimensional noise model that takes the characteristics of the noise sources and surrounding structures into account. Pursuant to the HUD Guidelines, the noise exposure at least 10 years in the future must be considered in addition to the existing noise exposure. BART operations are not anticipated to substantially change in the future, resulting in a noise level of 80 dBA DNL at the setback of the site, as shown in the attached HUD DNL calculator. Assuming a 2% per year increase in traffic volumes along 7th Street, the HUD DNL calculator yields a 2040 traffic noise level of 69 dBA DNL at the setback of the site. The combined noise level resulting from both BART and vehicular

traffic at the ground level southern property line of the site would be 80 dBA DNL under future conditions.

Exterior use areas would include an urban farm and dog run on the ground level, an outdoor exercise area, a community courtyard, and a deck for commercial tenants on the podium level, and an urban farm, lounge seating, and a community seating area on the roof level. All ground and podium level outdoor uses are located on the northern side of the site, shielded from BART and 7th Street by the proposed 65-foot tall building. The rooftop outdoor use areas are located on the eastern half of the building.

Based on the results of noise modeling in SoundPLAN and the HUD Barrier Performance Module, proposed outdoor use areas on the ground and podium levels would be exposed to exterior noise levels ranging from 53 to 64 dBA DNL, with the highest exposure (64 dBA DNL) occurring in the eastern portion of the deck for commercial tenants. These noise levels would be considered acceptable in accordance with HUD's exterior noise criteria.

Noise levels in the rooftop lounge seating area, community seating area, and rooftop urban farm would range from 62 dBA DNL to 69 dBA DNL, depending on the proximity to the southern building edge. Noise levels exceeding 65 dBA DNL would be considered normally unacceptable by HUD. Construction of a 5 foot high parapet wall along the southern, eastern, and western limits of the rooftop urban farm and community seating area would reduce noise levels in these areas to 65 dBA DNL or less.

Although not shown specifically on the plans, the project renderings also show a podium level patio on the south elevation facing BART. Noise levels in this south facing patio would be approximately 80 dBA DNL and cannot be reduced to meet the HUD guidelines for acceptability without fully enclosing the space.

Future Interior Noise Environment

A HUD goal of 45 dBA DNL is set forth for interior noise levels. Additionally, to minimize the potential for activity interference and sleep disturbance, typical maximum instantaneous noise levels from BART operations should be reduced to 55 dBA L_{max} or less inside bedrooms and other living spaces within the proposed residences. The Cal Green Code limits noise level inside occupied non-residential interior spaces to 50 dBA L_{eq} (1-hr) during any hour of operation.

Based on a review of site and floor plans developed by MWA Architects and dated May 5, 2016, commercial and shared community spaces would be located on the ground and podium levels, with residential units located on floors 3 through 6. The elevated BART tracks are approximately level with the 3rd floor of the building. Based on the project plans, air conditioning would be provided only to the commercial spaces. Residential units would be naturally ventilated, and corridors are open air.

Based on noise modeling in SoundPLAN, as described above, the exterior exposure of these south facing façades adjacent to BART would be about 80 dBA DNL, with maximum noise levels during train movements calculated to be 90 dBA L_{max} . The exterior exposure of the west facing façades

would range from 70 to 76 dBA DNL and the exterior exposure of the east facing façades would range from 72 to 76 dBA DNL. The predicted exterior noise level would exceed HUD’s “normally acceptable” threshold of 65 dBA DNL by up to 15 dBA DNL. Noise levels at north facing and courtyard facing façades would be below 60 dBA DNL, meeting HUD’s “normally acceptable” threshold.

Thirty-five (35) decibels of attenuation would be required for residential facades facing BART to achieve acceptable interior noise levels with respect to the HUD thresholds. This level of attenuation would also result in acceptable maximum noise levels inside residences. The eastern and western facing façades would require twenty-five (25) to thirty-five (35) decibels of attenuation. For north and courtyard facing, exterior noise levels would be 65 dBA DNL or less and would be meet HUD’s 65 dBA DNL criteria with standard construction only.

The façade elements which contribute to the composite sound isolation of the assembly are the exterior wall assemblies themselves, along with significant openings/penetrations to the wall assembly, such as windows or exterior doors. Floor plans and elevations available in the May 5, 2016 documents did not specify exact window and wall dimensions for residential units. Based on review of the plans, we estimate that the south facing façade of the studio apartments would have a window to wall ratio of about 24% windows and the worst-case room of the south facing façade of the 2-bedroom apartments would have a window to wall ratio of about 50% windows.

The project applicant indicated that metal siding or stucco exterior wall construction would be used. The sound isolation provided by the typical wall sections proposed for the project is anticipated to be STC 46 for the ‘stucco’ assembly, assuming a full three-coat (7/8” thick) stucco (not thin coat plaster on EPS foam), and about STC 39 for metal clad exterior walls. Use of standard metal siding exterior wall construction (STC 39) would not be sufficient to reduce noise levels inside south facing units to 45 dBA DNL or less. Table 3 indicates the construction materials needed to achieve the HUD and CalGreen Code standards. The recommendations are shown visually on Figure 1, using the colors identified in Table 3 by construction ‘Type’.

TABLE 3 Minimum STC Ratings to Achieve HUD and CalGreen Code Requirements

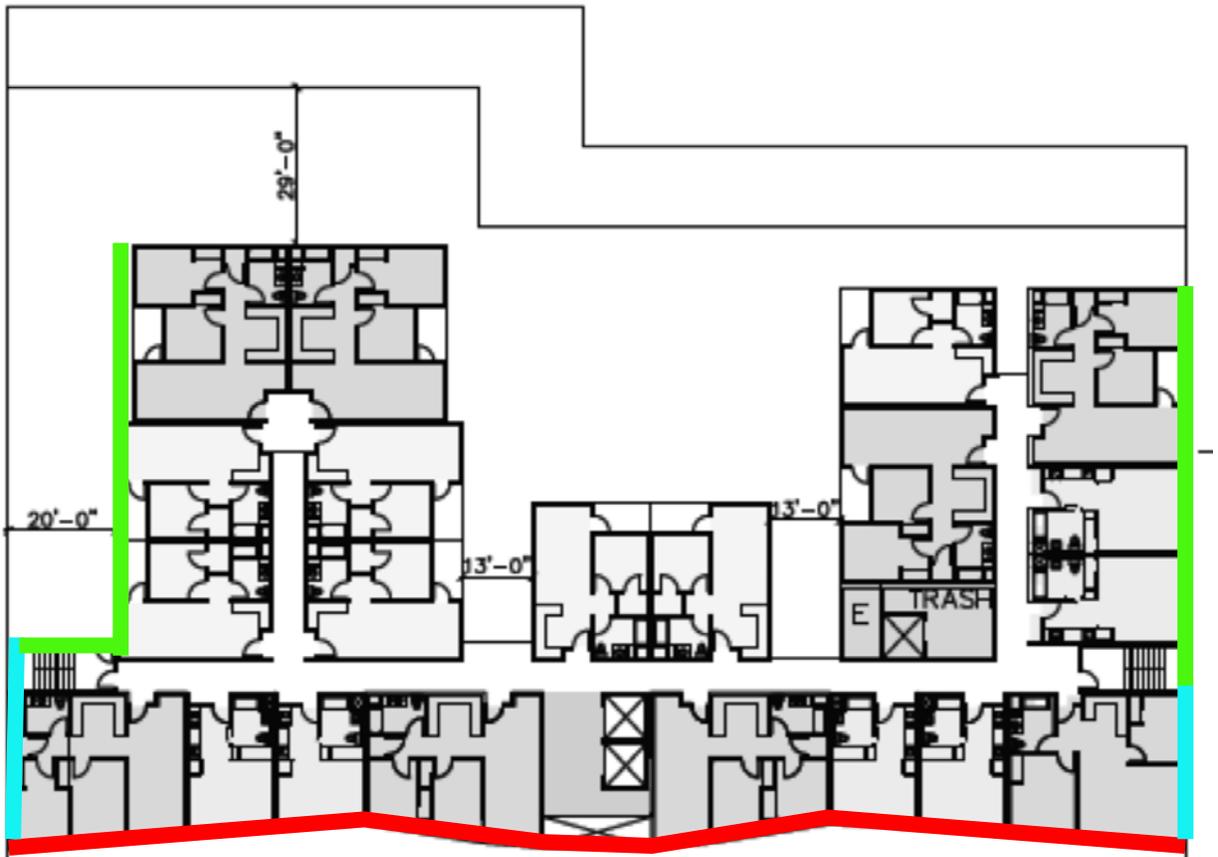
Receptor	Exterior Level, DNL dBA	Recommendations		
		Studio	2 BR	Commercial/ Shared
Façade facing 7 th Street/BART	80 (Type 1)	Wall: STC 46 Window: STC 38	Wall: STC 46 Window: STC 40	Wall: STC 46 Window: STC 32
Façade facing Campbell Street / West	76 (Type 2)	Wall: STC 46 Window: STC 38	Wall: STC 46 Window: STC 40	Wall: STC 46 Window: STC 28
Façade facing Campbell Street / West	70 to 75 (Type 3)	Wall: STC 46 Window: STC 30	Wall: STC 46 Window: STC 32	Wall: STC 46 Window: STC 28
Façade facing West	61 to 65	Standard	Standard	Standard
Façade facing North or Courtyard	<60	Standard	Standard	Standard

*All residential and commercial units with exterior noise levels exceeding 60 dBA DNL should be mechanically ventilated so that windows and doors can be kept closed at the occupant’s discretion to control noise intrusion indoors.

To maintain a habitable interior environment, all residential units should be mechanically ventilated so that windows and doors can be kept closed at the occupant's discretion to control noise intrusion indoors. For residential façades with exterior noise exposures of 76 and 80 dBA DNL (south facing façades and southerly east facing façades), stucco wall construction (STC 46) and windows with STC ratings of 38 to 40 dBA would be needed to achieve the required 35 dBA outdoor-to-indoor noise attenuation. To achieve 30 dBA outdoor-to-indoor noise attenuation for residential façades with exterior noise exposures of 70 to 75 dBA DNL (south facing façades and northerly east facing façades and southerly west facing façades), stucco wall construction (STC 46) and windows with STC ratings of 30 to 32 dBA would be needed. Standard exterior wall construction (STC 39 or better) and windows with STC ratings of 28 would achieve the 25 dBA outdoor-to-indoor noise attenuation for residential façades with exterior noise exposures of 65 to 70 dBA DNL (west facing façades). North and courtyard facing façades, which have exterior noise exposures below 65 dBA DNL, would achieve the HUD standards with standard construction.

Figure 1 summarizes the above noise control recommendations. Although only the upper floor plan is shown in the figure, these recommendations would apply to all levels of the building. HUD Figure 19 (Figure 2 of this report) provides a summary example of the inputs used to complete the calculations of interior noise levels at residential units with the future worst-case noise exposure.

