LMC

A Lennar Company

Friday, August 24, 2018

Karel Detterman, PG
Senior Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

Re: Updated Site Summary Report
Lennar Multifamily Communities (LMC)
1750 Webster Street, 1810 Webster Street, and 301 19th Street, Oakland, California
Site Cleanup Program Case RO0003229 and GeoTracker Global ID T0000010099

Dear Ms. Detterman:

You will find enclosed one copy of the following document prepared by Apex Companies, LLC for the subject site:

- Updated Site Summary Report dated August 24, 2018

I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to the State Water Board's GeoTracker website.
Should you have any questions, please do not hesitate to contact me at (415) 975-4991.

Sincerely:

DocuSigned by:
Tyler Wood
8E29352A4E4747B...

Tyler Wood
Development Director
Lennar Multifamily Communities

cc: Electronic File, GeoTracker
Ms. Dilan Roe, ACDEH (Sent via E-mail to: dilan.roe@acgov.org)
Ms. Ivy Inouye, Apex Companies (Sent via E-mail to: Ivy.Inouye@apexcos.com)

UPDATED SITE SUMMARY REPORT

Proposed Multifamily Development
1750 Webster Street, 1810 Webster Street, 301 19th Street
Oakland, California

APNs 008-625-016, 008-625-017; 008-625-018;
and 008-625-002-1

VRAP Case No. RO0003229
SCP No. RO0002672

093-LMC-001

Prepared For:

Lennar Multifamily Communities, LLC
492 9th Street, Suite 300
Oakland, California 94607

Prepared By:

APEX

3478 Buskirk Avenue, Suite 100
Pleasant Hill, California 94523

August 24, 2018

Katelyn Lazar
Staff Geologist

Casey Huff
Senior Staff Geologist

Ivy Inouye
Senior Toxicologist

Paisha Jorgensen, P.G.
Principal Geologist

PROFESSIONAL GEOLOGIST
PAISHA B. JORGENSEN
No. 7806
Exp. 5/31/20
STATE OF CALIFORNIA

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ACRONYMS

%	percent
mg/kg	milligram per kilogram
µg/L	microgram per liter
µg/m^3	microgram per cubic meter
ACDEH	Alameda County Department of Environmental Health
ACHCSA	Alameda County Health Care Services Agency
ACM	asbestos-containing material
AGI	Applied Geosciences, Inc.
Apex	Apex Companies, LLC
APN	Assessor's Parcel Number
ATC	ATC Associates Inc.
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
COPC	chemical of potential concern
CRA	Conestoga-Rovers & Associates
CSM	conceptual site model
CUPA	Certified Unified Program Agency
DCA	dichlorothane
DCE	dichloroethene
DRO	diesel range organics
EBMUD	East Bay Municipal Utility District
ESA	Environmental Site Assessment
ESL	Environmental Screening Level
GeoDesign	GeoDesign Inc.
GeoSolve	GeoSolve, Inc.
GPR	ground penetrating radar
GRO	gasoline range organics
HVOC	halogenated volatile organic compound
JMM	James M. Montgomery, Consulting Engineers, Inc.
LMC	Lennar Multifamily Communities, LLC
LOP	Local Oversight Program
LTCP	Low-Threat Underground Storage Tank Closure Policy
LUC	Land Use Covenant
LUST	Leaking Underground Storage Tank
MCL	maximum contaminant level
MSL	mean sea level
MTBE	methyl tert-butyl ether

ACRONYMS

OFD	Oakland Fire Department
PAH	polyaromatic hydrocarbon
Pangea	Pangea Environmental Services, Inc.
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
Q1	first quarter
Q2	second quarter
Q3	third quarter
Q4	fourth quarter
RBCA	Risk Based Corrective Action
REC	Recognized Environmental Condition
RL	reporting limit
RRO	residual range organics
RWQCB-SF	Regional Water Quality Control Board-San Francisco Bay Region
SCM	Site Conceptual Model
SCP	Site Cleanup Program
SGMP	Soil and Groundwater Management Plan
SMP	Site Management Plan
SSTL	Site Specific Target Levels
STLC	soluble threshold limit concentration
SVE	soil vapor extraction
SVOC	semivolatile organic compound
SWRCB	State Water Resources Control Board
TCE	trichloroethene
TCLP	toxicity characteristic leaching procedure
TEPHd	total extractable petroleum hydrocarbons as diesel
TEPHmo	total extractable petroleum hydrocarbons as motor oil
TMB	trimethylbenzene
TPH	total petroleum hydrocarbons
TPHd	total petroleum hydrocarbons as diesel
TPHg	total petroleum hydrocarbons as gasoline
TRPH	total recoverable petroleum hydrocarbons
USEPA	U.S. Environmental Protection Agency
UST	underground storage tank
VCAA	Voluntary Cleanup Action Agreement
Versar	Versar Inc
VOC	volatile organic compound
VRAP	Voluntary Remediation Action Program

1.0 INTRODUCTION

Apex Companies, LLC (Apex) has prepared this *Updated Site Summary Report* (Report) for the Lennar Multifamily Communities, LLC (LMC) redevelopment project located at 1750 Webster Street, 1810 Webster Street, and 301 19th Street in Oakland, California (the Project Site or Site; Figure 1-1). This Project Site is comprised of four contiguous parcels: Alameda County Assessor's Parcel Numbers (APNs) 008-625-016, 008-625-017, 008-625-018, and 008-625-002-1 (Figures 1-2 and 1-3).

Previous investigations, which have been conducted at the Site since 1991, have reported the presence of lead in soil and petroleum-related compounds and volatile organic compounds (VOCs) in soil, soil vapor, and groundwater. Therefore, prior to development, the following Site corrective actions were planned at the Site:

- Capping lead-impacted soil on Site beneath the building foundation;
- Installation of a vapor mitigation barrier in the subgrade portion of the elevator shafts; and
- Installation of trench plugs in utility trenches, where required, to prevent vapor migration.

These corrective actions will be documented in the Construction Soil and Groundwater Management Plan Compliance Report, Vapor Barrier and Utility Trench Dam Record Report of Construction, Long-Term Site Management Plan (SMP), and Land Use Covenant (LUC). Prior to building occupancy, these reports will be prepared and submitted to Alameda County Department of Environmental Health (ACDEH) for review and approval.

1.1 Objective

The objective of this Report is to summarize previous Site investigations and describe current environmental conditions at the Site to support Site closure activities and corrective actions.

1.2 Regulatory Framework

ACDEH Local Oversight Program for Hazardous Materials Releases (LOP) is the lead regulatory oversight agency for the environmental investigation and cleanup actions at the Site. A Site Cleanup Program (SCP) Number RO0002672 was historically associated with the Site in conjunction with a previously proposed redevelopment project as an aboveground, open-air parking structure which lasted from 1993 to 2000, but was not constructed. In a letter dated February 16, 2000, Alameda County Health Care Services Agency (ACHCSA), reviewed the file for the property at 1750 Webster Street in Oakland, California and determined "…groundwater pollution detected beneath the subject property [1750 Webster Street] is likely the result of the migration of pollutants in groundwater from upgradient sites." In this letter ACHCSA closed the case with specific conditions, which are described in Section 3.2.8.

In October 2016, LMC proposed a multifamily redevelopment plan for 1750 Webster Street (APN 008-625-016 and APN 008-625-017), 1801 Webster Street (APN 008-625-018), and 301 19th Street (APN 008-625-002-1) for mixed commercial and residential land use. Due to the closure conditions specified by ACHCSA (Section 3.2.8), Site conditions must be re-evaluated for land use changes. Therefore, LMC entered into a Voluntary Cleanup Action Agreement (VCAA) with ACDEH under Voluntary Remediation Action Program (VRAP) Number RO0003229.

Under this VCAA, additional Site investigations of soil, soil vapor, and groundwater were conducted. In a letter dated October 24, 2017, ACDEH conditionally approved the corrective actions and soil and groundwater management activities presented in the *Construction Soil and Groundwater Management Plan* (SGMP; GrafCon, 2017). According to the ACDEH letter dated October 24, 2017 (Appendix A), "case closure will be granted following completion and [ACDEH] approval of the technical reports and completion of corrective actions."

A record of environmental conditions at the Site (i.e., regulatory directives and correspondence, Site documents, and analytical data) may be obtained through a review of the case files for RO0002672 at ACDEH's website http://www.acgov.org/aceh/index.htm and RO0003229 at State Water Resources Control Board's (SWRCB's) GeoTracker website https://geotracker.waterboards.ca.gov (GeoTracker Global ID T0000010099).

1.3 Organization of the Report

This Report, which summarizes site background, site conditions, and findings of previous activities, consists of the following sections:

- Section 1.0 – Provides the objective of this Report, the regulatory framework, and the organization of this Report.
- Section 2.0 – Presents a description of the Site, historical, current, and future land use, surface features, regional geology and hydrogeology, and surrounding area land use.
- Section 3.0 – Presents a summary of previous soil, soil vapor, and groundwater investigation activities.
- Section 4.0 – Presents an interpretation of the hydrogeologic conditions and distribution of contaminants in soil, soil vapor, and groundwater beneath the Site (i.e., site conceptual model).
- Section 5.0 – Presents a brief summary of the report and conclusions.

References and limitations are provided in Sections 6.0 and 7.0, respectively.

2.0 SITE DESCRIPTION AND ENVIRONMENTAL SETTING

2.1 Site Description

LMC is redeveloping four contiguous parcels within downtown Oakland, California (Figures 1-2 and 1-3), at the following addresses:

- 1750 Webster Street (APN 008-625-016 and APN 008-625-017);
- 1810 Webster Street (APN 008-625-018); and
- 301 19th Street (APN 008-625-002-1).

The Site is bounded by 19th Street to the northeast, Harrison Street to the southeast, commercial property to the southwest, and Webster Street to the northwest. The LMC redevelopment project includes: (1) demolition of the existing asphalt parking lot; (2) grading and soil excavation for utilities, elevator shafts, and foundations; and (3) construction of a seven-story mixed-use commercial/retail and multi-family residential building, with the ground level consisting of building lobby, parking, retail, commercial, and mechanical/utility spaces (Figure 1-3). Multi-family residential use will be limited to upper levels of the building.

2.1.1 Historical Site Land Use

Based on available aerial photographs from 1982 to 2012 and Sanborn maps from 1889 to 1969, as presented in the Phase I Environmental Site Assessment (Phase I ESA; GeoSolve, Inc.[GeoSolve], 2015a), several uses were identified at the properties which comprise the Site.

- 1750 Webster Street (APN 008-625-016 and APN 008-625-017)
    - Year 1889: both APNs - vacant lot
    - Year 1903: APN 008-625-016 – vacant lot, APN 008-625-017 – single-family residence
    - Year 1911: both APNs - single-family residences
    - Year 1950: APN 008-625-016 – single-family residence, APN 008-625-017 – parking
    - Year 1964: both APNs - parking
- 1810 Webster Street (APN 008-625-018)
    - Year 1889: single-family residence
    - Year 1950: parking
- 301 19th Street (APN 008-625-002-1)
    - Year 1889: single-family residences
    - Year 1939: a three-pointed star shaped structure/building
    - Year 1946: a circular structure/building
    - Year 1964: parking

According to the Phase I ESA (GeoSolve, 2015a), in 1943, a former gasoline service station (Bliss M S Gasoline and Oil Service Station) was located at 1839 Harrison Street (APN 008-625-004). This address is located on the adjacent parcel, southeast of 301 19th Street (APN 008-625-002-1). In addition, the facility at 19th Street and Harrison Street was listed on the SWEEPS UST, HIST UST, and CA FID UST databases for the former presence of a 5,000-gallon gasoline underground storage tank (UST) and a 550-gallon waste oil UST. In 1991, the 5,000-gallon UST and a two stage wash-rack water clarifier were removed. A second UST (possibly a 550-gallon waste oil UST) was not discovered at the Site. The facility at 19th Street and Harrison Street was likely associated with the Bliss M S Gasoline and Oil Service Station listed at 1839 Harrison Street (GeoSolve, 2015a).

Years listed above indicate when land use changed based on historical aerial photograph or Sanborn map (GeoSolve, 2015a).

2.1.2 Current and Future Site Land Use

LMC is redeveloping the Site to include a seven-story mixed-use commercial/retail and multi-family residential building. In the future, the entire Site will be covered by the proposed building foundation. The ground level of the building will include building lobby, parking, retail, commercial, and mechanical/utility areas (Figure 1-3). Upper levels of the building will include residential use. Two elevators will be constructed to service the building occupants (Figure 1-3).

2.1.3 Historical and Current Land Use in Site Vicinity

Historical and current land use in the Site vicinity are mixed-use commercial/retail and multi-family residential (Figure 1-2). The Site is bounded to the northeast by 19th Street and commercial/retail beyond which is a 17-story commercial building (1901 Harrison Street), to the southeast by Harrison Street beyond which is a 25-story commercial building (1800 Harrison Street), to the southwest by a parking lot and multi-level building of multi-family residential and commercial/retail beyond which is a property undergoing redevelopment into a multi-level building of multi-family residential and commercial (1700-1710 Webster Street), and to the northwest by Webster Street beyond which is a parking lot and commercial/retail (1721 Webster Street). A neighborhood park, Snow Park, is located east of the Site. Beyond the park, in the downgradient direction from the Site, is Lake Merritt.

Based on a review of historical documents available on the SWRCB GeoTracker website, a Leaking Underground Storage Tank (LUST) Cleanup Site and two Cleanup Program Sites are located upgradient of the Site. The Site and general locations of the three nearby cleanup sites are shown on Figure 1-2 and described in the following sections.

2.1.3.1 1721 Webster Street, Douglas Parking Company Site

The Douglas Parking Company site is located upgradient of the Project Site towards the southwest, across Webster Street (Figure 1-2). The Douglas Parking Company site was used as an automotive fueling facility from approximately 1925 through 1992. In 1992, three gasoline USTs (one 1,000-gallon and two 500-gallon) and associated dispensers and piping were removed from the

Douglas Parking Company site. Elevated concentrations of gasoline-range hydrocarbons and benzene, toluene, ethylbenzene and xylenes (BTEX) were identified in soil and groundwater beneath the former USTs. Currently, the Douglas Parking Company site is being redeveloped.

Under ACDEH oversight, Pangea Environmental Services, Inc. (Pangea) performed site investigations, installed groundwater monitoring wells and soil vapor probes, and conducted groundwater and soil vapor monitoring. According to Pangea's *Soil Gas Sampling Report and Updated Conceptual Site Model (CSM)*, dated June 19, 2017, depth to groundwater has ranged from approximately 14 to 24 feet below ground surface (bgs) and groundwater generally flows north to northeast (Pangea, 2017a). Groundwater beneath the Douglas Parking Company site flows toward the Project Site. On October 26, 2017, Pangea destroyed 12 groundwater monitoring, air sparge, and soil gas wells at the Douglas Parking Company site (Pangea, 2017b). According to GeoTracker, the Douglas Parking Company is a LUST Cleanup Site, with a status of "completed – case closed as of 5/10/2018." Holland Partner Group (Holland) has entered into a VRAA (RO0003268) with ACDEH to provide regulatory oversight of redevelopment of the former Douglas Parking Garage.

2.1.3.2 1700-1710 Webster Street (APN 008-625-014-1), Mixed-Use Redevelopment Site

The property at 1700-1710 Webster Street is located upgradient of the Project Site towards the southwest (Figure 1-2). The property is approximately 0.56 acre in size. Historically, 1700-1710 Webster Street were first developed as residential property. By 1933, an automobile service station operated in the southwest corner of the property. By 1957, a car wash operated in the northeast corner of the property. By 1965, a two-story commercial building covered the entire property. In January 2017, this building was demolished and construction began on a multi-level mixed-use (commercial/residential) building.

Under Regional Water Quality Control Board-San Francisco Bay Region (RWQCB-SF) oversight, GeoDesign Inc. (GeoDesign) performed site investigations to assess the soil, soil vapor, and groundwater impacts. Elevated levels of petroleum hydrocarbons were identified in soil and groundwater and halogenated volatile organic compounds (HVOCs) were identified in groundwater and soil vapor. According to GeoDesign's *Groundwater Monitoring Report: October 2016*, dated November 14, 2016, depth to groundwater has ranged from approximately 20 to 23 feet bgs and groundwater generally flows to the north with occasional northwesterly and northeasterly fluctuations (GeoDesign, 2016). Groundwater beneath 1700-1710 Webster Street property flows toward the Project Site. Based on GeoDesign's response to comments on the *Groundwater Monitoring Report: October 2016* (GeoDesign, 2016), the four groundwater monitoring wells at 1700-1710 Webster Street were proposed for decommissioning prior to construction activities. According to GeoTracker, the 1700-1710 Webster Street property is a Cleanup Program Site, with a status of "open – remediation as of 4/15/2017."

2.1.3.3 1633 Harrison Street, Former Chevron Service Station 9-0020

The former Chevron Service Station is located upgradient of the Project Site to the south across 17th Street, on the southwest corner of the intersection of Harrison Street and 17th Street (Figure 1-2). Chevron operated a service station on the property until 1972. Between 1972 and 1975, the station building, two dispenser islands, one waste oil UST, and two gasoline USTs were removed. After December 1, 1975, it was used as a parking lot. In 2012, the property was redeveloped as a multi-level senior housing facility.

Since 1988, various consultants have performed site investigations to assess the soil, soil vapor, and groundwater. Elevated levels of petroleum hydrocarbons were identified in soil, soil vapor, and groundwater. Limited soil excavation was conducted in January 1992. A soil vapor extraction (SVE) system operated onsite in 1993, but showed minimal effectiveness. Between 1992 and 2011, approximately 1,414 cubic yards of hydrocarbon impacted soil were removed during remedial excavations and site redevelopment. Prior to decommissioning the groundwater monitoring wells at the former Chevron Service Station, depth to groundwater ranged from approximately 16 to 22 feet bgs and groundwater generally flowed to the east-northeast (Conestoga-Rovers & Associates [CRA], 2014). The former Chevron Service Station was evaluated for closure consistent with the SWRCB Low-Threat Underground Storage Tank Closure Policy (LTCP). On January 27, 2015, ACDEH issued a case closure letter. According to GeoTracker, the former Chevron Service Station is a LUST Cleanup Site, with a status of "completed – case closed as of 1/27/2015."

2.2 Topography, Surface Water, and Drainage

Topography at the Site slopes gradually to the northeast toward Lake Merritt (nearest surface water body), which is located approximately 800 feet northeast of the Site (Figure 1-1). The Site is relatively flat. The distance to the Oakland Inner Harbor, which leads into the San Francisco Bay, is approximately one mile southwest of the Site at its nearest point.

2.3 Regional and Local Geology and Hydrogeology

The Site is located within the Coast Range Geomorphic Province, an area characterized by north-northwest-trending mountain ranges and valleys formed by oblique compression along the San Andreas fault and associated strike-slip faults. The active trace of the right-lateral Hayward Fault is situated approximately 3.4 miles northeast of the Site.

The Site is primarily underlain by surficial fill materials, beach and dune sand deposits of the Late Pleistocene Merritt Sand, and sand-silt-clay Bay Mud deposits (Helley and Lajoie, 1979). Surficial fill materials are observed intermittently from the surface to approximately 3 feet bgs. Loose, well-sorted to poorly-sorted sands with silt are interbedded with discontinuous, fine-grained silty clays that pinch out towards the west. Schematic geologic cross-sections, the locations of which are shown on Figure 1-3, are provided in Figures 2-1 and 2-2 and are based on logged soil data from previous Site investigations. These cross-section figures include ground-level development plans,

building foundations and footings, elevator shaft locations, subsurface utility locations, and select soil, soil vapor, and groundwater data.

Groundwater historically has been encountered at the Site at depths ranging from 18.81 to 21.65 feet bgs (Table 2-1). The most recent groundwater monitoring event coordinated for onsite and offsite wells was in October 2016 (GeoDesign, 2016). Subsequent to this monitoring event, the offsite wells were destroyed (Section 3.3.7). Onsite wells A-1, A-2, and A-3 were gauged and sampled in October 2017, prior to destruction in preparation for redevelopment of the Site (Section 3.3.12).

Since the October 2016 monitoring event provides the most recent groundwater monitoring event, where data for LMC's property at 1750 Webster Street and the offsite upgradient properties at 1700-1710 Webster Street and 1721 Webster Street were collected on the same day, the October 2016 data were used in the preparation of figures illustrating the potentiometric surface (Figure 2-3). Groundwater elevations measured during the October 2016 groundwater monitoring event ranged from 5.88 feet above mean sea level (feet msl; well A-1) to 6.70 feet msl (well A-3) in Site monitoring wells with an onsite hydraulic gradient of 0.006 feet per foot (ft/ft). Local regional groundwater flow direction, based on October 2016 Site monitoring wells and nearby offsite monitoring wells associated with 1700-1710 Webster Street and 1721 Webster Street, is to the northeast with a slightly steeper hydraulic gradient of 0.01 ft/ft. The October 2016 groundwater elevation data for onsite and offsite groundwater monitoring wells are provided in the *Groundwater Monitoring Report: October 2016* (GeoDesign, 2016). Figure 2-3 depicts the potentiometric surface map based on the October 2016 data.

2.4 Groundwater Beneficial Use

According to the *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan), groundwater beneath the Site is part of the East Bay Plain Subbasin of the Santa Clara Valley Basin. The existing beneficial uses of this basin include municipal and domestic water supply, industrial process water supply, industrial service water supply, and agricultural water supply. East Bay Municipal Utility District (EBMUD) provides water for these uses to the Site and vicinity from Sierra Nevada-fed surface-water sources.

3.0 PREVIOUS SITE INVESTIGATIONS

This section describes the previous Site investigations, which have been conducted at one or more of the following addresses and APNs:

- 1750 Webster Street (APN 008-625-016 and APN 008-625-017);
- 1810 Webster Street (APN 008-625-018); and
- 301 19th Street (APN 008-625-002-1).

The contiguous addresses and APNs referenced above constitute the Site (Figure 1-3). The Site investigation summaries are presented in chronological order and reference the address(es) included in the investigation. Based on available data, each summary includes date(s) of investigation, reason for sampling, analyses performed, and conclusions on status and source of residual chemicals. The soil, soil vapor, and groundwater sample locations, former UST locations, and ground level redevelopment plan are shown on Figure 1-3, with the analytical data presented in Tables 2-2 through 2-6.

3.1 September 1991, UST Closure Report, 1833 Harrison Street (currently referred to as 301 19th Street)

According to James M. Montgomery, Consulting Engineers, Inc. (JMM), in September 1991, a 5,000-gallon UST and a two-stage wash-rack water clarifier were removed from 1833 Harrison Street in Oakland, California (JMM, 1991). The UST, wash-rack water clarifier, and tank piping were observed to be in good structural condition. At the time, the property at 1833 Harrison Street operated as a daily/hourly parking facility with no active hydrocarbon or hazardous material storage. According to the Phase I ESA (GeoSolve, 2015a), in 1943, a former gasoline service station (Bliss M S Gasoline and Oil Service Station) was located on the adjacent parcel toward the southwest at 1839 Harrison Street (APN 008-625-004). The facility at 19th Street and Harrison Street was likely associated with the Bliss M S Gasoline and Oil Service Station listed at 1839 Harrison Street (GeoSolve, 2015a).

The soil surrounding the 5,000-gallon UST and clarifier did not appear to be affected by subsurface release of hydrocarbons. Select soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and total petroleum hydrocarbons as diesel (TPHd) by United States Environmental Protection Agency (USEPA) Method 8015, BTEX by USEPA Method 8020, total lead by USEPA Method 7420, total oil and grease and total hydrocarbons by USEPA Method 5520D+F, and acid and base/neutral compounds (semivolatile organic compounds [SVOCs]) by USEPA Method 8270. Soil sample JM-01 was collected approximately 1 foot beneath the bottom of the southeast corner of the clarifier (approximately 5 feet bgs). No hydrocarbons or oil and grease were detected in the sample. Two soil samples (JM-04 and JM-05) were collected from the UST excavation, including one beneath each end of the former UST tank at approximately 15 feet bgs. One soil sample JM-06 was collected approximately 1-foot bgs at the location of the tank piping and gasoline dispenser

connections. A composite sample of the clarifier contents, JM-02, detected oil and grease, TPHd, and TPHg. The composite sample of the stockpile soil (JM-03) revealed no detectable concentrations of TPHd or BTEX. Lead was reported in the soil samples JM-04, JM-05, and JM-06 at concentrations of 4.4 milligram per kilogram (mg/kg), 10.6 mg/kg, and 8.8 mg/kg, respectively. These lead concentrations are representative of regional background concentrations of lead within the soil (JMM, 1991). Groundwater was not encountered at the Site during UST removal activities to an explored depth of approximately 18 feet bgs. No evidence of a subsurface release of hydrocarbons was found during the field activities; therefore, closure was recommended for the property at 1833 Harrison Street (JMM, 1991). This report also mentions that another smaller UST (possibly a 550-gallon waste oil tank) may be present on site. However, the smaller UST was not encountered during their field activities.

3.2 Site Cleanup Program (SCP) Number RO0002672

Site Cleanup Program (SCP) Number RO0002672 was opened in 1993 for the development of an aboveground, open-air parking structure. The parking garage was not constructed, and in February 2000 ACHCSA closed the case with specific conditions (Section 3.2.8). The site investigations described below were conducted at 1750 Webster Street (APN 008-625-016 and APN 008-625-017) and 301 19th Street, formerly known as 1833 Harrison Street (APN 008-625-002-1).

3.2.1 March 1993, Geophysical Survey and Soil and Groundwater Investigation, 1750 Webster Street and 301 19th Street

Based on recommendations presented in the *Environmental Assessment for Three Parcels Located in Oakland, California* prepared by Applied Geosciences, Inc. (AGI, 1993a), a geophysical survey was conducted at the property located at 301 19th Street in March 1993. No USTs were identified by the geophysical survey. The presence of elevated gasoline concentrations beneath the offsite facility located at 1721 Webster Street and perceived groundwater flow direction indicated that groundwater beneath the property at 1750 Webster Street may have been impacted by the release at 1721 Webster Street (AGI, 1993a). Consequently, two grab groundwater samples (HP-1 and HP-2) were collected using a Hydropunch groundwater sampling device, from screened intervals of approximately 20.5 to 24.5 feet bgs (AGI, 1993b). The groundwater sample locations were located along the eastern and southeastern portions of 1750 Webster Street. Groundwater was encountered at approximately 19 feet bgs. The groundwater samples were analyzed for TPHg and BTEX by USEPA Method 8015. TPHg concentrations of up to 200,000 microgram per liter (µg/L) were detected in groundwater. Maximum detected concentrations of BTEX were 18,000 µg/L, 24,000 µg/L, 2,900 µg/L, and 13,000 µg/L, respectively. These maximum concentrations were all detected in the groundwater sample collected at HP-1. Lower concentrations were detected in the groundwater sample collected at HP-2. AGI recommended further subsurface investigations to evaluate the source of the gasoline and petroleum hydrocarbons in groundwater (AGI, 1993b).

3.2.2 May 1993, Geophysical Survey and Soil Investigation, 1750 Webster Street

In May 1993, AGI conducted a follow-up geophysical survey and advanced four soil borings at the property located at 1750 Webster Street to further evaluate the likelihood that a source for petroleum hydrocarbons was present at the Site (AGI, 1993c). No USTs were identified by the geophysical survey. Four soil borings were advanced using a truck-mounted drill rig equipped with a 6-inch hollow-stem auger to a depth of approximately 20 feet bgs. Boring SB-1 was located near elevated gasoline concentrations detected in groundwater sample HP-1. Boring SB-2 was located in the area of a suspected former UST, in the vicinity of an asphalt patch that was interpreted to have been a potential location for a UST. Boring SB-3 was located along the southern boundary of 1750 Webster Street and boring SB-4 was located near the center of 1750 Webster Street. Based on observations during drilling activities, soil samples were collected from approximately 10 and 20 feet bgs and were analyzed for TPHg, TPHd, and BTEX by USEPA Method 8015. One soil sample from each boring was analyzed for total lead by USEPA Method 6010. Only xylenes were detected in SB3-4 at 20 feet bgs, SB4-2 at 10 feet bgs, SB4-4 at 20 feet bgs at concentrations ranging from 0.020 mg/kg to 0.057 mg/kg. AGI concluded that there was a low likelihood that USTs were present at the property located at 1750 Webster Street and that the gasoline detected in groundwater during the March 1993 investigation was likely from an offsite upgradient source (AGI, 1993c).

3.2.3 February 1998, Geophysical Survey and Soil and Groundwater Investigation, 1750 Webster Street

In February 1998, ATC Associates Inc. (ATC) performed a soil and groundwater investigation at the property located at 1750 Webster Street (ATC, 1998a). ATC conducted a more extensive geophysical survey and advanced 12 soil borings. A magnetometer geophysical survey identified four anomalies. Subsequently, a ground penetrating radar (GPR) geophysical survey was conducted and was unable to confirm the previously identified anomalies and did not detected the presence of USTs. Twelve soil borings were advanced using a Geoprobe sampling rig. Two soil samples were collected from each boring and analyzed for TPHg by USEPA Method 8015M and BTEX and methyl tert-butyl ether (MTBE) by USEPA Method 8020. One groundwater sample was collected from each boring and analyzed for TPHg by USEPA Method 8015M, and BTEX and MTBE by USEPA Method 8020. From five borings, a groundwater sample was collected and analyzed for HVOCs by USEPA Method 8010. Groundwater was encountered at approximately 20 feet bgs. TPHg, MTBE, and BTEX were not detected in the soil samples collected above the water table. TPHg, MTBE, and BTEX were detected in one or more soil samples collected from depths below the water table. All of the groundwater samples had detectable concentrations of TPHg and BTEX. MTBE was also detected in all groundwater samples with the exception of boring G-9. HVOCs were detected in the groundwater samples from borings G-3, G-4, and G-5. Maximum detected concentrations in groundwater were 760,000 µg/L of TPHg, 10,000 µg/L of benzene, 29,000 µg/L of toluene, 5,800 µg/L of ethylbenzene, 17,500 µg/L of xylenes, and 2,900 µg/L of MTBE. In addition,

the maximum detected concentrations of cis-1,2-dichloroethene (cis-1,2-DCE), tetrachloroethene (PCE), and trichloroethene (TCE) were 8.2 µg/L, 1.2 µg/L, and 13 µg/L, respectively. ATC concluded that the source(s) of groundwater impacts beneath the property located at 1750 Webster Street is located offsite and upgradient, possibly to the south and/or southwest including the Douglas Parking site located at 1721 Webster Street and the former Chevron site located at the southwest corner of 17th Street and Harrison which had the same detected HVOCs as the Site (ATC, 1998a).

3.2.4 February 1998, Risk-Based Corrective Action Assessment, 1750 Webster Street

A *Risk Based Corrective Action (RBCA) Assessment* for the property located at 1750 Webster Street was prepared by Versar Inc. (Versar, 1998). This RBCA assessment was prepared in response to a request from the ACHCSA in a letter dated February 19, 1998. Based on previous investigations and planned development as an above-ground, non-enclosed parking structure at the property located at 1750 Webster Street, a RBCA assessment was conducted. Site Specific Target Levels (SSTLs) for chemicals detected in groundwater were developed and compared to concentrations of chemicals detected in groundwater to determine if existing groundwater impacts pose a threat to potential future human receptors. Versar concluded that the presence of petroleum constituents in groundwater does not represent a health concern to potential human receptors under future land use as an above-ground, non-enclosed parking structure, where the primary exposure scenario includes outdoor exposures (Versar, 1998).

3.2.5 April and August 1998, Groundwater Well Installation and Monitoring Report, 1750 Webster Street

On April 26, 1998, ATC installed three groundwater monitoring wells at 1750 Webster Street. The purpose of the groundwater monitoring wells was to determine the groundwater gradient and perform groundwater monitoring (ATC, 1998b). Well A-1 was located in the northeastern portion of the property located at 1750 Webster Street. Wells A-2 and A-3 were located along the southwestern boundary of the property located at 1750 Webster Street. Borings A-1 and A-2 were advanced to 31.5 feet bgs and boring A-3 was advanced to 30 feet bgs.

During Quarter 2 (Q2) 1998, groundwater elevation ranged from 7.75 feet msl (well A-1) to 8.90 feet msl (well A-3). During Quarter 3 (Q3) 1998, groundwater elevation ranged from 7.40 feet msl (well A-2) to 8.66 feet MSL (well A-3). The groundwater flow direction was generally towards the northeast, with a gradient of approximately 0.008 ft/ft.

Two soil samples were collected from each boring and analyzed for TPHg by USEPA Method 8015M and BTEX and MTBE by USEPA Method 8020. TPHg, MTBE, and BTEX were not detected in the soil samples collected from borings A-1, A-2, and A-3 (ATC, 1998b).

Groundwater samples were collected from the three wells on April 28, 1998 (Q2 1998) and August 4, 1998 (Q3 1998), and analyzed for TPHg by USEPA Method 8015M, BTEX and MTBE by USEPA

Method 8020, and HVOCs by USEPA Method 8010. Based on the Q2 2018 and Q3 2018 groundwater monitoring results, TPHg, BTEX, and HVOCs were detected in the groundwater samples collected from wells A-1, A-2, and A-3. MTBE was not detected in groundwater in any of the wells. Maximum detected concentrations in groundwater were 84,000 µg/L of TPHg (well A-2), 12,000 µg/L of benzene (well A-1), 20,000 µg/L of toluene (well A-2), 1,700 µg/L of ethylbenzene (well A-1), and 8,400 µg/L of xylenes (well A-1). In addition, the maximum detected concentrations of cis-1,2-DCE, 1,2-dichloroethane (1,2-DCA), PCE, and TCE were 22 µg/L (well A-2), 13 µg/L (well A-1), 4.8 µg/L (well A-1), and 52 µg/L (well A-2), respectively. ATC concluded that there was no direct evidence of a surface spill of gasoline at the Site and the groundwater impacts beneath the property located at 1750 Webster Street are likely related to an offsite upgradient source in groundwater that flows in a northeasterly direction toward the property located at 1750 Webster Street (ATC, 1998b).

3.2.6 November 1998, Groundwater Monitoring Report, 1750 Webster Street

Groundwater samples were collected from the three groundwater monitoring wells, A-1, A-2, and A-3, on November 18, 1998 (fourth quarter 1998 [Q4 1998]), and analyzed for TPHg by USEPA Method 8015M, BTEX and MTBE by USEPA Method 8020, and HVOCs by USEPA Method 8010. During Q4 1998, groundwater elevation ranged from 9.81 feet msl (well A-1) to 11.05 feet msl (well A-3). The groundwater flow direction was generally towards the northeast, with a gradient of approximately 0.0076 ft/ft (ATC, 1999a). Based on the Q4 1998 groundwater monitoring results, TPHg, BTEX, and HVOCs were detected in the groundwater samples collected from wells A-1, A-2, and A-3. MTBE was not detected in groundwater in any of the wells. Maximum detected concentrations in groundwater were 110,000 µg/L of TPHg (well A-2), 12,000 µg/L of benzene (well A-1), 25,000 µg/L of toluene (well A-2), 2,000 µg/L of ethylbenzene (well A-2), and 10,300 µg/L of xylenes (well A-2). In addition, the maximum detected concentrations of cis-1,2-DCE, 1,2-DCA, and TCE were 21 µg/L (well A-1), 13 µg/L (well A-1), and 6.7 µg/L (well A-3), respectively. PCE and TCE were not detected in groundwater samples collected from wells A-1 and A-2, while A-3 only had TCE detected. ATC concluded that there was no direct evidence of a surface spill of gasoline at the Site due to non-detectable to low concentrations of TPHg, BTEX, and MTBE in vadose zone soils. ATC further concluded that the groundwater impacts beneath the property located at 1750 Webster Street are likely related to an offsite upgradient source in groundwater that flows in a northeasterly direction toward the property located at 1750 Webster Street (ATC, 1999a).