Figure 1 Recommendations for Noise Insulation



- Type 1: Stucco Walls (STC 46), Residential Windows STC 38 to 40, Non-residential Windows STC 32, and Forced-Air Ventilation
- Type 2: Stucco Walls (STC 46), Residential Windows STC 38 to 40, Non-residential Windows STC 28, and Forced-Air Ventilation
- Type 3: Stucco Walls (STC 46), Windows STC 28 to 32, and Forced-Air Ventilation

Figure 2 HUD Figure 19

Figure 19
Description of Noise Attenuation Measures
(Acoustical Construction)

Part I : South facing Studio Unit

Project Name: 7th & Campbell

Location: Oakland, California

Sponsor/Developer: Oakland and the World Enterprises, Inc

Noise Level (From NAG): 80 dBA DNL Attenuation Required: 35 dBA

Primary Noise Source(s): BART/7th Street

Part II

1. For wall(s) facing and parallel to the noise source(s) (or closest to parallel):
 - a. Description of wall construction*: full three-coat (7/8" thick) stucco
 - b. STC rating for wall (rated for no windows or doors): STC 46
 - c. Description of windows: Dual-pane with laminated glass
 - d. STC rating for window type: STC 38
 - e. Description of doors: N/A
 - f. STC rating for doors: N/A
 - g. Percentage of wall (per wall, per dwelling unit) composed of windows: 24% and doors: 0%
 - h. Combined STC rating for wall component: 41 dBA
2. For walls perpendicular to noise source(s):
 - a. Description of wall construction*: N/A
 - b. STC rating for wall (rated for no windows or doors): N/A
 - c. Description of windows: N/A
 - d. STC rating for window type: N/A
 - e. Description of doors: N/A
 - f. STC rating for doors: N/A
 - g. Percentage of wall (per wall, per dwelling unit) composed of windows: N/A and doors: N/A
 - h. Combined STC rating for wall component: N/A
3. Roofing component (if overhead attenuation is required to aircraft noise):
 - a. Description of roof construction: N/A
 - b. STC rating (rated as if no skylights or other openings): N/A
 - c. Description of skylights or overhead windows: N/A
 - d. STC rating for skylights or overhead windows: N/A
 - e. Percentage of roof composed of skylights or windows (per dwelling unit): N/A
 - f. Percentage of roof composed of large uncapped openings such as chimneys: N/A
 - g. Combined STC rating for roof component: N/A
4. Description of type of mechanical ventilation provided: Forced-air mechanical ventilation required

Figure 19
Description of Noise Attenuation Measures
(Acoustical Construction)

Part I : South facing 2BR Corner Unit

Project Name: 7th & Campbell

Location: Oakland, California

Sponsor/Developer: Oakland and the World Enterprises, Inc

Noise Level (From NAG): 80 dBA DNL Attenuation Required: 35 dBA

Primary Noise Source(s): BART/7th Street

Part II

1. For wall(s) facing and parallel to the noise source(s) (or closest to parallel):
 - a. Description of wall construction*: full three-coat (7/8" thick) stucco
 - b. STC rating for wall (rated for no windows or doors): STC 46
 - c. Description of windows: Dual-pane with laminated glass
 - d. STC rating for window type: STC 40
 - e. Description of doors: N/A
 - f. STC rating for doors: N/A
 - g. Percentage of wall (per wall, per dwelling unit) composed of windows: 50% and doors: 0%
 - h. Combined STC rating for wall component: 41 dBA
2. For walls perpendicular to noise source(s):
 - a. Description of wall construction*: full three-coat (7/8" thick) stucco
 - b. STC rating for wall (rated for no windows or doors): STC 46
 - c. Description of windows: Dual-pane with laminated glass
 - d. STC rating for window type: Dual-pane with laminated glass
 - e. Description of doors: N/A
 - f. STC rating for doors: N/A
 - g. Percentage of wall (per wall, per dwelling unit) composed of windows: 50% and doors: 0%
 - h. Combined STC rating for wall component: 41 dBA
3. Roofing component (if overhead attenuation is required to aircraft noise):
 - a. Description of roof construction: N/A
 - b. STC rating (rated as if no skylights or other openings): N/A
 - c. Description of skylights or overhead windows: N/A
 - d. STC rating for skylights or overhead windows: N/A
 - e. Percentage of roof composed of skylights or windows (per dwelling unit): N/A
 - f. Percentage of roof composed of large uncapped openings such as chimneys: N/A
 - g. Combined STC rating for roof component: N/A
4. Description of type of mechanical ventilation provided: Forced-air mechanical ventilation required

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > DNL Calculator

DNL Calculator

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the [Day/Night Noise Level Calculator Electronic Assessment Tool Overview \(/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/\)](#).

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID

Southern Facade - Existing

Record Date

06/15/2020

User's Name

Dana Lodico

Road # 1 Name:

7th Street

Road #1

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	45	45	45
Distance to Stop Sign			
Average Speed	35	30	30
Average Daily Trips (ADT)	9130	93	93
Night Fraction of ADT	10	10	10
Road Gradient (%)			0
Vehicle DNL	63	52	62
Calculate Road #1 DNL	66	Reset	

Road # 2 Name:

Road #2

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	785	785	785
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	1659	17	17
Night Fraction of ADT	10	10	10
Road Gradient (%)			0
Vehicle DNL	34	24	36
Calculate Road #2 DNL	39	Reset	

Railroad #1 Track Identifier:

BART

Rail # 1

Train Type

Electric

Diesel

Effective Distance

45

Average Train Speed

70

Engines per Train

1

Railway cars per Train

7

Average Train Operations (ATO)

635

Night Fraction of ATO

30

Railway whistles or horns?

Yes: No:

Yes: No:

Bolted Tracks?

Yes: No:

Yes: No:

Train DNL

80

0

Calculate Rail #1 DNL

80

Reset

Add Road Source

Add Rail Source

Airport Noise Level

50

Loud Impulse Sounds?

Yes No

Combined DNL for all

Road and Rail sources

80

	<input type="text"/>
Combined DNL including Airport	<input type="text" value="80"/>
Site DNL with Loud Impulse Sound	<input type="text"/>
<input type="button" value="Calculate"/>	<input type="button" value="Reset"/>

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
 - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

Tools and Guidance

[Day/Night Noise Level Assessment Tool User Guide \(/resource/3822/day-night-noise-level-assessment-tool-user-guide/\)](/resource/3822/day-night-noise-level-assessment-tool-user-guide/)

[Day/Night Noise Level Assessment Tool Flowcharts \(/resource/3823/day-night-noise-level-assessment-tool-flowcharts/\)](/resource/3823/day-night-noise-level-assessment-tool-flowcharts/)

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > DNL Calculator

DNL Calculator

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the [Day/Night Noise Level Calculator Electronic Assessment Tool Overview \(/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/\)](#).

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID

Center of Site - Future

Record Date

06/15/2020

User's Name

Dana Lodico

Road # 1 Name:

7th Street

Road #1

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	120	120	120
Distance to Stop Sign			
Average Speed	35	30	30
Average Daily Trips (ADT)	16868	172	172
Night Fraction of ADT	10	10	10
Road Gradient (%)			0
Vehicle DNL	59	48	59
Calculate Road #1 DNL	62	Reset	

Road # 2 Name:

Road #2

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	785	785	785
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	2832	29	29
Night Fraction of ADT	10	10	10
Road Gradient (%)			0
Vehicle DNL	37	27	39
Calculate Road #2 DNL	41	Reset	

Railroad #1 Track Identifier:

Rail # 1

Train Type **Electric** **Diesel**

Effective Distance

Average Train Speed

Engines per Train

Railway cars per Train

Average Train Operations (ATO)

Night Fraction of ATO

Railway whistles or horns? Yes: No: Yes: No:

Bolted Tracks? Yes: No: Yes: No:

Train DNL

Airport Noise Level

Loud Impulse Sounds? Yes No

Combined DNL for all
Road and Rail sources

	<input type="text"/>
Combined DNL including Airport	<input type="text" value="74"/>
Site DNL with Loud Impulse Sound	<input type="text"/>
<input type="button" value="Calculate"/>	<input type="button" value="Reset"/>

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
 - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

Tools and Guidance

[Day/Night Noise Level Assessment Tool User Guide \(/resource/3822/day-night-noise-level-assessment-tool-user-guide/\)](/resource/3822/day-night-noise-level-assessment-tool-user-guide/)

[Day/Night Noise Level Assessment Tool Flowcharts \(/resource/3823/day-night-noise-level-assessment-tool-flowcharts/\)](/resource/3823/day-night-noise-level-assessment-tool-flowcharts/)

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > DNL Calculator

DNL Calculator

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the [Day/Night Noise Level Calculator Electronic Assessment Tool Overview \(/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/\)](#).

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID

Northern Side of Site - Future

Record Date

06/15/2020

User's Name

Dana Lodico

Road # 1 Name:

7th Street

Road #1

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	165	165	165
Distance to Stop Sign			
Average Speed	35	30	30
Average Daily Trips (ADT)	16868	172	172
Night Fraction of ADT	10	10	10
Road Gradient (%)			0
Vehicle DNL	57	46	56
Calculate Road #1 DNL	60	Reset	

Road # 2 Name:	Wood Street
-----------------------	--------------------

Road #2

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	785	785	785
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	2832	29	29
Night Fraction of ADT	10	10	10
Road Gradient (%)			0
Vehicle DNL	37	27	39
Calculate Road #2 DNL	41	Reset	

Railroad #1 Track Identifier:

BART

Rail # 1

Train Type

Electric

Diesel

Effective Distance

165

Average Train Speed

70

Engines per Train

1

Railway cars per Train

7

Average Train Operations (ATO)

635

Night Fraction of ATO

30

Railway whistles or horns?

Yes: No:

Yes: No:

Bolted Tracks?

Yes: No:

Yes: No:

Train DNL

71

0

Calculate Rail #1 DNL

71

Reset

Add Road Source

Add Rail Source

Airport Noise Level

50

Loud Impulse Sounds?

Yes No

Combined DNL for all

Road and Rail sources

72

	<input type="text"/>
Combined DNL including Airport	<input type="text" value="72"/>
Site DNL with Loud Impulse Sound	<input type="text"/>
<input type="button" value="Calculate"/>	<input type="button" value="Reset"/>

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
 - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

Tools and Guidance

Day/Night Noise Level Assessment Tool User Guide (</resource/3822/day-night-noise-level-assessment-tool-user-guide/>)

Day/Night Noise Level Assessment Tool Flowcharts (</resource/3823/day-night-noise-level-assessment-tool-flowcharts/>)

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > DNL Calculator

DNL Calculator

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the [Day/Night Noise Level Calculator Electronic Assessment Tool Overview \(/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/\)](#).

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID

Southern Facade - Future

Record Date

06/15/2020

User's Name

Dana Lodico

Road # 1 Name:

7th Street

Road #1

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	45	45	45
Distance to Stop Sign			
Average Speed	35	30	30
Average Daily Trips (ADT)	16868	172	172
Night Fraction of ADT	10	10	10
Road Gradient (%)			0
Vehicle DNL	66	55	65
Calculate Road #1 DNL	69	Reset	

Road # 2 Name:	Wood Street
-----------------------	--------------------

Road #2

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	785	785	785
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	2832	29	29
Night Fraction of ADT	10	10	10
Road Gradient (%)			0
Vehicle DNL	37	27	39
Calculate Road #2 DNL	41	Reset	

Railroad #1 Track Identifier:

BART

Rail # 1

Train Type

Electric

Diesel

Effective Distance

45

Average Train Speed

70

Engines per Train

1

Railway cars per Train

7

Railway speed limit (input value must be in units of miles per hour (mph)) on the railway being assessed. Default value for diesel or electric trains is 30 mph.

Average Train Operations (ATO)

635

Night Fraction of ATO

30

Railway whistles or horns?

Yes: No:

Yes: No:

Bolted Tracks?

Yes: No:

Yes: No:

Train DNL

80

0

Calculate Rail #1 DNL

80

Reset

Add Road Source

Add Rail Source

Airport Noise Level

50

Loud Impulse Sounds?

Yes No

Combined DNL for all

Road and Rail sources

80

	<input type="text"/>
Combined DNL including Airport	<input type="text" value="80"/>
Site DNL with Loud Impulse Sound	<input type="text"/>
<input type="button" value="Calculate"/>	<input type="button" value="Reset"/>

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
 - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

Tools and Guidance

Day/Night Noise Level Assessment Tool User Guide (</resource/3822/day-night-noise-level-assessment-tool-user-guide/>)

Day/Night Noise Level Assessment Tool Flowcharts (</resource/3823/day-night-noise-level-assessment-tool-flowcharts/>)

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > BPM Calculator

Barrier Performance Module

This module provides to the user a measure on the barrier's effectiveness on noise reduction. A list of the input/output variables and their definitions, as well as illustrations of different scenarios are provided.

Calculator

[View Day/Night Noise Level Calculator \(/programs/environmental-review/dnl-calculator/\)](#)

[View Descriptions of the Input/Output variables.](#)

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the Input and Output variables with the mouse.

WARNING: If there is direct line-of-sight between the Source and the Observer, the module will report erroneous attenuation. "Direct line-of-sight" means if the 5' tall Observer can see the noise Source (cars, trucks, trains, etc.) over the Barrier (wall, hill/excavation, building, etc.), the current version of Barrier Performance Module will not accurately calculate the attenuation provided. In this instance, there is unlikely to be any appreciable attenuation.

Road/Rail Site DNL:

Note: Barrier height must block the line of sight

Input Data

H	<input type="text" value="65"/>	R¹	<input type="text" value="45"/>
S	<input type="text" value="22"/>	D¹	<input type="text" value="10"/>
O	<input type="text" value="21"/>	α	<input type="text" value="145"/>

[Calculate Output](#)

Output Data

h	<input type="text" value="44"/>	R	<input type="text" value="44"/>
D	<input type="text" value="11"/>	FS	<input type="text" value="8.1031"/>

New Site DNL:

Note: If you have separate Road and Rail DNL values, please enter the values below to calculate the new site DNL:

Road DNL:**Rail DNL:****Combined New Site DNL:**

Input/Output Variables

Input Variables

The following variables and definitions from the barrier being assessed are the input required for the web-based barrier performance module:

- H = Barrier Height
- S = Noise Source Height
- O = Observer Height (known as the receiver)
- R^1 = Distance from Noise Source to Barrier
- D^1 = Distance from the Observer to the Barrier
- α = Line of sight angle between the Observer and the Noise Source, subtended by the barrier at observer's location

Output Variables

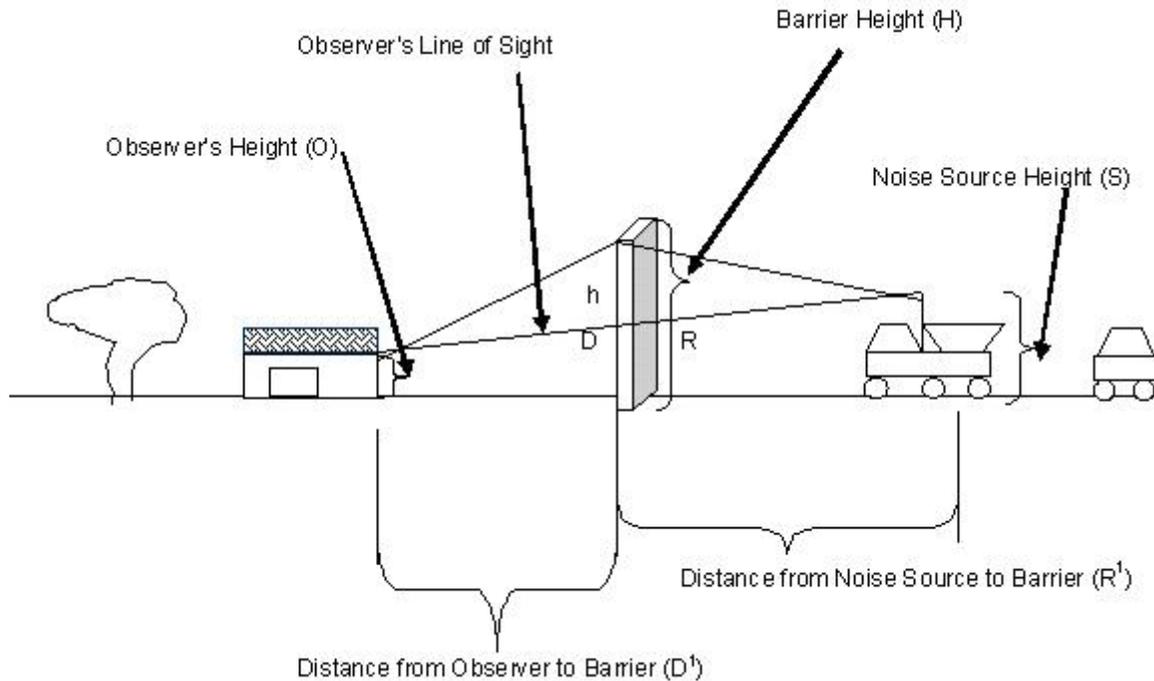
Definitions of the output variables from the mitigation module of the Day/Night Noise Level Assessment Tools as part of the Assessment Tools for Environmental Compliance:

- h = The shortest distance from the barrier top to the line of sight from the Noise source to

the Observer.

- R = Slant distance along the line of sight from the Barrier to the Noise Source
- D = Slant distance along the line of sight from the Barrier to the Observer

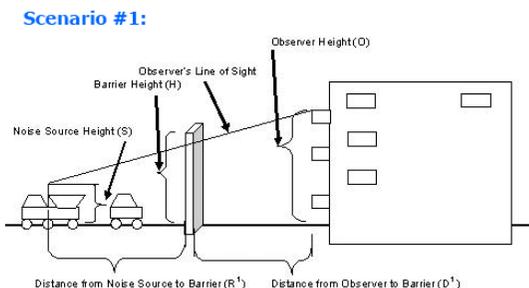
The “actual barrier performance for barriers of finite length” is noted on the worksheets(in the Guidebook) as **FS**.



Barrier Implementation Scenarios

Locate the cursor on the following thumbnails to enlarge the respective scenario as implementation examples of the barrier performance module.

Scenario #1:



Noise receiver at a higher elevation than the noise source and a man-made noise barrier in between the receiver and the source.

Noise receiver at a higher elevation than the noise source and a man-made noise barrier in between the receiver and the source.

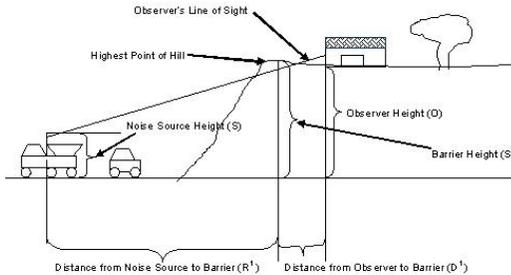
(<https://www.hudexchange.info/resources/documents/Barrier-Performance-Module-Barrier-Implementation-Scenario-1.gif>)

view larger version of image (/resource/3841/barrier-performance-module-bpm-barrier-

implementation-scenarios/

Scenario #2:

Scenario #2:



Noise receiver at a higher elevation than the noise source and a natural barrier (hill) between the receiver and the source.

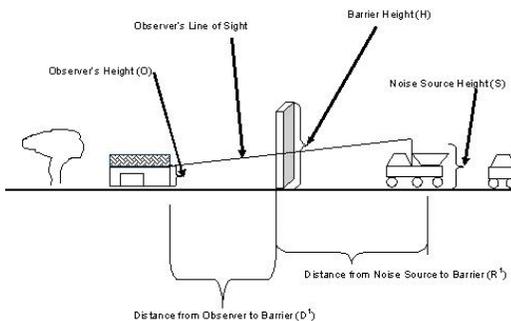
Noise receiver at a higher elevation than the noise source and a natural barrier (hill) between the receiver and the source.

(<https://www.hudexchange.info/resources/documents/Barrier-Performance-Module-Barrier-Implementation-Scenario-2.gif>)

view larger version of image (/resource/3841/barrier-performance-module-bpm-barrier-implementation-scenarios/)

Scenario #3:

Scenario #3:



Noise receiver at almost the same elevation of the noise source and a man-made noise barrier between the receiver and the source.

Noise receiver at almost the same elevation of the noise source and a man-made noise barrier between the receiver and the source.

(<https://www.hudexchange.info/resources/documents/Barrier-Performance-Module-Barrier-Implementation-Scenario-3.gif>)

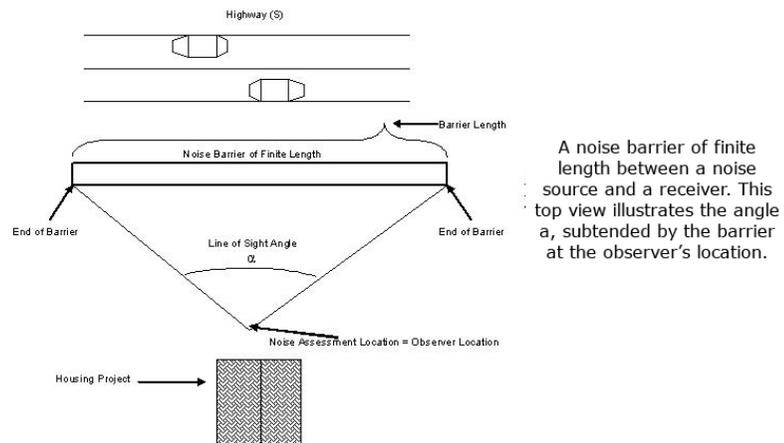
view larger version of image (/resource/3841/barrier-performance-module-bpm-barrier-implementation-scenarios/)

Scenario #4:

Scenario #4:

A noise barrier of finite length between a noise source and a receiver. This top view illustrates the angle α ,

subtended by the barrier at the



observer's location.

A noise barrier of finite length between a noise source and a receiver. This top view illustrates the angle α , subtended by the barrier at the observer's location.

(<https://www.hudexchange.info/resources/documents/Barrier-Performance-Module-Barrier-Implementation-Scenario-4.gif>)

view larger version of image (/resource/3841/barrier-performance-module-bpm-barrier-implementation-scenarios/)

Contents

Calculator

Input/Output Variables

Barrier Implementation Scenarios

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > BPM Calculator

Barrier Performance Module

This module provides to the user a measure on the barrier's effectiveness on noise reduction. A list of the input/output variables and their definitions, as well as illustrations of different scenarios are provided.

Calculator

[View Day/Night Noise Level Calculator \(/programs/environmental-review/dnl-calculator/\)](#)

[View Descriptions of the Input/Output variables.](#)

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the Input and Output variables with the mouse.

WARNING: If there is direct line-of-sight between the Source and the Observer, the module will report erroneous attenuation. "Direct line-of-sight" means if the 5' tall Observer can see the noise Source (cars, trucks, trains, etc.) over the Barrier (wall, hill/excavation, building, etc.), the current version of Barrier Performance Module will not accurately calculate the attenuation provided. In this instance, there is unlikely to be any appreciable attenuation.

Road/Rail Site DNL:

Note: Barrier height must block the line of sight

Input Data

H	<input type="text" value="65"/>	R¹	<input type="text" value="45"/>
S	<input type="text" value="22"/>	D¹	<input type="text" value="10"/>
O	<input type="text" value="5"/>	α	<input type="text" value="175"/>

[Calculate Output](#)

Output Data

h	<input type="text" value="55"/>	R	<input type="text" value="29"/>
D	<input type="text" value="28"/>	FS	<input type="text" value="17.004"/>

New Site DNL:

Note: If you have separate Road and Rail DNL values, please enter the values below to calculate the new site DNL:

Road DNL:**Rail DNL:****Combined New Site DNL:**

Input/Output Variables

Input Variables

The following variables and definitions from the barrier being assessed are the input required for the web-based barrier performance module:

- H = Barrier Height
- S = Noise Source Height
- O = Observer Height (known as the receiver)
- R^1 = Distance from Noise Source to Barrier
- D^1 = Distance from the Observer to the Barrier
- α = Line of sight angle between the Observer and the Noise Source, subtended by the barrier at observer's location

Output Variables

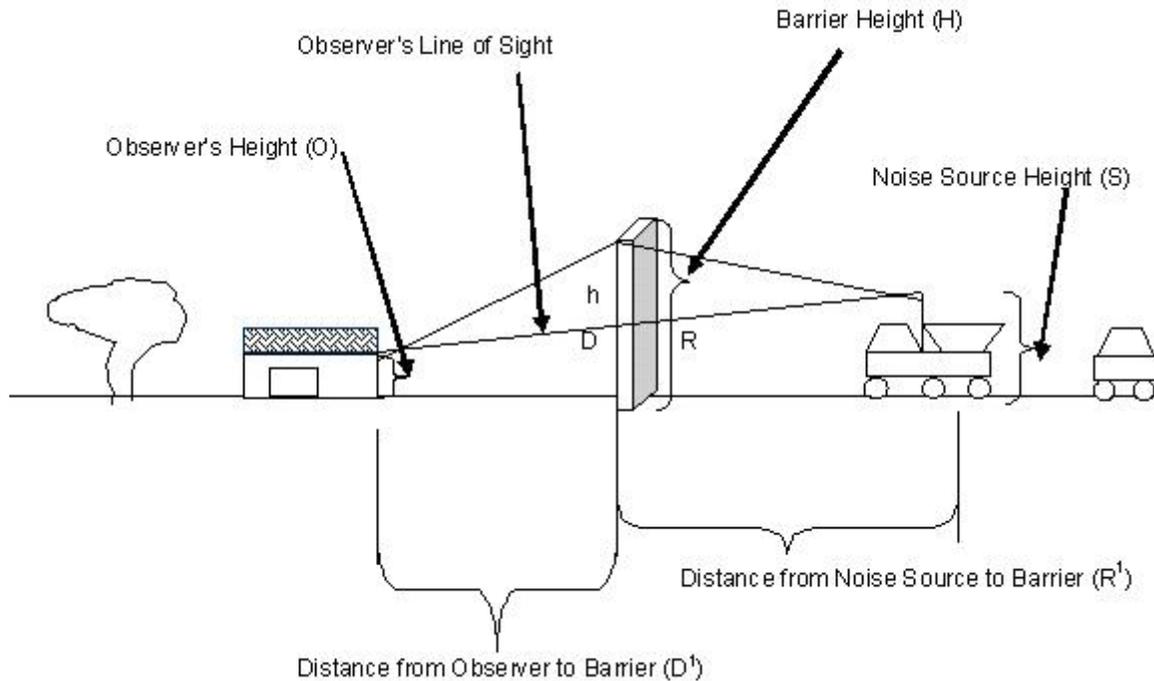
Definitions of the output variables from the mitigation module of the Day/Night Noise Level Assessment Tools as part of the Assessment Tools for Environmental Compliance:

- h = The shortest distance from the barrier top to the line of sight from the Noise source to

the Observer.