3.2.7 February 1999, Groundwater Monitoring Report, 1750 Webster Street

Groundwater samples were collected from the three wells, A-1, A-2, and A-3, on February 26, 1999 (first quarter 1999 [Q1 1999]), and analyzed for TPHg by USEPA Method 8015M, BTEX and MTBE by USEPA Method 8020, and HVOCs by USEPA Method 8010. During Q1 1999, groundwater elevation ranged from 10.38 feet msl (well A-1) to 11.39 feet msl (well A-3). The groundwater flow

direction was generally towards the northeast, with a gradient of approximately 0.0076 ft/ft (ATC, 1999b). Based on the Q1 1999 groundwater monitoring results, TPHg, BTEX, and HVOCs were detected in the groundwater samples collected from wells A-1, A-2, and A-3. MTBE was not detected in groundwater in any of the wells. Maximum detected concentrations in groundwater were 89,000 µg/L of TPHg (well A-2), 14,000 µg/L of benzene (well A-1), 22,000 µg/L of toluene (well A-2), 2,000 µg/L of ethylbenzene (well A-1), and 9,300 µg/L of xylenes (well A-1). In addition, the maximum detected concentrations of cis-1,2-DCE, 1,2-DCA, and TCE were 16 µg/L (well A-1), 10 µg/L (well A-1), and 11 µg/L (well A-3), respectively. PCE was detected in all groundwater samples collected from wells A-1, A-2, and A-3 with concentrations of 3.5 µg/L, 4.8 µg/L, and 3.1 µg/L, respectively. ATC concluded that after a full year of monitoring, the groundwater gradient consistently flowed in a northeasterly direction and contaminants originated from an upgradient source due to non-detectable to low concentrations of TPHg, BTEX, and MTBE in vadose zone soils. Furthermore, ATC recommended site closure to be issued (ATC, 1999b).

3.2.8 February 2000, ACHCSA Summary of File Review, 1750 Webster Street

In a letter dated February 16, 2000, ACHCSA reviewed the Site file for the property at 1750 Webster Street in Oakland, California and determined "…groundwater pollution detected beneath the subject property [1750 Webster Street] is likely the result of the migration of pollutants in groundwater from upgradient sites" (ACHCSA, 2000). In this letter ACHCSA approved site closure with the following conditions:

- Property owner must provide reasonable access to an upgradient discharger attempting to investigate and cleanup off-site groundwater pollution;
- A risk assessment evaluating the indoor exposure pathway must be submitted to the local implementing agency for review and approval if any enclosed structure is proposed for the Site;
- A deed restriction will be recorded to ensure the Site is re-evaluated if site use changes; and
- Three groundwater monitoring wells, A-1, A-2, and A-3 will not be destroyed, well covers will be locked to prevent vandalism, and the responsible party for the plume beneath the Site can use these wells for future monitoring.

3.3 Voluntary Remediation Action Program (VRAP) Number RO0003229

A VCAA under VRAP Number RO0003229 was opened with the ACDEH in 2016 for LMC's redevelopment plan for 1750 Webster Street (APNs 008-625-016 and 008-625-017), 301 19th Street (APN 008-625-002-1), and 1801 Webster Street (APN 008-625-018) for mixed commercial and residential land use. Case closure conditions of the previous case (SCP RO0002672) required re-evaluation of Site conditions for any land use changes for the properties located at 1750 Webster Street and 301 19th Street. As a result, under the oversight of ACDEH, LMC conducted additional Site investigations summarized below.

Since previous Site investigations were conducted from 1991 to 1999, the RWQCB-SF established Environmental Screening Levels (ESLs) for soil, groundwater, soil gas, and indoor air that can be compared to environmental sample data. The most current version of the RWQCB-SF ESLs were published in February 2016 (RWQCB-SF, 2016) and are used to discuss the data collected at the Site. Consistent with the anticipated land use and risk pathway summary in the Site Conceptual Model (SCM; Appendix B), the following screening levels were compared with Site data:

- ***Soil – Soil data were compared with soil ESLs for direct contact for the construction exposure scenario to be protective of onsite construction worker receptors during redevelopment.*** Current development plans include a building foundation across the entire Site; therefore, direct contact with soil exposure pathway (i.e., incidental ingestion, dermal contact, and dust inhalation) is considered incomplete for future resident or commercial worker receptors.
- ***Soil Vapor – Soil Vapor data were compared with soil gas ESLs for vapor intrusion for the commercial exposure scenario.*** The ground level of the future building will include parking, retail, commercial, and utility use. No residential receptors will occupy the ground level.
- ***Groundwater – Groundwater data were compared with groundwater ESLs for vapor intrusion for the commercial exposure scenario. For metals, which are considered non-volatile, groundwater data were compared with maximum contaminant levels (MCLs).*** Groundwater at the Site is serviced by a public water supply for beneficial use; therefore, direct contact with groundwater exposure pathway is considered incomplete for receptors at the Site.

3.3.1 October 2015, Phase I and Phase II Environmental Site Assessment, 1750 Webster Street and 301 19th Street

The Phase I ESA (GeoSolve, 2015a) identified the following Recognized Environmental Conditions (RECs): 1) elevated concentrations of TPHg, BTEX, and TCE in groundwater beneath the 1750 Webster Street property; 2) the Bliss M S Gasoline and Oil Service Station located at 1839 Harrison Street and/or 19th Street and Harrison Street; 3) possible elevated lead concentrations and/or asbestos-containing materials (ACMs) in the surficial soil; 4) a historical printing facility located at 1817 Harrison Street and potential residual metals in soil; and 5) possible upgradient sources of TPHg, BTEX, and other VOCs from historical uses as gasoline service stations and dry cleaner facilities.

Based on the results of the Phase I ESA conducted by GeoSolve (2015a), a Phase II ESA was performed in October 2015. During the Phase II ESA, soil and groundwater samples were collected from three soil borings (B-1, B-2, and B-3; GeoSolve, 2015b). Groundwater was encountered in boring B-1 at 22 feet bgs and in borings B-2 and B-3 at 17 feet bgs. At boring B-1, seven soil samples were collected at 5, 10, 15, 17.5, 22, 25, and 30 feet bgs. At borings B-2 and B-3, five soil samples

were collected at 5, 10, 15, 20, and 25 feet bgs. A duplicate soil sample was collected at boring B-3 at 20 feet bgs. Soil samples were analyzed for lead by USEPA Method 6010B and TPHg, BTEX, and MTBE by USEPA Method 8021B/modified 8015B. Lead was detected in soil at concentrations ranging from 5.3 mg/kg to 170 mg/kg. Lead was only detected in one soil sample (B1-5) at a concentration greater than the RWQCB-SF soil ESL of 160 mg/kg for the construction exposure scenario (Table 2-2). Of the VOCs, only xylene was detected in one soil sample (B1-25) at a low concentration of 0.016 mg/kg, which is well below the RWQCB-SF soil ESL for the construction exposure scenario (Table 2-3).

Groundwater samples were analyzed for lead (dissolved) by USEPA Method E200.8 and TPHg, BTEX, and MTBE by USEPA Method 8021B/modified 8015B. Only the groundwater sample from boring B-1 contained detectable concentrations of TPHg, BTEX, and dissolved lead. The dissolved lead concentrations in borings B-1, B-2, and B-3 ranged from not detected above 0.50 µg/L to 0.54 µg/L, which are well below the USEPA action level for lead of 15 µg/L. In boring B-1, concentrations of benzene of 140 µg/L and ethylbenzene of 1,100 µg/L exceeded the RWQCB-SF groundwater ESL for vapor intrusion for the commercial exposure scenario (Table 2-6). GeoSolve concluded the elevated concentrations are likely due to the impacted groundwater from the offsite upgradient property at 1721 Webster Street (GeoSolve, 2015b).

3.3.2 December 2015, Additional Phase II Environmental Site Assessment, 1750 Webster Street

During the additional Phase II ESA in December 2015, soil and groundwater samples were collected from three soil borings (B-4, B-5, and B-6) to further evaluate conditions in the subsurface soil and groundwater. At all three borings, eight soil samples were collected at 1, 2, 3, 4, 5, 10, 20, 25 feet bgs. Groundwater was encountered at 21 feet bgs in borings B-4 and B-5 and at 22 feet bgs in boring B-6. Soil samples collected at 1, 2, 3, 4, and 5 feet bgs in borings B-4, B-5, and B-6 and at 10, 20, and 25 feet bgs in borings B-5 and B-6 were analyzed for lead by USEPA Method 6010B. Soil samples collected at 10, 20, and 25 feet bgs were analyzed for TPHg, BTEX, and MTBE by USEPA Method 8021B/modified 8015B and VOC by USEPA Method 8260B. Lead was not detected at a concentration greater than the RWQCB-SF soil ESL of 160 mg/kg for the construction exposure scenario (Table 2-2). TPHg, BTEX, naphthalene, n-propylbenzene, n-butylbenzene, 1,2,4-trimethylbenzene (1,2,4-TMB), and 1,3,5-TMB were detected in soil samples collected from 25 feet bgs, which are located at a sample depth likely influenced by groundwater. No compound was detected in soil at a concentration greater than the RWQCB-SF soil ESLs for the construction exposure scenario (Tables 2-2 and 2-3).

Groundwater samples were analyzed for lead (total) by USEPA Method E200.8, TPHg, BTEX, and MTBE by USEPA Method 8021B/modified 8015B, and VOCs by USEPA Method 8260B. In borings B-4, B-5, and B-6, total lead concentrations ranged from 430 µg/L to 3,500 µg/L. Although the total lead concentrations exceed the USEPA action level for lead in drinking water of 15 µg/L, the total lead concentrations in groundwater includes both lead dissolved in groundwater and lead in the

particulates in groundwater. During the October 2015 Phase II ESA (Section 3.3.2), dissolved lead concentrations were well below the USEPA action level. Since the dissolved lead concentration would be lower than total lead concentration and dissolved metals are generally considered more mobile and biologically available, lead in groundwater is not considered a chemical of concern. Benzene, ethylbenzene, vinyl chloride, and naphthalene were detected in groundwater at concentrations exceeding the RWQCB-SF groundwater ESL for vapor intrusion for the commercial exposure scenario (Table 2-6). GeoSolve concluded that the soil impacts near the water table and groundwater impacts are likely due to the impacted groundwater from the offsite upgradient property at 1721 Webster Street (GeoSolve, 2015c).

3.3.3 February 2016, Phase II Environmental Site Assessment, 1810 Webster Street

The Phase II ESA in February 2016 advanced three borings (B-1, B-2, and B-3) to groundwater. Four soil samples were collected at 1, 15, 20, 22.5 feet bgs for each boring. Groundwater was encountered at 20.5 feet bgs in borings B-1 and B-3 and at 19 feet bgs in boring B-2. Soil samples were analyzed for lead by USEPA Method 6010B. Soil samples collected at 15, 20, and 22.5 feet bgs were analyzed for TPHg, BTEX, and MTBE by USEPA Method 8021B/modified 8015B and VOCs by USEPA Method 8260B. Lead was not detected at a concentration greater than the RWQCB-SF soil ESL of 160 mg/kg for the construction exposure scenario (Table 2-2). The remaining detections in soil were from samples collected at 20 feet bgs and 22.5 feet bgs which were likely influenced by groundwater. TPHg, toluene, ethylbenzene, xylenes, naphthalene, n-propylbenzene, n-butylbenzene, 1,2,4-TMB, 1,3,5-TMB, tert-butylbenzene, sec-butylbenzene, and isopropylbenzene were detected in soil samples collected from 20 to 22.5 feet bgs, which are located at sample depths likely influenced by groundwater. No compound was detected in soil at a concentration greater than the RWQCB-SF soil ESLs for the construction exposure scenario (Tables 2-2 and 2-3).

Groundwater samples were analyzed for lead (total) by USEPA Method E200.8 and TPHg, BTEX, and MTBE by USEPA Method 8021B/modified 8015B and VOCs by USEPA Method 8260B. In borings B-1, B-2, and B-3, total lead concentrations ranged from 5.9 µg/L to 21 µg/L with the maximum detected concentration exceeding the USEPA action level of 15 µg/L. Since the dissolved lead concentration would be lower than total lead concentration and dissolved metals are generally considered more mobile and biologically available, lead in groundwater is not considered a chemical of concern. Benzene, ethylbenzene, and naphthalene were detected in groundwater at concentrations exceeding the RWQCB-SF groundwater ESL for vapor intrusion for the commercial exposure scenario (Table 2-6). GeoSolve concluded that the soil impacts near the water table and groundwater impacts are likely due to the impacted groundwater from the offsite upgradient property at 1721 Webster Street (GeoSolve, 2016a).

3.3.4 February 2016, Soil Gas Survey, 1750 Webster Street, 1810 Webster Street, and 301 19th Street

In February 2016, six borings (SG-1 through SG-6) were advanced to a depth of 15 feet bgs for the purpose of collecting soil vapor samples. At each boring location, three nested soil vapor probes were installed at approximately 5, 10, and 15 feet bgs. After a two-hour equilibration period, soil vapor samples were collected and analyzed in a mobile laboratory for VOCs using USEPA Method SW8260B. Two duplicate soil vapor samples were collected at SG1-15 and SG5-15. As shown in Table 2-4, benzene was detected at SG-5 at 5 feet bgs (sample SG5-5) and PCE was detected at SG-5 at 15 feet bgs (SG5-15 and SG5-15 dup). Benzene and PCE concentrations were below the RWQCB-SF soil gas ESL for vapor intrusion for the commercial exposure scenario. GeoSolve noted that boring SG-5 was located near a surface drain, which could have potentially impacted soil vapor results at this location (GeoSolve, 2016b).

3.3.5 July 2016, Additional Phase II Environmental Site Assessment, 301 19th Street

In July 2016, three soil borings (B-7, B-8, and B-9) were advanced to groundwater to evaluate the subsurface conditions in soil and groundwater around the former gasoline service station identified in the Phase I ESA (GeoSolve, 2015a) and the southern portion of the 301 19th Street property. At each boring, three soil samples were collected at 1, 10, and 15 feet bgs and were analyzed for TPHg, BTEX, and MTBE by USEPA Method 8021B/modified 8015B. Groundwater was encountered at 17.5 feet bgs in borings B-7 and B-9 and at 15 feet bgs in boring B-8. All soil samples except B9-1 were analyzed for lead by USEPA Method 6010B. Lead was not detected at a concentration greater than the RWQCB-SF soil ESL of 160 mg/kg for the construction exposure scenario (Table 2-2). TPHg, BTEX and MTBE were not detected above laboratory reporting limits (RLs).

Groundwater samples were analyzed for lead (total) by USEPA Method E200.8 and TPHg, BTEX, and MTBE by USEPA Method 8021B/modified 8015B. In borings B-7, B-8, and B-9, total lead concentrations ranged from 34 µg/L to 440 µg/L (Table 2-5). Since the dissolved lead concentration would be lower than total lead concentration and dissolved metals are generally considered more mobile and biologically available, lead in groundwater is not considered a chemical of concern. TPHg, BTEX and MTBE were not detected above laboratory RLs (Table 2-6). GeoSolve concluded that the former gasoline service station did not significantly impact the Site and the existing petroleum-hydrocarbon groundwater plume detected on 1750 Webster Street has not impacted the southern portion of the 301 19th Street property (GeoSolve, 2016c).

3.3.6 August 2016, Additional Soil Gas Survey, 1750 Webster Street, 1810 Webster Street, and 301 19th Street

A follow-up soil gas survey was conducted in August 2016, to assess temporal variability in soil vapor concentrations since the February 2016 soil gas survey. Six borings were advanced to a depth of 10 feet bgs near the February 2016 soil vapor sample locations (GeoSolve, 2016b). Dual-nested

soil vapor probes were installed at approximately 5 and 10 feet bgs. After a two-hour equilibration period, soil vapor samples were collected and analyzed in mobile laboratory for VOCs using USEPA Method SW8260B. One duplicate soil vapor sample was collected at SG1-10. As shown in Table 2-4, benzene was detected at SG-5 at 5 and 10 feet bgs (samples SG5-5 and SG5-10) and PCE was detected at SG-6 at 10 feet bgs (SG6-10). Benzene and PCE concentrations were below the RWQCB-SF soil gas ESL for vapor intrusion for the commercial exposure scenario (GeoSolve, 2016d).

3.3.7 October 2016, Groundwater Monitoring Report, 1700-1710 Webster Street, 1721 Webster Street, and 1750 Webster Street

In October 2016, a groundwater monitoring event was coordinated by GeoDesign (2016) to determine the extent of groundwater contamination and flow direction at three properties located at 1700-1710 Webster Street (mixed-use redevelopment site), 1721 Webster Street (former Douglas Parking Company Site), and 1750 Webster Street. On behalf of 1700 Webster, LLC and at the request of the RWQCB-SF, GeoDesign conducted this groundwater monitoring event at 10 wells (wells A-1, A-2, and A-3 at 1750 Webster Street, wells MW-01 through MW-04 at 1700-1710 Webster Street, and wells MW-2, MW-3, and MW-6 at 1721 Webster Street). Depth to groundwater in these wells ranged from approximately 20 to 23 feet bgs. Groundwater flow direction was to the north with northwesterly and northeasterly fluctuations (GeoDesign, 2016). Ten groundwater samples were collected and analyzed for gasoline range organics (GRO) by USEPA Method 8015, diesel range organics (DRO) and residual range organics (RRO) by USEPA Methods 3511/8015, and VOCs by USEPA Method 8260B. GeoDesign concluded that based on a comparison of the October 2016 groundwater data to historical maximum detected concentrations, the petroleum hydrocarbon and VOC concentrations in groundwater have diminished significantly over the last 25 years and the plume is stable (GeoDesign, 2016). Additionally, GeoDesign states that based on the existing infrastructure (municipal water supply), the shallow groundwater table, and the highly urban area, it is unlikely the shallow groundwater will be used for beneficial use (i.e., drinking water) before water quality objectives are restored by natural attenuation (GeoDesign, 2016).

Subsequently, the groundwater monitoring wells at 1750 Webster Street, 1700-1710 Webster Street, and 1721 Webster Street were abandoned. On October 27, 2017, GeoSolve coordinated the destruction of wells A-1, A-2, and A-3 at the property at 1750 Webster Street (Apex, 2018a; Section 3.3.12). According to documents available on GeoTracker, prior to the commencement of earthwork activities for redevelopment of the property at 1700-1710 Webster Street, wells MW-01 through MW-04 were destroyed. On October 26, 2017, Pangea coordinated the destruction of wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, AS-1, AS-2, AS-3, SG-1, and SG-2 at the property located at 1721 Webster Street (Pangea, 2017b).

Since this report provides results from the most recent groundwater monitoring event, where data for LMC's property at 1750 Webster Street (wells A-1, A-2, and A-3) and the offsite upgradient properties at 1700-1710 Webster Street (wells MW-01 through MW-04) and 1721 Webster Street

(wells MW-2, MW-3, and MW-6) were collected on the same day, the October 2016 data were used in the preparation of figures illustrating the potentiometric surface (Figure 2-3) and isoconcentration contours for chemicals of interest (Figures 3-1 through 3-4).

3.3.8 February 2017, Soil Management Plan, 1750 Webster Street, 1810 Webster Street, and 301 19th Street

This SMP was created to provide analytical results of composited soil samples collected beneath the Site to facilitate pre-landfill approval for disposal activities (GeoSolve, 2017a). On February 22, 2017, four soil borings (SPB-1 through SPB-4) were advanced to approximately 10 feet bgs. At each boring soil samples were collected at 2.5, 5, 7.5, and 10 feet bgs. The four discrete soil samples from each boring were submitted to the laboratory. Prior to analysis, the discrete soil samples at each boring were composited into one soil sample per boring by the laboratory. The composite soil samples were analyzed for analyzed for TPHg, BTEX, and MTBE by USEPA Method 8021B/modified 8015B, total recoverable petroleum hydrocarbons (TRPH) by USEPA Method E418.1, total extractable petroleum hydrocarbons as diesel and motor oil (TEPHd and TEPHmo) using silica gel cleanup by USEPA Method 8015m, VOCs by USEPA Method 8260B, SVOCs by USEPA Method 8270C, polychlorinated biphenyls (PCBs) and pesticides by USEPA Method 8081A/80826020B, and CAM 17 metals by USEPA 6020B. BTEX, MTBE, pesticides, PCBs, VOCs, and SVOCs were not detected above the laboratory RLs. Lead was only detected in one composite soil sample (SPB3-A/B/C/D) at a concentration greater than the RWQCB-SF soil ESL of 160 mg/kg for the construction exposure scenario (Table 2-2). As a result, the four discrete soil samples from boring SPB-3 were analyzed for lead. Lead was only detected in one discrete soil sample (SPB3-A collected at 2.5 feet bgs) at a concentration greater than the RWQCB-SF soil ESL of 160 mg/kg for the construction exposure scenario (Table 2-2).

The four composite soil samples from borings SPB-1 through SPB-4 were analyzed for soluble threshold limit concentration (STLC) for chromium and one composite soil sample from boring SPB-3 was analyzed for STLC for lead. STLC for chromium was detected at concentrations of not detected above the laboratory RL of 0.10 milligram per liter (mg/L) to 0.21 mg/L and STLC for lead was detected at 16 mg/L, which exceeds the California hazardous waste criteria for lead. The one composite soil sample from boring SPB-3 was also analyzed for toxicity characteristic leaching procedure (TCLP) for lead, which was 0.82 mg/L and below the Federal hazardous waste criteria for lead. The total lead, STLC, and TCLP results are presented in Table 2-2.

Based on the data presented in this report by GeoSolve (2017a), the report concluded that a 10-foot by 10-foot area to a depth of 5 feet bgs around boring SPB-3 was determined to be California hazardous waste. The remainder of the property is considered Class II to Class III material, dependent on landfill requirements, and/or can be used as offsite fill material. The remainder of this report provided details of a soil management plan for the Site.

3.3.9 May 2017, Additional Soil Gas Survey, 1750 Webster Street, 1810 Webster Street, and 301 19th Street

At the request of ACDEH, an additional soil gas survey was conducted to evaluate the soil vapor concentrations near the bottom of the proposed elevator shafts and evaluate oxygen, methane, and carbon dioxide concentrations along Webster Street and on the western portion of Site. On May 13, 2017, borings SG-7, SG-8, and SG-9 were advanced to a depth of 5 feet bgs and boring SG-10 was advanced to a depth of 6 feet bgs (the proposed elevator shaft depth). Soil vapor probes were installed at approximately 5 feet bgs in borings SG-7, SG-8, and SG-9, and 6 feet bgs in boring SG-10. On May 15, 2017, soil vapor samples were collected in Summa canisters and analyzed in a fixed laboratory for total oxygen, total methane, and total carbon dioxide using Method ASTM D 1946-90 and VOCs using USEPA Method TO-15. As shown in Table 2-4, ethylbenzene, xylenes, and 1,4-dichlorobenzene were detected at SG-8 at 5 feet bgs, chloroethane was detected at SG-9 at 5 feet bgs, 1,3-dichlorobenzene was detected at SG-8 at 5 feet bgs and SG-10 at 6 feet bgs, and dichlorodifluoromethane was detected at SG-7 and SG-8 at 5 feet bgs and SG-10 at 6 feet bgs. Ethylbenzene, xylenes, 1,4-dichlorobenzene, and chloroethane concentrations were below the RWQCB-SF soil gas ESL for vapor intrusion for the commercial exposure scenario (GeoSolve, 2017b). RWQCB-SF soil gas ESLs were not available for 1,3-dichlorobenzene and dichlorofluoromethane. Methane was not detected above laboratory RLs, oxygen concentrations ranged from 16 to 17 percent (%), and carbon dioxide concentrations ranged from 0.036 to 0.039%.

3.3.10 May 2017, Evaluation of Lead Impacts in Soil 1750 Webster Street, 1810 Webster Street, and 301 19th Street

Previous Site investigations identified three areas of elevated lead concentrations that exceeded the RWQCB-SF soil ESL for the residential exposure scenario of 80 mg/kg. On May 15, 2017, GeoSolve coordinated the collection of 186 discrete soil samples at 29 locations, at depths ranging from 1 foot bgs to 30 feet bgs to further evaluate the elevated lead concentrations in shallow soil. The lead soil boring locations (L-1 through L-29) and the three areas of elevated lead concentrations are shown on GeoSolve's Figure A in Appendix C. Of the 186 soil samples collected in May 2017, lead was only detected in one soil sample (L6-2) at a concentration greater than the RWQCB-SF soil ESL of 80 mg/kg for the residential exposure scenario (Table 2-2).

Prior to construction activities, GeoSolve identified the following areas in soil of elevated lead concentrations for removal.

<u>Locations on area of Site formerly referred to as 301 19th Street</u>

- Lead was detected at 170 mg/kg in sample B1-5 collected at 5 feet bgs in October 2015.
- Lead was detected at 760 mg/kg in sample SPB3-A collected at 2.5 feet bgs in February 2017.

Locations on area of Site formerly referred to as 1810 Webster Street

- Lead was detected at 130 mg/kg in sample B2-1 collected at 1 foot bgs in February 2016.
- Lead was detected at 86 mg/kg in sample L6-2 collected at 2 feet bgs in May 2017.

The removal of lead impacted soil was not documented, and it is unknown if the lead impacted areas were removed from the Site. Based on a conference call with ACDEH on February 14, 2018, it was agreed that since documentation of the soil removal actions and characterization of excavated soil was not available, it would be assumed that the lead impacted soil was not removed from the Site and remains in-place as depicted on GeoSolve's Figure A in Appendix C.

3.3.11 October 2017, Construction Soil and Groundwater Management Plan, 1750 Webster Street, 1810 Webster Street, and 301 19th Street

The Construction SGMP was prepared by GrafCon for earthwork activities associated with LMC's redevelopment project. The purpose of the SGMP was to provide LMC and the construction team with guidance for the proper handling and management of contaminated soil and groundwater during redevelopment activities. This SGMP provided a summary of known environmental conditions at the Site and established a decision-making structure to assist the construction team in the identification and management of contaminated media, when and if they were encountered (GrafCon, 2017).

3.3.12 January 2018, Groundwater Sampling and Well Destruction Report, 1750 Webster Street, 1810 Webster Street, and 301 19th Street

On behalf of LMC, the coordination and oversight of the sampling of groundwater and destruction of three groundwater monitoring wells at the Site were conducted by GeoSolve. Apex prepared the report based on information provided by LMC and GeoSolve (Apex, 2018a). On October 10, 2017, groundwater samples were collected from the area of the former gasoline service station (boring WO-1) and from the three existing on-site groundwater monitoring wells A-1, A-2, and A-3. One soil boring WO-1 was advanced to a maximum depth of approximately 20 feet bgs and a grab groundwater sample was collected. Three on-site groundwater monitoring wells A-1, A-2, and A-3 were gauged and sampled. Depth to water in wells A-1, A-2, and A-3 were 20.50, 19.75, and 19.45 feet bgs, respectively. Each groundwater sample was analyzed for TPHg, BTEX, and MTBE by USEPA Method 8015B modified, TPHd and TPHmo by USEPA Method 8015B, and VOCs by USEPA Method 8260B. In grab groundwater sample WO-1, TPHd was detected at a concentration of 98 µg/L, PCE was detected at a concentration of 0.89 µg/L, and acetone was detected at a concentration of 11 µg/L. In groundwater wells A-1, A-2, and A-3, TPHg, TPHd, TPHmo, BTEX, and other VOCs were detected at concentrations consistent with previous monitoring events. The October 10, 2017 groundwater results are presented in Table 2-6.

On October 27, 2017, GeoSolve coordinated the destruction of onsite groundwater monitoring wells A-1, A-2, and A-3.

3.3.13 April 2018, Tank Closure Report, 1750 Webster Street, 1810 Webster Street, and 301 19th Street

The *Tank Closure Report* (Apex, 2018c) documents the removal of one 300-gallon UST that was discovered on December 27, 2017, on the portion of the Site located at 301 19th Street. This report was prepared in accordance with the ACDEH Certified Unified Program Agency (CUPA) tank removal permit No. SR0034334 and Oakland Fire Department (OFD) Operational Fire Permit No. FP18SKIS-00011.

At the request of ACDEH, a *Work Plan for Assessing Impacts of Unauthorized Release* (Apex, 2018b) was prepared. It was approved by ACDEH in an email correspondence dated February 20, 2018. Sample collection and analysis was conducted in accordance with this Work Plan and ACDEH CUPA tank removal permit No. SR0034334. The sampling methods and procedures are provided in the *Tank Closure Report* (Apex, 2018c) and a brief summary is provided below:

- On February 20, 2018, the UST discovery area was re-excavated (approximately 8 feet by 5 feet and 7 feet in depth) and three sidewall soil samples and one floor soil sample were collected from the UST discovery area. A soil sample was not collected from the western sidewall of the UST discovery area due to the presence of an existing building footing. No groundwater was observed in the excavation pit, nor was stained or odor-bearing soil, or free product or sheen.
- Two near-surface soil samples were collected from the UST relocation area and three sidewall soil samples were collected from the UST spill area. A soil sample was not collected from the southern sidewall of the UST spill area due to the presence of an existing building footing. Due to the presence of oily mud and water in the bottom of the foundation footing excavation, the floor soil sample was not collected on this day.

  Soil samples were analyzed for TPHd and TPHmo by USEPA Method 8015M without silica gel cleanup, TPHg, BTEX, MTBE, and VOCs by USEPA Method 8260B, metals by USEPA Method 6010, and PCBs by USEPA Method 8082. At the request of ACDEH CUPA, the floor soil sample from the re-excavation of the UST discovery area was also analyzed for SVOCs including polyaromatic hydrocarbons (PAHs), pentachlorophenol, and creosote by USEPA Method 8270.
- On February 23, 2018, the oily mud and water were removed from the foundation footing excavation in the UST spill area and placed into drums. One floor soil sample was collected in the foundation footing excavation of the UST spill area. The soil sample analyzed for TPHd and TPHmo without silica gel cleanup by USEPA Method 8015M, TPHg, BTEX, MTBE, and VOCs by USEPA Method 8260B, metals by USEPA Method 6010, PCBs by USEPA Method 8082, and SVOCs including PAHs, pentachlorophenol, and creosote by USEPA Method 8270.

- On March 1, 2018, two soil borings were advanced and grab-groundwater samples were collected from the UST discovery area (boring SB-5) and the UST spill area (boring SB-6). At boring SB-5, two soil samples were collected at 8 and 16 feet bgs. A grab-groundwater sample was collected from approximately 17 feet bgs. At boring SB-6, two soil samples were collected at 6 and 16 feet bgs. A grab groundwater sample was collected from approximately 17 feet bgs. Groundwater samples were analyzed for TPHd and TPHmo without silica gel cleanup by USEPA Method 8015M, TPHg, BTEX, MTBE, and VOCs by USEPA Method 8260B, metals by USEPA Method 6010. PCBs were not detected above decision objectives in soil samples; therefore, in accordance with the Work Plan, grab groundwater samples were not analyzed for PCBs.

Apex recommended that the Site receive closure of the UST tank removal permit No. SR0034334 with no further action (Apex, 2018c), based on an evaluation of the data and decision objectives as summarized in the following bullets:

- The UST was visually inspected and corrosion and pitting of the steel tank was observed. Soil with evidence of petroleum hydrocarbon-type impacts immediately adjacent and immediately underneath the UST were removed to the extent practical to a depth of approximately 7 feet bgs, where visual/odor and evidence of over-lying impact was lacking. Significant discoloration/contamination of soil was not noted or observed along the sidewalls of the excavation. No further action is warranted with regards to the UST.
- Shallow and deep soil data for the UST discovery area, UST relocation area, and UST spill area were compared to RWQCB-SF ESLs for Construction Worker Shallow and Deep Soil Exposure Scenario. Metals, TPH, VOCs, PCBs, and SVOCs were not detected above decision objectives. No further action is warranted with regards to shallow and deep soil.
- Groundwater data for the UST discovery area and UST spill area were compared with historical groundwater data from the Site and offsite upgradient areas to determine if groundwater concentrations are consistent with regional concentrations. Only three VOCs (PCE, TCE, and chloroform) were detected above the laboratory RL in grab-groundwater samples. These VOCs were not detected above the RWQCB-SF groundwater ESLs for vapor intrusion for the commercial exposure scenario. Additionally, PCE and TCE in groundwater are associated with regional groundwater impacts in the area upgradient of the Site. No further action is warranted with regards to groundwater.

4.0 SITE CONCEPTUAL MODEL

This section provides a scientifically defensible basis for the selection of potentially exposed hypothetical receptors and the most likely ways they might be exposed to chemicals at the Site. To develop a conceptual understanding of the Site, information regarding potential chemical source, chemical release and transport mechanisms, locations of potentially exposed human receptors, and potential exposure routes were assessed. This information is outlined in a site conceptual model (SCM) table in Appendix B. The SCM associates source of chemicals with potentially exposed human receptors and associated complete exposure pathways. In this way, the SCM assists in quantifying potential impacts to human health.

As defined by USEPA (1989), all of the following four components are necessary for a chemical exposure pathway to be considered complete and for chemical exposure to occur:

- A chemical source and a mechanism of chemical release to the environment;
- An environmental transport medium (e.g., soil) for the released chemical;
- A point of contact between the contaminated medium and the receptor (i.e., the exposure point); and
- An exposure route (e.g., dermal contact with chemically-impacted soils) at the exposure point.

Sections 4.1 through 4.4 provide a summary of conditions used to conceptualize the geology and hydrogeology and the distribution of COPCs beneath the Site. Sections 4.5 through 4.8 describe the four components for a complete exposure pathway and provide a basis for the SCM.

4.1 Exposure Setting and Land Use

The Site is located in a mixed commercial and residential use area. LMC is redeveloping the Site for a seven-story mixed-use commercial/retail and multi-family residential building. In the future, the entire Site will be covered by the proposed building foundation. The ground level of the building will include building lobby, parking, retail, commercial, and mechanical/utility areas (Figure 1-3). Upper levels of the building will include residential use. Two elevators will be constructed to service the building occupants (Figure 1-3).

4.2 Site Geology and Hydrogeology

The vadose zone comprises unsaturated soils extending from ground surface to the water table at 18.81 to 21.65 feet bgs. The materials underlying the Site are mapped as the Late Pleistocene Merritt Sand (Qps) by Helley and Lajoie (1979), which consists of beach and eolian (dune) sand deposits, which are loose, well-sorted, fine- to medium-grained sand with silt. The Merritt Sand is approximately 50 feet in thickness. The Merritt Sand was deposited by wind eroding and transporting steam sediments during the lower stands of sea level, which occurred approximately 40,000 years

ago and may have been reworked by shoreline processes as sea levels rose. The Late Pleistocene Merritt Sand is underlain by Bay Mud and alternating layers of older alluvial deposits to approximately 1 to 2 kilometers (km). The older alluvial deposits are underlain by Cenozoic marine bedrock units.

Surficial fill materials are observed intermittently from the surface to approximately 3 feet bgs. Loose, well-sorted to poorly-sorted sands with silt are interbedded with discontinuous, fine-grained silty clays that pinch out towards the west. Schematic geologic cross-sections, the locations of which are shown on Figure 1-3, are provided in Figures 2-1 and 2-2 and are based on logged soil data from previous investigations. Subsurface geology consists of highly permeable, Merritt sand and discontinues silty clay pockets with low permeability.

Groundwater is historically encountered at the Site at depths ranging from 18.81 to 21.65 feet bgs. Groundwater elevations measured in the October 2016 groundwater monitoring event ranged from 5.88 feet msl (well A-1) to 6.70 feet msl (well A-3) to in Site monitoring wells (GeoDesign, 2016). Groundwater flow direction, based on October 2016 Site monitoring wells and nearby groundwater monitoring data from 1700-1710 Webster Street and 1721 Webster Street, is to the northeast with a hydraulic gradient of 0.01 ft/ft. Figure 2-3 depicts the potentiometric surface map based on the October 2016 data.

4.3 Potential Sources

The sources of potential contamination at a Site are related to exposure setting (site characteristics and past and current site operations) and land and groundwater uses at the Site and surrounding area. The primary sources for potential contamination at the Site are related to former Site operations as a gasoline service station and offsite upgradient sources of TPH, BTEX, and other VOCs from historical uses as gasoline service stations and dry cleaner facilities. Following a release to soil, secondary sources may include ambient air, fugitive dust, groundwater, and surface water.

4.4 Nature and Extent of COPCs

Soil and groundwater have been impacted at the Site from historic Site use and offsite upgradient sources. Based on former Site land use and previous Site investigations, the chemicals of potential concern (COPCs) are TPH, BTEX, and VOCs. The lateral distribution of chemicals of interest in groundwater is illustrated by isoconcentration contours (Figures 3-1 through 3-4). Tabulated results of analytical data are presented in Tables 2-2 through 2-6. A summary of known environmental conditions in soil, soil vapor, and groundwater is provided below.

4.4.1 Soil

During previous Site investigations and UST removal activities, numerous soil samples have been collected at the Site. Soil samples have been analyzed for metals, TPHg, TPHd, TPHmo, BTEX, MTBE, VOCs, PCBs, and SVOCs including PAHs. SVOCs and PCBs were not detected in soil above the laboratory RLs. Of the compounds detected in soil, with the exception of arsenic and lead, no concentrations exceeded their respective RWQCB-SF ESL for direct contact with soil for the

construction exposure scenario to be protective of onsite construction worker receptors during redevelopment. Soil analytical results are summarized on Tables 2-2 and 2-3. A brief summary of the soil data is provided in the following bullets.

Metals

- Arsenic was detected in soil at concentrations ranging from 1.8 mg/kg to 5.9 mg/kg. The maximum detected concentration of 5.9 mg/kg is well below the regional background arsenic concentration of 11 mg/kg for San Francisco Bay Region (Duvergé, 2011).
- Lead exists randomly at the Site in the shallow fill layer and has been detected at concentrations that exceed residential human health risk-based screening levels at four locations in the upper 5 feet of soil. At two of these four locations, lead was detected at 170 mg/kg and 760 mg/kg, which exceed the RWQCB-SF soil ESL of 160 mg/kg for the construction exposure scenario. No soil removal actions were documented and lead impacted soil will be capped in-place beneath the building foundation.
- All other metals were either not detected above the laboratory RL or were detected at concentrations below their respective RWQCB-SF ESLs for direct contact with soil for the residential, commercial, and construction exposure scenarios.

TPH

- TPHg has been detected in soil at depths of 20 to 25 feet bgs, which is typically below first encountered groundwater. Based on the results of previous investigations, it is not anticipated that petroleum-related impacted soil will be encountered in near-surface soil during any potential earthwork activities.
- On February 22, 2017, four soil borings (SPB-1 through SPB-4) were advanced to approximately 10 feet bgs to facilitate pre-landfill approval for disposal activities (GeoSolve, 2017a). Soil samples were collected at 2.5, 5, 7.5, and 10 feet bgs from each boring, then the laboratory composited the soil samples for each boring for analysis. The maximum detected concentrations of TPHd and TPHmo were 2.5 mg/kg and 33 mg/kg, respectively. These concentrations are well below their respective RWQCB-SF ESLs for direct contact with soil for the residential, commercial, and construction exposure scenarios.
- During the UST removal activities in February and March 2018, the maximum detected concentration of TPHg, TPHd, and TPHmo were 4.2 mg/kg, 240 mg/kg, and 1,100 mg/kg, respectively. The TPHg and TPHmo concentrations are well below their respective RWQCB-SF ESLs for direct contact with soil for the residential, commercial, and construction exposure scenarios. The maximum detected concentration of TPHd of 240 mg/kg is below the RWQCB-SF ESLs for direct contact with soil for the commercial and construction exposure scenarios, but only slightly above the ESL for the residential exposure scenario.

BTEX, MTBE, and VOCs

- BTEX, MTBE, and VOCs were predominately detected in soil at depths of 20 to 25 feet bgs, which is typically below first encountered groundwater. Based on the results of previous investigations, it is not anticipated that VOC impacted soil will be encountered in near-surface soil during any potential earthwork activities. Any vapor intrusion impacts in indoor air are being evaluated with soil vapor and groundwater data.

4.4.2 Soil Vapor

During previous Site investigations, soil vapor samples have been collected at 5, 10, and 15 feet bgs. Soil vapor samples have been analyzed for TPHg and VOCs. Of the compounds detected in soil vapor, no concentrations exceeded their respective RWQCB-SF soil gas ESL for vapor intrusion for the commercial exposure scenario. Soil vapor analytical results are summarized on Table 2-4. A brief summary of the soil vapor data is provided in the following bullets.

TPHg

- TPHg was not detected above laboratory RLs.

BTEX, MTBE, and VOCs

- Benzene, ethylbenzene, xylenes, dichlorodifluoromethane, PCE, chloroethane, 1,3-dichlorobenzene, and 1,4-dichlorobenzene were detected in soil vapor. Of the VOCs detected, none exceeded their respective RWQCB-SF soil gas ESL for vapor intrusion for the commercial exposure scenario. RWQCB-SF soil gas ESLs were not available for 1,3-dichlorobenzene and dichlorofluoromethane.
- Benzene was only detected in three of 37 soil vapor samples, with concentrations ranging from 88 micrograms per cubic meter (µg/m^3) to 160 µg/m^3. Benzene was detected in soil vapor samples collected at 5 and 10 feet bgs. The benzene concentrations are below the RWQCB-SF soil gas ESLs for vapor intrusion for the commercial exposure scenario. Ethylbenzene and xylenes were detected in one of 37 soil vapor samples at concentrations of 37 µg/m^3 and 160 µg/m^3, respectively. Ethylbenzene and xylenes were detected in soil vapor samples collected at 5 feet bgs. The ethylbenzene and xylenes concentrations are below the RWQCB-SF soil gas ESLs for vapor intrusion for the residential and commercial exposure scenarios. Toluene and MTBE were not detected above laboratory RLs.
- PCE was only detected in three of 37 soil vapor samples, with concentrations ranging from 120 µg/m^3 to 160 µg/m^3. PCE was detected in soil vapor samples collected at 10 and 15 feet bgs. In the same sample locations, PCE was not detected in the shallow soil vapor samples collected at 5 feet bgs. None of the daughter products of PCE degradation (i.e., TCE, cis-1,2-dichloroethene, and vinyl chloride) were detected above laboratory RLs in any of the soil vapor samples. The PCE concentrations are below the RWQCB-SF soil gas ESLs for vapor intrusion for the residential and commercial exposure scenarios.

4.4.3 Groundwater

During previous Site investigations, grab groundwater and groundwater well samples have been collected. Groundwater samples have been analyzed for metals, TPHg, TPHd, TPHmo, BTEX, MTBE, and VOCs. Petroleum hydrocarbons, associated volatile organic compounds (BTEX, MTBE, and naphthalene), and halogenated volatile organic compounds (tetrachloroethylene and trichloroethylene) are present in groundwater beneath the western and central portions of the Site.

Three groundwater monitoring wells, A-1, A-2, and A-3, were installed in April 1998. In these wells, groundwater was historically encountered at depths ranging from 18.81 to 21.65 feet bgs. The most recent groundwater monitoring event coordinated for both onsite and offsite wells was conducted in October 2016. Subsequent to this monitoring event, the offsite wells were destroyed. Onsite wells A-1, A-2, and A-3 were gauged and sampled in October 2017, prior to destruction in preparation for redevelopment of the Site.

Since the October 2016 monitoring event provides the most recent groundwater monitoring event, where data for LMC's property at 1750 Webster Street and the offsite upgradient properties at 1700-1710 Webster Street and 1721 Webster Street were collected on the same day, the October 2016 data were used in evaluating the potentiometric surface and isoconcentration contours for chemicals of interest. Groundwater flow direction, based on October 2016 groundwater monitoring wells is to the northeast with a hydraulic gradient of 0.01 foot per foot (ft/ft).

Groundwater analytical results are summarized on Tables 2-5 and 2-6. A brief summary of the groundwater data is provided in the following bullets.

Metals

- During the October 2015 Site investigation, grab groundwater samples were analyzed for dissolved lead by USEPA Method E200.8 (sample was filtered by laboratory). Dissolved lead concentrations ranged from not detected above laboratory RL of 0.50 µg/L to 0.54 µg/L. During subsequent Site investigations conducted in 2015 and 2016, grab groundwater samples were analyzed for total lead by USEPA Method E200.8 (unfiltered sample). Total lead concentrations ranged from 5.9 µg/L to 3,500 µg/L. As expected, the dissolved lead concentrations are lower than total lead concentrations. Due to low dissolved lead concentrations in groundwater and since dissolved metals are generally considered more mobile and biologically available, lead in groundwater is not considered a chemical of concern.
- During the March 2018 tank removal activities, two grab groundwater samples were collected in the UST discovery area and the UST spill area (Apex, 2018c). These samples were analyzed for CAM 17 metals by USEPA Method 6010B. Of the 17 metals, only barium, molybdenum, nickel, and vanadium were detected above laboratory RLs. Barium, nickel, and vanadium were not detected above their respective maximum contaminant level (MCL).

No MCL was available for molybdenum, which was detected at a maximum concentration of 38 µg/L.

TPH

- During the initial Site investigations in 1993 (AGI, 1993b) and 1998 (ATC, 1998a) on the portion of the Site located at 1750 Webster Street, TPHg was detected in grab groundwater samples at concentrations ranging from 700 µg/L at boring G-1 to 760,000 µg/L at boring G-6 (ATC, 1998a). Subsequently, three groundwater monitoring wells, A-1, A-2, and A-3 were installed on the portion of the Site located at 1750 Webster Street. Since the wells were installed in April 1998 to the most recent sampling event in October 2017, TPHg concentrations have decreased in well A-1 from 56,000 µg/L to 19,000 µg/L, in well A-2 from 84,000 µg/L to 58,000 µg/L, and in well A-3 from 23,000 µg/L to 21,000 µg/L.
- In the groundwater monitoring wells, diesel range organics (DRO) concentrations in October 2016 and October 2017 ranged from 388 µg/L in well A-1 in October 2016 to 11,000 µg/L in well A-2 in October 2017.
- In the groundwater monitoring wells, residual range organics (RRO) concentrations in October 2016 and October 2017 ranged from not detected above laboratory RL to 580 µg/L in well A-1 in October 2017.
- Grab groundwater samples were recently collected on the portion of the Site located at 301 19th Street, in the vicinity of the former gasoline service station and former USTs. In these areas, grab groundwater sample WO-1 was collected in the area of the former gasoline service station (Apex 2018a) and samples SB-5-15-20 and SB-6-13-18 were collected in the UST discovery area and the UST spill area, respectively (Apex, 2018c). In these grab groundwater samples TPHg and TPHmo were not detected above laboratory RLs. TPHd was detected at a maximum concentration of 98 µg/L in sample WO-1. The TPH concentrations in the vicinity of former sources on the portion of the Site located at 301 19th Street are significantly lower than TPH concentrations from offsite upgradient sources in groundwater that flow toward the portion of the Site located at 1750 Webster Street.

BTEX, MTBE, and VOCs

- BTEX has historically been detected in groundwater from wells A-1, A-2, and A-3. MTBE has not been detected in these wells. Since the wells were installed in April 1998 to the most recent sampling event in October 2017, benzene concentrations have decreased in well A-1 from 12,000 µg/L to 290 µg/L and in well A-2 from 8,600 µg/L to 360 µg/L. During this time period, benzene concentrations have increased in well A-3 from 89 µg/L to 1,100 µg/L. Well A-3 is the monitoring well that is located at the furthest upgradient corner of the Site, closest to offsite sources.

- BTEX and MTBE were not detected above laboratory RLs in the grab groundwater samples that were recently collected on the portion of the Site located at 301 19th Street, in the vicinity of the former gasoline service station and former USTs.
- In October 2017, naphthalene was detected in wells A-1, A-2, and A-3 at 320 µg/L, 1,100 µg/L, and 710 µg/L, respectively. These naphthalene concentrations exceed the RWQCB-SF groundwater ESL for vapor intrusion for the commercial exposure scenario of 220 µg/L.
- Naphthalene was not detected above laboratory RLs in grab groundwater sample WO-1 that was recently collected on the portion of the Site located at 301 19th Street, in the vicinity of the former gasoline service station.
- Low concentrations of PCE and TCE have been detected in both groundwater monitoring wells and grab groundwater samples. Of the most recent groundwater data (2016 to 2017), the maximum detected concentration of PCE of 13 µg/L and TCE of 1.0 µg/L was detected in sample SB-5-15-20, which was collected in the March 2018 UST discovery area. For some groundwater samples, the presence of TPH in groundwater has resulted in elevated detection limits above the typically low VOC concentrations that have been detected.

Groundwater data from the Site and upgradient monitoring wells indicated the presence of an areal distribution of low concentrations of petroleum-related compounds and PCE and its daughter products. Based on grab groundwater samples recently collected on the portion of the Site located at 301 19th Street, in the vicinity of the former gasoline service station and former USTs, no BTEX, MTBE, or other VOC concentrations exceeded their respective RWQCB-SF groundwater ESL for vapor intrusion for the commercial exposure scenario. Although benzene, ethylbenzene, and naphthalene concentrations in groundwater collected at 1750 Webster Street exceeded their respective RWQCB-SF groundwater ESL for vapor intrusion for the commercial exposure scenario, previous investigations have demonstrated that groundwater impacts detected beneath the Site are likely related to an offsite upgradient source in groundwater that flows in a northeasterly direction toward the portion of the Site located at 1750 Webster Street. Based on the known groundwater impacts originating from upgradient sites, local groundwater flow direction, and no known sources identified at the Site, groundwater impacts detected beneath the Site are likely sourced from an offsite upgradient property. The offsite upgradient sources at 1700-1710 Webster Street and 1721 Webster Street have undergone remediation and the sources were removed and remediated. As a result, any residual impacts in groundwater beneath the Site are likely to naturally attenuate and decrease over time.

4.5 Chemical Release Mechanisms and Identification of Transport Media

In this section, the first two components necessary for a complete exposure pathway are addressed. Chemical properties of the Site-related chemicals and the physical characteristics of the Site were

reviewed to identify the factors that might allow the release of a chemical to the environment, and transport to or through soil, soil vapor, and groundwater.

Future development plans include a multi-story building covering the entire Site. The building footprint and sidewalks will generally preclude leaching of surface water through impacted subsurface soil; therefore, leaching is not expected to occur at the Site to any significant extent. Additionally, the anticipated cover across the Site is expected to preclude direct contact with soil for an onsite receptor. However, during redevelopment of the Site, an onsite construction worker receptor may be directly exposed to onsite soil.

Other routes of exposure may be associated with the release of chemicals through volatilization, wind and/or mechanical erosion (i.e., during construction), lateral migration of chemicals in groundwater, or migration of chemicals via stormwater runoff. These types of releases may result in chemical vapor or dust (with sorbed chemicals) emissions in air, or the movement of chemicals in groundwater or stormwater runoff. These potential release mechanisms are discussed in more detail below.

4.5.1 Volatilization of Chemical Vapors

Some of the chemicals detected at the Site are VOCs. These chemicals typically have a low organic-carbon partition coefficient (K_{oc}), a low molecular weight, and a high Henry's Law constant, indicating that these chemicals may volatilize. Therefore, volatilization of VOCs was considered a significant release mechanism for Site-related contaminants.

4.5.2 Emission of Fugitive Dust

Some chemicals (e.g., metals in soil) adsorb readily to dust particles. Chemicals adsorbed to soil particles can be blown into the air by wind and/or mechanical erosion. This is referred to as fugitive dust. During redevelopment activities, this is a potential release mechanism. However, the predominant Site-related contaminants include TPH and VOCs, which typically volatilize. Therefore, exposure to chemicals in soil via fugitive dust emissions was not considered a significant release mechanism for Site-related contaminants.

4.5.3 Lateral Migration of Groundwater into Offsite Surface Water

In the downgradient direction, the nearest surface water body is Lake Merritt. Lake Merritt, a large former tidal lagoon, is approximately 800 feet northeast of the Site. Site-related contaminants in groundwater may migrate offsite and potentially impact Lake Merritt. However, due to the distance to Lake Merritt from the Site and significant dilution upon groundwater discharging into Lake Merritt, any potential migration of Site-related contaminants in groundwater into Lake Merritt is not expected to be significant.

4.5.4 Stormwater Runoff

Stormwater runoff from areas of contaminated soil has the potential to transport contaminants bound to soil particles. However, future development plans include a large multi-story building across the entire Site. Redevelopment at the Site will include engineering controls to control stormwater runoff from the Site. Additionally, Site-related contaminants are more likely to volatilize and less likely to be adsorbed to any surface soil runoff. Although the potential chemical release via stormwater runoff is possible, it is not identified as a significant chemical release mechanism for Site-related contaminants.

4.6 Potential Human Receptors

The third component necessary for an exposure pathway to be complete is identification of potential receptors at the Site. The following hypothetical human receptors were identified on the basis of proximity to the Site, proposed activities that could possibly result in direct or indirect contact with Site-related chemicals, and anticipated Site use:

- Onsite Construction Worker Receptor;
- Onsite Commercial/Retail Worker Receptor; and
- Onsite Resident Receptor.

4.7 Potential Exposure Points

The other portion of the third component necessary for an exposure pathway to be complete is a point of contact between the contaminated medium and the receptor (i.e., the exposure point). This SCM evaluates potential exposure of receptors assuming that access to the Site is unrestricted and that onsite receptors are exposed directly to contaminated soil (construction exposure scenario only) and indirectly to soil vapor and groundwater. During redevelopment of the Site, outdoor construction worker receptors may be directly exposed to soil. Post-construction, the building foundation and concrete/asphalt paving across the Site will preclude direct contact with soil for the onsite commercial/industrial worker and onsite resident receptors. For soil, the exposure point is assumed to be the area within the Site boundaries.

In general, any hypothetical onsite construction worker receptor will be performing activities consistent with a Site Management Plan (SMP) and a Site-specific HASP. The HASP will require the use of proper personal protective equipment (PPE) and the best management practices (BMPs) will require dewatering to preclude any direct contact with groundwater for workers at the Site. Therefore, direct contact with groundwater for onsite workers was not evaluated.

Volatile compounds can be released from the subsurface into outdoor and indoor air resulting in an indirect exposure to contaminants in soil, soil vapor, and groundwater. Inhalation of VOCs in outdoor air is generally negligible due to dispersion in ambient air. For the volatilization pathway into indoor air, exposure to subsurface contamination is best characterized through the collection of soil vapor

or groundwater samples. For onsite receptors, the exposure point for soil vapor and groundwater is assumed to be the soil vapor and groundwater within the Site boundaries.

4.8 Exposure Pathways Considered Potentially Complete and Significant

The fourth and final component, a complete exposure pathway (i.e., route of exposure), is discussed in combination with the third component (i.e., presence of receptors at an exposure point) to define those exposure pathways considered to be complete and significant. The following sections summarize those pathways considered complete and significant for each receptor.

4.8.1 Hypothetical Onsite Construction Worker Receptor

The hypothetical onsite construction worker receptor is included based on construction and redevelopment activities at the Site. This receptor spends the workday outdoors performing construction-related tasks. This receptor is expected to come in contact with soil. Inhalation of chemical vapors while indoors was not considered a complete and significant exposure pathway because this receptor is not expected to be working inside buildings. The exposure pathways assumed to be complete and significant for the hypothetical onsite construction worker receptor include:

- Incidental ingestion of soil;
- Dermal contact with soil; and
- Inhalation of dust/vapors in outdoor air.

4.8.2 Hypothetical Onsite Commercial/Retail Worker Receptor

The proposed multi-story building will include retail space and building services and a lobby for the upper floor residential apartments. Based on this expected future land use, the hypothetical onsite commercial/retail worker receptor is included. This receptor spends the workday (8 hours per day) conducting activities primarily indoors with limited outdoor exposure. Although inhalation of vapors in outdoor air may be complete, outdoor air concentrations are typically lower than indoor air concentrations due to dispersion; such relatively minor exposures are subsumed by the assumption that all exposure is from indoor air. The Site is expected to be capped by the building footprint, which would preclude any direct contact with soil while outdoors. The exposure pathway assumed to be complete and significant for the hypothetical onsite commercial/retail worker receptor includes:

- Inhalation of vapors in indoor air.

4.8.3 Hypothetical Onsite Resident Receptor

Upper levels of the proposed multi-story building will include residential apartments; therefore, the hypothetical resident receptor is included. The Site is expected to be capped by the building footprint, which would preclude any direct contact with soil while outdoors. The residential apartments are not located on the ground floor; therefore, the only potential preferential pathway to the upper residential

floors would be the two elevator shafts. The exposure pathway assumed to be complete and significant for the hypothetical onsite resident receptor includes:

- Inhalation of vapors in indoor air via the elevator shaft.

Although this is a potentially complete exposure pathway, there is no known regulatory-recommended or approved method to evaluate this exposure pathway. The evaluation of this exposure pathway introduces significant uncertainty, when estimating the concentrations in vapor that enter the elevator shaft, mix with ambient air, then diffuse into ambient air on upper floors of a multi-story building. Therefore, this exposure pathway is qualitatively discussed but cannot be quantitatively evaluated.

As a precautionary measure, a vapor mitigation system will be installed in the two elevator shaft areas to further reduce the potential for vapor intrusion into upper residential levels. At the request of ACDEH, on March 9, 2018, a letter was prepared by Tom Graf of GrafCon and Ivy Inouye of Apex to support the sufficiency of the proposed vapor mitigation system to provide adequate protection to reduce the vapor intrusion risk to occupants of the new building to acceptable risk levels. A copy of this letter is included in Appendix D.

5.0 SUMMARY AND CONCLUSIONS

Apex has prepared this Report for the LMC redevelopment project located at 1750 Webster Street, 1810 Webster Street and 301 19th Street in Oakland, California. The objective of this Report is to summarize previous Site investigations and describe current environmental conditions at the Site to support Site closure activities and corrective actions. Site investigation activities were initiated in 1991, with the discovery and removal of a 5,000-gallon UST and a two-stage wash-rack water clarifier from the property located at 1833 Harrison Street (currently referred to as 301 19th Street). No evidence of a subsurface release of hydrocarbons was found during the field activities; therefore, closure was recommended (JMM, 1991). Site Cleanup Program (SCP) Number RO0002672 was opened in 1993 for the development of an aboveground, open-air parking structure. The parking garage was not constructed, and in February 2000 ACHCSA closed the case with specific conditions (Section 3.2.8). Then a VCAA under VRAP Number RO0003229 was opened with ACDEH in 2016 for LMC's redevelopment plan for a seven-story mixed-use commercial/retail and multi-family residential building occupying four contiguous parcels: 1750 Webster Street (APNs 008-625-016 and 008-625-017), 301 19th Street (APN 008-625-002-1), and 1801 Webster Street (APN 008-625-018). This report evaluates the previous Site investigations conducted under SCP Number RO0002672 and VRAP Number RO0003229 and summarizes the results of each investigation.

A SCM was prepared to identify any potential data gaps and evaluate potential impacts to human health based on the geology, hydrogeology, and distribution of COPCs beneath the Site (Appendix B). In order to identify whether the existing soil, soil vapor, and groundwater contamination poses a potential risk to human receptors, the Site data was compared with applicable RWQCB-SF ESLs (RWQCB-SF, 2016). Based on the results and interpretation of the site investigation data, the following conclusions and recommendations were made:

- COPCs in soil, soil vapor, and groundwater have been fully delineated.
- The Site is expected to be capped by the building footprint, which would preclude any direct contact with soil for future onsite commercial and residential receptors. During redevelopment of the Site, an onsite construction worker receptor may be directly exposed to onsite soil. Of the compounds detected in soil, with the exception of arsenic and lead, no concentrations exceeded their respective RWQCB-SF ESL for direct contact with soil for the construction exposure scenario to be protective of onsite construction worker receptors during redevelopment.
    - Arsenic was detected in soil at a maximum detected concentration of 5.9 mg/kg, which is well below the regional background arsenic concentration of 11 mg/kg for San Francisco Bay Region (Duvergé, 2011).
    - Lead exists randomly at the Site in the shallow fill layer and has been detected in four locations at the Site at concentrations that exceed the RWQCB-SF ESL for direct contact with soil for the residential, commercial, and/or construction exposure scenarios. No soil removal actions were documented and lead impacted soil will be capped in-place beneath the building foundation.

- The ground level of the building will include building lobby, parking, retail, commercial, and mechanical/utility areas (Figure 1-3). Residential use will be limited to the upper levels. Two elevators will be constructed to service the building occupants.
- Of the compounds detected in soil vapor, no concentrations exceeded their respective RWQCB-SF soil gas ESL for vapor intrusion for the commercial exposure scenario.
- Groundwater data from the Site and upgradient monitoring wells indicated the presence of an areal distribution of low concentrations of petroleum-related compounds and PCE and its daughter products.
    - Of the 2017 and 2018 grab groundwater samples collected on the portion of the Site located at 301 19th Street, in the vicinity of the former gasoline service station and former USTs, no BTEX, MTBE, or other VOC concentrations exceeded their respective RWQCB-SF groundwater ESL for vapor intrusion for the commercial exposure scenario.
    - Although benzene, ethylbenzene, and naphthalene concentrations in groundwater monitoring wells installed at 1750 Webster Street exceeded their respective RWQCB-SF groundwater ESL for vapor intrusion for the commercial exposure scenario, previous investigations have demonstrated that groundwater impacts detected beneath the Site are likely related to an offsite upgradient source in groundwater that flows in a northeasterly direction toward the Site.
    - The offsite upgradient sources at 1700-1710 Webster Street and 1721 Webster Street have undergone remediation and the sources were removed and remediated. As a result, any residual impacts in groundwater beneath the Site are likely to naturally attenuate and decrease over time.

Based on current contaminant concentrations and distribution at the Site, the following corrective actions were planned at the Site: (1) capping lead-impacted soil on Site beneath the building foundation to prevent direct contact with soil; (2) installation of a vapor mitigation barrier in the subgrade portion of the elevator shafts to further reduce the potential for vapor intrusion into upper residential levels; and (3) installation of a trench plugs in utility trenches where required to prevent vapor migration. No further remediation of soil, soil vapor, or groundwater is considered necessary.

These corrective actions will be documented in the Construction Soil and Groundwater Management Plan Compliance Report, Vapor Barrier and Utility Trench Dam Record Report of Construction, Long-Term Site Management Plan (SMP), and Land Use Covenant (LUC). In accordance with ACDEH's letter dated October 24, 2017 (Appendix A), prior to building occupancy, these reports will be prepared and submitted to ACDEH for review and approval.

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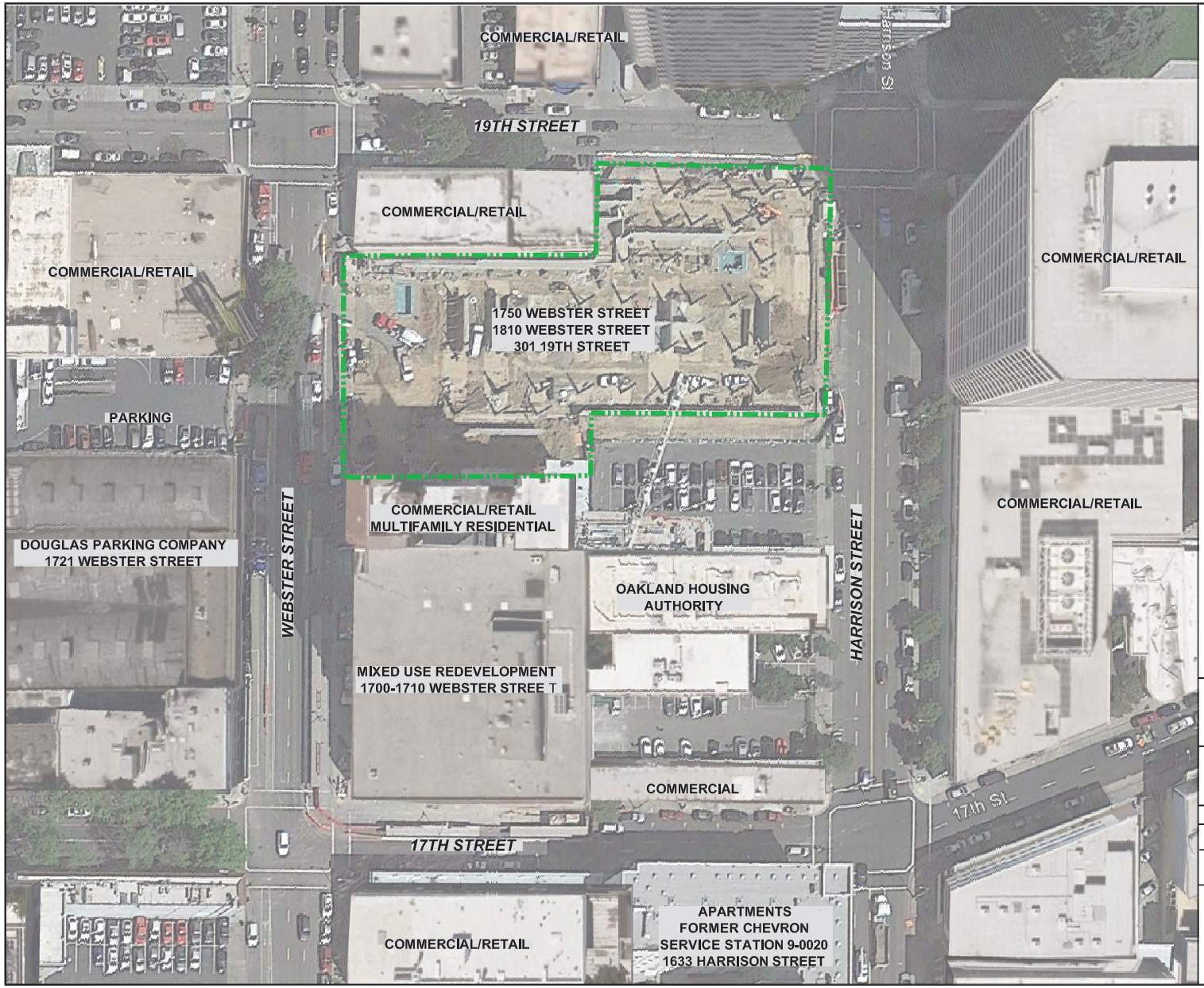
7.0 LIMITATIONS

This document was prepared for the exclusive use of the Lennar Multifamily Communities, LLC (LMC) and the Alameda County Department of Environmental Health (ACDEH) for the express purpose of complying with a client- or regulatory directive for environmental investigation or restoration. Apex Companies, LLC (Apex) and LMC must approve any re-use of this work product in whole or in part for a different purpose or by others in writing. If any such unauthorized use occurs, it shall be at the user's sole risk without liability to Apex or LMC. To the extent that this report is based on information provided to Apex by third parties, including LMC, their direct contractors, previous workers, and other stakeholders, Apex cannot guarantee the completeness or accuracy of this information, even where efforts were made to verify third-party information. Apex has exercised professional judgment to collect and present findings and opinions of a scientific and technical nature. The opinions expressed are based on the conditions of the Site existing at the time of the field investigation, current regulatory requirements, and any specified assumptions. The presented findings and recommendations in this report are intended to be taken in their entirety to assist LMC and ACDEH personnel in applying their own professional judgment in making decisions related to the property. Apex cannot provide conclusions on environmental conditions outside the completed scope of work. Apex cannot guarantee that future conditions will not change and affect the validity of the presented conclusions and recommended work. No warranty or guarantee, whether expressed or implied, is made with respect to the data or the reported findings, observations, conclusions, and recommendations.