- R = Slant distance along the line of sight from the Barrier to the Noise Source
- D = Slant distance along the line of sight from the Barrier to the Observer

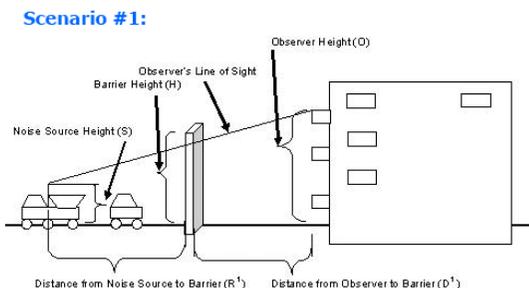
The “actual barrier performance for barriers of finite length” is noted on the worksheets(in the Guidebook) as **FS**.



Barrier Implementation Scenarios

Locate the cursor on the following thumbnails to enlarge the respective scenario as implementation examples of the barrier performance module.

Scenario #1:



Noise receiver at a higher elevation than the noise source and a man-made noise barrier in between the receiver and the source.

Noise receiver at a higher elevation than the noise source and a man-made noise barrier in between the receiver and the source.

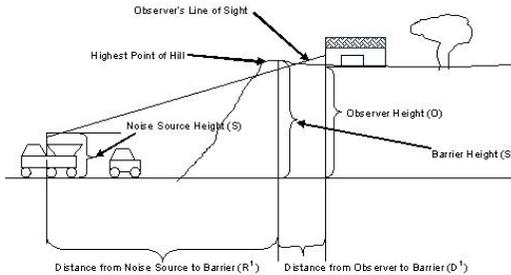
(<https://www.hudexchange.info/resources/documents/Barrier-Performance-Module-Barrier-Implementation-Scenario-1.gif>)

view larger version of image (/resource/3841/barrier-performance-module-bpm-barrier-

implementation-scenarios/

Scenario #2:

Scenario #2:



Noise receiver at a higher elevation than the noise source and a natural barrier (hill) between the receiver and the source.

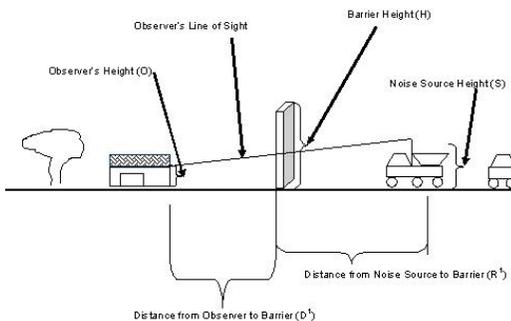
Noise receiver at a higher elevation than the noise source and a natural barrier (hill) between the receiver and the source.

(<https://www.hudexchange.info/resources/documents/Barrier-Performance-Module-Barrier-Implementation-Scenario-2.gif>)

view larger version of image (/resource/3841/barrier-performance-module-bpm-barrier-implementation-scenarios/)

Scenario #3:

Scenario #3:



Noise receiver at almost the same elevation of the noise source and a man-made noise barrier between the receiver and the source.

Noise receiver at almost the same elevation of the noise source and a man-made noise barrier between the receiver and the source.

(<https://www.hudexchange.info/resources/documents/Barrier-Performance-Module-Barrier-Implementation-Scenario-3.gif>)

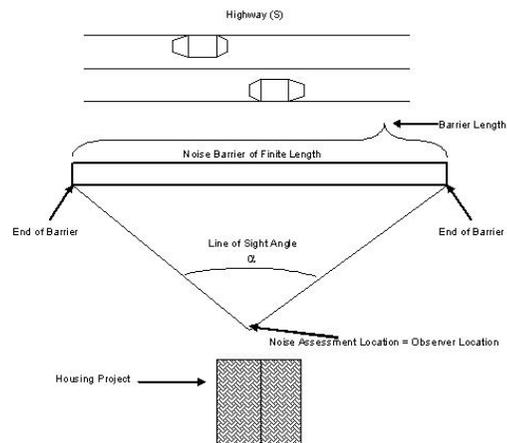
view larger version of image (/resource/3841/barrier-performance-module-bpm-barrier-implementation-scenarios/)

Scenario #4:

Scenario #4:

A noise barrier of finite length between a noise source and a receiver. This top view illustrates the angle α ,

subtended by the barrier at the



A noise barrier of finite length between a noise source and a receiver. This top view illustrates the angle α , subtended by the barrier at the observer's location.

observer's location.

(<https://www.hudexchange.info/resources/documents/Barrier-Performance-Module-Barrier-Implementation-Scenario-4.gif>)

view larger version of image (/resource/3841/barrier-performance-module-bpm-barrier-implementation-scenarios/)

Contents

Calculator

Input/Output Variables

Barrier Implementation Scenarios

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > BPM Calculator

Barrier Performance Module

This module provides to the user a measure on the barrier's effectiveness on noise reduction. A list of the input/output variables and their definitions, as well as illustrations of different scenarios are provided.

Calculator

[View Day/Night Noise Level Calculator \(/programs/environmental-review/dnl-calculator/\)](#)

[View Descriptions of the Input/Output variables.](#)

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the Input and Output variables with the mouse.

WARNING: If there is direct line-of-sight between the Source and the Observer, the module will report erroneous attenuation. "Direct line-of-sight" means if the 5' tall Observer can see the noise Source (cars, trucks, trains, etc.) over the Barrier (wall, hill/excavation, building, etc.), the current version of Barrier Performance Module will not accurately calculate the attenuation provided. In this instance, there is unlikely to be any appreciable attenuation.

Road/Rail Site DNL:

Note: Barrier height must block the line of sight

Input Data

H	<input type="text" value="65"/>	R¹	<input type="text" value="45"/>
S	<input type="text" value="22"/>	D¹	<input type="text" value="10"/>
O	<input type="text" value="21"/>	α	<input type="text" value="175"/>

[Calculate Output](#)

Output Data

h	<input type="text" value="44"/>	R	<input type="text" value="44"/>
D	<input type="text" value="11"/>	FS	<input type="text" value="17.0867"/>

New Site DNL:

Note: If you have separate Road and Rail DNL values, please enter the values below to calculate the new site DNL:

Road DNL:**Rail DNL:****Combined New Site DNL:**

Input/Output Variables

Input Variables

The following variables and definitions from the barrier being assessed are the input required for the web-based barrier performance module:

- H = Barrier Height
- S = Noise Source Height
- O = Observer Height (known as the receiver)
- R^1 = Distance from Noise Source to Barrier
- D^1 = Distance from the Observer to the Barrier
- α = Line of sight angle between the Observer and the Noise Source, subtended by the barrier at observer's location

Output Variables

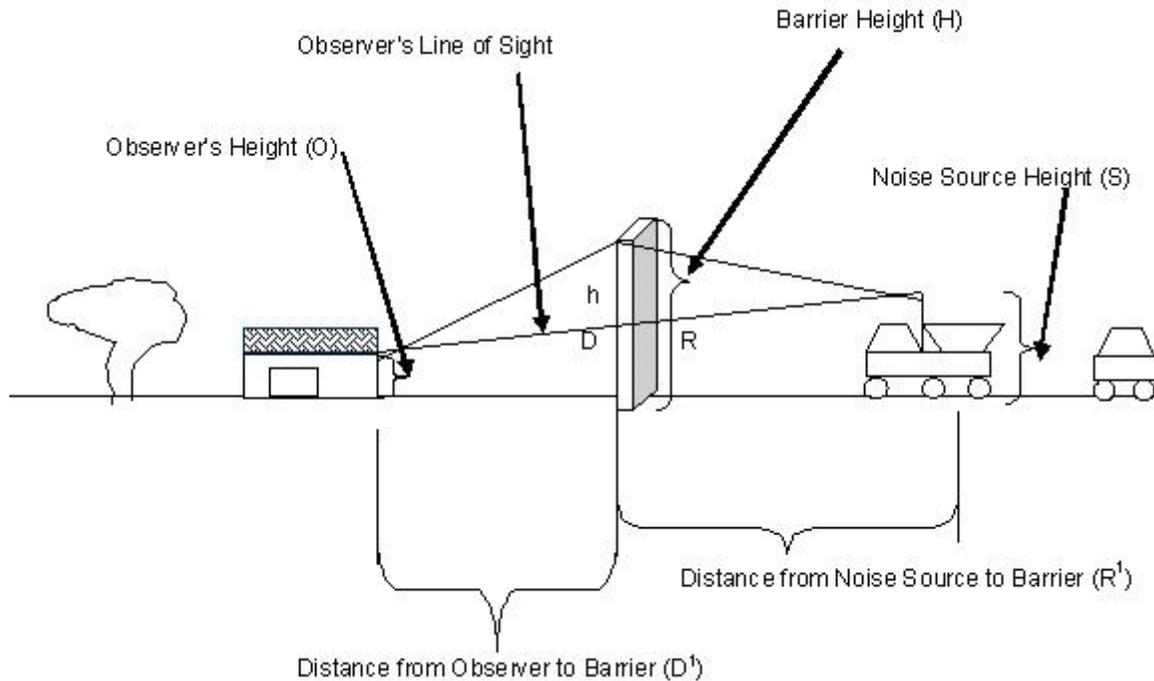
Definitions of the output variables from the mitigation module of the Day/Night Noise Level Assessment Tools as part of the Assessment Tools for Environmental Compliance:

- h = The shortest distance from the barrier top to the line of sight from the Noise source to

the Observer.

- R = Slant distance along the line of sight from the Barrier to the Noise Source
- D = Slant distance along the line of sight from the Barrier to the Observer

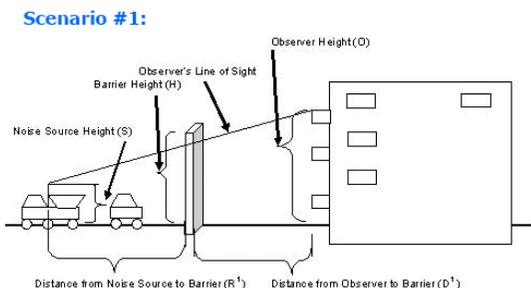
The “actual barrier performance for barriers of finite length” is noted on the worksheets(in the Guidebook) as **FS**.



Barrier Implementation Scenarios

Locate the cursor on the following thumbnails to enlarge the respective scenario as implementation examples of the barrier performance module.

Scenario #1:



Noise receiver at a higher elevation than the noise source and a man-made noise barrier in between the receiver and the source.

Noise receiver at a higher elevation than the noise source and a man-made noise barrier in between the receiver and the source.