FIGURES

APEX 3478 BUSKIRK AVENUE, SUITE 100 PLEASANT HILL, CA 94523	LENNAR MULTIFAMILY COMMUNITIES 1750 WEBSTER STREET, 1810 WEBSTER STREET, 301 19TH STREET OAKLAND, CALIFORNIA				**SITE LOCATION MAP**	N
	PROJECT NO. 093-LMC-001	DATE 01/09/2018	DR.BY: ZA	APP. BY: II	0 1,500 3,000 HORIZONTAL SCALE IN FEET	**FIGURE 1-1**



LEGEND

Site Boundary

SITE VICINITY MAP

LENNAR MULTIFAMILY COMMUNITIES
1750 WEBSTER STREET, 1810 WEBSTER STREET,
301 19TH STREET
OAKLAND, CALIFORNIA

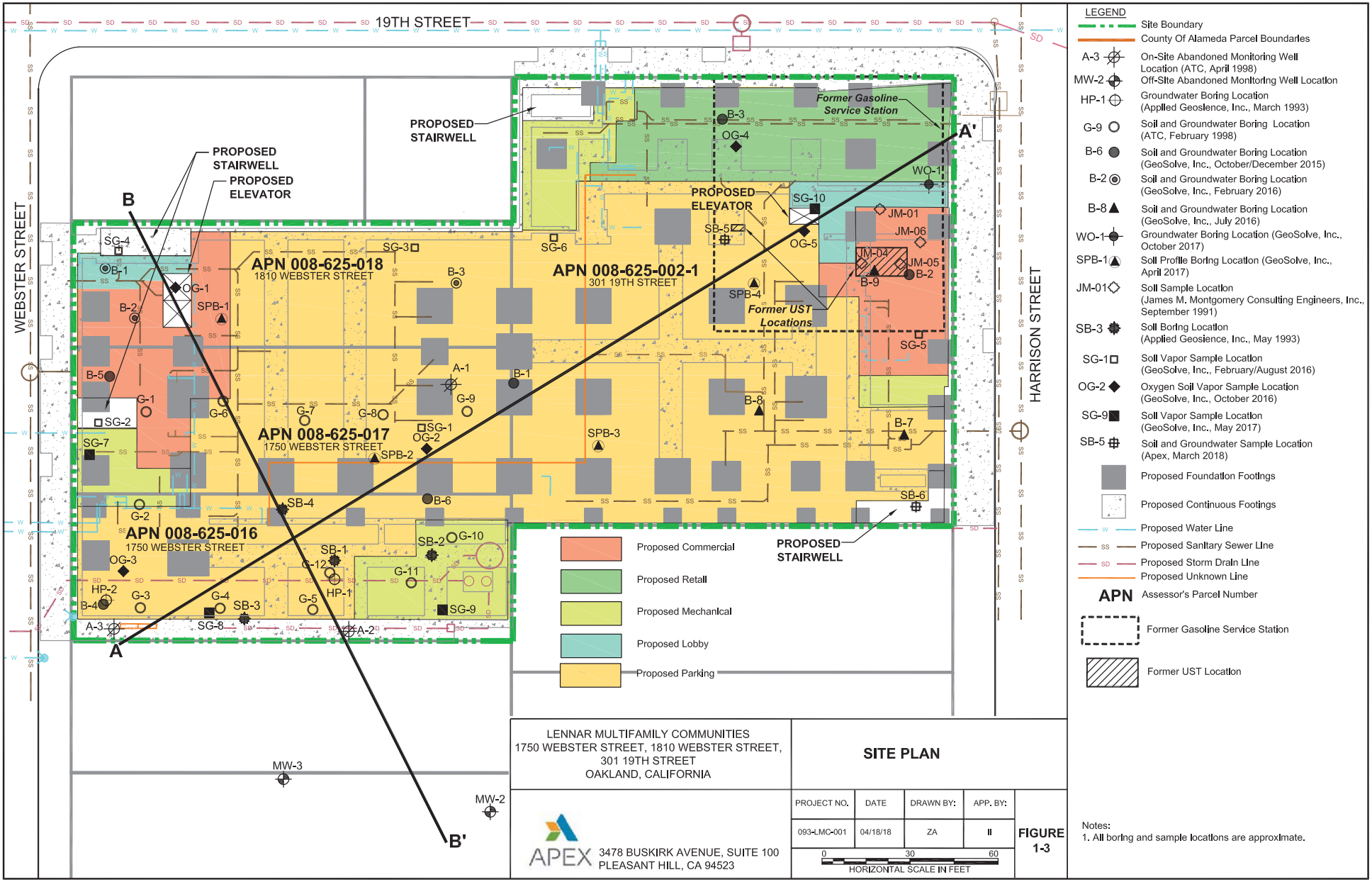
PROJECT NO.	DATE	DRAWN BY:	APP. BY:
093-LMC-001	12/08/17	ZA	II

0 60 120
HORIZONTAL SCALE IN FEET

APEX
3478 BUSKIRK AVENUE, SUITE 100
PLEASANT HILL, CA 94523

N

FIGURE
1-2



LENNAR MULTIFAMILY COMMUNITIES
1750 WEBSTER STREET, 1810 WEBSTER STREET,
301 19TH STREET
OAKLAND, CALIFORNIA

SITE PLAN

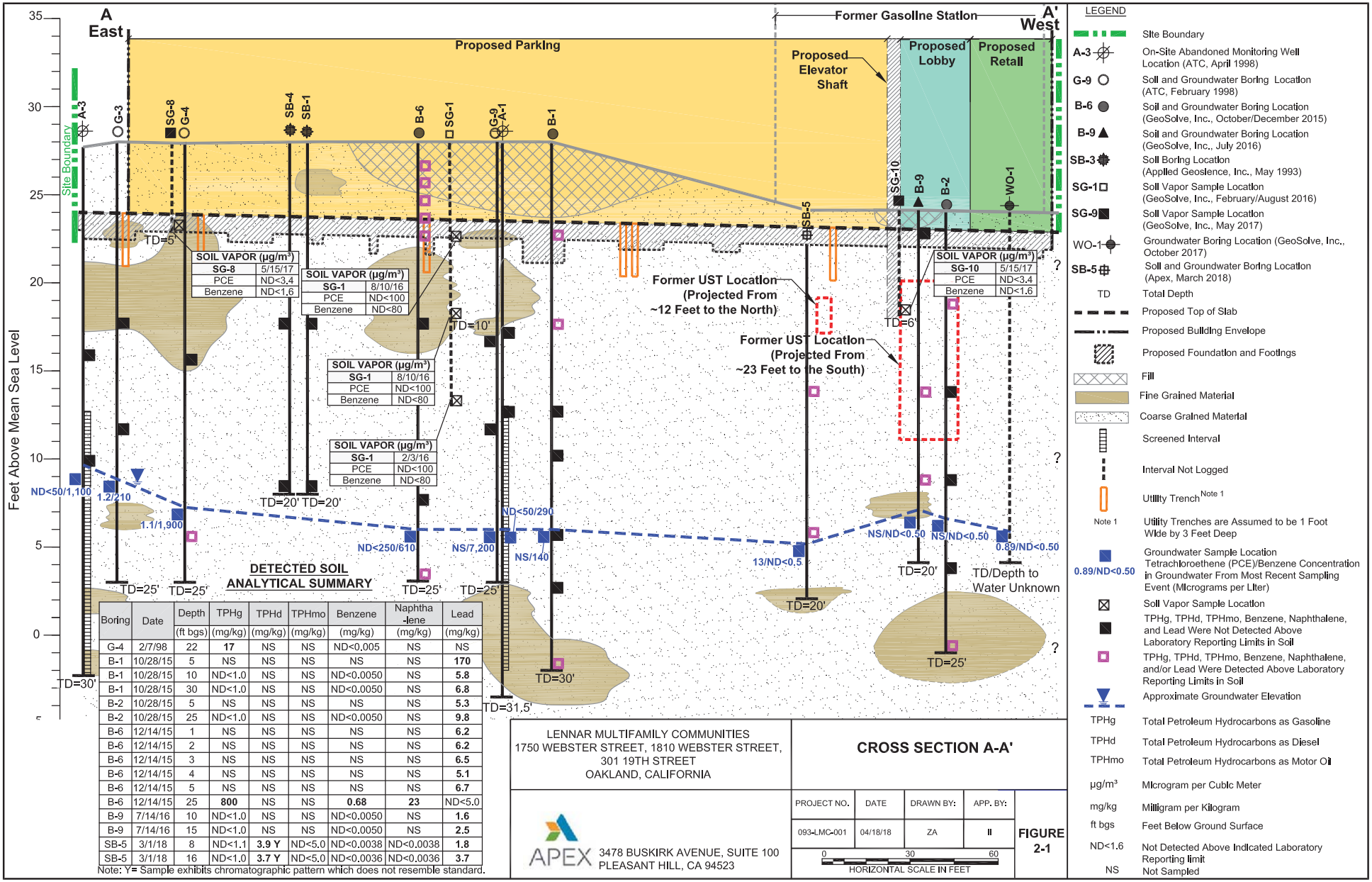
PROJECT NO.	DATE	DRAWN BY:	APP. BY:
093-LMC-001	04/18/18	ZA	II

0 30 60
HORIZONTAL SCALE IN FEET

FIGURE 1-3

APEX 3478 BUSKIRK AVENUE, SUITE 100
PLEASANT HILL, CA 94523

Notes:
1. All boring and sample locations are approximate.



DETECTED SOIL ANALYTICAL SUMMARY

Boring	Date	Depth (ft bgs)	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)	Benzene (mg/kg)	Naphthalene (mg/kg)	Lead (mg/kg)
G-4	2/7/98	22	**17**	NS	NS	ND<0.005	NS	NS
B-1	10/28/15	5	NS	NS	NS	NS	NS	**170**
B-1	10/28/15	10	ND<1.0	NS	NS	ND<0.0050	NS	**5.8**
B-1	10/28/15	30	ND<1.0	NS	NS	ND<0.0050	NS	**6.8**
B-2	10/28/15	5	NS	NS	NS	NS	NS	**5.3**
B-2	10/28/15	25	ND<1.0	NS	NS	ND<0.0050	NS	**9.8**
B-6	12/14/15	1	NS	NS	NS	NS	NS	**6.2**
B-6	12/14/15	2	NS	NS	NS	NS	NS	**6.2**
B-6	12/14/15	3	NS	NS	NS	NS	NS	**6.5**
B-6	12/14/15	4	NS	NS	NS	NS	NS	**5.1**
B-6	12/14/15	5	NS	NS	NS	NS	NS	**6.7**
B-6	12/14/15	25	**800**	NS	NS	**0.68**	**23**	ND<5.0
B-9	7/14/16	10	ND<1.0	NS	NS	ND<0.0050	NS	**1.6**
B-9	7/14/16	15	ND<1.0	NS	NS	ND<0.0050	NS	**2.5**
SB-5	3/1/18	8	ND<1.1	**3.9 Y**	ND<5.0	ND<0.0038	ND<0.0038	**1.8**
SB-5	3/1/18	16	ND<1.0	**3.7 Y**	ND<5.0	ND<0.0036	ND<0.0036	**3.7**

Note: Y= Sample exhibits chromatographic pattern which does not resemble standard.

LENNAR MULTIFAMILY COMMUNITIES
1750 WEBSTER STREET, 1810 WEBSTER STREET,
301 19TH STREET
OAKLAND, CALIFORNIA

CROSS SECTION A-A'

APEX 3478 BUSKIRK AVENUE, SUITE 100
PLEASANT HILL, CA 94523

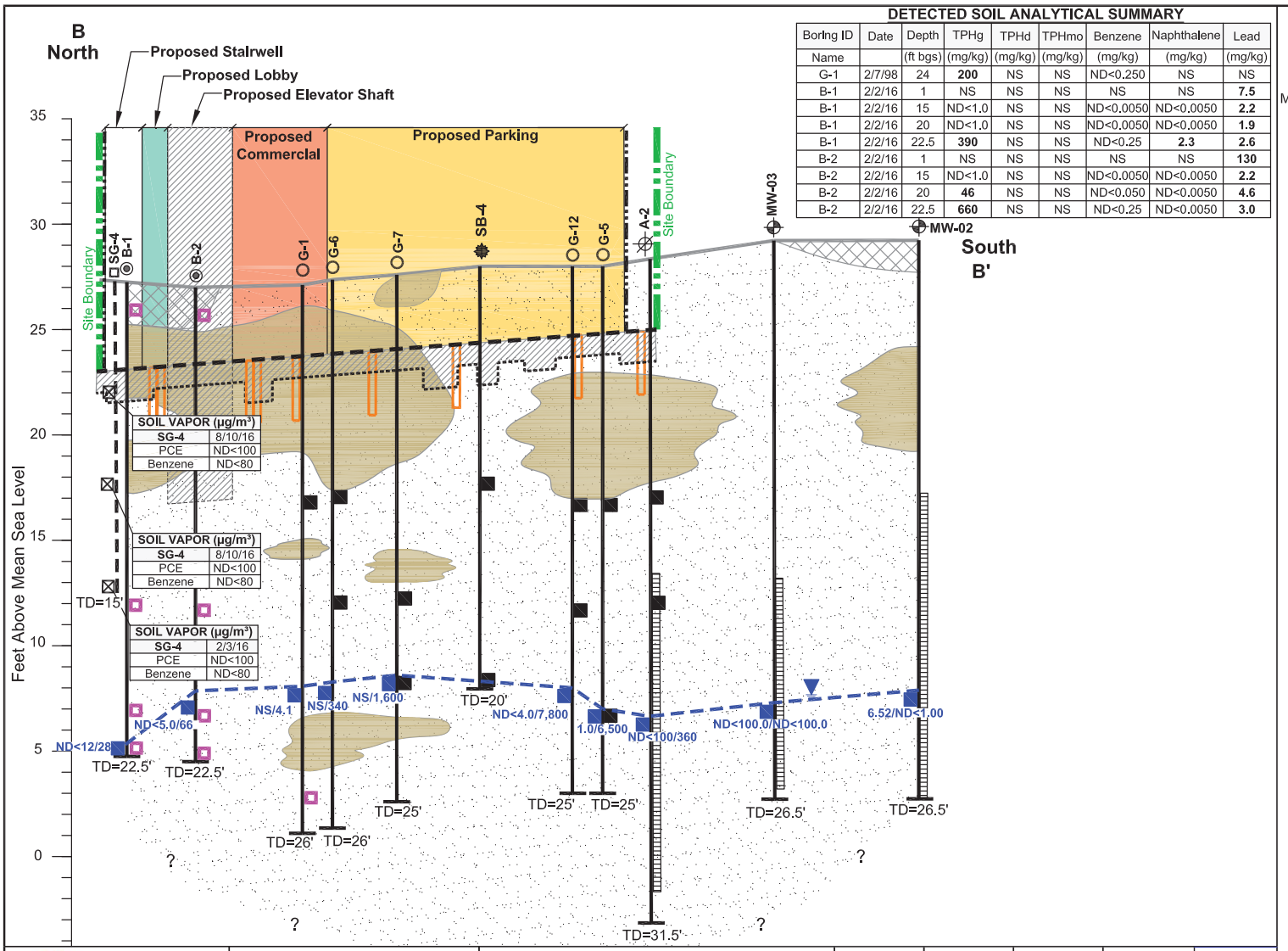
PROJECT NO.	DATE	DRAWN BY:	APP. BY:
093-LMC-001	04/18/18	ZA	II

0 30 60
HORIZONTAL SCALE IN FEET

FIGURE 2-1

LEGEND

- Site Boundary
- A-3 — On-Site Abandoned Monitoring Well Location (ATC, April 1998)
- G-9 — Soil and Groundwater Boring Location (ATC, February 1998)
- B-6 — Soil and Groundwater Boring Location (GeoSolve, Inc., October/December 2015)
- B-9 — Soil and Groundwater Boring Location (GeoSolve, Inc., July 2016)
- SB-3 — Soil Boring Location (Applied Geoslence, Inc., May 1993)
- SG-1 — Soil Vapor Sample Location (GeoSolve, Inc., February/August 2016)
- SG-9 — Soil Vapor Sample Location (GeoSolve, Inc., May 2017)
- WO-1 — Groundwater Boring Location (GeoSolve, Inc., October 2017)
- SB-5 — Soil and Groundwater Boring Location (Apex, March 2018)
- TD — Total Depth
- Proposed Top of Slab
- Proposed Building Envelope
- Proposed Foundation and Footings
- Fill
- Fine Grained Material
- Coarse Grained Material
- Screened Interval
- Interval Not Logged
- Utility Trench Note 1
- Note 1 — Utility Trenches are Assumed to be 1 Foot Wide by 3 Feet Deep
- 0.89/ND<0.50 — Groundwater Sample Location Tetrachloroethene (PCE)/Benzene Concentration in Groundwater From Most Recent Sampling Event (Micrograms per Liter)
- Soil Vapor Sample Location
- TPHg, TPHd, TPHmo, Benzene, Naphthalene, and Lead Were Not Detected Above Laboratory Reporting Limits in Soil
- TPHg, TPHd, TPHmo, Benzene, Naphthalene, and/or Lead Were Detected Above Laboratory Reporting Limits in Soil
- Approximate Groundwater Elevation
- TPHg — Total Petroleum Hydrocarbons as Gasoline
- TPHd — Total Petroleum Hydrocarbons as Diesel
- TPHmo — Total Petroleum Hydrocarbons as Motor Oil
- µg/m³ — Microgram per Cubic Meter
- mg/kg — Milligram per Kilogram
- ft bgs — Feet Below Ground Surface
- ND<1.6 — Not Detected Above Indicated Laboratory Reporting limit
- NS — Not Sampled



DETECTED SOIL ANALYTICAL SUMMARY

Boring ID	Date	Depth	TPHg	TPHd	TPHmo	Benzene	Naphthalene	Lead
Name		(ft bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
G-1	2/7/98	24	**200**	NS	NS	ND<0.250	NS	NS
B-1	2/2/16	1	NS	NS	NS	NS	NS	**7.5**
B-1	2/2/16	15	ND<1.0	NS	NS	ND<0.0050	ND<0.0050	**2.2**
B-1	2/2/16	20	ND<1.0	NS	NS	ND<0.0050	ND<0.0050	**1.9**
B-1	2/2/16	22.5	**390**	NS	NS	ND<0.25	**2.3**	**2.6**
B-2	2/2/16	1	NS	NS	NS	NS	NS	**130**
B-2	2/2/16	15	ND<1.0	NS	NS	ND<0.0050	ND<0.0050	**2.2**
B-2	2/2/16	20	**46**	NS	NS	ND<0.050	ND<0.0050	**4.6**
B-2	2/2/16	22.5	**660**	NS	NS	ND<0.25	ND<0.0050	**3.0**

LEGEND

- Site Boundary
- A-2: On-Site Abandoned Monitoring Well Location (ATC, April 1998)
- MW-02: Off-Site Abandoned Monitoring Well Location
- G-9: Soil and Groundwater Boring Location (ATC, February 1998)
- B-2: Soil and Groundwater Boring Location (GeoSolve, Inc., February 2016)
- SB-3: Soil Boring Location (Applied Geosience, Inc., May 1993)
- SG-1: Soil Vapor Sample Location (GeoSolve, Inc., February/August 2016)
- TD: Total Depth
- Proposed Top of Slab
- Proposed Building Envelope
- Proposed Cement Foundation and Footings
- Fill
- Fine Grained Material
- Coarse Grained Material
- Screened Interval
- Interval Not Logged
- Utility Trench[Note 1]
- Note 1: Utility Trenches are Assumed to be 1 Foot Wide by 3 Feet Deep
- Groundwater Sample Location
- 360/ND<100: Tetrachloroethene (PCE)/Benzene Concentration In Groundwater From Most Recent Sampling Event (Micrograms per Liter)
- Soil Vapor Sample Location
- TPHg, TPHd, TPHmo, Benzene, Naphthalene, and Lead Were Not Detected Above Laboratory Reporting Limits In Soil
- TPHg, TPHd, TPHmo, Benzene, Naphthalene, and/or Lead Were Detected Above Laboratory Reporting Limits in Soil
- Approximate Groundwater Elevation
- TPHg: Total Petroleum Hydrocarbons as Gasoline
- TPHd: Total Petroleum Hydrocarbons as Diesel
- TPHmo: Total Petroleum Hydrocarbons as Motor Oil
- µg/m³: Microgram per Cubic Meter
- mg/kg: Milligram per Kilogram
- ft bgs: Feet Below Ground Surface
- ND<1.6: Not Detected Above Indicated Laboratory Reporting Limit
- NS: Not Sampled

APEX
3478 BUSKIRK AVENUE, SUITE 100
PLEASANT HILL, CA 94523

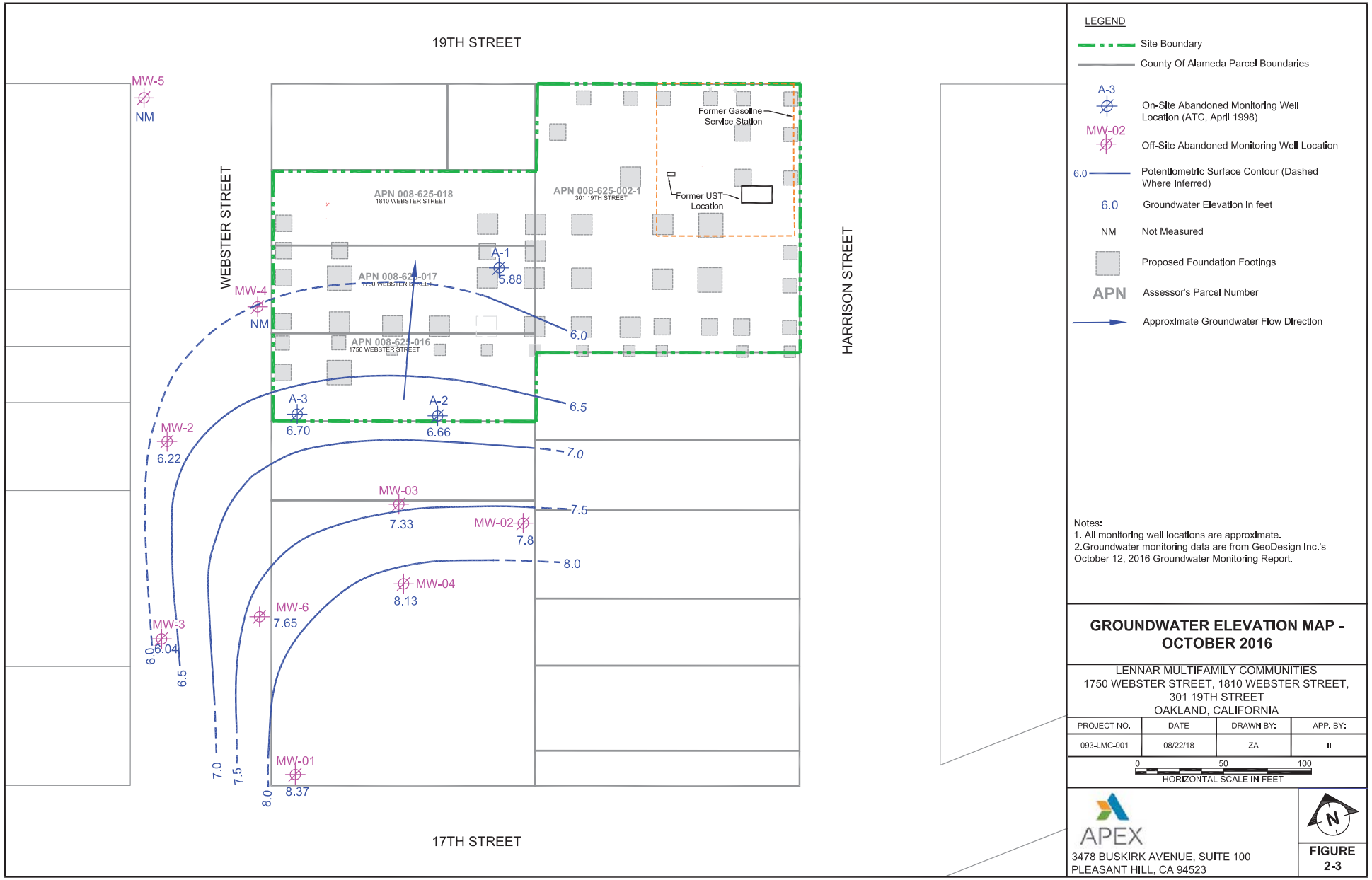
CROSS SECTION B-B'

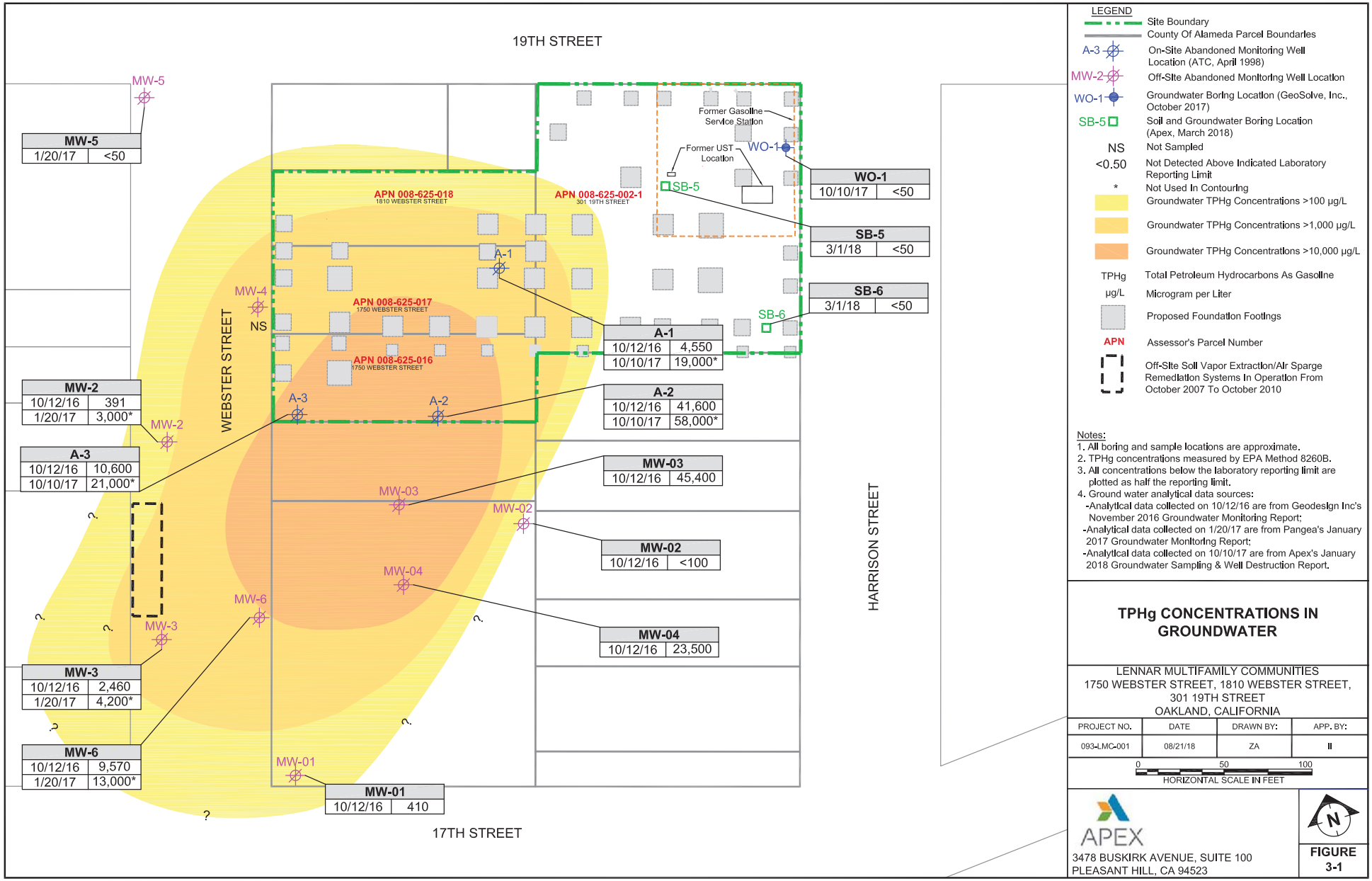
LENNAR MULTIFAMILY COMMUNITIES
1750 WEBSTER STREET, 1810 WEBSTER STREET,
301 19TH STREET
OAKLAND, CALIFORNIA

PROJECT NO.	DATE	DRAWN BY:	APP. BY:
093-LMC-001	04/26/18	ZA	II

0 30 60
HORIZONTAL SCALE IN FEET

FIGURE 2-2


19TH STREET
17TH STREET
WEBSTER STREET
HARRISON STREET
MW-5
NM
MW-4
NM
MW-2
6.22
MW-3
6.04
MW-6
7.65
MW-01
8.37
MW-03
7.33
MW-02
7.8
MW-04
8.13
A-1
5.88
A-2
6.66
A-3
6.70
APN 008-625-018
1810 WEBSTER STREET
APN 008-625-017
1750 WEBSTER STREET
APN 008-625-016
1750 WEBSTER STREET
APN 008-625-002-1
301 19TH STREET
Former Gasoline Service Station
Former UST Location
6.0
6.5
7.0
7.5
8.0
LEGEND
Site Boundary
County Of Alameda Parcel Boundaries
A-3
On-Site Abandoned Monitoring Well Location (ATC, April 1998)
MW-02
Off-Site Abandoned Monitoring Well Location
6.0
Potentiometric Surface Contour (Dashed Where Inferred)
6.0
Groundwater Elevation In feet
NM
Not Measured
Proposed Foundation Footings
APN
Assessor's Parcel Number
Approximate Groundwater Flow Direction
Notes:
1. All monitoring well locations are approximate.
2.Groundwater monitoring data are from GeoDesign Inc.'s October 12, 2016 Groundwater Monitoring Report.
GROUNDWATER ELEVATION MAP - OCTOBER 2016
LENNAR MULTIFAMILY COMMUNITIES
1750 WEBSTER STREET, 1810 WEBSTER STREET,
301 19TH STREET
OAKLAND, CALIFORNIA
PROJECT NO. 093-LMC-001
DATE 08/22/18
DRAWN BY: ZA
APP. BY: II
0 50 100
HORIZONTAL SCALE IN FEET
APEX
3478 BUSKIRK AVENUE, SUITE 100
PLEASANT HILL, CA 94523
N
FIGURE 2-3



LEGEND

- Site Boundary
- County Of Alameda Parcel Boundaries
- A-3 — On-Site Abandoned Monitoring Well Location (ATC, April 1998)
- MW-2 — Off-Site Abandoned Monitoring Well Location
- WO-1 — Groundwater Boring Location (GeoSolve, Inc., October 2017)
- SB-5 — Soil and Groundwater Boring Location (Apex, March 2018)
- NS — Not Sampled
- <0.50 — Not Detected Above Indicated Laboratory Reporting Limit
- * — Not Used In Contouring
- Groundwater TPHg Concentrations >100 µg/L
- Groundwater TPHg Concentrations >1,000 µg/L
- Groundwater TPHg Concentrations >10,000 µg/L
- TPHg — Total Petroleum Hydrocarbons As Gasoline
- µg/L — Microgram per Liter
- Proposed Foundation Footings
- APN — Assessor's Parcel Number
- Off-Site Soil Vapor Extraction/Air Sparge Remediation Systems In Operation From October 2007 To October 2010

Notes:
1. All boring and sample locations are approximate.
2. TPHg concentrations measured by EPA Method 8260B.
3. All concentrations below the laboratory reporting limit are plotted as half the reporting limit.
4. Ground water analytical data sources:
   - Analytical data collected on 10/12/16 are from Geodesign Inc's November 2016 Groundwater Monitoring Report;
   - Analytical data collected on 1/20/17 are from Pangea's January 2017 Groundwater Monitoring Report;
   - Analytical data collected on 10/10/17 are from Apex's January 2018 Groundwater Sampling & Well Destruction Report.

TPHg CONCENTRATIONS IN GROUNDWATER

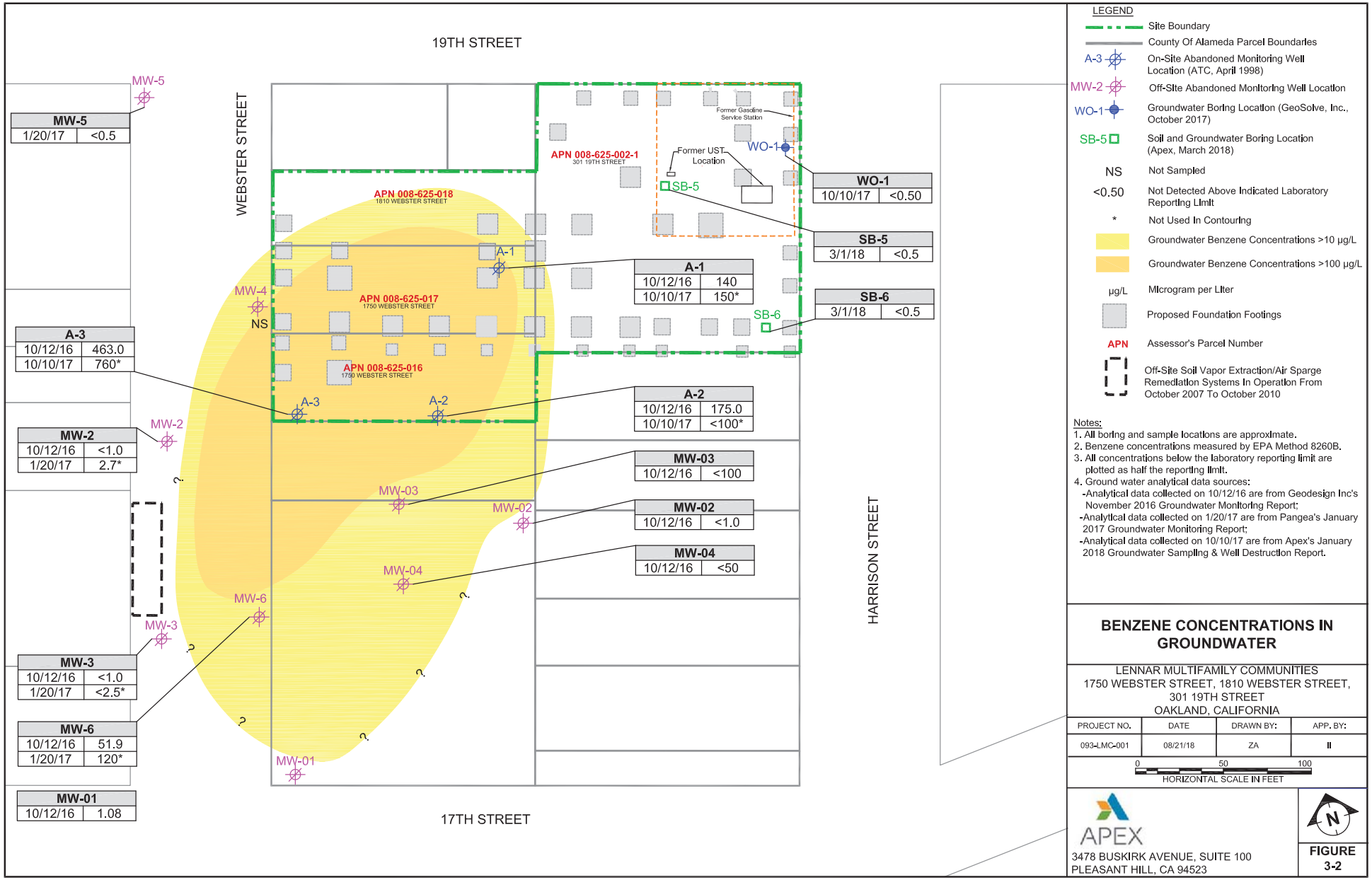
LENNAR MULTIFAMILY COMMUNITIES
1750 WEBSTER STREET, 1810 WEBSTER STREET,
301 19TH STREET
OAKLAND, CALIFORNIA

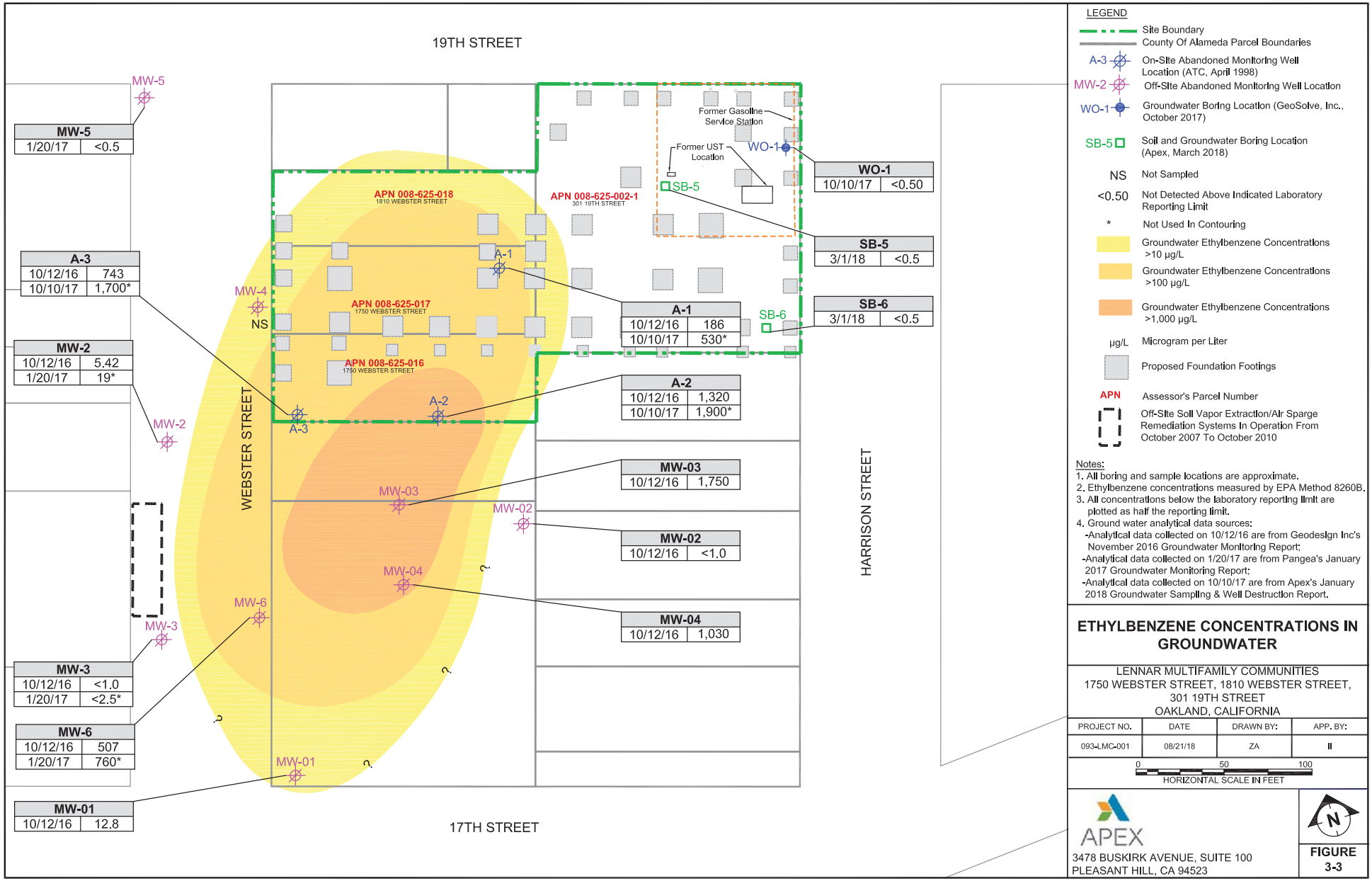
PROJECT NO.	DATE	DRAWN BY:	APP. BY:
093-LMC-001	08/21/18	ZA	II

0 50 100
HORIZONTAL SCALE IN FEET

APEX
3478 BUSKIRK AVENUE, SUITE 100
PLEASANT HILL, CA 94523

FIGURE 3-1


19TH STREET
17TH STREET
WEBSTER STREET
HARRISON STREET
APN 008-625-018
1810 WEBSTER STREET
APN 008-625-017
1750 WEBSTER STREET
APN 008-625-016
1750 WEBSTER STREET
APN 008-625-002-1
301 19TH STREET
Former Gasoline Service Station
Former UST Location
SB-5
WO-1
SB-6
A-1
A-2
A-3
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
NS
MW-5
1/20/17 <0.5
WO-1
10/10/17 <0.50
SB-5
3/1/18 <0.5
A-1
10/12/16 140
10/10/17 150*
SB-6
3/1/18 <0.5
A-3
10/12/16 463.0
10/10/17 760*
A-2
10/12/16 175.0
10/10/17 <100*
MW-2
10/12/16 <1.0
1/20/17 2.7*
MW-03
10/12/16 <100
MW-02
10/12/16 <1.0
MW-04
10/12/16 <50
MW-3
10/12/16 <1.0
1/20/17 <2.5*
MW-6
10/12/16 51.9
1/20/17 120*
MW-01
10/12/16 1.08
2
LEGEND
Site Boundary
County Of Alameda Parcel Boundaries
A-3 On-Site Abandoned Monitoring Well Location (ATC, April 1998)
MW-2 Off-Site Abandoned Monitoring Well Location
WO-1 Groundwater Boring Location (GeoSolve, Inc., October 2017)
SB-5 Soil and Groundwater Boring Location (Apex, March 2018)
NS Not Sampled
<0.50 Not Detected Above Indicated Laboratory Reporting Limit
* Not Used In Contouring
Groundwater Benzene Concentrations >10 µg/L
Groundwater Benzene Concentrations >100 µg/L
µg/L Microgram per Liter
Proposed Foundation Footings
APN Assessor's Parcel Number
Off-Site Soil Vapor Extraction/Air Sparge Remediation Systems In Operation From October 2007 To October 2010
Notes:
1. All boring and sample locations are approximate.
2. Benzene concentrations measured by EPA Method 8260B.
3. All concentrations below the laboratory reporting limit are plotted as half the reporting limit.
4. Ground water analytical data sources:
-Analytical data collected on 10/12/16 are from Geodesign Inc's November 2016 Groundwater Monitoring Report;
-Analytical data collected on 1/20/17 are from Pangea's January 2017 Groundwater Monitoring Report;
-Analytical data collected on 10/10/17 are from Apex's January 2018 Groundwater Sampling & Well Destruction Report.
BENZENE CONCENTRATIONS IN GROUNDWATER
LENNAR MULTIFAMILY COMMUNITIES
1750 WEBSTER STREET, 1810 WEBSTER STREET,
301 19TH STREET
OAKLAND, CALIFORNIA
PROJECT NO. 093-LMC-001
DATE 08/21/18
DRAWN BY: ZA
APP. BY: II
0 50 100
HORIZONTAL SCALE IN FEET
APEX
3478 BUSKIRK AVENUE, SUITE 100
PLEASANT HILL, CA 94523
N
FIGURE 3-2



LEGEND

- Site Boundary
- County Of Alameda Parcel Boundaries
- A-3 — On-Site Abandoned Monitoring Well Location (ATC, April 1998)
- MW-2 — Off-Site Abandoned Monitoring Well Location
- WO-1 — Groundwater Boring Location (GeoSolve, Inc., October 2017)
- SB-5 — Soil and Groundwater Boring Location (Apex, March 2018)
- NS — Not Sampled
- <0.50 — Not Detected Above Indicated Laboratory Reporting Limit
- * — Not Used In Contouring
- Groundwater Ethylbenzene Concentrations >10 µg/L
- Groundwater Ethylbenzene Concentrations >100 µg/L
- Groundwater Ethylbenzene Concentrations >1,000 µg/L
- µg/L — Microgram per Liter
- Proposed Foundation Footings
- APN — Assessor's Parcel Number
- Off-Site Soil Vapor Extraction/Air Sparge Remediation Systems In Operation From October 2007 To October 2010

Notes:
1. All boring and sample locations are approximate.
2. Ethylbenzene concentrations measured by EPA Method 8260B.
3. All concentrations below the laboratory reporting limit are plotted as half the reporting limit.
4. Ground water analytical data sources:
   - Analytical data collected on 10/12/16 are from Geodesign Inc's November 2016 Groundwater Monitoring Report;
   - Analytical data collected on 1/20/17 are from Pangea's January 2017 Groundwater Monitoring Report;
   - Analytical data collected on 10/10/17 are from Apex's January 2018 Groundwater Sampling & Well Destruction Report.

ETHYLBENZENE CONCENTRATIONS IN GROUNDWATER

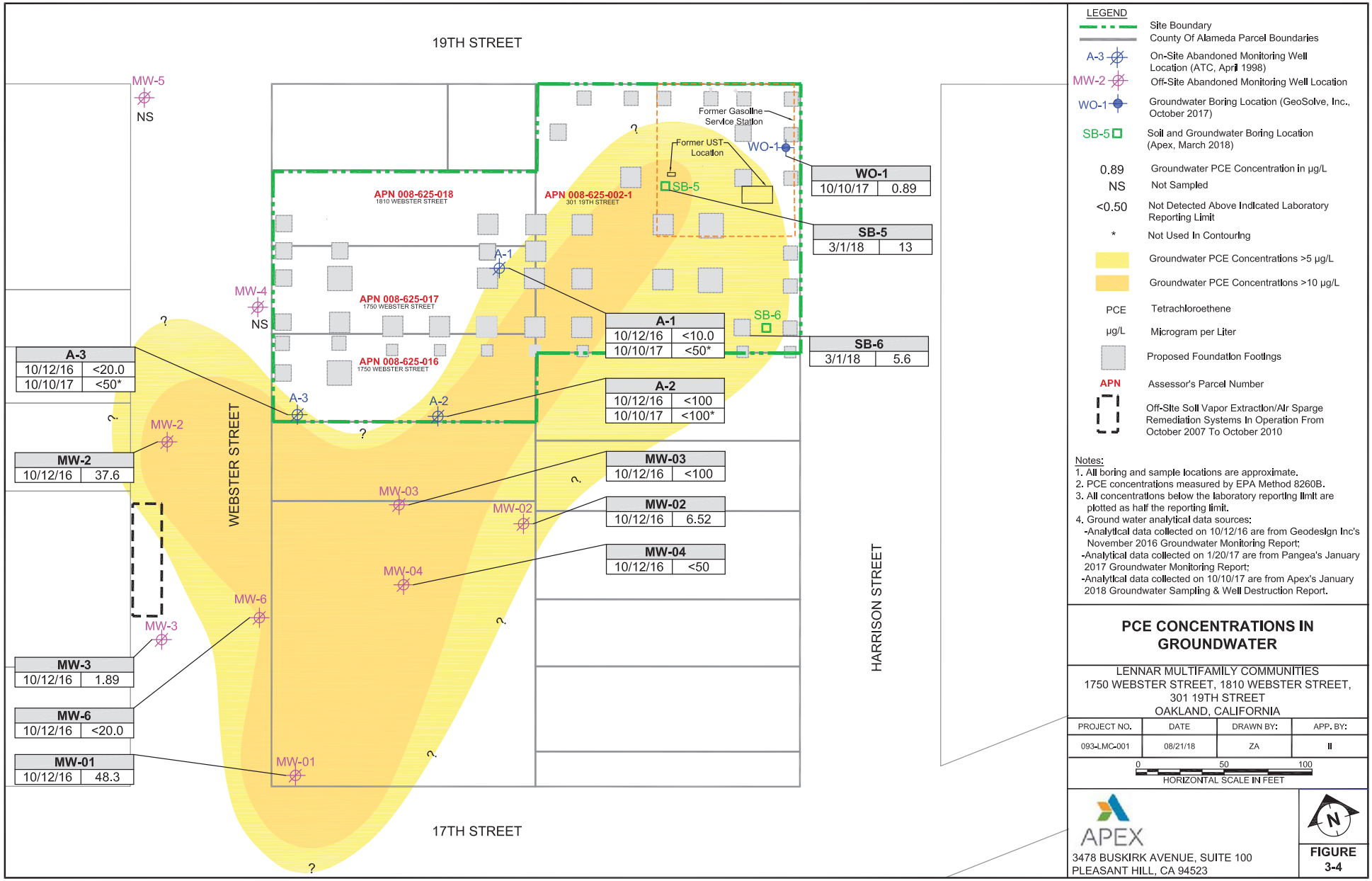
LENNAR MULTIFAMILY COMMUNITIES
1750 WEBSTER STREET, 1810 WEBSTER STREET,
301 19TH STREET
OAKLAND, CALIFORNIA

PROJECT NO.	DATE	DRAWN BY:	APP. BY:
093-LMC-001	08/21/18	ZA	II

0 50 100
HORIZONTAL SCALE IN FEET

APEX
3478 BUSKIRK AVENUE, SUITE 100
PLEASANT HILL, CA 94523

FIGURE 3-3



LEGEND

- Site Boundary
- County Of Alameda Parcel Boundaries
- A-3 — On-Site Abandoned Monitoring Well Location (ATC, April 1998)
- MW-2 — Off-Site Abandoned Monitoring Well Location
- WO-1 — Groundwater Boring Location (GeoSolve, Inc., October 2017)
- SB-5 — Soil and Groundwater Boring Location (Apex, March 2018)
- 0.89 — Groundwater PCE Concentration in µg/L
- NS — Not Sampled
- <0.50 — Not Detected Above Indicated Laboratory Reporting Limit
- * — Not Used In Contouring
- Groundwater PCE Concentrations >5 µg/L
- Groundwater PCE Concentrations >10 µg/L
- PCE — Tetrachloroethene
- µg/L — Microgram per Liter
- Proposed Foundation Footings
- APN — Assessor's Parcel Number
- Off-Site Soil Vapor Extraction/Air Sparge Remediation Systems In Operation From October 2007 To October 2010

Notes:
1. All boring and sample locations are approximate.
2. PCE concentrations measured by EPA Method 8260B.
3. All concentrations below the laboratory reporting limit are plotted as half the reporting limit.
4. Ground water analytical data sources:
   - Analytical data collected on 10/12/16 are from Geodesign Inc's November 2016 Groundwater Monitoring Report;
   - Analytical data collected on 1/20/17 are from Pangea's January 2017 Groundwater Monitoring Report;
   - Analytical data collected on 10/10/17 are from Apex's January 2018 Groundwater Sampling & Well Destruction Report.

PCE CONCENTRATIONS IN GROUNDWATER

LENNAR MULTIFAMILY COMMUNITIES
1750 WEBSTER STREET, 1810 WEBSTER STREET,
301 19TH STREET
OAKLAND, CALIFORNIA

PROJECT NO.	DATE	DRAWN BY:	APP. BY:
093-LMC-001	08/21/18	ZA	II

0 50 100
HORIZONTAL SCALE IN FEET

APEX
3478 BUSKIRK AVENUE, SUITE 100
PLEASANT HILL, CA 94523

FIGURE 3-4

TABLES

Table 2-1
Summary of Historical Depth to Water and Groundwater Elevation Data
1750 Webster Street, 1810 Webster Street, 301 19th Street
Oakland, CA

Well ID	Parcel	Date Installed	Top of Casing[1] NGVD (ft-msl)	Top of Casing[2] City of Oakland (ft-msl)	Total Depth of Well (ft-bgs)	Well Diameter (inches)	Screened Interval (ft-bgs)	Sample Date	Depth to Water (ft-btoc)	Groundwater Elevation[3] (ft-msl)
A-1	008-625-016	04/26/98	30.20	27.20	31	2	15 - 31	04/28/98	19.45	7.75
								08/04/98	19.80	7.40
								11/18/98	20.39	6.81
								02/26/99	19.82	7.38
								10/12/16	21.32	5.88
								10/10/17	20.50	6.70
A-2	008-625-016	04/26/98	31.31	28.31	31.5	2	15 - 31.5	04/28/98	19.65	8.66
								08/04/98	19.97	8.34
								11/18/98	20.57	7.74
								02/26/99	20.23	8.08
								10/12/16	21.65	6.66
								10/10/17	19.75	8.56
A-3	008-625-016	04/26/98	30.71	27.71	30	2	15 - 30	04/28/98	18.81	8.90
								08/04/98	19.05	8.66
								11/18/98	19.66	8.05
								02/26/99	19.32	8.39
								10/12/16	21.01	6.70
								10/10/17	19.45	8.26

Notes:
ft-msl = feet above mean sea level.
ft-bgs = feet below ground surface.
ft-btoc = feet below top of casing.
[1] Wells surveyed by Ron Archer Civil Engineer, Inc. on April 28, 1998 to National Geodetic Vertical Datum (NGVD).
[2] Converted from NGVD to City of Oakland Datum using the information provided by the City of Oakland, a vertical datum adjustment of +3.00.
http://www2.oaklandnet.com/oakcal/groups/pwa/documents/report/oak049845.pdf
[3] Based on top of casing elevation using City of Oakland datum minus depth to water.

References:
GeoDesign Inc. 2016. Groundwater Monitoring Report: October 2016, 1700 through 1750 Webster Street, Oakland, California. November 14.

Table 2-2
Summary of Historical Soil Sample Analytical Results for Metals
1750 Webster Street, 1810 Webster Street, 301 19th Street
Oakland, CA

Sample Location	Sample ID	Parcel	Lab Method[5]	Sample Depth (feet)	Sample Date	Metals																
						Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
RWQCB Regional Background Arsenic Concentration[1]						--	***11***	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RWQCB ESL Direct Contact-Construction Soil[2]						***140***	***0.98***	***3,000***	***42***	***43***	***530,000***	***28***	***14,000***	***160***	***44***	***1,800***	***86***	***1,700***	***1,800***	***3.5***	***470***	***110,000***
RWQCB ESL Direct Contact-Residential Soil[3]						*31*	*0.067*	*15,000*	*150*	*39*	*120,000*	*23*	*3,100*	*80*	*13*	*390*	*820*	*390*	*390*	*0.78*	*390*	*23,000*
RWQCB ESL Direct Contact-Commercial Soil[4]						*470*	*0.31*	*220,000*	*2,200*	*580*	*1,800,000*	*350*	*47,000*	*320*	*190*	*5,800*	*11,000*	*5,800*	*5,800*	*12*	*5,800*	*350,000*
JM-01	JM-01	008-625-002-1	(a)	5	09/06/91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JM-03	JM-03	008-625-002-1	(b)	Stockpile	09/06/91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JM-04	JM-04	008-625-002-1	(c)	15	09/10/91	--	--	--	--	--	--	--	--	**4.40**	--	--	--	--	--	--	--	--
JM-05	JM-05	008-625-002-1	(c)	15	09/10/91	--	--	--	--	--	--	--	--	**10.6**	--	--	--	--	--	--	--	--
JM-06	JM-06	008-625-002-1	(c)	1	09/10/91	--	--	--	--	--	--	--	--	**8.80**	--	--	--	--	--	--	--	--
															--	--	--	--	--	--	--	--
SB-1	SB1-2	008-625-016	(d), (e)	10	05/18/93	--	--	--	--	--	--	--	--	ND<5	--	--	--	--	--	--	--	--
SB-1	SB1-4	008-625-016	(e)	20	05/18/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2	SB2-2	008-625-016	(e)	10	05/18/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2	SB2-4	008-625-016	(d), (e)	20	05/18/93	--	--	--	--	--	--	--	--	ND<5	--	--	--	--	--	--	--	--
SB-3	SB3-2	008-625-016	(d), (e)	10	05/18/93	--	--	--	--	--	--	--	--	ND<5	--	--	--	--	--	--	--	--
SB-3	SB3-4	008-625-016	(e)	20	05/18/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-4	SB4-2	008-625-016	(e)	10	05/18/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-4	SB4-4	008-625-016	(d), (e)	20	05/18/93	--	--	--	--	--	--	--	--	ND<5	--	--	--	--	--	--	--	--
															--	--	--	--	--	--	--	--
G-1	G-1-10	008-625-016	(f)	10	02/07/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-1	G-1-24	008-625-016	(f)	24	02/07/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-2	G-2-10	008-625-016	(f)	10	02/07/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-2	G-2-22	008-625-016	(f)	22	02/07/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-3	G-3-10	008-625-016	(f)	10	02/07/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-3	G-3-16	008-625-016	(f)	16	02/07/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-4	G-4-12	008-625-016	(f)	12	02/07/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-4	G-4-22	008-625-016	(f)	22	02/07/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-5	G-5-11	008-625-016	(f)	11	02/07/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-5	G-5-21	008-625-016	(f)	21	02/07/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-6	G-6-10	008-625-016	(f)	10	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-6	G-6-15	008-625-016	(f)	15	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-7	G-7-15	008-625-016	(f)	15	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-7	G-7-19	008-625-016	(f)	19	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-8	G-8-12	008-625-016	(f)	12	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-8	G-8-16	008-625-016	(f)	16	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-9	G-9-11	008-625-016	(f)	11	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-9	G-9-16	008-625-016	(f)	16	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-10	G-10-10	008-625-016	(f)	10	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-10	G-10-17	008-625-016	(f)	17	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-11	G-11-11	008-625-016	(f)	11	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-11	G-11-16	008-625-016	(f)	16	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-12	G-12-11	008-625-016	(f)	11	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-12	G-12-16	008-625-016	(f)	16	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
															--	--	--	--	--	--	--	--
A-1-10.5	A-1-10.5	008-625-017	(g)	10.5	04/25/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-1-15	A-1-15	008-625-017	(g)	15	04/25/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-2-11	A-2-11	008-625-016	(g)	11	04/25/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-2-16	A-2-16	008-625-016	(g)	16	04/25/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-3-11.5	A-3-11.5	008-625-016	(g)	11.5	04/25/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-3-17.5	A-3-17.5	008-625-016	(g)	17.5	04/25/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	B1-5	008-625-017/002-1	(h)	5	10/28/15	--	--	--	--	--	--	--	--	170	--	--	--	--	--	--	--	--
B-1	B1-10	008-625-017/002-1	(h), (i)	10	10/28/15	--	--	--	--	--	--	--	--	**5.8**	--	--	--	--	--	--	--	--
B-1	B1-15	008-625-017/002-1	(h), (i)	15	10/28/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-1	B1-17.5	008-625-017/002-1	(h), (i)	17.5	10/28/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-1	B1-22	008-625-017/002-1	(h), (i)	22	10/28/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-1	B1-25	008-625-017/002-1	(h), (i)	25	10/28/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-1	B1-30	008-625-017/002-1	(h), (i)	30	10/28/15	--	--	--	--	--	--	--	--	**6.8**	--	--	--	--	--	--	--	--
B-2	B2-5	008-625-002-1	(h)	5	10/28/15	--	--	--	--	--	--	--	--	**5.3**	--	--	--	--	--	--	--	--
B-2	B2-10	008-625-002-1	(h), (i)	10	10/28/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-2	B2-15	008-625-002-1	(h), (i)	15	10/28/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-2	B2-20	008-625-002-1	(h), (i)	20	10/28/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-2	B2-25	008-625-002-1	(h), (i)	25	10/28/15	--	--	--	--	--	--	--	--	**9.8**	--	--	--	--	--	--	--	--
B-3	B3-5	008-625-002-1	(h)	5	10/28/15	--	--	--	--	--	--	--	--	**5.3**	--	--	--	--	--	--	--	--
B-3	B3-10	008-625-002-1	(h), (i)	10	10/28/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-3	B3-15	008-625-002-1	(h), (i)	15	10/28/15	--	--	--	--	--	--	--	--	**6.7**	--	--	--	--	--	--	--	--
B-3	B3-20	008-625-002-1	(h), (i)	20	10/28/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-3	B3-20D	008-625-002-1	(h), (i)	20	10/28/15	--	--	--	--	--	--	--	--	**8.9**	--	--	--	--	--	--	--	--
B-3	B3-25	008-625-002-1	(h), (i)	25	10/28/15	--	--	--	--	--	--	--	--	**7.3**	--	--	--	--	--	--	--	--
B-4	B4-1	008-625-016	(h)	1	12/11/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-4	B4-2	008-625-016	(h)	2	12/11/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-4	B4-3	008-625-016	(h)	3	12/11/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-4	B4-4	008-625-016	(h)	4	12/11/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-4	B4-5	008-625-016	(h)	5	12/11/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-4	B4-10	008-625-016	(j)	10	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4	B4-10	008-625-016	(i)	10	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4	B4-20	008-625-016	(j)	20	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4	B4-20	008-625-016	(i)	20	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4	B4-25	008-625-016	(j)	25	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2-2
Summary of Historical Soil Sample Analytical Results for Metals
1750 Webster Street, 1810 Webster Street, 301 19th Street
Oakland, CA

Sample Location	Sample ID	Parcel	Lab Method[5]	Sample Depth (feet)	Sample Date	Metals																
						Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
RWQCB Regional Background Arsenic Concentration[1]						--	***11***	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RWQCB ESL Direct Contact-Construction Soil[2]						***140***	***0.98***	***3,000***	***42***	***43***	***530,000***	***28***	***14,000***	***160***	***44***	***1,800***	***86***	***1,700***	***1,800***	***3.5***	***470***	***110,000***
RWQCB ESL Direct Contact-Residential Soil[3]						*31*	*0.067*	*15,000*	*150*	*39*	*120,000*	*23*	*3,100*	*80*	*13*	*390*	*820*	*390*	*390*	*0.78*	*390*	*23,000*
RWQCB ESL Direct Contact-Commercial Soil[4]						*470*	*0.31*	*220,000*	*2,200*	*580*	*1,800,000*	*350*	*47,000*	*320*	*190*	*5,800*	*11,000*	*5,800*	*5,800*	*12*	*5,800*	*350,000*
B-4	B4-25	008-625-016	(i)	25	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5	B5-1	008-625-017	(h)	1	12/11/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-5	B5-2	008-625-017	(h)	2	12/11/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-5	B5-3	008-625-017	(h)	3	12/11/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-5	B5-4	008-625-017	(h)	4	12/11/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-5	B5-5	008-625-017	(h)	5	12/11/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-5	B5-10	008-625-017	(j)	10	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5	B5-10	008-625-017	(h), (i)	10	12/11/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-5	B5-20	008-625-017	(j)	20	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5	B5-20	008-625-017	(h), (i)	20	12/11/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-5	B5-25	008-625-017	(j)	25	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5	B5-25	008-625-017	(h), (i)	25	12/11/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-6	B6-1	008-625-016	(h)	1	12/11/15	--	--	--	--	--	--	--	--	**6.2**	--	--	--	--	--	--	--	--
B-6	B6-2	008-625-016	(h)	2	12/11/15	--	--	--	--	--	--	--	--	**6.2**	--	--	--	--	--	--	--	--
B-6	B6-3	008-625-016	(h)	3	12/11/15	--	--	--	--	--	--	--	--	**6.5**	--	--	--	--	--	--	--	--
B-6	B6-4	008-625-016	(h)	4	12/11/15	--	--	--	--	--	--	--	--	**5.1**	--	--	--	--	--	--	--	--
B-6	B6-5	008-625-016	(h)	5	12/11/15	--	--	--	--	--	--	--	--	**6.7**	--	--	--	--	--	--	--	--
B-6	B6-10	008-625-016	(j)	10	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6	B6-10	008-625-016	(h), (i)	10	12/11/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-6	B6-20	008-625-016	(j)	20	12/14/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6	B6-20	008-625-016	(h), (i)	20	12/14/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-6	B6-25	008-625-016	(j)	25	12/14/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6	B6-25	008-625-016	(h), (i)	25	12/14/15	--	--	--	--	--	--	--	--	ND<5.0	--	--	--	--	--	--	--	--
B-1	B1-1	008-625-018	(k)	1	02/02/16	--	--	--	--	--	--	--	--	**7.5**	--	--	--	--	--	--	--	--
B-1	B1-15	008-625-018	(j)	15	02/02/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	B1-15	008-625-018	(k), (i)	15	02/02/16	--	--	--	--	--	--	--	--	**2.2**	--	--	--	--	--	--	--	--
B-1	B1-20	008-625-018	(j)	20	02/02/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	B1-20	008-625-018	(k), (i)	20	02/02/16	--	--	--	--	--	--	--	--	**1.9**	--	--	--	--	--	--	--	--
B-1	B1-22.5	008-625-018	(j)	22.5	02/02/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	B1-22.5	008-625-018	(k), (i)	22.5	02/02/16	--	--	--	--	--	--	--	--	**2.6**	--	--	--	--	--	--	--	--
B-2	B2-1	008-625-018	(k)	1	02/02/16	--	--	--	--	--	--	--	--	**130**	--	--	--	--	--	--	--	--
B-2	B2-15	008-625-018	(j)	15	02/02/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	B2-15	008-625-018	(k), (i)	15	02/02/16	--	--	--	--	--	--	--	--	**2.2**	--	--	--	--	--	--	--	--
B-2	B2-20	008-625-018	(j)	20	02/02/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	B2-20	008-625-018	(k), (i)	20	02/02/16	--	--	--	--	--	--	--	--	**4.6**	--	--	--	--	--	--	--	--
B-2	B2-22.5	008-625-018	(j)	22.5	02/02/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	B2-22.5	008-625-018	(k), (i)	22.5	02/02/16	--	--	--	--	--	--	--	--	**3.0**	--	--	--	--	--	--	--	--
B-3	B3-1	008-625-018	(k)	1	02/02/16	--	--	--	--	--	--	--	--	**16**	--	--	--	--	--	--	--	--
B-3	B3-15	008-625-018	(j)	15	02/02/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	B3-15	008-625-018	(k), (i)	15	02/02/16	--	--	--	--	--	--	--	--	**2.2**	--	--	--	--	--	--	--	--
B-3	B3-20	008-625-018	(j)	20	02/02/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	B3-20	008-625-018	(k), (i)	20	02/02/16	--	--	--	--	--	--	--	--	**2.3**	--	--	--	--	--	--	--	--
B-3	B3-22.5	008-625-018	(j)	22.5	02/02/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	B3-22.5	008-625-018	(k), (i)	22.5	02/02/16	--	--	--	--	--	--	--	--	**3.1**	--	--	--	--	--	--	--	--
B-7	B7-1	008-625-002-1	(k), (i)	1	07/14/16	--	--	--	--	--	--	--	--	**5.1**	--	--	--	--	--	--	--	--
B-7	B7-10	008-625-002-1	(k), (i)	10	07/14/16	--	--	--	--	--	--	--	--	**1.7**	--	--	--	--	--	--	--	--
B-7	B7-15	008-625-002-1	(k), (i)	15	07/14/16	--	--	--	--	--	--	--	--	**2.0**	--	--	--	--	--	--	--	--
B-8	B8-1	008-625-002-1	(k), (i)	1	07/14/16	--	--	--	--	--	--	--	--	**9.7**	--	--	--	--	--	--	--	--
B-8	B8-10	008-625-002-1	(k), (i)	10	07/14/16	--	--	--	--	--	--	--	--	**2.0**	--	--	--	--	--	--	--	--
B-8	B8-15	008-625-002-1	(k), (i)	15	07/14/16	--	--	--	--	--	--	--	--	**2.3**	--	--	--	--	--	--	--	--
B-9	B9-1	008-625-002-1	(i)	1	07/14/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-9	B9-10	008-625-002-1	(k), (i)	10	07/14/16	--	--	--	--	--	--	--	--	**1.6**	--	--	--	--	--	--	--	--
B-9	B9-15	008-625-002-1	(k), (i)	15	07/14/16	--	--	--	--	--	--	--	--	**2.5**	--	--	--	--	--	--	--	--
SPB-1	SPB1-A,B,C,D	008-625-018	(l)	Composite[3]	02/22/17	ND<0.50	**2.3**	**95**	ND<0.50	ND<0.25	**69**	**7.7**	**9.6**	**3.5**	ND<0.050	ND<0.50	**49**	ND<0.50	ND<0.50	ND<0.50	**31**	**24**
SPB-1	SPB1-A,B,C,D	008-625-018	(m)	Composite[3]	02/22/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPB-2	SPB2-A,B,C,D	008-625-017	(l)	Composite[3]	02/22/17	ND<0.50	**3.9**	**96**	ND<0.50	ND<0.25	**58**	**8.9**	**12**	**5.4**	ND<0.050	ND<0.50	**48**	ND<0.50	ND<0.50	ND<0.50	**40**	**35**
SPB-2	SPB2-A,B,C,D	008-625-017	(m)	Composite[3]	02/22/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPB-3	SPB3-A,B,C,D	008-625-002-1	(l)	Composite[3]	02/22/17	**0.70**	**4.1**	**220**	ND<0.50	**0.42**	**53**	**14**	**22**	**470**	**0.88**	**0.56**	**57**	ND<0.50	ND<0.50	ND<0.50	**34**	**130**
SPB-3	SPB3-A,B,C,D	008-625-002-1	(m)	Composite[3]	02/22/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPB-4	SPB4-A,B,C,D	008-625-002-1	(l)	Composite[3]	02/22/17	ND<0.50	**2.9**	**78**	ND<0.50	ND<0.25	**52**	**6.0**	**9.4**	**4.2**	**0.065**	ND<0.50	**40**	ND<0.50	ND<0.50	ND<0.50	**30**	**21**
SPB-4	SPB4-A,B,C,D	008-625-002-1	(m)	Composite[3]	02/22/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPB-3	SPB3-A	008-625-002-1	(k)	2.5	02/22/17	--	--	--	--	--	--	--	--	**760**	--	--	--	--	--	--	--	--
SPB-3	SPB3-B	008-625-002-1	(k)	5	02/22/17	--	--	--	--	--	--	--	--	**4.8**	--	--	--	--	--	--	--	--
SPB-3	SPB3-C	008-625-002-1	(k)	7.5	02/22/17	--	--	--	--	--	--	--	--	**3.1**	--	--	--	--	--	--	--	--
SPB-3	SPB3-D	008-625-002-1	(k)	10	02/22/17	--	--	--	--	--	--	--	--	**3.5**	--	--	--	--	--	--	--	--
SPB-1	SPB1-A,B,C,D	008-625-018	(n) STLC	Composite[3]	02/22/17	--	--	--	--	--	ND<0.10 mg/L	--	--	--	--	--	--	--	--	--	--	--
SPB-2	SPB2-A,B,C,D	008-625-017	(n) STLC	Composite[3]	02/22/17	--	--	--	--	--	**0.11 mg/L**	--	--	--	--	--	--	--	--	--	--	--
SPB-3	SPB1-A,B,C,D	008-625-002-1	(n) STLC	Composite[3]	02/22/17	--	--	--	--	--	**0.21 mg/L**	--	--	**16 mg/L**	--	--	--	--	--	--	--	--
SPB-4	SPB2-A,B,C,D	008-625-002-1	(n) STLC	Composite[3]	02/22/17	--	--	--	--	--	ND<0.10 mg/L	--	--	--	--	--	--	--	--	--	--	--
SPB-3	SPB1-A,B,C,D	008-625-002-1	(o) TCLP	Composite[3]	02/22/17	--	--	--	--	--	--	--	--	**0.82 mg/L**	--	--	--	--	--	--	--	--
L-1	L1-2	008-625-016	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**3.1**	--	--	--	--	--	--	--	--

Table 2-2
Summary of Historical Soil Sample Analytical Results for Metals
1750 Webster Street, 1810 Webster Street, 301 19th Street
Oakland, CA