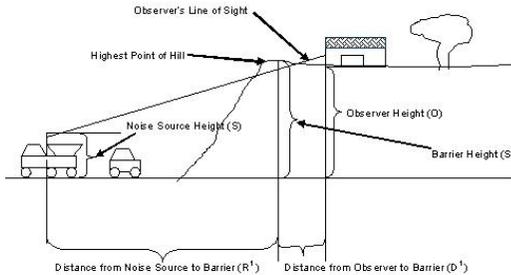
(<https://www.hudexchange.info/resources/documents/Barrier-Performance-Module-Barrier-Implementation-Scenario-1.gif>)

view larger version of image (/resource/3841/barrier-performance-module-bpm-barrier-

implementation-scenarios/

Scenario #2:

Scenario #2:



Noise receiver at a higher elevation than the noise source and a natural barrier (hill) between the receiver and the source.

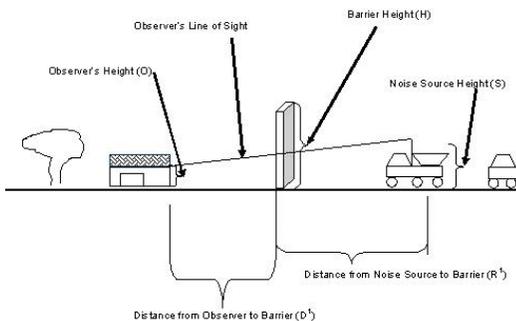
Noise receiver at a higher elevation than the noise source and a natural barrier (hill) between the receiver and the source.

(<https://www.hudexchange.info/resources/documents/Barrier-Performance-Module-Barrier-Implementation-Scenario-2.gif>)

view larger version of image (/resource/3841/barrier-performance-module-bpm-barrier-implementation-scenarios/)

Scenario #3:

Scenario #3:



Noise receiver at almost the same elevation of the noise source and a man-made noise barrier between the receiver and the source.

Noise receiver at almost the same elevation of the noise source and a man-made noise barrier between the receiver and the source.

(<https://www.hudexchange.info/resources/documents/Barrier-Performance-Module-Barrier-Implementation-Scenario-3.gif>)

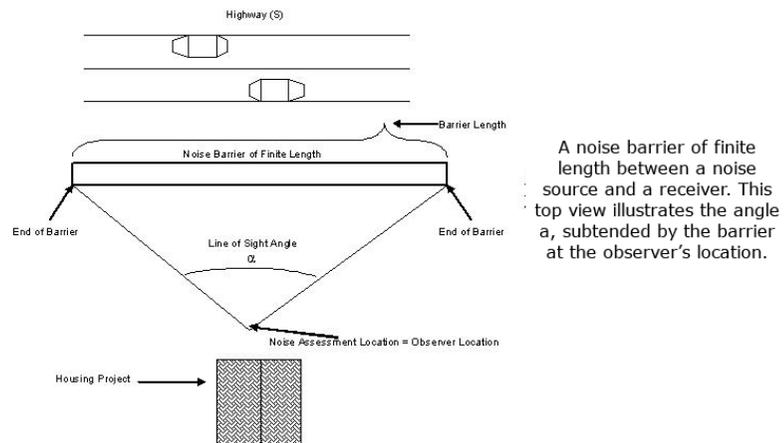
view larger version of image (/resource/3841/barrier-performance-module-bpm-barrier-implementation-scenarios/)

Scenario #4:

Scenario #4:

A noise barrier of finite length between a noise source and a receiver. This top view illustrates the angle α ,

subtended by the barrier at the



observer's location.

A noise barrier of finite length between a noise source and a receiver. This top view illustrates the angle α , subtended by the barrier at the observer's location.

(<https://www.hudexchange.info/resources/documents/Barrier-Performance-Module-Barrier-Implementation-Scenario-4.gif>)

view larger version of image (/resource/3841/barrier-performance-module-bpm-barrier-implementation-scenarios/)

Contents

Calculator

Input/Output Variables

Barrier Implementation Scenarios

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > BPM Calculator

Barrier Performance Module

This module provides to the user a measure on the barrier's effectiveness on noise reduction. A list of the input/output variables and their definitions, as well as illustrations of different scenarios are provided.

Calculator

[View Day/Night Noise Level Calculator \(/programs/environmental-review/dnl-calculator/\)](#)

[View Descriptions of the Input/Output variables.](#)

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the Input and Output variables with the mouse.

WARNING: If there is direct line-of-sight between the Source and the Observer, the module will report erroneous attenuation. "Direct line-of-sight" means if the 5' tall Observer can see the noise Source (cars, trucks, trains, etc.) over the Barrier (wall, hill/excavation, building, etc.), the current version of Barrier Performance Module will not accurately calculate the attenuation provided. In this instance, there is unlikely to be any appreciable attenuation.

Road/Rail Site DNL:

Note: Barrier height must block the line of sight

Input Data

H	<input type="text" value="70"/>	R¹	<input type="text" value="45"/>
S	<input type="text" value="22"/>	D¹	<input type="text" value="10"/>
O	<input type="text" value="70"/>	α	<input type="text" value="175"/>

[Calculate Output](#)

Output Data

h	<input type="text" value="6"/>	R	<input type="text" value="72"/>
D	<input type="text" value="7"/>	FS	<input type="text" value="13.7736"/>

New Site DNL:

Note: If you have separate Road and Rail DNL values, please enter the values below to calculate the new site DNL:

Road DNL:**Rail DNL:****Combined New Site DNL:**

Input/Output Variables

Input Variables

The following variables and definitions from the barrier being assessed are the input required for the web-based barrier performance module:

- H = Barrier Height
- S = Noise Source Height
- O = Observer Height (known as the receiver)
- R^1 = Distance from Noise Source to Barrier
- D^1 = Distance from the Observer to the Barrier
- α = Line of sight angle between the Observer and the Noise Source, subtended by the barrier at observer's location

Output Variables

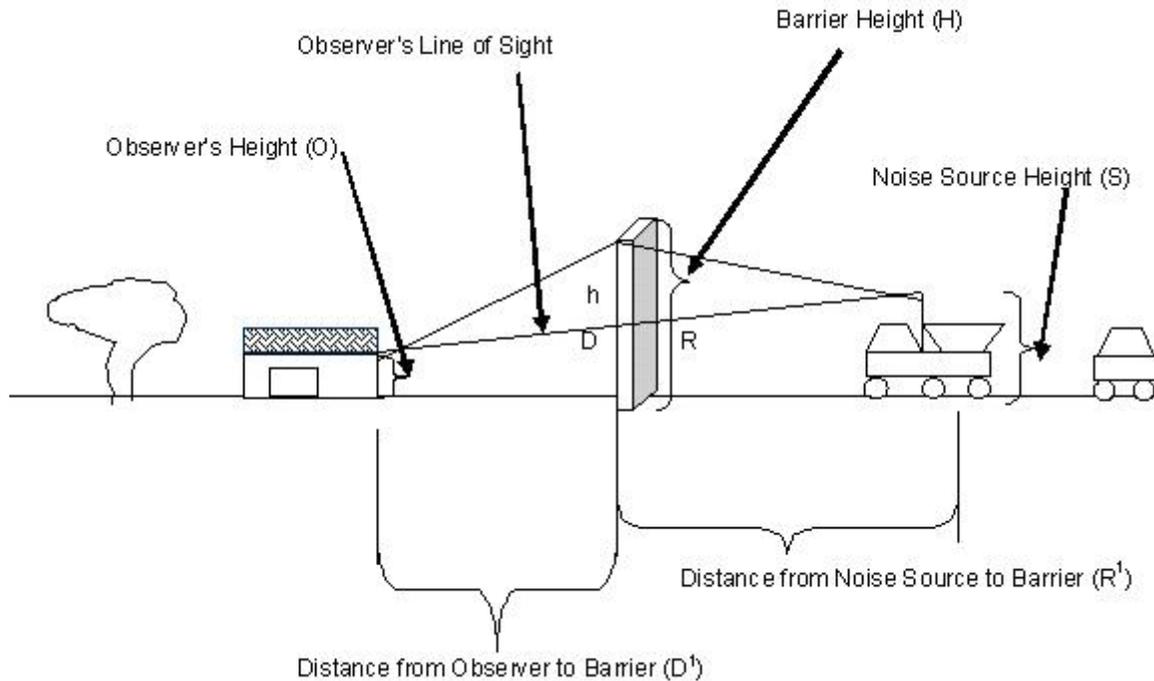
Definitions of the output variables from the mitigation module of the Day/Night Noise Level Assessment Tools as part of the Assessment Tools for Environmental Compliance:

- h = The shortest distance from the barrier top to the line of sight from the Noise source to

the Observer.

- R = Slant distance along the line of sight from the Barrier to the Noise Source
- D = Slant distance along the line of sight from the Barrier to the Observer

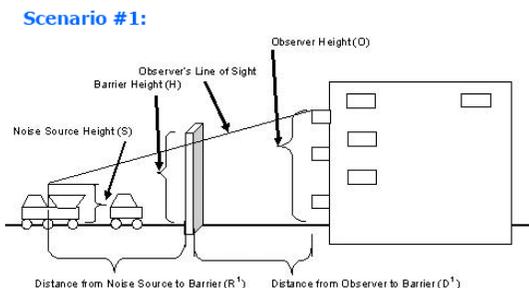
The “actual barrier performance for barriers of finite length” is noted on the worksheets(in the Guidebook) as **FS**.



Barrier Implementation Scenarios

Locate the cursor on the following thumbnails to enlarge the respective scenario as implementation examples of the barrier performance module.

Scenario #1:



Noise receiver at a higher elevation than the noise source and a man-made noise barrier in between the receiver and the source.

Noise receiver at a higher elevation than the noise source and a man-made noise barrier in between the receiver and the source.

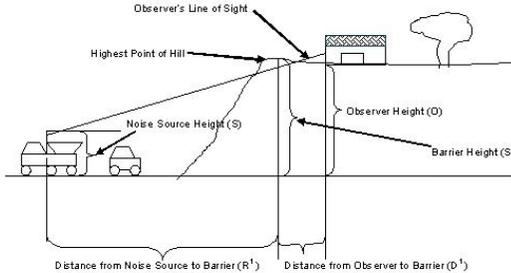
(<https://www.hudexchange.info/resources/documents/Barrier-Performance-Module-Barrier-Implementation-Scenario-1.gif>)

view larger version of image (/resource/3841/barrier-performance-module-bpm-barrier-

implementation-scenarios/

Scenario #2:

Scenario #2:



Noise receiver at a higher elevation than the noise source and a natural barrier (hill) between the receiver and the source.

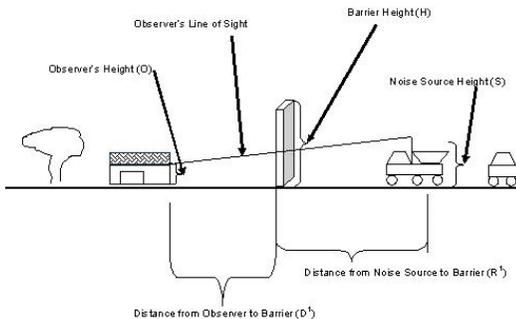
Noise receiver at a higher elevation than the noise source and a natural barrier (hill) between the receiver and the source.

(<https://www.hudexchange.info/resources/documents/Barrier-Performance-Module-Barrier-Implementation-Scenario-2.gif>)

view larger version of image (/resource/3841/barrier-performance-module-bpm-barrier-implementation-scenarios/)

Scenario #3:

Scenario #3:



Noise receiver at almost the same elevation of the noise source and a man-made noise barrier between the receiver and the source.

Noise receiver at almost the same elevation of the noise source and a man-made noise barrier between the receiver and the source.