Sample Location	Sample ID	Parcel	Lab Method[5]	Sample Depth (feet)	Sample Date	Metals																
						Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
RWQCB Regional Background Arsenic Concentration[1]						--	***11***	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RWQCB ESL Direct Contact-Construction Soil[2]						***140***	***0.98***	***3,000***	***42***	***43***	***530,000***	***28***	***14,000***	***160***	***44***	***1,800***	***86***	***1,700***	***1,800***	***3.5***	***470***	***110,000***
RWQCB ESL Direct Contact-Residential Soil[3]						*31*	*0.067*	*15,000*	*150*	*39*	*120,000*	*23*	*3,100*	*80*	*13*	*390*	*820*	*390*	*390*	*0.78*	*390*	*23,000*
RWQCB ESL Direct Contact-Commercial Soil[4]						*470*	*0.31*	*220,000*	*2,200*	*580*	*1,800,000*	*350*	*47,000*	*320*	*190*	*5,800*	*11,000*	*5,800*	*5,800*	*12*	*5,800*	*350,000*
L-1	L1-4	008-625-016	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**4.1**	--	--	--	--	--	--	--	--
L-1	L1-6	008-625-016	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**5.6**	--	--	--	--	--	--	--	--
L-1	L1-8	008-625-016	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**4.6**	--	--	--	--	--	--	--	--
L-1	L1-10	008-625-016	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**3.1**	--	--	--	--	--	--	--	--
L-2	L2-2	008-625-016	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**2.7**	--	--	--	--	--	--	--	--
L-2	L2-4	008-625-016	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**3.3**	--	--	--	--	--	--	--	--
L-2	L2-6	008-625-016	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**3.8**	--	--	--	--	--	--	--	--
L-2	L2-8	008-625-016	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**4.5**	--	--	--	--	--	--	--	--
L-2	L2-10	008-625-016	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**3.7**	--	--	--	--	--	--	--	--
L-3	L3-2	008-625-017	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**3.5**	--	--	--	--	--	--	--	--
L-3	L3-4	008-625-017	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**3.5**	--	--	--	--	--	--	--	--
L-3	L3-6	008-625-017	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**5.4**	--	--	--	--	--	--	--	--
L-3	L3-8	008-625-017	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**4.3**	--	--	--	--	--	--	--	--
L-3	L3-10	008-625-017	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**2.6**	--	--	--	--	--	--	--	--
L-4	L4-2	008-625-017	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**5.9**	--	--	--	--	--	--	--	--
L-4	L4-4	008-625-017	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**4.5**	--	--	--	--	--	--	--	--
L-4	L4-6	008-625-017	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**5.5**	--	--	--	--	--	--	--	--
L-4	L4-8	008-625-017	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**3.6**	--	--	--	--	--	--	--	--
L-4	L4-10	008-625-017	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**2.9**	--	--	--	--	--	--	--	--
L-5	L5-2	008-625-018	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**3.3**	--	--	--	--	--	--	--	--
L-5	L5-4	008-625-018	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**4.7**	--	--	--	--	--	--	--	--
L-5	L5-6	008-625-018	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**3.4**	--	--	--	--	--	--	--	--
L-5	L5-8	008-625-018	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**5.3**	--	--	--	--	--	--	--	--
L-5	L5-10	008-625-018	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**2.6**	--	--	--	--	--	--	--	--
L-6	L6-2	008-625-018	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**86**	--	--	--	--	--	--	--	--
L-6	L6-4	008-625-018	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**3.5**	--	--	--	--	--	--	--	--
L-6	L6-6	008-625-018	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**4.9**	--	--	--	--	--	--	--	--
L-6	L6-8	008-625-018	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**4.1**	--	--	--	--	--	--	--	--
L-6	L6-10	008-625-018	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**2.8**	--	--	--	--	--	--	--	--
L-7	L7-2	008-625-017	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**3.4**	--	--	--	--	--	--	--	--
L-7	L7-4	008-625-017	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**4.3**	--	--	--	--	--	--	--	--
L-7	L7-6	008-625-017	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**4.8**	--	--	--	--	--	--	--	--
L-7	L7-8	008-625-017	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**5.0**	--	--	--	--	--	--	--	--
L-7	L7-10	008-625-017	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**3.8**	--	--	--	--	--	--	--	--
L-8	L8-2	008-625-017	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**4.7**	--	--	--	--	--	--	--	--
L-8	L8-4	008-625-017	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**7.2**	--	--	--	--	--	--	--	--
L-8	L8-6	008-625-017	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**4.9**	--	--	--	--	--	--	--	--
L-8	L8-8	008-625-017	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**4.2**	--	--	--	--	--	--	--	--
L-8	L8-10	008-625-017	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**4.1**	--	--	--	--	--	--	--	--
L-9	L9-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**16**	--	--	--	--	--	--	--	--
L-9	L9-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**3.2**	--	--	--	--	--	--	--	--
L-9	L9-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**4.0**	--	--	--	--	--	--	--	--
L-9	L9-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**4.5**	--	--	--	--	--	--	--	--
L-9	L9-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**2.7**	--	--	--	--	--	--	--	--
L-10	L10-2	008-625-017	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**5.3**	--	--	--	--	--	--	--	--
L-10	L10-4	008-625-017	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**4.3**	--	--	--	--	--	--	--	--
L-10	L10-6	008-625-017	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**5.3**	--	--	--	--	--	--	--	--
L-10	L10-8	008-625-017	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**4.9**	--	--	--	--	--	--	--	--
L-10	L10-10	008-625-017	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**3.9**	--	--	--	--	--	--	--	--
L-11	L11-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**5.2**	--	--	--	--	--	--	--	--
L-11	L11-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**4.4**	--	--	--	--	--	--	--	--
L-11	L11-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**4.2**	--	--	--	--	--	--	--	--
L-11	L11-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**2.9**	--	--	--	--	--	--	--	--
L-11	L11-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**1.9**	--	--	--	--	--	--	--	--
L-12	L12-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**3.4**	--	--	--	--	--	--	--	--
L-12	L12-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**4.7**	--	--	--	--	--	--	--	--
L-12	L12-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**3.8**	--	--	--	--	--	--	--	--
L-12	L12-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**3.2**	--	--	--	--	--	--	--	--
L-12	L12-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**2.1**	--	--	--	--	--	--	--	--
L-13	L13-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**13**	--	--	--	--	--	--	--	--
L-13	L13-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**3.3**	--	--	--	--	--	--	--	--
L-13	L13-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**4.7**	--	--	--	--	--	--	--	--
L-13	L13-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**3.8**	--	--	--	--	--	--	--	--
L-13	L13-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**4.2**	--	--	--	--	--	--	--	--
L-14	L14-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**4.0**	--	--	--	--	--	--	--	--
L-14	L14-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**4.2**	--	--	--	--	--	--	--	--
L-14	L14-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**2.9**	--	--	--	--	--	--	--	--
L-14	L14-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**2.3**	--	--	--	--	--	--	--	--
L-14	L14-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**1.9**	--	--	--	--	--	--	--	--
L-15	L15-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**3.3**	--	--	--	--	--	--	--	--
L-15	L15-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**3.9**	--	--	--	--	--	--	--	--
L-15	L15-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**2.6**	--	--	--	--	--	--	--	--
L-15	L15-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**2.3**	--	--	--	--	--	--	--	--
L-15	L15-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**2.0**	--	--	--	--	--	--	--	--
L-16	L16-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**2.8**	--	--	--	--	--	--	--	--
L-16	L16-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**6.1**	--	--	--	--	--	--	--	--

Table 2-2
Summary of Historical Soil Sample Analytical Results for Metals
1750 Webster Street, 1810 Webster Street, 301 19th Street
Oakland, CA

Sample Location	Sample ID	Parcel	Lab Method[5]	Sample Depth (feet)	Sample Date	Metals																
						Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
RWQCB Regional Background Arsenic Concentration[1]						--	***11***	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RWQCB ESL Direct Contact-Construction Soil[2]						***140***	***0.98***	***3,000***	***42***	***43***	***530,000***	***28***	***14,000***	***160***	***44***	***1,800***	***86***	***1,700***	***1,800***	***3.5***	***470***	***110,000***
RWQCB ESL Direct Contact-Residential Soil[3]						*31*	*0.067*	*15,000*	*150*	*39*	*120,000*	*23*	*3,100*	*80*	*13*	*390*	*820*	*390*	*390*	*0.78*	*390*	*23,000*
RWQCB ESL Direct Contact-Commercial Soil[4]						*470*	*0.31*	*220,000*	*2,200*	*580*	*1,800,000*	*350*	*47,000*	*320*	*190*	*5,800*	*11,000*	*5,800*	*5,800*	*12*	*5,800*	*350,000*
L-16	L16-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**4.0**	--	--	--	--	--	--	--	--
L-16	L16-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**2.9**	--	--	--	--	--	--	--	--
L-16	L16-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**2.7**	--	--	--	--	--	--	--	--
L-17	L17-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**3.8**	--	--	--	--	--	--	--	--
L-17	L17-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**3.7**	--	--	--	--	--	--	--	--
L-17	L17-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**2.8**	--	--	--	--	--	--	--	--
L-17	L17-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**2.4**	--	--	--	--	--	--	--	--
L-17	L17-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**2.1**	--	--	--	--	--	--	--	--
L-18	L18-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**3.3**	--	--	--	--	--	--	--	--
L-18	L18-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**4.2**	--	--	--	--	--	--	--	--
L-18	L18-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**3.1**	--	--	--	--	--	--	--	--
L-18	L18-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**2.4**	--	--	--	--	--	--	--	--
L-18	L18-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**2.0**	--	--	--	--	--	--	--	--
L-19	L19-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**19**	--	--	--	--	--	--	--	--
L-19	L19-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**4.7**	--	--	--	--	--	--	--	--
L-19	L19-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**4.1**	--	--	--	--	--	--	--	--
L-19	L19-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**2.7**	--	--	--	--	--	--	--	--
L-19	L19-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**2.0**	--	--	--	--	--	--	--	--
L-20	L20-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**6.3**	--	--	--	--	--	--	--	--
L-20	L20-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**4.2**	--	--	--	--	--	--	--	--
L-20	L20-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**2.9**	--	--	--	--	--	--	--	--
L-20	L20-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**2.6**	--	--	--	--	--	--	--	--
L-20	L20-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**1.8**	--	--	--	--	--	--	--	--
L-21	L21-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**4.6**	--	--	--	--	--	--	--	--
L-21	L21-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**6.6**	--	--	--	--	--	--	--	--
L-21	L21-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**3.0**	--	--	--	--	--	--	--	--
L-21	L21-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**2.3**	--	--	--	--	--	--	--	--
L-21	L21-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**1.9**	--	--	--	--	--	--	--	--
L-22	L22-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**6.0**	--	--	--	--	--	--	--	--
L-22	L22-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**3.6**	--	--	--	--	--	--	--	--
L-22	L22-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**3.2**	--	--	--	--	--	--	--	--
L-22	L22-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**2.5**	--	--	--	--	--	--	--	--
L-22	L22-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**1.8**	--	--	--	--	--	--	--	--
L-23	L23-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**3.5**	--	--	--	--	--	--	--	--
L-23	L23-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**3.9**	--	--	--	--	--	--	--	--
L-23	L23-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**3.3**	--	--	--	--	--	--	--	--
L-23	L23-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**2.6**	--	--	--	--	--	--	--	--
L-23	L23-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**2.0**	--	--	--	--	--	--	--	--
L-24	L24-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**3.0**	--	--	--	--	--	--	--	--
L-24	L24-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**2.0**	--	--	--	--	--	--	--	--
L-24	L24-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**8.3**	--	--	--	--	--	--	--	--
L-24	L24-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**4.8**	--	--	--	--	--	--	--	--
L-24	L24-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**3.8**	--	--	--	--	--	--	--	--
L-25	L25-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**44**	--	--	--	--	--	--	--	--
L-25	L25-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**5.0**	--	--	--	--	--	--	--	--
L-25	L25-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**3.7**	--	--	--	--	--	--	--	--
L-25	L25-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**3.0**	--	--	--	--	--	--	--	--
L-25	L25-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**2.4**	--	--	--	--	--	--	--	--
L-26	L26-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**5.1**	--	--	--	--	--	--	--	--
L-26	L26-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**5.3**	--	--	--	--	--	--	--	--
L-26	L26-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**2.9**	--	--	--	--	--	--	--	--
L-26	L26-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**1.9**	--	--	--	--	--	--	--	--
L-26	L26-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**1.9**	--	--	--	--	--	--	--	--
L-27	L27-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**4.5**	--	--	--	--	--	--	--	--
L-27	L27-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**4.7**	--	--	--	--	--	--	--	--
L-27	L27-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**4.3**	--	--	--	--	--	--	--	--
L-27	L27-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**3.0**	--	--	--	--	--	--	--	--
L-27	L27-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**1.9**	--	--	--	--	--	--	--	--
L-28	L28-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**6.0**	--	--	--	--	--	--	--	--
L-28	L28-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**4.1**	--	--	--	--	--	--	--	--
L-28	L28-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**2.4**	--	--	--	--	--	--	--	--
L-28	L28-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**2.3**	--	--	--	--	--	--	--	--
L-28	L28-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**1.7**	--	--	--	--	--	--	--	--
L-29	L29-2	008-625-002-1	(k)	2	05/15/17	--	--	--	--	--	--	--	--	**13**	--	--	--	--	--	--	--	--
L-29	L29-4	008-625-002-1	(k)	4	05/15/17	--	--	--	--	--	--	--	--	**6.5**	--	--	--	--	--	--	--	--
L-29	L29-6	008-625-002-1	(k)	6	05/15/17	--	--	--	--	--	--	--	--	**2.8**	--	--	--	--	--	--	--	--
L-29	L29-8	008-625-002-1	(k)	8	05/15/17	--	--	--	--	--	--	--	--	**2.2**	--	--	--	--	--	--	--	--
L-29	L29-10	008-625-002-1	(k)	10	05/15/17	--	--	--	--	--	--	--	--	**2.1**	--	--	--	--	--	--	--	--
UST-Discovery Area	UST-N-5'	008-625-002-1	(h)	5	02/20/18	ND<2.0	**2.5**	**56**	**0.39**	ND<0.25	**85**	**8.0**	**8.6**	**3.2**	ND<0.017	ND<0.25	**64**	ND<2.0	ND<0.25	ND<0.50	**32**	**22**
UST-Discovery Area	UST-E-5'	008-625-002-1	(h)	5	02/20/18	ND<2.0	**3.1**	**98**	**0.35**	ND<0.27	**61**	**8.2**	**8.1**	**18**	**0.032**	ND<0.27	**42**	ND<2.0	ND<0.27	ND<0.54	**35**	**26**
UST-Discovery Area	UST-S-5'	008-625-002-1	(h)	5	02/20/18	ND<2.0	**5.9**	**81**	**0.41**	ND<0.26	**84**	**7.5**	**8.0**	**3.2**	ND<0.017	ND<0.26	**67**	ND<2.0	ND<0.26	ND<0.52	**43**	**23**
UST-Discovery Area	UST-FL-7'	008-625-002-1	(h)	7	02/20/18	ND<2.0	**1.8**	**61**	**0.25**	ND<0.27	**59**	**4.9**	**5.1**	**2.4**	ND<0.018	ND<0.27	**34**	ND<2.0	ND<0.27	ND<0.53	**28**	**21**
UST-Discovery Area	SB-5-8	008-625-002-1	(h)	8	03/01/18	ND<2.0	**5.3**	**65**	**0.22**	ND<0.25	**43**	**5.8**	**4.9**	**1.8**	**0.023**	ND<0.25	**55**	ND<2.0	ND<0.25	ND<0.50	**37**	**19**
UST-Discovery Area	SB-5-16	008-625-002-1	(h)	16	03/01/18	ND<2.0	**1.9**	**52**	**0.32**	ND<0.25	**35**	**7.1**	**7.9**	**3.7**	ND<0.018	ND<0.25	**38**	ND<2.0	ND<0.25	ND<0.50	**27**	**25**

Table 2-2
Summary of Historical Soil Sample Analytical Results for Metals
1750 Webster Street, 1810 Webster Street, 301 19th Street
Oakland, CA

Sample Location	Sample ID	Parcel	Lab Method[5]	Sample Depth (feet)	Sample Date	Metals															
						Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
RWQCB Regional Background Arsenic Concentration [1]						--	***11***	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RWQCB ESL Direct Contact-Construction Soil [2]						***140***	***0.98***	***3,000***	***42***	***43***	***530,000***	***28***	***14,000***	***160***	***44***	***1,800***	***86***	***1,700***	***1,800***	***3.5***	***470***	***110,000***
RWQCB ESL Direct Contact-Residential Soil[2]						*31*	*0.067*	*15,000*	*150*	*39*	*120,000*	*23*	*3,100*	*80*	*13*	*390*	*820*	*390*	*390*	*0.78*	*390*	*23,000*
RWQCB ESL Direct Contact-Commercial Soil[2]						*470*	*0.31*	*220,000*	*2,200*	*580*	*1,800,000*	*350*	*47,000*	*320*	*190*	*5,800*	*11,000*	*5,800*	*5,800*	*12*	*5,800*	*350,000*
UST-Relocation Area	SS-1-0.5	008-625-002-1	(h)	0.5	02/20/18	ND<2.0	**4.8**	**100**	**0.38**	**0.31**	**47**	**8.9**	**13**	**15**	**0.046**	**1.9**	**39**	ND<2.0	**0.31**	ND<0.52	**38**	**40**
UST-Relocation Area	SS-2-0.5	008-625-002-1	(h)	0.5	02/20/18	ND<2.0	**3.7**	**95**	**0.39**	ND<0.27	**50**	**9.5**	**11**	**4.2**	**0.018**	ND<0.27	**42**	ND<2.0	ND<0.27	ND<0.54	**39**	**27**
UST-Spill Area (Footing)	SS-N-3'	008-625-002-1	(h)	3	02/20/18	ND<1.8	**3.8**	**98**	**0.41**	ND<0.23	**52**	**11**	**12**	**4.1**	**0.024**	**0.41**	**39**	ND<1.8	ND<0.23	ND<0.45	**41**	**27**
UST-Spill Area (Footing)	SS-E-3'	008-625-002-1	(h)	3	02/20/18	ND<2.0	**3.6**	**100**	**0.41**	ND<0.26	**45**	**9.4**	**12**	**4.1**	**0.018**	**0.31**	**41**	ND<2.0	ND<0.26	ND<0.53	**41**	**28**
UST-Spill Area (Footing)	SS-W-3'	008-625-002-1	(h)	3	02/20/18	ND<1.9	**5.1**	**140**	**0.49**	ND<0.24	**64**	**19**	**13**	**5.1**	**0.030**	**0.45**	**45**	ND<1.9	ND<0.24	ND<0.49	**49**	**28**
UST-Spill Area (Footing)	SS-FL-3	008-625-002-1	(h)	3	02/23/18	ND<1.9	**2.2**	**100** [(Note 4)]	**0.31**	**0.24**	**67**	**10.0**	**7.9**	**4.3**	ND<0.015	**0.57**	**54**	ND<1.9	ND<0.24	ND<0.48	**29**	**21**
UST-Spill Area (Footing)	SB-6-6	008-625-002-1	(h)	6	03/01/18	ND<2.0	**2.3**	**70**	**0.31**	ND<0.25	**82**	**7.6**	**8.9**	**2.7**	**0.017**	**0.89**	**55**	ND<2.0	ND<0.25	ND<0.51	**32**	**25**
UST-Spill Area (Footing)	SB-6-16	008-625-002-1	(h)	16	03/01/18	ND<2.0	**2.2**	**39**	**0.20**	ND<0.25	**44**	**6.3**	**4.2**	**1.9**	ND<0.018	**0.37**	**37**	ND<2.0	ND<0.25	ND<0.49	**28**	**20**

Notes:
Bold font indicates concentration above laboratory reporting limit.
Indicates concentration above regional background level and construction soil screening level.
mg/kg = milligram per kilogram
mg/L = milligram per liter
- - = Not available, not analyzed
ND<5.0 = Not detected above indicated laboratory reporting limit
[1] California Regional Water Quality Control Board - San Francisco Bay Region estimate of background arsenic concentration in soil (Duvergé, 2011).
[2] Values represent California Regional Water Quality Control Board - San Francisco Bay Region Environmental Screening Levels (RWQCB ESLs), Revision 3 dated February 2016.
[3] Composite soil sample from discrete soil samples collected at 2.5, 5 , 7.5, and 10 feet bgs. Samples were composited by the laboratory.
[4] Low response noted by laboratory.
[5] Lab methods:
(a) TPHd and TPHg by EPA Method 5030/8015, TPH Oil and Grease and Total Hydrocarbon by EPA Method 5520-D&F, BTEX and Purgeable Organics by EPA Method 8240, Acid & Base Neutral Compounds by EPA Method 8270
(b) TPHd by EPA Method 5030/8015, BTEX by EPA Method 8020
(c) Total Lead by EPA Method 7420, TPHg by EPA Method 5030/8015, BTEX and Purgeable Organics by EPA Method 8240
(d) TPHg, TPHd, BTEX by EPA Method 8015
(e) Total Lead by EPA Method 6010
(f) TPHg by EPA Method 8015M, BTEX by EPA Method 8020A
(g) TPHg by EPA Method 8015M, BTEX & MTBE by EPA Method 8020A, HVOCs by EPA Method 8010
(h) Metals by EPA Method 6010B
(i) TPHg, BTEX, MTBE by EPA Method 8021B/8015B
(j) VOCs by EPA Method 8260B
(k) Total Lead by EPA Method 6020
(l) Total recoverable Petroleum Hydrocarbon with silica gel cleanup by EPA Method E418.1, TPHd, TPHmo with silica gel cleanup by EPA Method 8015B, TPHg, BTEX and MTBE by EPA Method 8015BM, Metals by EPA Method 6020
(m) Pesticides and PCBs by EPA Method 8081A/8082, VOCs by EPA Method 8260B, SVOCs by EPA Method 8270C, Metals by EPA Method 6020
(n) STLC for chromium and lead by EPA Method CA Title 22/6020
(o) TCLP for lead by EPA Method 1311/3010/6020

References:
Duvergé, Dylan Jacques. 2011. Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region. A thesis submitted to the faculty of San Francicisco State University. December.
RWQCB. 2016. Environmental Screening Levels (ESLs). Revision 3. February.

Table 2-3
Summary of Historical Soil Sample Analytical Results for TPH and VOCs
1750 Webster Street, 1810 Webster Street, 301 19th Street
Oakland, CA

Sample Location	Sample ID	Parcel	Lab Method[3]	Sample Depth (feet)	Sample Date	Total Petroleum Hydrocarbons					BTEX & MTBE							Other Volatile Organic Compounds (VOCs)													
						TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)	Oil and Grease (mg/kg)	Total Hydrocarbon (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	m,p-Xylene (mg/kg)	o-Xylene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	Acetone (mg/kg)	cis-1,2-DCE (mg/kg)	trans-1,2-DCE (mg/kg)	PCE (mg/kg)	TCE (mg/kg)	Vinyl chloride (mg/kg)	Naphthalene (mg/kg)	n-Propyl-benzene (mg/kg)	n-Butyl-benzene (mg/kg)	1,2,4-TMB (mg/kg)	1,3,5-TMB (mg/kg)	tert-Butylbenzene (mg/kg)	sec-Butylbenzene (mg/kg)	Isopropyl-benzene (mg/kg)
RWQCB ESL Direct Contact-Construction Soil[1]						**2,800**	**880**	**32,000**	**--**	**--**	**24**	**4,100**	**480**	**--**	**--**	**2,400**	**3,700**	**260,000**	**82**	**680**	**33**	**23**	**3.4**	**350**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
RWQCB ESL Direct Contact-Residential Soil[1]						*740*	*230*	*11,000*	*--*	*--*	*0.23*	*970*	*5.1*	*--*	*--*	*560*	*42*	*19*	*19*	*160*	*0.6*	*1.2*	*0.0082*	*3.3*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
RWQCB ESL Direct Contact-Commercial Soil[1]						*3,900*	*1,100*	*140,000*	*--*	*--*	*1.0*	*4,600*	*22*	*--*	*--*	*2,400*	*180*	*630,000*	*90*	*730*	*2.7*	*8.0*	*0.15*	*14*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
JM-01	JM-01	008-625-002-1	(a)	5	09/06/91	ND<1.0	ND<1	--	ND<50	ND<50	ND<0.3	ND<0.2	ND<0.2	ND<0.5	ND<0.2	ND<0.5	--	ND<1.0	ND<0.3	ND<0.5	ND<0.2	ND<0.1	ND<0.5	ND<0.20	--	--	--	--	--	--	--
JM-03	JM-03	008-625-002-1	(b)	Stockpile	09/06/91	--	ND<1	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.5	ND<0.2	ND<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JM-04	JM-04	008-625-002-1	(c)	15	09/10/91	ND<1.0	--	--	--	--	ND<0.3	ND<0.2	ND<0.2	ND<0.5	ND<0.2	ND<0.5	--	ND<1.0	ND<0.3	ND<0.5	ND<0.2	ND<0.1	ND<0.5	--	--	--	--	--	--	--	--
JM-05	JM-05	008-625-002-1	(c)	15	09/10/91	ND<1.0	--	--	--	--	ND<0.3	ND<0.2	ND<0.2	ND<0.5	ND<0.2	ND<0.5	--	ND<1.0	ND<0.3	ND<0.5	ND<0.2	ND<0.1	ND<0.5	--	--	--	--	--	--	--	--
JM-06	JM-06	008-625-002-1	(c)	1	09/10/91	ND<1.0	--	--	--	--	ND<0.3	ND<0.2	ND<0.2	ND<0.5	ND<0.2	ND<0.5	--	ND<1.0	ND<0.3	ND<0.5	ND<0.2	ND<0.1	ND<0.5	--	--	--	--	--	--	--	--
SB-1	SB1-2	008-625-016	(d), (e)	10	05/18/93	ND<1	ND<10	--	--	--	ND<0.003	ND<0.003	ND<0.003	--	--	ND<0.009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1	SB1-4	008-625-016	(e)	20	05/18/93	ND<1	ND<10	--	--	--	ND<0.003	ND<0.003	ND<0.003	--	--	ND<0.009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2	SB2-2	008-625-016	(e)	10	05/18/93	ND<1	ND<10	--	--	--	ND<0.003	ND<0.003	ND<0.003	--	--	ND<0.009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2	SB2-4	008-625-016	(d), (e)	20	05/18/93	ND<1	ND<10	--	--	--	ND<0.003	ND<0.003	ND<0.003	--	--	ND<0.009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-3	SB3-2	008-625-016	(d), (e)	10	05/18/93	ND<1	ND<10	--	--	--	ND<0.003	ND<0.003	ND<0.003	--	--	ND<0.009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-3	SB3-4	008-625-016	(e)	20	05/18/93	ND<1	ND<10	--	--	--	ND<0.003	ND<0.003	ND<0.003	--	--	**0.057**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-4	SB4-2	008-625-016	(e)	10	05/18/93	ND<1	ND<10	--	--	--	ND<0.003	ND<0.003	ND<0.003	--	--	**0.020**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-4	SB4-4	008-625-016	(d), (e)	20	05/18/93	ND<1	ND<10	--	--	--	ND<0.003	ND<0.003	ND<0.003	--	--	**0.022**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-1	G-1-10	008-625-016	(f)	10	02.07/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-1	G-1-24	008-625-016	(f)	24	02.07/98	**200**	--	--	--	--	ND<0.250	**0.310**	**1.7**	**1.3**	**0.53**	1.8	ND<1.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-2	G-2-10	008-625-016	(f)	10	02.07/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	**0.0065**	ND<0.005	0.0065	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-2	G-2-22	008-625-016	(f)	22	02.07/98	**4.3**	--	--	--	--	**0.0066**	**0.0087**	**0.087**	**0.028**	**0.054**	0.082	**0.027**	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-3	G-3-10	008-625-016	(f)	10	02.07/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-3	G-3-16	008-625-016	(f)	16	02.07/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-4	G-4-12	008-625-016	(f)	12	02.07/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-4	G-4-22	008-625-016	(f)	22	02.07/98	**17**	--	--	--	--	ND<0.005	**0.020**	**0.110**	**0.074**	**0.230**	0.304	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-5	G-5-11	008-625-016	(f)	11	02.07/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-5	G-5-21	008-625-016	(f)	21	02.07/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-6	G-6-10	008-625-016	(f)	10	02.08/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-6	G-6-15	008-625-016	(f)	15	02.08/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-7	G-7-15	008-625-016	(f)	15	02.08/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-7	G-7-19	008-625-016	(f)	19	02.08/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-8	G-8-12	008-625-016	(f)	12	02.08/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-8	G-8-16	008-625-016	(f)	16	02.08/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-9	G-9-11	008-625-016	(f)	11	02.08/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-9	G-9-16	008-625-016	(f)	16	02.08/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-10	G-10-10	008-625-016	(f)	10	02.08/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-10	G-10-17	008-625-016	(f)	17	02.08/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-11	G-11-11	008-625-016	(f)	11	02.08/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-11	G-11-16	008-625-016	(f)	16	02.08/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-12	G-12-11	008-625-016	(f)	11	02.08/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-12	G-12-16	008-625-016	(f)	16	02.08/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-1-10.5	A-1-10.5	008-625-017	(g)	10.5	04/25/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	--	--	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-1-15	A-1-15	008-625-017	(g)	15	04/25/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	--	--	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-2-11	A-2-11	008-625-016	(g)	11	04/25/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	--	--	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-2-16	A-2-16	008-625-016	(g)	16	04/25/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	--	--	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-3-11.5	A-3-11.5	008-625-016	(g)	11.5	04/25/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	--	--	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-3-17.5	A-3-17.5	008-625-016	(g)	17.5	04/25/98	ND<1	--	--	--	--	ND<0.005	ND<0.005	ND<0.005	--	--	ND<0.005	ND<0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	B1-5	008-625-017/002-1	(h)	5	10/28/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	B1-10	008-625-017/002-1	(h), (i)	10	10/28/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	B1-15	008-625-017/002-1	(h), (i)	15	10/28/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	B1-17.5	008-625-017/002-1	(h), (i)	17.5	10/28/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	B1-22	008-625-017/002-1	(h), (i)	22	10/28/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	B1-25	008-625-017/002-1	(h), (i)	25	10/28/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	**0.016**	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	B1-30	008-625-017/002-1	(h), (i)	30	10/28/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	B2-5	008-625-002-1	(h)	5	10/28/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	B2-10	008-625-002-1	(h), (i)	10	10/28/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	B2-15	008-625-002-1	(h), (i)	15	10/28/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	B2-20	008-625-002-1	(h), (i)	20	10/28/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	B2-25	008-625-002-1	(h), (i)	25	10/28/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	B3-5	008-625-002-1	(h)	5	10/28/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	B3-10	008-625-002-1	(h), (i)	10	10/28/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	B3-15	008-625-002-1	(h), (i)	15	10/28/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	B3-20	008-625-002-1	(h), (i)	20	10/28/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	B3-20D	008-625-002-1	(h), (i)	20	10/28/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	B3-25	008-625-002-1	(h), (i)	25	10/28/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4	B4-1	008-625-016	(h)	1	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4	B4-2	008-625-016	(h)	2	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4	B4-3	008-625-016	(h)	3	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4	B4-4	008-625-016	(h)	4	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4	B4-5	008-625-016	(h)	5	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4	B4-10	008-625-016	(j)	10	12/11/15	--	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.0050	ND<0.10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
B-4	B4-10	008-625-016	(i)	10	12/11/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4	B4-20	008-625-016	(j)	20	12/11/15	--	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.0050	ND<0.10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
B-4	B4-20	008-625-016	(i)	20	12/11/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4	B4-25	008-625-016	(j)	25	12/11/15	--	--	--	--	--	**0.038**	ND<0.0050	**0.032**	--	--	**0.0056**	ND<0.0050	ND<0.10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	**0.018**	**0.010**	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
B-4	B4-25	008-625-016	(i)	25	12/11/15	**1.3**	--	--	--	--	**0.074**	**0.0072**	**0.069**	--	--	**0.020**	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5	B5-1	008-625-017	(h)	1	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5	B5-2	008-625-017	(h)	2	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5	B5-3	008-625-017	(h)	3	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5	B5-4	008-625-017	(h)	4	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5	B5-5	008-625-017	(h)	5	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5	B5-10	008-625-017	(j)	10	12/11/15	--	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.0050	ND<0.10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
B-5	B5-10	008-625-017	(h), (i)	10	12/11/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5	B5-20	008-625-017	(j)	20	12/11/15	--	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.0050	ND<0.10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
B-5	B5-20	008-625-017	(h), (i)	20	12/11/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5	B5-25	008-625-017	(j)	25	12/11/15	--	--	--	--	--	**0.0077**	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.0050	ND<0.10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	**0.010**	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
B-5	B5-25	008-625-017	(h), (i)	25	12/11/15	ND<1.0	--	--	--	--	**0.011**	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6	B6-1	008-625-016	(h)	1	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6	B6-2	008-625-016	(h)	2	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6	B6-3	008-625-016	(h)	3	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6	B6-4	008-625-016	(h)	4	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6	B6-5	008-625-016	(h)	5	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6	B6-10	008-625-016	(j)	10	12/11/15	--	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.0050	ND<0.10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
B-6	B6-10	008-625-016	(h), (i)	10	12/11/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6	B6-20	008-625-016	(j)	20	12/14/15	--	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.0050	ND<0.10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050

Table 2-3
Summary of Historical Soil Sample Analytical Results for TPH and VOCs
1750 Webster Street, 1810 Webster Street, 301 19th Street
Oakland, CA

Sample Location	Sample ID	Parcel	Lab Method[3]	Sample Depth (feet)	Sample Date	Total Petroleum Hydrocarbons					BTEX & MTBE							Other Volatile Organic Compounds (VOCs)													
						TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)	Oil and Grease (mg/kg)	Total Hydrocarbon (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	m,p-Xylene (mg/kg)	o-Xylene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	Acetone (mg/kg)	cis-1,2-DCE (mg/kg)	trans-1,2-DCE (mg/kg)	PCE (mg/kg)	TCE (mg/kg)	Vinyl chloride (mg/kg)	Naphthalene (mg/kg)	n-Propyl-benzene (mg/kg)	n-Butyl-benzene (mg/kg)	1,2,4-TMB (mg/kg)	1,3,5-TMB (mg/kg)	tert-Butylbenzene (mg/kg)	sec-Butylbenzene (mg/kg)	Isopropyl-benzene (mg/kg)
RWQCB ESL Direct Contact-Construction Soil[1]						**2,800**	**880**	**32,000**	**--**	**--**	**24**	**4,100**	**480**	**--**	**--**	**2,400**	**3,700**	**260,000**	**82**	**680**	**33**	**23**	**3.4**	**350**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
RWQCB ESL Direct Contact-Residential Soil[1]						*740*	*230*	*11,000*	--	--	*0.23*	*970*	*5.1*	--	--	*560*	*42*	*19*	*19*	*160*	*0.6*	*1.2*	*0.0082*	*3.3*	--	--	--	--	--	--	--
RWQCB ESL Direct Contact-Commercial Soil[1]						*3,900*	*1,100*	*140,000*	--	--	*1.0*	*4,600*	*22*	--	--	*2,400*	*180*	*630,000*	*90*	*730*	*2.7*	*8.0*	*0.15*	*14*	--	--	--	--	--	--	--
B-6	B6-20	008-625-016	(h), (i)	20	12/14/15	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6	B6-25	008-625-016	(j)	25	12/14/15	--	--	--	--	--	ND<5.0	**9.6**	**18**	--	--	**76**	ND<5.0	ND<100	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	**23**	**7.4**	**5.5**	**54**	**13**	--	--	--
B-6	B6-25	008-625-016	(h), (i)	25	12/14/15	**800**	--	--	--	--	**0.68**	**4.7**	**10**	--	--	**45**	ND<1.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	B1-1	008-625-018	(k)	1	02/02/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	B1-15	008-625-018	(j)	15	02/02/16	--	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.0050	ND<0.10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
B-1	B1-15	008-625-018	(k), (i)	15	02/02/16	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	B1-20	008-625-018	(j)	20	02/02/16	--	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.0050	ND<0.10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
B-1	B1-20	008-625-018	(k), (i)	20	02/02/16	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	B1-22.5	008-625-018	(j)	22.5	02/02/16	--	--	--	--	--	ND<0.50	ND<0.50	**3.0**	--	--	**4.9**	ND<0.50	ND<10	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**2.3**	**4**	**2.5**	**17**	**3.8**	--	**0.55**	**1.3**
B-1	B1-22.5	008-625-018	(k), (i)	22.5	02/02/16	**390**	--	--	--	--	ND<0.25	ND<0.25	**2.5**	--	--	**5.3**	ND<2.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	B2-1	008-625-018	(k)	1	02/02/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	B2-15	008-625-018	(j)	15	02/02/16	--	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.0050	ND<0.10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
B-2	B2-15	008-625-018	(k), (i)	15	02/02/16	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	B2-20	008-625-018	(j)	20	02/02/16	--	--	--	--	--	ND<0.050	ND<0.050	ND<0.050	--	--	ND<0.050	ND<0.050	ND<1.0	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.050	**0.14**	**0.13**	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
B-2	B2-20	008-625-018	(k), (i)	20	02/02/16	**46**	--	--	--	--	ND<0.050	ND<0.050	**0.12**	--	--	ND<0.15	ND<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	B2-22.5	008-625-018	(j)	22.5	02/02/16	--	--	--	--	--	ND<0.50	ND<0.50	**1.3**	--	--	ND<0.50	ND<0.50	ND<10	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.0050	**8.1**	**4.1**	**0.84**	ND<0.0050	**0.79**	**1.2**	**1.8**
B-2	B2-22.5	008-625-018	(k), (i)	22.5	02/02/16	**660**	--	--	--	--	ND<0.25	**0.34**	**0.78**	--	--	**0.76**	ND<2.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	B3-1	008-625-018	(k)	1	02/02/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	B3-15	008-625-018	(j)	15	02/02/16	--	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.0050	ND<0.10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
B-3	B3-15	008-625-018	(k), (i)	15	02/02/16	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	B3-20	008-625-018	(j)	20	02/02/16	--	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.0050	ND<0.10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
B-3	B3-20	008-625-018	(k), (i)	20	02/02/16	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	B3-22.5	008-625-018	(j)	22.5	02/02/16	--	--	--	--	--	ND<0.50	**0.64**	**0.98**	--	--	**3.4**	ND<0.50	ND<10	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**1.4**	**2.2**	**1.5**	**14**	**3.4**	ND<0.0050	ND<0.0050	**0.78**
B-3	B3-22.5	008-625-018	(k), (i)	22.5	02/02/16	**170**	--	--	--	--	ND<0.10	**0.30**	**0.39**	--	--	**1.7**	ND<1.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-7	B7-1	008-625-002-1	(k), (i)	1	07/14/16	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-7	B7-10	008-625-002-1	(k), (i)	10	07/14/16	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-7	B7-15	008-625-002-1	(k), (i)	15	07/14/16	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-8	B8-1	008-625-002-1	(k), (i)	1	07/14/16	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-8	B8-10	008-625-002-1	(k), (i)	10	07/14/16	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-8	B8-15	008-625-002-1	(k), (i)	15	07/14/16	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-9	B9-1	008-625-002-1	(i)	1	07/14/16	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-9	B9-10	008-625-002-1	(k), (i)	10	07/14/16	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-9	B9-15	008-625-002-1	(k), (i)	15	07/14/16	ND<1.0	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPB-1	SPB1-A,B,C,D	008-625-018	(l)	2.5,5,7.5,10	02/22/17	ND<1.0	ND<1.0	ND<5.0	--	ND<15	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPB-1	SPB1-A,B,C,D	008-625-018	(m)	2.5,5,7.5,10	02/22/17	--	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.0050	ND<0.10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
SPB-2	SPB2-A,B,C,D	008-625-017	(l)	2.5,5,7.5,10	02/22/17	**1.8**	ND<1.0	ND<5.0	--	ND<15	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPB-2	SPB2-A,B,C,D	008-625-017	(m)	2.5,5,7.5,10	02/22/17	--	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.0050	ND<0.10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
SPB-3	SPB3-A,B,C,D	008-625-002-1	(l)	2.5,5,7.5,10	02/22/17	ND<1.0	ND<1.0	**13**	--	**7.5**	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPB-3	SPB3-A,B,C,D	008-625-002-1	(m)	2.5,5,7.5,10	02/22/17	--	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.0050	ND<0.10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
SPB-4	SPB4-A,B,C,D	008-625-002-1	(l)	2.5,5,7.5,10	02/22/17	ND<1.0	**2.5**	**33**	--	**62**	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.015	ND<0.050	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPB-4	SPB4-A,B,C,D	008-625-002-1	(m)	2.5,5,7.5,10	02/22/17	--	--	--	--	--	ND<0.0050	ND<0.0050	ND<0.0050	--	--	ND<0.0050	ND<0.0050	ND<0.10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
UST-Discovery Area	UST-N-5'	008-625-002-1	(n)	5	02/20/18	ND<1.1	ND<1.0	ND<5.0	--	--	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.015	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0074	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0037
UST-Discovery Area	UST-E-5'	008-625-002-1	(n)	5	02/20/18	ND<1.0	**2.0** (Note 2)	**11**	--	--	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0037	**0.028**	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0074	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0037	ND<0.0037
UST-Discovery Area	UST-S-5'	008-625-002-1	(n)	5	02/20/18	ND<1.1	ND<1.0	ND<5.0	--	--	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.014	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0071	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035
UST-Discovery Area	UST-FL-7'	008-625-002-1	(n)	7	02/20/18	ND<0.94	**240** (Note 2)	**1,000**	--	--	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.014	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0071	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035
UST-Discovery Area	SB-5-8	008-625-002-1	(n)	8	03/01/18	ND<1.1	**3.9** (Note 2)	ND<5.0	--	--	ND<0.0038	ND<0.0038	ND<0.0038	ND<0.0038	ND<0.0038	ND<0.0038	ND<0.0038	ND<0.019	ND<0.0038	ND<0.0038	ND<0.0038	ND<0.0038	ND<0.0076	ND<0.0038	ND<0.0038	ND<0.0038	ND<0.0038	ND<0.0038	ND<0.0038	ND<0.0038
UST-Discovery Area	SB-5-16	008-625-002-1	(n)	16	03/01/18	ND<1.0	**3.7** (Note 2)	ND<5.0	--	--	ND<0.0036	ND<0.0036	ND<0.0036	ND<0.0036	ND<0.0036	ND<0.0036	ND<0.0036	ND<0.018	ND<0.0036	ND<0.0036	ND<0.0036	ND<0.0036	ND<0.0072	ND<0.0036	ND<0.0036	ND<0.0036	ND<0.0036	ND<0.0036	ND<0.0036	ND<0.0036
UST-Relocation Area	SS-1-0.5	008-625-002-1	(n)	0.5	02/20/18	**1.8** (Note 2)	**220** (Note 2)	**1,100**	--	--	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	**0.044**	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.011	**0.012**	ND<0.0057	ND<0.0057	**0.0067**	ND<0.0057	ND<0.0057	ND<0.0057
UST-Relocation Area	SS-2-0.5	008-625-002-1	(n)	0.5	02/20/18	ND<1.0	ND<1.0	**6.3**	--	--	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.014	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.007	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035
UST-Spill Area (Footing)	SS-N-3'	008-625-002-1	(n)	3	02/20/18	ND<0.99	ND<1.0	ND<5.0	--	--	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	**0.026**	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0065	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033
UST-Spill Area (Footing)	SS-E-3'	008-625-002-1	(n)	3	02/20/18	**1.7** (Note 2)	ND<0.99	ND<5.0	--	--	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.014	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0070	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035
UST-Spill Area (Footing)	SS-W-3'	008-625-002-1	(n)	3	02/20/18	ND<1.1	ND<1.0	ND<5.0	--	--	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	**0.023**	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0067	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033
UST-Spill Area (Footing)	SS-FL-3	008-625-002-1	(n)	3	02/23/18	**4.2** (Note 2)	**58** (Note 2)	**260**	--	--	ND<0.0028	ND<0.0028	ND<0.0028	**0.0031**	ND<0.0028	ND<0.0028	ND<0.0028	**0.012**	ND<0.0028	ND<0.0028	ND<0.0028	ND<0.0028	ND<0.0028	**0.0084**	ND<0.0028	ND<0.0028	**0.013**	**0.0038**	ND<0.0028	ND<0.0028
UST-Spill Area (Footing)	SB-6-6	008-625-002-1	(n)	6	03/01/18	ND<0.91	**3.2** (Note 2)	ND<5.0	--	--	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.017	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0070	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035
UST-Spill Area (Footing)	SB-6-16	008-625-002-1	(n)	16	03/01/18	ND<1.0	ND<0.99	ND<5.0	--	--	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.017	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0067	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033	ND<0.0033

Notes:
Bold font indicates concentration above laboratory reporting limit.
Indicates concentration above construction soil screening level.
mg/kg = milligram per kilogram
-- = Not available, not analyzed
ND<5.0 = Not detected above indicated laboratory reporting limit
TPHg = Total petroleum hydrocarbons as gasoline
TPHd = Total petroleum hydrocarbons as diesel
TPHmo = Total petroleum hydrocarbon as motor oil
BTEX = Benzene, toluene, ethylbenzene, xylenes
MTBE = Methyl tert-butyl ether
DCE = Dichloroethene
PCE = Tetrachloroethene
TCE = Trichloroethene
TMB = Trimethylbenzene

[1] Values represent California Regional Water Quality Control Board - San Francisco Bay Region Environmental Screening Levels (RWQCB ESLs), Revision 3 dated February 2016.
[2] Sample exhibits chromatographic pattern which does not resemble standard.
[3] Lab methods:
(a) TPHd and TPHg by EPA Method 5030/8015, TPH Oil and Grease and Total Hydrocarbon by EPA Method 5520-D&F, BTEX and Purgeable Organics by EPA Method 8240, Acid & Base Neutral Compounds by EPA Method 827
(b) TPHd by EPA Method 5030/8015, BTEX by EPA Method 8020,
(c) Total Lead by EPA Method 7420, TPHg by EPA Method 5030/8015, BTEX and Purgeable Organics by EPA Method 8240
(d) TPHg, TPHd, BTEX by EPA Method 8015
(e) Total Lead by EPA Method 6010
(f) TPHg by EPA Method 8015M, BTEX by EPA Method 8020A
(g) TPHg by EPA Method 8015M, BTEX & MTBE by EPA Method 8020A, HVOCs by EPA Method 8010
(h) Total Lead by EPA Method 6010B
(i) TPHg, BTEX, MTBE by EPA Method 8021B/8015B
(j) VOCs by EPA Method 8260B
(k) Total Lead by EPA Method 6020
(l) Total recoverable Petroleum Hydrocarbon with silica gel cleanup by EPA Method E418.1, TPHd, TPHmo with silica gel cleanup by EPA Method 8015B, TPHg, BTEX and MTBE by EPA Method 8015BM, Metals by E
(m) Pesticides and PCBs by EPA Method 8081A/8082, VOCs by EPA Method 8260B, SVOCs by EPA Method 8270C, Metals by EPA Method 6020
(n) TPHg by EPA Method 5030B/8015B, TPHd and TPHmo by EPA Method 3550C/8015B, BTEX, MTBE, VOCs by EPA Method 8260

References:
RWQCB. 2016. Environmental Screening Levels (ESLs). Revision 3. February.

Table 2-4
Summary of Historical Soil Vapor Sample Analytical Results for TPHg and VOCs
1750 Webster Street, 1810 Webster Street, 301 19th Street
Oakland, CA

Sample Location	Sample ID	Parcel	Lab Method[2]	Sample Depth (feet)	Purge Volume	Sample Date	Oxygen (µL/L)	Oxygen (%)	Carbon Dioxide (%)	Methane (%)	TPHg (µg/m³)	Benzene (µg/m³)	Toluene (µg/m³)	Ethyl-benzene (µg/m³)	m,p-Xylene (µg/m³)	o-Xylene (µg/m³)	Total Xylenes (µg/m³)	Dichloro-difluoro-methane (µg/m³)	MTBE (µg/m³)	cis-1,2-DCE (µg/m³)	trans-1,2-DCE (µg/m³)	PCE (µg/m³)	TCE (µg/m³)	Vinyl chloride (µg/m³)	Chloro-ethane (µg/m³)	1,3-DCB (µg/m³)	1,4-DCB (µg/m³)	Leak Check Compound	
																												1,1-DFE (µg/m³)	Isopropyl Alcohol (µg/m³)
RWQCB ESL Soil Vapor-Residential[1]							--	--	--	--	*300,000*	*48*	*160,000*	*560*	--	--	*52,000*	--	*5,400*	*4,200*	*42,000*	*240*	*240*	*4.7*	*5,200,000*	--	*130*	--	--
RWQCB ESL Soil Vapor-Commercial[1]							--	--	--	--	***2,500,000***	***420***	***1,300,000***	***4,900***	--	--	***440,000***	--	***47,000***	***35,000***	***350,000***	***2,100***	***3,000***	***160***	***44,000,000***	--	***1,100***	--	--
SG-1	SG1-5	008-625-017	(a)	5	3	02/03/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	–	--	ND<10,000	–
SG-1	SG1-10	008-625-017	(a)	10	3	02/03/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	–	--	ND<10,000	–
SG-1	SG1-15	008-625-017	(a)	15	3	02/03/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	–	--	ND<10,000	–
SG-1	SG1-15 dup	008-625-017	(a)	15	3	02/03/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	–	--	ND<10,000	–
SG-2	SG2-5	008-625-017	(a)	5	3	02/03/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	–	--	ND<10,000	–
SG-2	SG2-10	008-625-017	(a)	10	3	02/03/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	–	--	ND<10,000	–
SG-2	SG2-15	008-625-017	(a)	15	3	02/03/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	–	--	ND<10,000	–
SG-3	SG3-5	008-625-018	(a)	5	3	02/03/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	–	--	ND<10,000	–
SG-3	SG3-10	008-625-018	(a)	10	3	02/03/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	–	--	ND<10,000	–
SG-3	SG3-15	008-625-018	(a)	15	3	02/03/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	–	--	ND<10,000	–
SG-4	SG4-5	008-625-018	(a)	5	3	02/03/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	–	--	ND<10,000	–
SG-4	SG4-10	008-625-018	(a)	10	3	02/03/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	–	--	ND<10,000	–
SG-4	SG4-15	008-625-018	(a)	15	3	02/03/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	–	--	ND<10,000	–
SG-5	SG5-5	008-625-002-1	(a)	5	3	02/04/16	--	--	--	--	ND<10,000	**120**	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	ND<10,000	–
SG-5	SG5-10	008-625-002-1	(a)	10	3	02/04/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	ND<10,000	–
SG-5	SG5-15	008-625-002-1	(a)	15	3	02/04/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	**150**	ND<100	ND<100	--	--	--	ND<10,000	–
SG-5	SG5-15 dup	008-625-002-1	(a)	15	3	02/04/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	**160**	ND<100	ND<100	--	--	--	ND<10,000	–
SG-6	SG6-5	008-625-002-1	(a)	5	3	02/04/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	–	--	ND<10,000	–
SG-6	SG6-10	008-625-002-1	(a)	10	3	02/04/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	ND<10,000	–
SG-6	SG6-15	008-625-002-1	(a)	15	3	02/04/16	--	--	--	--	ND<10,000	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	ND<10,000	–
SG-1	SG1-5	008-625-017	(a)	5	3	08/10/16	--	--	--	--	--	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	ND<10,000	–
SG-1	SG1-10	008-625-017	(a)	10	3	08/10/16	--	--	--	--	--	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	ND<10,000	–
SG-1	SG1-10 dup	008-625-017	(a)	10	3	08/10/16	--	--	--	--	--	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	ND<10,000	–
SG-2	SG2-5	008-625-017	(a)	5	3	08/10/16	--	--	--	--	--	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	ND<10,000	–
SG-2	SG2-10	008-625-017	(a)	10	3	08/10/16	--	--	--	--	--	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	ND<10,000	–
SG-3	SG3-5	008-625-018	(a)	5	3	08/10/16	--	--	--	--	--	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	ND<10,000	–
SG-3	SG3-10	008-625-018	(a)	10	3	08/10/16	--	--	--	--	--	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	ND<10,000	–
SG-4	SG4-5	008-625-018	(a)	5	3	08/10/16	--	--	--	--	--	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	ND<10,000	–
SG-4	SG4-10	008-625-018	(a)	10	3	08/10/16	--	--	--	--	--	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	ND<10,000	–
SG-5	SG5-5	008-625-002-1	(a)	5	3	08/10/16	--	--	--	--	--	**160**	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	ND<10,000	–
SG-5	SG5-10	008-625-002-1	(a)	10	3	08/10/16	--	--	--	--	--	**88**	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	ND<10,000	–
SG-6	SG6-5	008-625-002-1	(a)	5	3	08/10/16	--	--	--	--	--	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	ND<10,000	–
SG-6	SG6-10	008-625-002-1	(a)	10	3	08/10/16	--	--	--	--	--	ND<80	ND<200	ND<100	ND<200	ND<100	–	ND<100	–	ND<100	ND<100	**120**	ND<100	ND<100	--	--	--	ND<10,000	–
OG-1	OG-1	008-625-018	(b)	--	--	10/21/16	**130,000**	–	--	--	--	--	--	--	--	--	–	--	–	--	–	--	–	--	--	--	--	--	–
OG-2	OG-2	008-625-017	(b)	--	--	10/21/16	**140,000**	–	--	--	--	--	--	--	--	--	–	--	–	--	–	--	–	--	--	--	--	--	–
OG-3	OG-3	008-625-016	(b)	--	--	10/21/16	**140,000**	–	--	--	--	--	--	--	--	--	–	--	–	--	–	--	–	--	--	--	--	--	–
OG-4	OG-4	008-625-002-1	(b)	--	--	10/21/16	**140,000**	–	--	--	--	--	--	--	--	--	–	--	–	--	–	--	–	--	--	--	--	--	–
OG-5	OG-5	008-625-002-1	(b)	--	--	10/21/16	**140,000**	–	--	--	--	--	--	--	--	--	–	--	–	--	–	--	–	--	--	--	--	--	–
SG-7	SG-7	008-625-017	(c), (d)	5	3	05/15/17	--	**17**	**0.036**	ND<0.0020	--	ND<1.6	ND<1.9	ND<2.2	–	--	ND<6.6	**2.6**	ND<1.8	ND<2.0	ND<2.0	ND<3.4	ND<2.8	ND<1.3	ND<1.0	ND<3.0	ND<3.0	--	ND<50
SG-8	SG-8	008-625-016	(c), (d)	5	3	05/15/17	--	**17**	**0.039**	ND<0.0020	--	ND<1.6	ND<1.9	**37**	--	--	**160**	**2.6**	ND<1.8	ND<2.0	ND<2.0	ND<3.4	ND<2.8	ND<1.3	ND<1.0	**5.9**	**5.4**	--	ND<50
SG-9	SG-9	008-625-016	(c), (d)	5	3	05/15/17	--	**16**	**0.037**	ND<0.0020	--	ND<1.6	ND<1.9	ND<2.2	–	--	ND<6.6	ND<2.5	ND<1.8	ND<2.0	ND<2.0	ND<3.4	ND<2.8	ND<1.3	**1.2**	ND<3.0	ND<3.0	--	ND<50
SG-10	SG-10	008-625-002-1	(c), (d)	6	3	05/15/17	--	**16**	**0.038**	ND<0.0020	--	ND<1.6	ND<1.9	ND<2.2	–	--	ND<6.6	**2.5**	ND<1.8	ND<2.0	ND<2.0	ND<3.4	ND<2.8	ND<1.3	ND<1.0	**3.5**	ND<3.0	--	ND<50

Notes:
Bold font indicates concentration above laboratory reporting limit.
Indicates concentration above commercial soil vapor screening level.
µL/L = microliter per liter
% = percent
µg/m³ = microgram per cubic meter
-- = Not available, not analyzed
ND<1.6 = Not detected above indicated laboratory reporting limit
TPHg = Total petroleum hydrocarbons as gasoline
MTBE = Methyl tert-butyl ether
DCE = Dichloroethene
PCE = Tetrachloroethene
TCE = Trichloroethene
DCB = Dichlorobenzene
DFA = Difluoroethane
[1] Values represent California Regional Water Quality Control Board - San Francisco Bay Region Environmental Screening Levels (RWQCB ESLs), Revision 3 dated February 2016.
[2] Lab methods:
(a) VOCs by EPA Method 8260B
(b) Oxygen by ASTM D 1946-90
(c) Oxygen, Methane, and Carbon Dioxide by ASTM D 1946-90
(d) VOCs by TO15
References:
RWQCB. 2016. Environmental Screening Levels (ESLs). Revision 3. February.

Table 2-5
Summary of Historical Groundwater Sample Analytical Results for Metals
1750 Webster Street, 1810 Webster Street, 301 19th Street
Oakland, CA

Sample ID	Parcel	Lab Method[4]	Sample Depth (feet)	Sample Date	Metals																
					Antimony (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Cadmium (µg/L)	Chromium (µg/L)	Cobalt (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Molybdenum (µg/L)	Nickel (µg/L)	Selenium (µg/L)	Silver (µg/L)	Thallium (µg/L)	Vanadium (µg/L)	Zinc (µg/L)
California Maximum Contaminant Level (MCL)[1]					*6*	*10*	*1000*	*4*	*5*	*50*	*--*	*1000 (Note 2)*	*15*	*2*	*--*	*100*	*50*	*100 (Note 2)*	*2*	*50 (Note 3)*	*5000 (Note 2)*
Grab Groundwater Samples																					
HP-1	008-625-016	--	20.5'-24.5'	03/22/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HP-2	008-625-016	--	20.5'-24.5'	03/22/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-1	008-625-016	--	20'	02/07/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-2	008-625-016	--	20'	02/07/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-3	008-625-016	--	20'	02/07/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-4	008-625-016	--	20'	02/07/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-5	008-625-016	--	20'	02/07/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-6	008-625-016	--	20'	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-7	008-625-016	--	20'	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-8	008-625-016	--	20'	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-9	008-625-016	--	20'	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-10	008-625-016	--	20'	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-11	008-625-016	--	20'	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-12	008-625-016	--	20'	02/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	008-625-018	(a)	21'-25'	10/28/15	--	--	--	--	--	--	--	--	**0.54**	--	--	--	--	--	--	--	--
B-2	008-625-017	(a)	21'-25'	10/28/15	--	--	--	--	--	--	--	--	ND<0.50	--	--	--	--	--	--	--	--
B-3	008-625-018	(a)	21'-25'	10/28/15	--	--	--	--	--	--	--	--	ND<0.50	--	--	--	--	--	--	--	--
B-4	008-625-016	--	21'-25'	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4	008-625-016	(b)	21'-25'	12/11/15	--	--	--	--	--	--	--	--	**430**	--	--	--	--	--	--	--	--
B-5	008-625-016	--	21'-25'	12/11/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5	008-625-016	(b)	21'-25'	12/11/15	--	--	--	--	--	--	--	--	**550**	--	--	--	--	--	--	--	--
B-6	008-625-016	--	21'-25'	12/14/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6	008-625-016	(b)	21'-25'	12/14/15	--	--	--	--	--	--	--	--	**3,500**	--	--	--	--	--	--	--	--
B-1	008-625-018	--	21'-25'	02/02/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	008-625-018	(b)	21'-25'	02/02/16	--	--	--	--	--	--	--	--	**21**	--	--	--	--	--	--	--	--
B-2	008-625-017	--	21'-25'	02/02/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	008-625-017	(b)	21'-25'	02/02/16	--	--	--	--	--	--	--	--	**13**	--	--	--	--	--	--	--	--
B-3	008-625-018	--	21'-25'	02/02/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	008-625-018	(b)	21'-25'	02/02/16	--	--	--	--	--	--	--	--	**5.9**	--	--	--	--	--	--	--	--
B-7	008-625-002-1	(b)	21'-25'	07/14/16	--	--	--	--	--	--	--	--	**280**	--	--	--	--	--	--	--	--
B-8	008-625-002-1	(b)	21'-25'	07/14/16	--	--	--	--	--	--	--	--	**440**	--	--	--	--	--	--	--	--
B-9	008-625-002-1	(b)	21'-25'	07/14/16	--	--	--	--	--	--	--	--	**34**	--	--	--	--	--	--	--	--
WO-1	008-625-002-1	--	--	10/10/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WO-1	008-625-002-1	--	--	10/10/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-5-15-20	008-625-002-1	(c)	15-20	3/1/2018	ND<10	ND<10	**110**	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<0.20	**12**	**12**	ND<10	ND<5.0	ND<10	**15**	ND<20
SB-6-13-18	008-625-002-1	(c)	13-18	3/1/2018	ND<10	ND<10	**110**	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<0.20	**38**	**11**	ND<10	ND<5.0	ND<10	**19**	ND<20
Groundwater Well Samples																					
A-1	008-625-016	--	20'-30'	04/28/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-1	008-625-016	--	20'-30'	08/04/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-1	008-625-016	--	20'-30'	11/18/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-1	008-625-016	--	20'-30'	02/26/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-1	008-625-016	--	20'-30'	10/12/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-1	008-625-016	--	20'-30'	10/10/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-1	008-625-016	--	20'-30'	10/10/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-2	008-625-016	--	20'-30'	04/28/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-2	008-625-016	--	20'-30'	08/04/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-2	008-625-016	--	20'-30'	11/18/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-2	008-625-016	--	20'-30'	02/26/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-2	008-625-016	--	20'-30'	10/12/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-2	008-625-016	--	20'-30'	10/10/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-2	008-625-016	--	20'-30'	10/10/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-3	008-625-016	--	20'-30'	04/28/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-3	008-625-016	--	20'-30'	08/04/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-3	008-625-016	--	20'-30'	11/18/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-3	008-625-016	--	20'-30'	02/26/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-3	008-625-016	--	20'-30'	10/12/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-3	008-625-016	--	20'-30'	10/10/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-3	008-625-016	--	20'-30'	10/10/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
Bold font indicates concentration above laboratory reporting limit.
Indicates concentration above MCL.
µg/L = microgram per liter
- - = Not available, not analyzed
ND<10 = Not detected above indicated laboratory reporting limit

[1] Values represent California Primary Maximum Contaminant Levels (MCLs), unless otherwise noted.
[2] Value represents California Secondary Maximum Contaminant Level (Secondary MCL).
[3] Value represents California Drinking Water Notification Level (NL).

[4] Lab methods:
(a) Lead (Dissolved) by EPA Method E200.8, Sample was filtered by laboratory
(b) Lead (Total) by EPA Method E200.8
(c) Metals by EPA Method 6010B

Table 2-6
Summary of Historical Groundwater Sample Analytical Results for TPH, and VOCs
1750 Webster Street, 1810 Webster Street, 301 19th Street
Oakland, CA