(<https://www.hudexchange.info/resources/documents/Barrier-Performance-Module-Barrier-Implementation-Scenario-3.gif>)

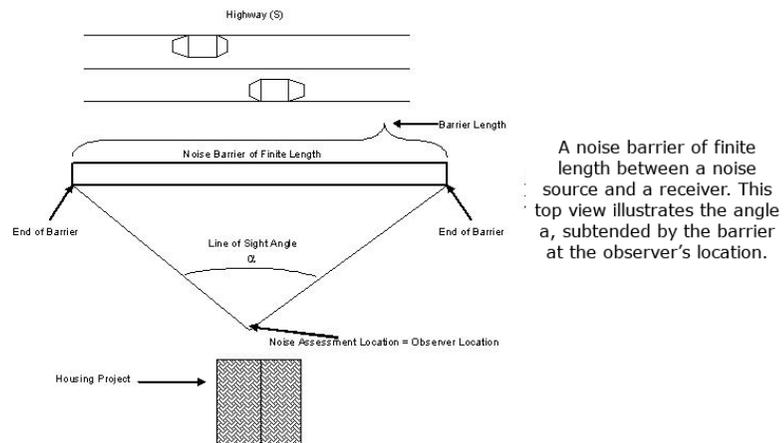
view larger version of image (/resource/3841/barrier-performance-module-bpm-barrier-implementation-scenarios/)

Scenario #4:

Scenario #4:

A noise barrier of finite length between a noise source and a receiver. This top view illustrates the angle α ,

subtended by the barrier at the



observer's location.

A noise barrier of finite length between a noise source and a receiver. This top view illustrates the angle α , subtended by the barrier at the observer's location.

(<https://www.hudexchange.info/resources/documents/Barrier-Performance-Module-Barrier-Implementation-Scenario-4.gif>)

view larger version of image (/resource/3841/barrier-performance-module-bpm-barrier-implementation-scenarios/)

Contents

Calculator

Input/Output Variables

Barrier Implementation Scenarios

Appendix O

**Kittelson and Associates Inc.
Preliminary Trip Generation Assessment, April 19, 2016**



KITTELSON & ASSOCIATES, INC.

TRANSPORTATION ENGINEERING / PLANNING

610 SW Alder Street, Suite 700, Portland, OR 97205 P 503.228.5230 F 503.273.8169

April 19, 2016

Project #: 20050

Scott Gregory
Lamphier-Gregory
1944 Embarcadero
Oakland, CA 94606

RE: 7th and Campbell Mixed Use Project, Preliminary Trip Generation Assessment - Draft

Dear Mr. Gregory,

Oakland and the World Enterprises has proposed construction a mixed-use development on a 0.71 acre site located near the intersection of 7th Street and Campbell Street in West Oakland (herein referred to as the "Project"). The development would include publicly accessible retail and commercial space, and 79 residential units (including 23 studio units, 24 one-bedroom units, and 32 two-bedroom units) of affordable housing. The Project site is bounded by Campbell Street to the east, single-family residential to the north, mixed use commercial and residential to the west (Slim Jenkins Court), and 7th Street to the south. The site covers the southeast corner of the block bound by Willow Street, 8th Street, Campbell Street, and 7th Street, and is currently in temporary use as a productive urban farm, called West Oakland Farms, which sells organic produce to local restaurants. The site is identified as Opportunity Site 31 within Opportunity Area 2 (7th Street) in the *West Oakland Specific Plan (WOSP)* and evaluated in the *WOSP EIR* (certified June 2014). The proposed site plan is shown in *Appendix A*.

Based on guidance provided by City of Oakland staff on previous analyses for similar developments in the West Oakland area, the following assessment focuses on a preliminary trip generation and distribution estimate and a site plan evaluation focusing on access and circulation for all modes. The following sections summarize the findings of our assessment.

TRIP GENERATION AND DISTRIBUTION

Trip Generation

The trip generation estimates were developed for the Project based on the trip rates provided in the *Institute of Transportation Engineer's (ITE) Trip Generation Manual, 9th Edition (2012) (Trip Generation Manual)* and using methods consistent with the *City of Oakland Transportation Impact Study (TIS) Guidelines (2013) (TIS Guidelines)*. The trip generation comparisons for the daily, weekday AM peak hour and weekday PM peak hour are provided in Table 1, below.

Table 1: Vehicle Trip Generation Estimate

Land Use	ITE Code	Units	Weekday Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
				In	Out	Total	In	Out	Total
General Office	710	8.85 KSF	98	12	2	14	2	12	14
Gym/Fitness	492	4.25 KSF	140	3	3	6	9	7	16
Restaurant (High-Turnover)	932	2.8 KSF	357	17	14	31	17	11	28
General Retail	820	3.5 KSF	150	2	2	4	6	7	13
Residential (Apartment)	220	79 DU	526	8	33	41	32	17	49
<i>Non-Auto Reduction (-43.0%)¹</i>			-545	-16	-23	-39	-26	-24	-50
New Vehicle Trips			726	26	31	57	40	30	70

Source: KAI, 2015; Institute of Transportation Engineers' *Trip Generation Manual, 9th Edition*, 2012; City of Oakland's *Traffic Impact Analysis Guidelines*, 2013; Metropolitan Transportation Commission, *2000 Bay Area Travel Survey*, 2000.

1 The *TIS Guidelines* shows a 43.0 percent reduction for motor vehicle trips for locations less than 0.5 miles from rail/ferry stations.

The *TIS Guidelines* presents multimodal trip generation adjustment factors to apply to the ITE trip generation to calculate the number of trips generated by the Project for each mode. These factors are based on observed travel data for Alameda County from the Metropolitan Transportation Commission's *2000 Bay Area Travel Survey*, and differentiate between proximity to rail/ferry stations and surrounding residential density (people per square mile). As the Project site is located less than 0.5 miles from a rail/ferry station (i.e., 0.3 miles from the West Oakland BART station), a factor of 57.0 percent is applied to the ITE-estimated trip generation to calculate the number of new motor vehicle trips generated by the Project.

As shown in Table 1, the Project is expected to generate approximately 726 net new daily motor vehicle trips, including 57 motor vehicle trips (26 inbound, 31 outbound) during the weekday AM peak hour, and 70 motor vehicle trips (40 inbound, 30 outbound) during the weekday PM peak hour. It should be noted that the site is currently in use as a productive urban farm, and in order to present a more conservative trip generation estimate, no trip generation reduction factors have been applied for existing uses or for pass-by and diverted trips.

Trip Distribution and Assignment

The site-generated motor vehicle trips shown in Table 1 were distributed onto the roadway network based on existing travel patterns and the locations of major trip origins and destinations in the Oakland area. The following approximate trip distribution was assumed for the motor vehicle trips:

- 45 percent to and from the San Francisco area in the west via Frontage Road to Grand Avenue,
- 25 percent to and from downtown Oakland in the southeast via Peralta Street to Grand Avenue, and 7th Street to Broadway,
- 10 percent to and from CA-24 to the north via Frontage Road to I-580, and 7th Street to I-980,

- 10 percent to and from I-880 to the south at Frontage Road and 7th Street, and
- 10 percent would come to and from the north via Adeline Street and Mandela Parkway.

Based on this proposed trip distribution pattern, the trips generated by the Project were assigned to the nearby study intersections during the weekday AM and weekday PM peak hours.

WOSP EIR Study Intersections and 7th and Campbell Project Trips

Table 2 shows the intersections that were studied in the *WOSP EIR* and indicates the intersections that were shown to be impacted under Existing plus Project and 2035 plus Project conditions. The last column of the table shows the number of trips that would be added to the intersection by the Project.

As shown in Table 2, trips associated with the Project would be added to 20 of the 24 intersections studied in the *WOSP EIR*. There are less than 45 trips added to each intersection studied in the *WOSP EIR*.

The following intersections were identified as having an impact under the WOSP EIR 2035 plus Project Conditions:

1. Hollis Street/40th Street
 - The Project is estimated to generate 3 AM and 3 PM peak hour trips at this intersection.
 - The WOSP EIR 2035 plus Project scenario projected this intersection to have a total entering volume of 4,863 trips in the AM and 4,669 trips in the PM peak hour.
2. San Pablo Avenue/40th
 - The Project is estimated to generate 2 AM and 4 PM peak hour trips at this intersection.
 - The WOSP EIR 2035 plus Project scenario projected this intersection to have a total entering volume of 7,062 trips in the AM and 6,459 trips in the PM peak hour.
7. Mandela Parkway/West Grand Avenue
 - The Project is estimated to generate 18 AM and 20 PM peak hour trips at this intersection.
 - The WOSP EIR 2035 plus Project scenario projected this intersection to have a total entering volume of 7,092 trips in the AM and 5,239 trips in the PM peak hour.
13. Broadway/West Grand Avenue
 - The Project is estimated to generate 15 AM and 17 PM peak hour trips at this intersection.
 - The WOSP EIR 2035 plus Project scenario projected this intersection to have a total entering volume of 3,870 trips in the AM and 4,777 trips in the PM peak hour.
15. Harrison Street/West Grand
 - The Project is estimated to generate 2 AM and 4 PM peak hour trips at this intersection.
 - The WOSP EIR 2035 plus Project scenario projected this intersection to have a total entering volume of 1,304 trips in the AM and 2,300 trips in the PM peak hour.

24. Adeline Street/5th Street

- The Project is estimated to generate 0 AM and 0 PM peak hour trips at this intersection.
- The WOSP EIR 2035 plus Project scenario projected this intersection to have a total entering volume of 1,762 trips in the AM and 2,118 trips in the PM peak hour.

Relative to the projected 2035 total entering volume, the trips generated by the Project represent less than 1 percent of the 2035 total entering volume in the AM and PM peak hours at these six intersections.

DRAFT

Table 2: WOSP EIR Impacts and 7th and Campbell Project Trips

WOSP EIR Study Intersections		WOSP EIR Existing plus Project Conditions		WOSP EIR 2035 plus Project Conditions		Trips Added by Project	
		Impact	Level of Significance	Impact	Level of Significance	AM Peak Hour	PM Peak Hour
1	Hollis Street/40th Street	PM	SU	AM and PM	SU (AM & PM)	3	3
2	San Pablo Avenue/40th Street	PM	SU	AM and PM	SU (AM & PM)	2	4
3	I-980 off-ramp/27th Street	--	--	--	--	1	2
4	I-980 on-ramp/27th Street	--	--	--	--	0	0
5	Maritime Street/West Grand Avenue	--	--	--	--	26	31
6	Frontage Road/West Grand Avenue	--	--	--	--	29	35
7	Mandela Parkway/West Grand Avenue	--	--	AM and PM	SU (AM & PM)	18	20
8	Adeline Street/West Grand Avenue	--	--	--	--	17	21
9	Market Street/West Grand Avenue	--	--	--	--	15	17
10	San Pablo Avenue/West Grand Avenue	--	--	--	--	15	17
11	Martin Luther King Jr. Way/West Grand Avenue	--	--	--	--	15	17
12	Northgate Avenue/West Grand Avenue	--	--	--	--	15	17
13	Broadway/West Grand Avenue	--	--	PM	LTS with MM	15	17
14	Harrison Street/West Grand Avenue	--	--	--	--	15	17
15	Adeline Street/18th Street	--	--	PM	LTS with MM	2	4
16	Market Street/18th Street	--	--	--	--	0	0
17	Adeline Street/14th Street	--	--	--	--	2	4
18	Adeline Street/12th Street	--	--	--	--	2	4
19	Frontage Road/7th Street	--	--	--	--	35	42
20	Mandela Parkway/7th Street	--	--	--	--	7	11
21	Adeline Street/7th Street	--	--	--	--	4	8
22	Market Street/7th Street	--	--	--	--	2	4
23	Market Street/5th Street/I-880 off-ramp	--	--	--	--	0	0
24	Adeline Street/5th Street	--	--	PM	LTS with MM	0	0

SITE PLAN EVALUATION

Appendix A shows the proposed site plan, dated March 16, 2016. The proposed site plan was analyzed for multimodal access and circulation.

Motor Vehicle Access and Circulation

Motor vehicle access to the site would be via Campbell Street. The access would be located approximately 75 feet to the north of the Campbell Street/7th Street intersection, and would lead to the on-site parking area at the rear of the building.

There is a loading space located within the Project site, which can be accessed from Campbell Street approximately 50 feet to the north of the Campbell Street/7th Street intersection. This loading space can accommodate garbage trucks and delivery vehicles.

The draft site plan shows a total of 48 parking spaces (24 regular, 24 compact) located on-site. City of Oakland Municipal Code requirements for parking are shown in Table 4. Based on the City of Oakland Municipal Code requirements for parking (Section 17.116), a minimum of 128 parking spaces are required.

Table 3: Parking Requirement

Land Use	Units	Parking Requirement	
		Code	Number Required
Residential	79 DU	1 space per dwelling units	79
Retail	3,500 sf	1 space per 400 sf	9
Restaurant	2,800 sf	1 space per 200 sf	14
Office	8,850 sf	1 space per 600 sf	15
Gym/Fitness	4,250 sf	1 space per 400 sf	11
Total		--	128

While the Project would not meet minimum parking requirements, the Project is requesting a reduced parking ratio due to its mixed use nature and its proximity to public transit opportunities. On-street parking opportunities are also provided on nearby streets (i.e., Campbell Street, 7th Street, Willow Street, and 8th Street).

Pedestrian Access and Circulation

Per the *TIS Guidelines*, 23.0 percent of the ITE-estimated trips generated would be walk trips resulting in an estimated 292 daily walk-only trips. Including walk-to-transit trips, the Project would add 678 pedestrians (292 walk-only trips, 386 walk-to-transit trips) to the surrounding street network.

Primary pedestrian accesses to the site would be provided via the 7th Street frontage (two entrances for the commercial uses and the lobby entrance for the residential units). It should be noted that 7th Street is designated as a City Route in the *WOSP*. This designation indicates the importance of pedestrian circulation and safety on this thoroughfare.

The Project would provide street trees between the sidewalk and the roadway along the site frontage on Campbell Street and 7th Street, which would improve general pedestrian conditions in the public realm. Sidewalks along the frontage range from about six feet on Campbell Street to about nine feet on 7th Street, and the existing curb ramp at the northwest corner of the Campbell Street/7th Street intersection does not meet City standards.

Bicycle Access and Circulation

Per the *TIS Guidelines*, 3.9 percent of the ITE-estimated trips rates would be bicycle trips and the Project would generate an estimated 50 daily bicycle trips.

Primary bicycle access to the site would be provided via 7th Street at the entrance to the bike parking area, adjacent to the lobby. Although no bicycle facilities are adjacent to the Project site, several existing or planned bicycle facilities are located in the vicinity. Currently, bike lanes are provided on 8th Street and on 7th Street (to the east of Peralta Street). According to the *WOSP*, the proposed bikeway network includes the installation of new bike lanes on 7th Street and on Peralta Street.

City of Oakland Municipal Code requirements for bicycle parking are shown in Table 4. Based on the City of Oakland Municipal Code requirements for bicycle parking (Section 17.117), a minimum of 23 long-term and nine short-term bicycle parking spaces are required.

Table 4: Bicycle Parking Requirement

Land Use	Units	Long-Term Bicycle Parking Requirement		Short-Term Bicycle Parking Requirement	
		Code	Number Required	Code	Number Required
Residential	79 DU	1 space per 4 units	20	1 per 20 DU (2 spaces minimum)	4
Retail (includes general retail, restaurant, and gym/fitness center)	10,820 sf	1 space per 12,000 sf (2 spaces minimum)	1	1 space per 5,000 sf (2 spaces minimum)	3
Office	8,850 sf	1 space per 10,000 sf (2 spaces minimum)	2	1 space per 20,000 sf (2 spaces minimum)	2
Total		--	23	--	9

Based on a review of the draft site plan, the Project would provide 84 long-term and 6 short-term bicycle parking spaces, and would meet City of Oakland requirements for long-term bicycle parking but not meet the requirements for short-term bicycle parking. Long-term bicycle parking will be provided in the bicycle parking area, adjacent to the lobby, and the location of the short-term parking has not yet been finalized.

Transit Access

Per the *TIS Guidelines*, 30.4 percent of the ITE-estimated trips would be transit trips resulting in an estimated 386 daily transit trips. BART and Alameda Contra-Costa Transit (AC Transit) operate local and regional transit service with transit stops located near the Project to serve these trips.

BART provides regional rail service in the San Francisco Bay Area with the nearest BART station located 0.3 miles away at the West Oakland BART station, which is served by most BART lines including the Dublin/Pleasanton-Daly City line, the Fremont-Daly City line, the Pittsburg/Bay-point-Millbrae line, and the Richmond-Millbrae line.

AC Transit provides local and regional transit service and operates in Western Alameda and Contra Costa Counties and provides Transbay service to San Francisco. The nearest AC Transit stop (served by lines 26, 314 and 800) is across the street from the Project site on 7th Street. The following three AC Transit lines have stops within one mile of the site:

- Line 26 passes through West Oakland as it connects Emeryville to the Lakeshore and Trestle Glen neighborhoods in Oakland. The nearest stops are located across the street from the Project site along 7th Street and 300 feet west of the Project site at the northwest corner of Willow Street/7th Street. Line 26 operates from approximately 6:00 AM to 10:30 PM on the weekdays, with approximately 20-minute headways during the AM and PM peak hours and approximately 30-minute headways during the off-peak periods. On weekends, the hours of operations are the same and the headways are 30-minutes throughout the day.
- Line 31 passes through West Oakland as it connects the MacArthur, West Oakland, and 12th Street BART stations and continues through the Webster/Posey Tube to Alameda City Hall West in the City of Alameda. The nearest stop is located 400 feet east of the Project site at the northeast corner of Peralta Street/7th Street. Line 31 operates from approximately 5:45 AM to 11:00 PM on the weekdays, with approximately 30-minute headways all day. On weekends, Line 31 operates from approximately 5:30 AM to 11:30 PM with 30-minutes headways throughout the day.
- Line 314 passes through West Oakland as it connects the West Oakland and 12th Street BART stations, continues through the Webster/Posey Tube to the City of Alameda, and continues on Doolittle Drive to near the Oakland International Airport. Line 314 operates one bus in each direction per day, with eastbound leaving at 10:30 AM and arriving at 11:12 AM, and westbound leaving at 12:50 PM and arriving at 1:34 PM. Line 314 does not operate during the weekend.
- Line 800 is an All Nighter bus that passes through West Oakland as it connects Richmond to San Francisco. The nearest stop is located across the street from the Project site along 7th Street, and serves the northbound direction (toward Richmond). The southbound direction (toward San Francisco) does not stop near the Project site. Line 800 operates from

approximately 1:30 AM to 5:30 AM, with one-hour headways. On weekends, Line 800 operates from approximately 1:10 AM to 7:30 AM with 20-minute headways.

The *WOSP* and *Emeryville Berkeley Oakland Transit Study (EBOTS)* identify several recommendations which would improve transit service in the vicinity of the Project site. Planned/proposed improvements include an enhanced bus trunkline which is designed as a north-south route linking the cities of Oakland, Berkeley, and Emeryville. This route would connect transportation hubs (e.g., West Oakland BART station and Emeryville Amtrak) with frequent service. Both documents recommend upgrades to existing transit stops (e.g., seating, shelters, bike racks, lighting, and other amenities) to increase comfort and convenience for transit users. Additionally, the *WOSP* recommends a future transit link (i.e., "The O") be evaluated in a "transit needs study", to be undertaken by the City of Oakland in conjunction with AC Transit, BART, and other public stakeholders. This new transit link is envisioned as a community service provided through a collaboration of existing transit providers, with service similar to the Emery-Go-Round and Broadway "Free B". These enhancements would improve transit for all residents, employees, and visitors traveling to, from, and within West Oakland.

In addition, the proposed AC Transit Service Expansion Plan (SEP) shows the new route for Line 14 14th/High (identified as L17 in the SEP) running along 7th Street, between the West Oakland BART station and Wood Street, serving the Project site. Service on Line 14 (L17) is to operate from 6:00 AM to 10:00 PM with 15-minute headways, during both peak- and off-peak periods. Implementation of this change to Line 14 is expected to roll out with the rest of the SEP in spring of 2016. *Appendix B* shows the proposed route for Line 14.

The Project does not propose to change transit service to the area. Due to this expected increase in ridership generated by the Project (i.e., 386 daily trips, 29 AM peak hour trips and 36 PM peak hour trips), the Project is not expected to result in overcrowding on individual AC Transit lines or at nearby transit stops.

SUMMARY OF FINDINGS

Based on this assessment, the Project would generate 726 weekday daily vehicle trips, 57 weekday AM peak hour vehicle trips, and 70 weekday PM peak hour vehicle trips. Overall, the Project would add a maximum of 45 vehicle-trips to intersections studied in the *WOSP EIR* and would represent less than 1 percent of peak hour traffic volumes at the significantly impacted intersections identified in the *WOSP EIR*. For other modes, the Project would generate 386 daily transit trips, 50 daily bicycle trips, and 292 daily walk and other trips.

We hope that this letter has provided sufficient information regarding trip generation and the site plan review for the 7th and Campbell Project. Please do not hesitate to contact us with questions.

Sincerely,
KITTELSON & ASSOCIATES, INC.



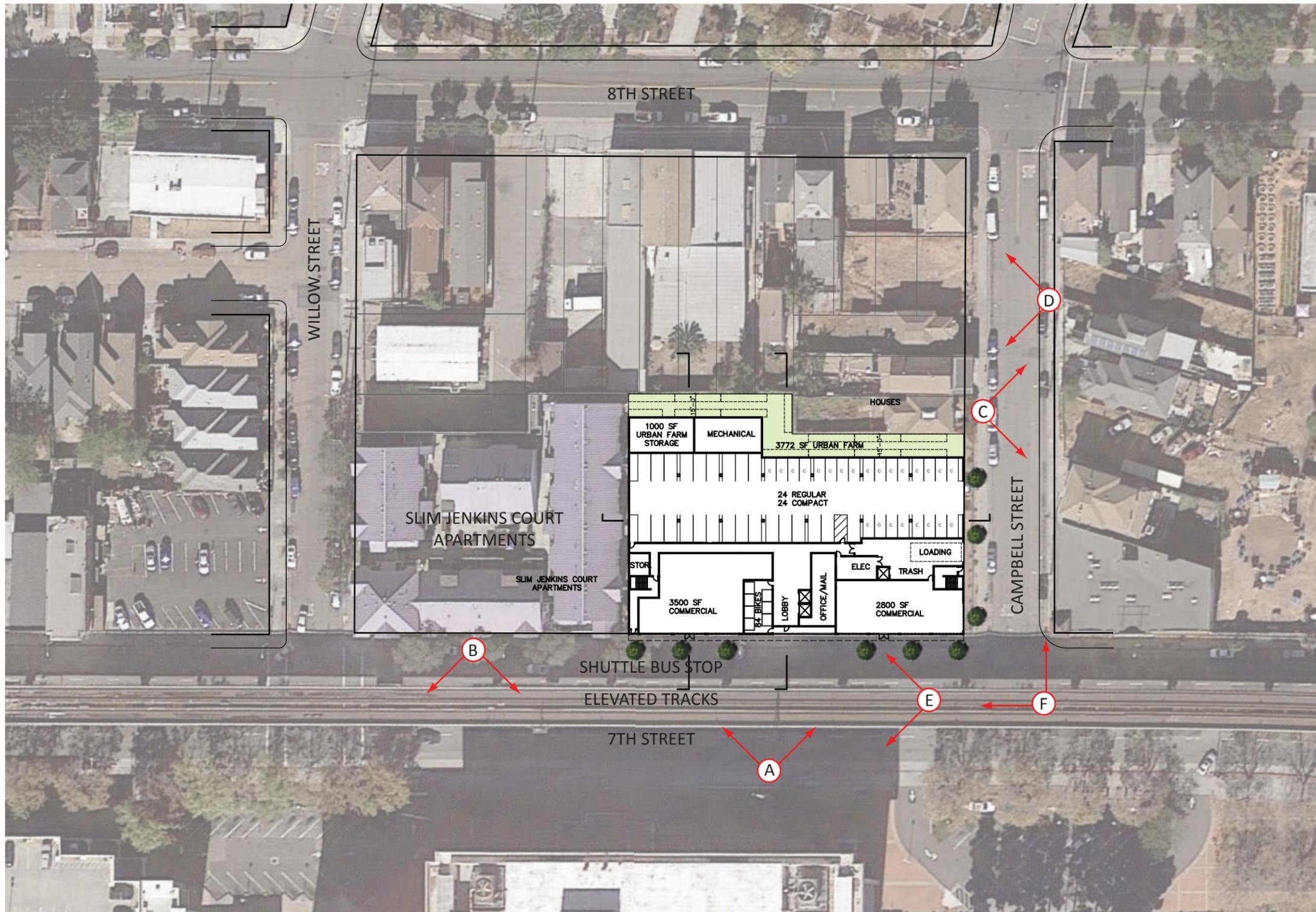
Aaron Elias
Senior Engineer

Ribeka Toda
Transportation Analyst

DRAFT

DRAFT

Appendix A
Site Plan



SITE PLAN WITH LOCAL CONTEXT



Site Area
31,114 sf (0.714 acres)

Zoning
CC-2 / 45'

Building Footprint: 27,342 sf
79 units
4,250 sf general retail
15,150 Commercial

Density
1 unit per 450 sf + 35% affordable housing bonus
*Max FAR: 24,000 sf of nonresidential space reduces maximum number of units by 29 units
64 units permitted (11 units/acre)
79 units proposed (84 units/acre)

Height Limit: 45'
Buildings above 30' must step back from inner line of yard at 1:1 when adjoining R zones.

Open Space
150 sf of common open space per unit required

9000 sf of common open space required
16,000 sf of common open space provided
2,000 sf of private open space provided
(Private open space counted at 2x actual sf)
18,000 sf open space provided

Parking
0.5 space per unit for affordable housing
1 space per 400 sf for general retail
1 space per 1000 sf for agriculture
101 spaces required

48 spaces provided (Affordable Housing Concession 2)

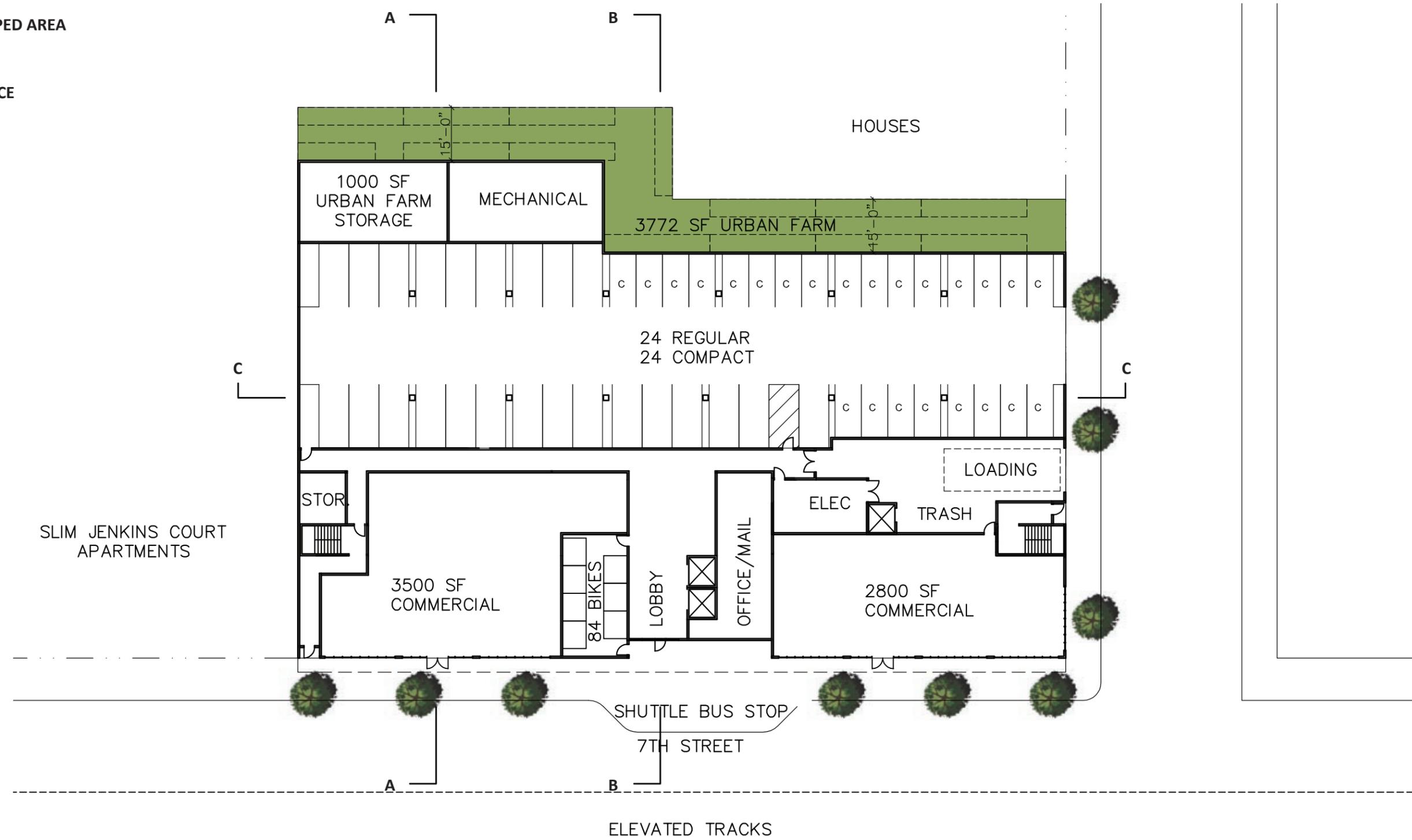
Bike Parking Required long term:
1 space per 4 units
1 space per 12,000 sf retail (2 spaces minimum)
1 space per 15,000 agriculture (2 spaces minimum)
Total required: 24

Required short term:
1 space per 20 units
1 spacer per 5000 sf retail (2 spaces minimum)
Total required: 6

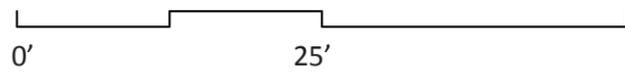
Total Provided: 84 Long Term, 6 Short Term

Unit Mix
422 sf Studios: 23 (23.3%)
517sf 1BR flats: 24 (23.3%)
822 sf 2BR flats: 32 (45.0%)
Total Units: 79

0% 3BR Units



GROUND FLOOR LANDSCAPE PLAN



March 16, 2016

DRAFT

7th and Campbell
 Oakland and the World Enterprises, INC.
 1676 7th Street
 Oakland, California



DRAFT

Appendix B Proposed AC Transit
Service Expansion Plan, Line 17

L17 14th/High West Oakland - Fruitvale

Peak Headway	Base Headway	Span
15	15	6:00 am
		10:00 pm

Activity Centers:

- Downtown Oakland
- Laurel District
- Fruitvale Transit Village

Major Transit Hub Connections:

- W. Oakland BART
- 12th Street BART
- Fruitvale BART

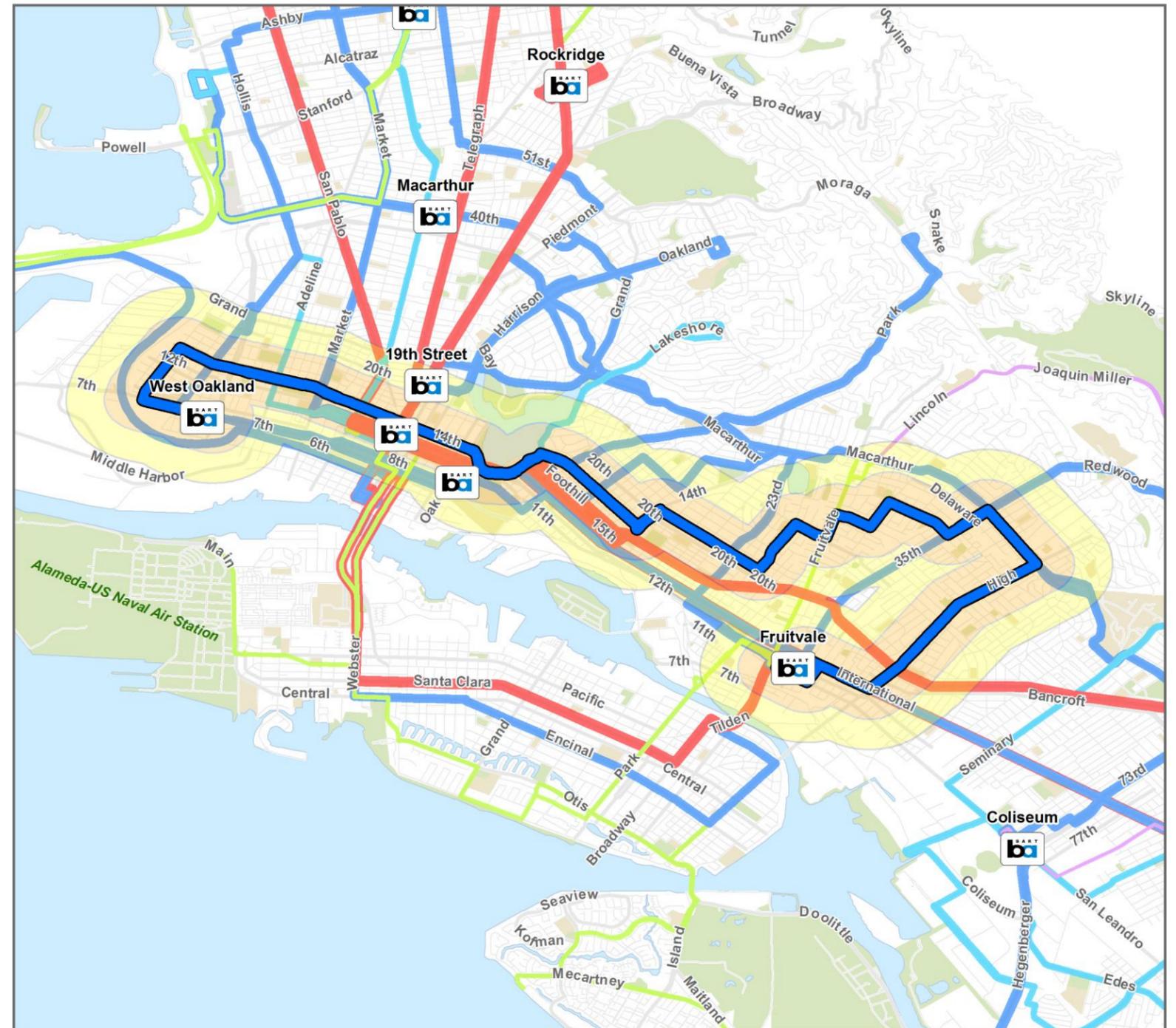
Frequent Network Connections:

- Ashby (L21)
- International Local (M7)*
- International Rapid (R2)*
- Macarthur (M5)
- Oakland/Park (L16)
- Shattuck/Solano (L20)
- Telegraph (M6)
- University (L18)
- 40 Foothill
- 51A Broadway/Santa Clara
- 54 35th Av
- 62 7th St/23rd Av
- 72M San Pablo/Macdonald
- 72R San Pablo Rapid
- 88 Sacramento

**Replaced by International Bus Rapid Transit (BRT), 2017*

North/East Route: Fruitvale BART, L 33rd, L San Leandro St, L High, L Macarthur, L 35th, R School, L Coolidge, R Brookdale, L Fruitvale, R E 27th Ave, L 25th Ave, R E. 21st St, L 14th Ave, R E.18th St, L Lakeshore, Into 1st Ave, Into 12th St Dam, R Into 14th St, L Wood, L 7th St, R Chester, L BART Roadway To W. Oakland BART

South/West Route: W. Oakland BART, L Mandela, L 7th St, R Wood, R 14th St, Into 12th St Dam, L 1st Ave, Into Lakeshore Ave, R E.18th St, L 14th Ave, R E.21st St, L 25th Ave, R E.27th St, L Fruitvale, R Brookdale, L Coolidge, R School, L35th Ave, R Macarthur, R High, R San Leandro St, R 35th Ave, Into Fruitvale BART



Bus every __ minutes

- 5 - 8
- 10 - 12
- 15
- 20
- 30
- 40 - 60

Distance from Bus Line

- 1/4 mile
- 1/2 mile

0 0.5 1 2 Miles



Created by AC Transit
June 2, 2015