Sample ID	Parcel	Lab Method[6]	Sample Depth (feet)	Sample Date	TPH			BTEX and MTBE							Other Volatile Organic Compounds (VOCs)																			
					TPHg (µg/L)	TPHd/DRO (µg/L)	TPHmo/RRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	m,p-Xylenes (µg/L)	o-Xylenes (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	PCE (µg/L)	TCE (µg/L)	Vinyl chloride (µg/L)	1,1-DCA (µg/L)	1,2-DCP (µg/L)	1,2-DCA (µg/L)	Naphthalene (µg/L)	n-Butyl-benzene (µg/L)	sec-Butyl-benzene (µg/L)	tert-Butyl-benzene (µg/L)	TBA (µg/L)	MEK (µg/L)	n-Propyl-benzene (µg/L)	Isopropyl-benzene (µg/L)	1,2,3-TMB (µg/L)	1,2,4-TMB (µg/L)	1,3,5-TMB (µg/L)
RWQCB ESL Groundwater Vapor Intrusion-Residential[1]					--	--	--	*1.4*	*4,300*	*16*	--	--	*1,600*	*1,500*	*140*	*1,600*	*3.7*	*6.9*	*0.073*	*25*	*9.3*	*7.4*	*25*	--	--	--	--	*5,500,000*	--	--	--	--	--
RWQCB ESL Groundwater Vapor Intrusion-Commercial[1]					--	--	--	*12*	*37,000*	*140*	--	--	*13,000*	*13,000*	*1,100*	*13,000*	*32*	*60*	*0.64*	*210*	*81*	*64*	*220*	--	--	--	--	*46,000,000*	--	--	--	--	--
California Maximum Contaminant Level (MCL)[2]					--	--	--	*1.0*	*150*	*300*	--	--	*1,750*	*13*	*6.0*	*10*	*5.0*	*5.0*	*0.5*	*5.0*	*5.0*	*0.5*	*17* [(Note 2)]	*260* [(Note 2)]	*260* [(Note 2)]	*260* [(Note 2)]	*260* [(Note 2)]	*12* [(Note 2)]	--	*260* [(Note 2)]	*770* [(Note 2)]	--	*330* [(Note 2)]	*330* [(Note 2)]
Grab Groundwater Samples																																	
HP-1	008-625-016	(a)	20.5'-24.5'	03/22/93	**200,000**	--	--	**18,000**	**24,000**	**2,900**	--	--	**13,000**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HP-2	008-625-016	(a)	20.5'-24.5'	03/22/93	**42,000**	--	--	**46**	**900**	**2,200**	--	--	**5,500**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-1	008-625-016	(b)	20'	02/07/98	**700**	--	--	**4.1**	**9.3**	**140**	**63**	ND<0.5	**63**	**50**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-2	008-625-016	(b)	20'	02/07/98	**7,300**	--	--	**69**	**870**	**660**	**80**	**470**	**550**	**510**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-3	008-625-016	(b), (c)	20'	02/07/98	**20,000**	--	--	**210**	**1,300**	**1,300**	**2,400**	**720**	**3,120**	**560**	ND<1.0	ND<1.0	**1.2**	**13**	***ND<2.0***	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-4	008-625-016	(b), (c)	20'	02/07/98	**36,000**	--	--	**1,900**	**3,100**	**1,400**	**3,800**	**900**	**4,700**	**620**	ND<1.0	ND<1.0	**1.1**	**11**	***ND<2.0***	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-5	008-625-016	(b), (c)	20'	02/07/98	**32,000**	--	--	**6,500**	**9,600**	**1,100**	**3,300**	**1,700**	**5,000**	**390**	**8.2**	ND<1.0	**1.0**	**4.2**	***ND<2.0***	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-6	008-625-016	(b)	20'	02/08/98	**760,000**	--	--	**340**	**730**	**5,800**	**9,200**	**4,200**	**13,400**	**2,000**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-7	008-625-016	(b)	20'	02/08/98	**46,000**	--	--	**1,600**	**670**	**2,700**	**6,500**	**1,100**	**7,600**	**1,100**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-8	008-625-016	(b)	20'	02/08/98	**51,000**	--	--	**10,000**	**7,200**	**2,300**	**7,100**	**280**	**7,380**	**930**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-9	008-625-016	(b)	20'	02/08/98	**19,000**	--	--	**7,200**	**7,900**	**490**	**1,500**	**870**	**2,370**	ND<200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-10	008-625-016	(b)	20'	02/08/98	**280,000**	--	--	**7,700**	**29,000**	**3,600**	**12,000**	**5,500**	**17,500**	**2,900**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-11	008-625-016	(b), (c)	20'	02/08/98	**17,000**	--	--	**6,000**	**4,600**	**740**	**2,100**	**660**	**2,760**	**420**	ND<4.0	ND<4.0	ND<4.0	ND<4.0	***ND<8.0***	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-12	008-625-016	(b), (c)	20'	02/08/98	**78,000**	--	--	**7,800**	**8,500**	**2,200**	**7,100**	**2,100**	**9,200**	**1,300**	ND<10	ND<10	ND<4.0	ND<10	***ND<20***	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	008-625-018	(d)	21'-25'	10/28/15	**26,000**	--	--	**140**	**1,300**	**1,100**	--	--	**4,900**	ND<250	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	008-625-017	(d)	21'-25'	10/28/15	ND<50	--	--	ND<0.50	ND<0.50	ND<0.50	--	--	ND<0.50	ND<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	008-625-018	(d)	21'-25'	10/28/15	ND<50	--	--	ND<0.50	ND<0.50	ND<0.50	--	--	ND<0.50	ND<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4	008-625-016	(e)	21'-25'	12/11/15	--	--	--	**930**	**72**	**570**	--	--	**180**	ND<25	ND<25	ND<25	ND<25	ND<25	**29**	--	--	--	**220**	ND<25	ND<25	ND<25	--	--	**150**	**86**	--	ND<25	ND<25
B-4	008-625-016	(d)	21'-25'	12/11/15	**8,100**	--	--	**1,000**	**77**	**580**	--	--	**200**	ND<500	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5	008-625-016	(e)	21'-25'	12/11/15	--	--	--	**490**	**67**	**140**	--	--	**89**	ND<25	ND<25	ND<25	ND<25	ND<25	**33**	--	--	--	**220**	ND<25	ND<25	ND<25	--	--	**100**	**62**	--	**45**	ND<25
B-5	008-625-016	(d)	21'-25'	12/11/15	**6,800**	--	--	**620**	**73**	**140**	--	--	**140**	ND<300	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6	008-625-016	(e)	21'-25'	12/14/15	--	--	--	***ND<250***	**13,000**	**2,200**	--	--	**8,800**	ND<250	ND<250	ND<250	***ND<250***	***ND<250***	***ND<250***	--	--	--	**550**	ND<250	ND<250	ND<250	--	--	ND<250	ND<250	--	**1,800**	**430**
B-6	008-625-016	(d)	21'-25'	12/14/15	**130,000**	--	--	**610**	**12,000**	**3,000**	--	--	**13,000**	ND<900	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	008-625-018	(e)	21'-25'	02/02/16	--	--	--	ND<12	20	**310**	--	--	**460**	ND<12	ND<12	ND<12	ND<12	ND<12	***ND<12***	--	--	--	**150**	**44**	**15**	ND<12	**1,200**	**99**	**160**	**69**	--	**670**	**150**
B-1	008-625-018	(d)	21'-25'	02/02/16	**7,500**	--	--	**28**	**14**	**45**	--	--	**46**	ND<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	008-625-017	(e)	21'-25'	02/02/16	--	--	--	**55**	ND<5.0	**110**	--	--	**15**	ND<5.0	**8.8**	ND<5.0	ND<5.0	ND<5.0	***ND<5.0***	--	--	--	**120**	**65**	**35**	**29**	--	--	**270**	**86**	--	**12**	ND<5.0
B-2	008-625-017	(d)	21'-25'	02/02/16	**14,000**	--	--	**66**	**11**	**99**	--	--	**21**	ND<110	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	008-625-018	(e)	21'-25'	02/02/16	--	--	--	**280**	**1,100**	**340**	--	--	**930**	ND<50	ND<50	ND<50	***ND<50***	ND<50	***ND<50***	--	--	--	**240**	ND<50	ND<50	ND<50	--	--	**150**	**80**	--	**1,200**	**170**
B-3	008-625-018	(d)	21'-25'	02/02/16	**4,700**	--	--	**110**	**450**	**110**	--	--	**300**	ND<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-7	008-625-002-1	(d)	21'-25'	07/14/16	ND<50	--	--	ND<0.50	ND<0.50	ND<0.50	--	--	ND<1.5	ND<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-8	008-625-002-1	(d)	21'-25'	07/14/16	ND<50	--	--	ND<0.50	ND<0.50	ND<0.50	--	--	ND<1.5	ND<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-9	008-625-002-1	(d)	21'-25'	07/14/16	ND<50	--	--	ND<0.50	**0.77**	ND<0.50	--	--	ND<1.5	ND<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WO-1	008-625-002-1	(g)	--	10/10/17	ND<50	**98**	ND<250	ND<0.50	ND<0.50	ND<0.50	--	--	ND<1.5	ND<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WO-1	008-625-002-1	(e) [Note 4]	--	10/10/17	--	--	--	ND<0.50	ND<0.50	ND<0.50	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**0.89**	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0	ND<2.0	ND<0.50	ND<0.50	--	ND<0.50	ND<0.50
SB-5-15-20	008-625-002-1	(a) [Note 6]	15-20	3/1/2018	ND<50	ND<49	ND<290	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**13**	**1.0**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	--	--	ND<0.5	ND<0.5	--	ND<0.5	ND<0.5
SB-6-13-18	008-625-002-1	(a) [Note 7]	13-18	3/1/2018	ND<50	**72** [(Note 5)]	ND<290	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**5.6**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5	--	--	ND<0.5	ND<0.5	--	ND<0.5	ND<0.5
Groundwater Well Samples																																	
A-1	008-625-016	(b), (c)	20'-30'	04/28/98	**56,000**	--	--	**12,000**	**8,500**	**1,500**	**5,300**	**2,000**	**7,300**	ND<200	**21**	ND<1.0	**4.8**	**5.5**	***ND<2.0***	--	--	**13**	--	--	--	--	--	--	--	--	--	--	--	--
A-1	008-625-016	(b), (c)	20'-30'	08/04/98	**59,000**	--	--	**12,000**	**9,200**	**1,700**	**6,100**	**2,300**	**8,400**	ND<200	**19**	ND<5.0	ND<5.0	**8.4**	***ND<1.0***	--	--	ND<5.0	--	--	--	--	--	--	--	--	--	--	--	--
A-1	008-625-016	(b), (c)	20'-30'	11/18/98	**61,000**	--	--	**12,000**	**8,400**	**1,800**	**5,900**	**2,400**	**8,300**	ND<160	**21**	ND<5.0	ND<5.0	ND<5.0	***ND<1.0***	--	--	**13**	--	--	--	--	--	--	--	--	--	--	--	--
A-1	008-625-016	(b), (c)	20'-30'	02/26/99	**68,000**	--	--	**14,000**	**9,900**	**2,000**	**6,700**	**2,600**	**9,300**	ND<200	**16**	ND<0.5	**3.5**	**4.0**	***ND<1.0***	**1.9**	**3.8**	**10**	--	--	--	--	--	--	--	--	--	--	--	--
A-1	008-625-016	(f), (e)	20'-30'	10/12/16	**4,550**	**388**	ND<100	**140**	**70.7**	**186**	--	--	**58**	ND<10	ND<10	ND<10	ND<10	ND<10	***ND<1.0***	ND<10	ND<10	ND<10	ND<50.0	ND<10	ND<10	ND<10	--	ND<100	**27**	**39**	ND<10	**20.6**	ND<10
A-1	008-625-016	(g)	20'-30'	10/10/17	**19,000**	**4,100**	**580**	**290**	**2,300**	**730**	--	--	**2,700**	ND<400	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-1	008-625-016	(e)	20'-30'	10/10/17	--	--	--	**150**	**1,600**	**530**	--	--	**1,700**	ND<50	ND<50	ND<50	***ND<50***	ND<50	***ND<50***	ND<50	ND<50	ND<50	**320**	ND<50	ND<50	ND<50	ND<200	ND<200	**75**	**68**	--	**610**	**130**
A-2	008-625-016	(b), (c)	20'-30'	04/28/98	**84,000**	--	--	**8,600**	**20,000**	**1,600**	**5,400**	**2,600**	**8,000**	ND<250	**18**	ND<1.0	**2.7**	**3.1**	***ND<2.0***	--	--	ND<1.0	--	--	--	--	--	--	--	--	--	--	--	--
A-2	008-625-016	(b), (c)	20'-30'	08/04/98	**73,000**	--	--	**7,700**	**18,000**	**1,400**	**5,100**	**2,300**	**7,400**	ND<400	**22**	ND<17	ND<17	**52**	***ND<33***	--	--	ND<17	--	--	--	--	--	--	--	--	--	--	--	--
A-2	008-625-016	(b), (c)	20'-30'	11/18/98	**110,000**	--	--	**10,000**	**25,000**	**2,000**	**6,900**	**3,400**	**10,300**	ND<400	**10**	ND<5.0	ND<5.0	ND<5.0	***ND<1.0***	--	--	**5.7**	--	--	--	--	--	--	--	--	--	--	--	--
A-2	008-625-016	(b), (c)	20'-30'	02/26/99	**89,000**	--	--	**9,500**	**22,000**	**1,600**	**5,400**	**2,700**	**8,100**	ND<400	**8.7**	ND<0.5	**4.8**	**5.0**	***ND<1.0***	ND<0.5	**4.5**	ND<0.5	--	--	--	--	--	--	--	--	--	--	--	--
A-2	008-625-016	(f), (e)	20'-30'	10/12/16	**41,600**	**1,810**	ND<100	**175**	**6,690**	**1,370**	--	--	**6,010**	ND<100	ND<100	ND<100	***ND<100***	***ND<100***	***ND<100***	ND<100	***ND<100***	***ND<100***	***ND<500***	ND<100	ND<100	ND<100	--	ND<1,000	**151**	ND<100	**363**	**1,290**	**303**
A-2	008-625-016	(g)	20'-30'	10/10/17	**58,000**	**11,000**	**300**	**360**	**3,700**	**2,600**	--	--	**11,000**	ND<500	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-2	008-625-016	(e)	20'-30'	10/10/17	--	--	--	***ND<100***	**2,800**	**1,900**	--	--	**7,500**	ND<100	ND<100	ND<100	***ND<100***	***ND<100***	***ND<100***	ND<100	***ND<100***	***ND<100***	**1,100**	ND<100	ND<100	ND<100	ND<400	ND<400	**230**	**160**	--	**2,200**	**500**
A-3	008-625-016	(b), (c)	20'-30'	04/28/98	**23,000**	--	--	**89**	**460**	**1,400**	**2,500**	**370**	**2,870**	ND<40	ND<1.0	ND<1.0	**2.5**	**10**	***ND<2.0***	--	--	ND<1.0	--	--	--	--	--	--	--	--	--	--	--	--
A-3	008-625-016	(b), (c)	20'-30'	08/04/98	**23,000**	--	--	**65**	**270**	**1,300**	**2,400**	**250**	**2,650**	ND<20	ND<5.0	ND<5.0	ND<5.0	**9.6**	***ND<1.0***	--	--	ND<5.0	--	--	--	--	--	--	--	--	--	--	--	--
A-3	008-625-016	(b), (c)	20'-30'	11/18/98	**24,000**	--	--	**73**	**370**	**1,200**	**1,900**	**310**	**2,210**	ND<20	ND<2.5	ND<2.5	ND<2.5	**6.7**	***ND<5.0***	--	--	ND<5.0	--	--	--	--	--	--	--	--	--	--	--	--
A-3	008-625-016	(b), (c)	20'-30'	02/26/99	**30,000**	--	--	**160**	**520**	**1,400**	**2,200**	**430**	**2,630**	ND<20	**0.9**	ND<0.5	**3.1**	**11**	***ND<1.0***	ND<0.5	**0.80**	**0.70**	--	--	--	--	--	--	--	--	--	--	--	--
A-3	008-625-016	(f), (e)	20'-30'	10/12/16	**10,600**	**1,450**	ND<100	**463**	**170**	**743**	--	--	**843**	ND<20	ND<20	ND<20	ND<20	ND<20	***ND<2.0***	ND<20	ND<20	ND<20	**183**	ND<20	ND<20	ND<20	--	ND<200	**101**	**51.9**	**90.5**	**501**	**32.7**
A-3	008-625-016	(g)	20'-30'	10/10/17	**21,000**	**5,100**	ND<250	**1,100**	**510**	**2,200**			**2,300**	ND<500	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-3	008-625-016	(e)	20'-30'	10/10/17	--	--	--	**760**	**400**	**1,700**			**1,600**	ND<50	ND<50	ND<50	***ND<50***	ND<50	***ND<50***	ND<50	ND<50	ND<50	**710**	ND<50	ND<50	ND<50	ND<200	ND<200	**190**	**120**	--	**710**	**51**

Notes:
Bold font indicates concentration above laboratory reporting limit.
Bold italic font indicates laboratory reporting limit above commercial groundwater vapor intrusion screening level.
Indicates concentration above commercial groundwater vapor intrusion screening level.
µg/L = microgram per liter
-- = Not available, not analyzed
ND<5.0 = Not detected above indicated laboratory reporting limit
TPHg = Total petroleum hydrocarbons as gasoline
TPHd = Total petroleum hydrocarbons as diesel
TPHmo = Total petroleum hydrocarbon as motor oil
DRO = Diesel Range Organics
RRO = Residual Range Organics
MTBE = Methyl tert-butyl ether
DCE = Dichloroethene
PCE = Tetrachloroethene
TCE = Trichloroethene
DCA = Dichloroethane
DCP = Dichloropropane
TBA = tert-Butyl alcohol
MEK = Methyl ethyl ketone
TMB = Trimethylbenzene

[1] Values represent California Regional Water Quality Control Board - San Francisco Bay Region Environmental Screening Levels (RWQCB ESLs), Revision 3 dated February 2016 for groundwater vapor intrusion, sand scenario, deep groundwater (>10 feet bgs).
[2] Values represent California Primary Maximum Contaminant Levels (MCLs), unless otherwise noted.
[3] Value represents California Drinking Water Notification Level (NL).
[4] Acetone was detected at 11 µg/L, which is slightly above the laboratory reporting limit of 10 µg/L and well below the groundwater ESL for vapor intrusion, sand scenario, deep groundwater (>10 feet bgs) of 45,000,000 µg/L for residential and 370,000,000 µg/L for commercial.
[5] Sample exhibits chromatographic pattern which does not resemble standard.
[6] Chloroform was detected at 1.9 µg/L, which is below the groundwater ESL for vapor intrusion, sand scenario, deep groundwater (>10 feet bgs) of 2.8 µg/L for residential and 25 µg/L for commercial.
[7] Chloroform was detected at 0.7 µg/L, which is below the groundwater ESL for vapor intrusion, sand scenario, deep groundwater (>10 feet bgs) of 2.8 µg/L for residential and 25 µg/L for commercial.

[6] Lab methods:
(a) TPHg, BTEX by EPA Method 8015m
(b) TPHg by EPA Method 8015m, BTEX & MTBE by EPA Method 8020A
(c) HVOCs by EPA Method 8010
(d) TPHg, BTEX, MTBE by EPA Method 8021B/8015B
(e) VOCs by EPA Method 8260B.
(f) DRO (C12-C22), RRO (C22-C40) by EPA Method 3511/8015B, GRO, BTEX, MTBE by EPA Method 8021B/8015B
(g) DRO (C10-C23), RRO (C18-C36) by EPA Method 3511/8015B, GRO, BTEX, MTBE by EPA Method 8021B/8015B

References:
RWQCB. 2016. Environmental Screening Levels (ESLs). Revision 3. February.

APPENDIX A

ACDEH LETTER TITLED: *SITE CLEANUP PROGRAM CASE RO0003229 AND GEOTRACKER GLOBAL ID T0000010099, LENNAR MULTIFAMILY COMMUNITIES, 1750 WEBSTER STREET, OAKLAND, CA 94612*, DATED OCTOBER 24, 2017

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
REBECCA GEBHART, Interim Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
LOCAL OVERSIGHT PROGRAM (LOP)
For Hazardous Materials Releases
1131 HARBOR BAY PARKWAY, SUITE 250
ALAMEDA, CA 94502
(510) 567-6700
FAX (510) 337-9335

October 24, 2017

Mr. Tyler Wood
Lennar Multifamily Communities
492 9th Street Suite 300
Oakland, California 94607

Subject: Site Cleanup Program Case RO0003229 and GeoTracker Global ID T0000010099, Lennar Multifamily Communities, 1750 Webster Street, Oakland, CA 94612

Dear Mr. Wood:

Alameda County Department of Environmental Health (ACDEH) has reviewed the case file in conjunction with the *Construction Soil and Groundwater Management Plan, Proposed Multifamily Development, 1750 Webster Street, 1810 Webster Street and 301 19th Street, Oakland, California* (SGMP), prepared by GrafCon on your behalf, and dated October 24, 2017. The SGMP includes a summary of soil and groundwater conditions at the subject site and soil and groundwater management protocols that will be implemented during site redevelopment to mitigate conditions potentially hazardous to human health or the environment during and after construction.

The SGMP was prepared to support construction-related activities related to redevelopment of the site and a change in site use from commercial/industrial to commercial/multi-family residential, as detailed in the following redevelopment plans submitted to the City of Oakland Planning Department and Building and Public Works Departments:

- *Planning Permit Number PLN16-071, 301 19th Street Development Submittal:* This submittal includes schematic and entitlement set development plans for 301 19th street, 1750-1810 Webster (APN: 008-0625-002-01; -016-00; -017-00; & -018-00), submitted to the City of Oakland Planning Department on March 17th, 2016, as later revised on May 25th, 2017, and approved by the City of Oakland on August 26, 2016.

- *PZ Permit Number PZ1700062, 301 19th Street Site Improvements and Building Permit Set.* This submittal includes plans dated and submitted to the City of Oakland on August 29th, 2016, as revised on April 10th, 2017, and subsequently revised on June 26th, 2017, and July 25th, 2017, and approved and permitted by the City of Oakland on August 14th, 2017.

- *Grading Permit Number GR1700069, 301 19th Street Grading Permit Plan Set*. This submittal includes plans dated and submitted to the City of Oakland on March 3rd, 2017 as later revised on May 5th, 2017, and approved, bonded, and permitted by the City of Oakland on July 17th, 2017.

Based on the information in the case file, and with the provision that the information provided to this agency is accurate and representative of site conditions, ACDEH conditionally approves of the corrective actions and soil and groundwater management activities presented in the SGMP and concurs that implementation of the proposed measures will prevent exposure to construction workers and site occupants of the proposed development project from residual contamination at the site.

Therefore, at this juncture, you may proceed with site redevelopment activities provided the soil and groundwater management activities presented in the SGMP are implemented, the required mitigation measures including vapor barriers beneath the elevator pits and utility trench dams are installed, and the documents and field work listed in the Technical Report section below are submitted in accordance with the associated compliance dates. Case closure will be granted following completion and approval of the technical reports and completion of corrective actions.

TECHNICAL REPORT AND FIELD WORK REQUEST

1. Prior to the start of building construction the following work must be completed and documents submitted to ACDEH:

    a. **Project Schedule.** A project schedule providing details of the sequencing of corrective actions and site redevelopment activities and submittal of requisite reports and documentation listed below. The schedule must include at a minimum the following activities: site grading and excavation of lead-impacted soil, soil import characterization and ACDEH approval, vapor barrier installation and testing, utility trench dam installation, and foundation construction.

    b. **Groundwater Sampling and Monitoring Well Destruction.** Sampling of groundwater for volatile organic compounds in the area of the former gasoline station and from the three existing on-site wells. Following groundwater sampling permits for well destruction shall be obtained from Alameda County and well destruction activities shall be performed according to agency requirements. Results of groundwater sampling and documentation of the well destruction activities must be included in the Updated Site Summary Report required below.

2. Prior to the import of soil to the site the following documents must be submitted to ACDEH for review and approval:

    a. **Soil Import Documentation.** Requisite documentation for imported fill material including information on proposed sources, sampling and profiling protocols, analytical laboratory reports, and tables with analytical results and applicable environmental screening levels.

3. Prior to pouring of elevator pits the following reports must be submitted to ACDEH for review and approval:

    a. **Vapor Barrier and Trench Dam Design Report and Approved Building Permit Plans.** A basis of design report incorporating a copy of plans approved by the City of Oakland Building Department showing the vapor barrier and utility trench dam locations and specifications for the two on-site elevator areas and a Construction Quality Assurance Plan (CQA Plan). The report and plans must be stamped by a registered engineer. ACDEH must be notified if LMC or the City proposes changes to the site development and first floor building plans presented in the documents in the case files including but not limited to the location, depth and/or design of the elevator shafts, vapor barriers and utility trench dams. Any substantial changes made to the plans without review by ACDEH may invalidate the conclusions of the protectiveness of the redevelopment of the site with respect to residual contamination.

4. Prior to building occupancy the following documents must be submitted to ACDEH for review and approval:

    a. **Construction SGMP Compliance Report**. A report documenting compliance with the Construction SGMP.

    b. **Vapor Barrier and Utility Trench Dam Record Report of Construction.** A vapor barrier and utility trench dam record report of construction with as-built drawings and other information relevant to the installation of the vapor barriers and utility trench dams and certifying that the vapor barriers and utility trench dams were installed in accordance with the basis of design report and design plans.

c. **Long-Term Site Management Plan (SMP).** An SMP for long-term site management providing details regarding the location and construction of the vapor barriers and utility trench dams, precautions should subsurface work be required in the area of installed mitigation measures, protocols for handling potentially impacted soil and groundwater exceeding direct exposure screening criteria that may remain beneath the ground floor slab and foundations, and notification and documentation procedures should the vapor barriers and/or trench dams be damaged. The SMP must include-as built drawings and specifications of the vapor barriers and utility trench dams and must be maintained at the site address by the property manager or designated representative and must be recorded at the Alameda County Clerk Recorder's Office.

d. **Updated Site Summary Report.** An Updated Site Summary Report containing figures and tables showing locations and results of all sampling that has occurred at the site. The report will include descriptions of the year, reason for sampling, and what was analyzed for, and conclusions on status and source of residual chemicals.

e. **Land Use Covenant**. A land use covenant (LUC) documenting long-term site use will be prepared and recorded, and will include the following restrictions: (1) implementation of the long-term SMP for the site, which shall be incorporated therein by reference, including preservation of the site cap, vapor barriers under the elevators and utility trench dams; and (2) prohibition on the extraction of groundwater for any use, including but not limited to domestic, potable, or industrial uses.

f. **Continued Geotracker and Alameda County ftp Database Upload Compliance.** Electronic submittal of all reports and analytical data to both the County and State databases. A new "non-case" number will be opened to act as a repository for long-term monitoring documents including annual reports and five-year reviews.

TECHNICAL REPORTS/WORK SCHEDULE

Please perform the requested work and submit technical reports to ACDEH (Attention: Karel Detterman) in accordance with Attachment 1 and the schedule below. The technical reports may be combined as appropriate. The submittal compliance date for reports with a "Date to be Determined" notation will be finalized in a subsequent directive letter and will be based on the date(s) proposed in the Project Schedule.

- **Project Schedule -** November 3, 2017
- **Soil Import Documentation** – Date to be Determined
- **Vapor Barrier and Trench Dam Design Report and Approved Building Permit Plans** – Date to be Determined
- **Construction SGMP Compliance Report** – Date to be Determined
- **Vapor Barrier and Utility Trench Dam Record Report of Construction** – Date to be Determined
- **Long-Term Site Management Plan (SMP)** – Date to be Determined
- **Updated Site Summary Report** – Date to be Determined
- **Land Use Covenant** – Date to be Determined

Thank you for your cooperation. Should you have any questions or concerns regarding this correspondence or your case, please call me at (510) 567-6767 or send me an electronic mail message at dilan.roe@acgov.org.

Sincerely,

Dilan Roe

Chief – Land Water Division

cc:

Tom Graf, Grafcon, (*Sent via E-mail to: tom@grafcon.us*)

Rob Campbell, Geosolve, (*Sent via E-mail to: rcampbell@geosolve-inc.com*)

Karel Detterman, ACDEH (*Sent via E-mail to: karel.detterman@acgov.org*)
Paresh Khatri, ACDEH (*Sent via E-mail to: paresh.khatri@acgov.org*)
File

APPENDIX B

SITE CONCEPTUAL MODEL

SITE CONCEPTUAL MODEL AND DATA GAP EVALUATION

The following table presents the site conceptual site model (SCM) and data gap evaluation in tabular format.

Project Site/ Site Address:	1750 Webster Street, 1810 Webster Street, and 301 19th Street Oakland, California		**ACDEH Case No.**	RO0003229	
			ACDEH Regulator	Ms. Karel Detterman	
SCM Element/ Sub- Element	**Description**		**Data Gap No. and Description**	**Proposed Investigation**	**Rationale**
	Site Description				
Land Use and Site History	Based on Phase I Environmental Assessment Report (Phase I ESA; GeoSolve, Inc. [GeoSolve], 2015), the Site history includes the following land uses: • 1750 Webster Street (Assessor's Parcel Numbers (APNs) 008-625-016 and 008-625-017) o Year 1889: both APNs - vacant lot o Year 1903: APN 008-625-016 – vacant lot, APN 008-625-017 – single-family residence o Year 1911: both APNs - single-family residences o Year 1950: APN 008-625-016 – single-family residence, APN 008-625-017 – parking o Year 1964: both APNs - parking • 1810 Webster Street (APN 008-625-018) o Year 1889: single-family residence o Year 1950: parking • 301 19th Street (APN 008-625-002-1) o Year 1889: single-family residences o Year 1939: a three-pointed star shaped structure/building o Year 1946: a circular structure/building o Year 1964: parking		None	NA	NA

SCM Element/ Sub- Element	Description		Data Gap No. and Description	Proposed Investigation	Rationale
	Site Description (Continued)				
Land Use and Site History (Continued)	According to the Phase I ESA (GeoSolve, 2015a), in 1943, a former gasoline service station (Bliss M S Gasoline and Oil Service Station) was located at 1839 Harrison Street (APN 008-625-004). This address is located on the adjacent parcel, southwest of 301 19th Street (APN 008-625-002-1). In addition, the facility at 19th Street and Harrison Street was listed on the SWEEPS UST, HIST UST, and CA FID UST databases for the former presence of a 5,000-gallon gasoline underground storage tank (UST) and a 550-gallon waste oil UST. In 1991, the 5,000-gallon UST and a two stage wash-rack water clarifier were removed. A second UST (possibly a 550-gallon waste oil UST) was not discovered at the Site. The facility at 19th Street and Harrison Street was likely associated with the Bliss M S Gasoline and Oil Service Station listed at 1839 Harrison Street (GeoSolve, 2015a).				
Nearby Sites	Historical and current land use in the Site vicinity are mixed-use commercial/retail and multi-family residential. The Site is bounded to the northeast by 19th Street and commercial/retail beyond which is a 17-story commercial building (1901 Harrison Street), to the southeast by Harrison Street beyond which is a 25-story commercial building (1800 Harrison Street), to the southwest by a parking lot and multi-level building of multi-family residential and commercial/retail beyond which is a property undergoing redevelopment into a multi-level building of multi-family residential and commercial (1700-1710 Webster Street), and to the northwest by Webster Street beyond which is a parking lot and commercial/retail (1721 Webster Street). A neighborhood park, Snow Park, is located east of the Site. Beyond the park, in the downgradient direction from the Site, is Lake Merritt.		None	NA	NA

SCM Element/ Sub- Element	Description		Data Gap No. and Description	Proposed Investigation	Rationale
	Site Description (Continued)				
Nearby Sites (Continued)	Based on a review of historical documents available on the State Water Regional Control Board (SWRCB) GeoTracker website, a Leaking Underground Storage Tank (LUST) Cleanup Site and two Cleanup Program Sites are located upgradient of the Site. These three nearby cleanup sites are described below. • 1721 Webster Street, Douglas Parking Company Site - The Douglas Parking Company site was used as an automotive fueling facility from approximately 1925 through 1992. In 1992, three gasoline USTs (one 1,000-gallon and two 500-gallon) and associated dispensers and piping were removed from the site. Elevated concentrations of gasoline-range hydrocarbons and benzene, toluene, ethylbenzene and xylenes (BTEX) were identified in soil and groundwater beneath the former USTs. Groundwater beneath the Douglas Parking Company site flows toward the Project Site. • 1700-1710 Webster Street, Mixed-Use Redevelopment Site - The property at 1700 and 1710 Webster Street is located upgradient of the Project Site towards the south. The property is approximately 0.56 acre in size. Historically, 1700 and 1710 Webster Street were first developed as residential property. By 1933, an automobile service station operated in the southwest corner of the property. By 1957, a car wash operated in the northeast corner of the property. By 1965, a two-story commercial building covered the entire property. In January 2017, this building was demolished and construction began on a multi-level mixed-use (commercial/residential) building. Groundwater beneath 1700 and 1710 Webster Street property flows toward the Project Site.				

SCM Element/ Sub- Element	Description		Data Gap No. and Description	Proposed Investigation	Rationale
	Site Description (Continued)				
Nearby Sites (Continued)	• 1633 Harrison Street, Former Chevron Service Station 9-0020 - The former Chevron Service Station is located upgradient of the Project Site to the south across 17th Street, on the southwest corner of the intersection of Harrison Street and 17th Street. Chevron operated a service station on the property until 1972. Between 1972 and 1975, the station building, two dispenser islands, one waste oil UST, and two gasoline USTs were removed. After December 1, 1975, it was used as a parking lot. The property was redeveloped as a multi-level senior housing facility. Prior to decommissioning the groundwater monitoring wells at the former Chevron Service Station, depth to groundwater ranged from approximately 16 feet bgs to 22 feet bgs and groundwater generally flowed to the east-northeast (Conestoga-Rovers & Associates [CRA], 2014). On January 27, 2015, ACDEH issued a case closure letter.				
Building Characteristics	Redevelopment plans included construction of a seven-story mixed-use commercial/retail and multi-family residential building, with the ground level consisting of parking, retail, commercial, and mechanical/utility space. Multi-family residential use will be limited to upper levels of the building. Two elevators will be constructed to service the building occupants. The building is currently in the process of being constructed.		None	NA	NA

SCM Element/ Sub- Element	Description		Data Gap No. and Description	Proposed Investigation	Rationale
	Geology and Hydrogeology				
Regional	The Site is situated within the East Bay portion of the greater San Francisco Bay region within Alameda County. The Site is located within the Coast Range Geomorphic Province, an area characterized by north-northwest-trending mountain ranges and valleys formed by oblique compression along the San Andreas fault and associated strike-slip faults. The active trace of the right-lateral Hayward Fault is situated approximately 3.4 miles northeast of the Site. Topography at the Site slopes gradually to the northeast toward Lake Merritt (nearest surface water body), which is located approximately 800 feet northeast of the Site. The Site is relatively flat. The distance to the Oakland Inner Harbor, which leads into the San Francisco Bay, is approximately one mile southwest of the Site at its nearest point.		None	NA	NA
Local Geology	The Site is primarily underlain by surficial fill materials, beach and dune sand deposits of the Late Pleistocene Merritt Sand, and sand-silt-clay Bay Mud deposits (Helley and Lajoie, 1979). Surficial fill materials are observed intermittently from the surface to approximately 3 feet below ground surface (bgs). Loose, well-sorted to poorly-sorted sands with silt are interbedded with discontinuous, fine-grained silty clays that pinch out towards the west.		None	NA	NA

SCM Element/ Sub- Element	Description		Data Gap No. and Description	Proposed Investigation	Rationale
	Geology and Hydrogeology (Continued)				
Local Hydrogeology	Groundwater is historically encountered at the Site at depths ranging from 18.81 to 21.65 feet bgs. The most recent groundwater monitoring event coordinated for both onsite and nearby offsite wells was in October 2016. Groundwater elevations measured in the October 2016 groundwater monitoring event ranged from 6.70 feet msl (well A-3) to 5.88 feet msl (well A-2) in Site monitoring wells (GeoDesign, Inc., 2016). Subsequent to this monitoring event, the offsite wells were destroyed. Onsite wells A-1, A-2, and A-3 were sampled in October 2017 prior to destruction in preparation for redevelopment of the Site. Groundwater flow direction, based on October 2016 Site monitoring wells and nearby groundwater monitoring data from 1700/1710 Webster Street and 1721 Webster Street, is to the northeast.		None	NA	NA
Surface Water	The nearest surface water body is Lake Merritt, situated approximately 800 feet northeast of the Site.		None	NA	NA
Nearby Wells	A well survey has not been conducted at the Site. Based on a review of files available on GeoTracker for properties in the Site vicinity, two nearby sites with groundwater monitoring wells were identified. The groundwater monitoring wells were formerly located at 1700-1710 Webster Street and 1721 Webster Street. According to documents available on GeoTracker, prior to the commencement of earthwork activities for redevelopment of the property at 1700-1710 Webster Street, wells MW-01 through MW-04 were destroyed. On October 26, 2017, wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, AS-1, AS-2, AS-3, SG-1, and SG-2 at the property located at 1721 Webster Street were destroyed.		None	NA	NA

SCM Element/ Sub- Element	Description		Data Gap No. and Description	Proposed Investigation	Rationale
	Geology and Hydrogeology (Continued)				
Nearby Wells (Continued)	According to the *Soil Gas Sampling Report and Updated SCM*, dated June 19, 2017, prepared by Pangea Environmental Services for the nearby property at 1721 Webster Street (located across Webster Street), a review of well information provided by the Department of Water Resources (DWR) and Alameda County Public Works Agency (ACPWA), identified several permitted wells within approximately a ¼ mile radius of the property at 1721 Webster Street. According to Pangea (2017a), two locations are listed as irrigation wells and these locations are greater than 1,000 feet from the property at 1721 Webster Street.				
Groundwater Beneficial Use	According to the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan), groundwater beneath the Site is part of the East Bay Plain Subbasin of the Santa Clara Valley Basin. The existing beneficial uses of this basin include municipal and domestic water supply, industrial process water supply, industrial service water supply, and agricultural water supply. East Bay Municipal Utility District (EBMUD) provides water for these uses to the Site and vicinity from Sierra Nevada-fed surface-water sources.		None	NA	NA

SCM Element/ Sub- Element	Description		Data Gap No. and Description	Proposed Investigation	Rationale
	Contaminant Source and Release Information				
Source/ Release Information	The Phase I ESA (GeoSolve, 2015a) identified the following Recognized Environmental Conditions (RECs): 1) elevated concentrations of total petroleum hydrocarbons (TPH) as gasoline, BTEX, and trichloroethene (TCE) in groundwater beneath the 1750 Webster Street property; 2) the Bliss M S Gasoline and Oil Service Station located at 1839 Harrison Street and/or 19th Street and Harrison Street; 3) possible elevated lead concentrations and/or asbestos-containing materials (ACMs) in the surficial soil; 4) a historical printing facility located at 1817 Harrison Street and potential residual metals in soil; and 5) possible upgradient sources of TPHg, BTEX, and other volatile organic compounds (VOCs) from historical uses as gasoline service stations and dry cleaner facilities. Based on former Site land use as a gasoline service station (Bliss M S Gasoline and Oil Service Station) at the adjacent parcel toward the southwest at 1839 Harrison Street (APN 008-625-004), in September 1991, a 5,000-gallon UST and a two-stage wash-rack water clarifier were removed from 1833 Harrison Street (JMM, 1991). In December 2017, a 300-gallon UST was discovered and removed from 301 19th Street. The UST removal activities are discussed in more detail in SCM Element – Remedial Activities.		None	NA	NA
Chemicals of Potential Concern	Based on former Site land use and previous Site investigations, the chemicals of potential concern (COPCs) are TPH, BTEX, and VOCs.		None	NA	NA

SCM Element/ Sub-Element	Description		Data Gap No. and Description	Proposed Investigation	Rationale
	Contaminant Source and Release Information (Continued)				
Soil and Groundwater Investigations	The following bullets list the all available reports related to the Site, which are described in more detail in Section 3.0 of the *Updated Site Summary Report*: • September 1991: James Montgomery (JJM) UST Closure Report (1833 Harrison Street). • March 1993, Applied Geoscience, Inc. (AGI) did a Geophysical Survey and Soil and Groundwater Investigation (1750 Webster Street and 301 19th Street). • May 1993, Geophysical Survey and Soil Investigation (1750 Webster Street). • February 1998, AGI, Geophysical Survey and Soil and Groundwater Investigation (1750 Webster Street). • February 1998, Risk-Based Corrective Action Assessment (1750 Webster Street). • April and August 1998, ATC Associates (ATC), Groundwater Well Installation and Monitoring Report. • November 1998, Groundwater Monitoring Report (1750 Webster Street). • February 1999, Groundwater Monitoring Report (1750 Webster Street). • February 2000, Alameda County Health Care Services Agency (ACHCSA), Summary of File Review. • October 2015, GeoSolve, Phase I and Phase II Environmental Site Assessment (1750 Webster Street and 301 19th Street) • December 2015, Additional Phase II Environmental Site Assessment (1750 Webster Street)		None	NA	NA

SCM Element/ Sub-Element	Description		Data Gap No. and Description	Proposed Investigation	Rationale
	Contaminant Source and Release Information (Continued)				
Soil and Groundwater Investigations (Continued)	• February 2016, Phase II Environmental Site Assessment (1810 Webster Street) • February 2016, Soil Gas Survey (1750 Webster Street, 1810 Webster Street, and 301 19th Street) • July 2016, GeoSolve, Additional Phase II Environmental Site Assessment (301 19th Street) • August 2016, Additional Soil Gas Survey (1750 Webster Street, 1810 Webster Street, and 301 19th Street) • October 2016, Groundwater Monitoring Report (1700-1710 Webster Street, 1721 Webster Street, and 1750 Webster Street) • February 2017, Soil Management Plan (1750 Webster Street, 1810 Webster Street, and 301 19th Street) • May 2017, Additional Soil Gas Survey (1750 Webster Street, 1810 Webster Street, and 301 19th Street) • May 2017, Evaluation of Lead Impacts in Soil (1750 Webster Street, 1810 Webster Street, and 301 19th Street) • October 2017, Construction Soil and Groundwater Management Plan (1750 Webster Street, 1810 Webster Street, and 301 19th Street) • January 2018, Groundwater Sampling and Well Destruction Report (1750 Webster Street, 1810 Webster Street, and 301 19th Street) • April 2018, Apex Companies, LLC, Tank Closure Report (1750 Webster Street, 1810 Webster Street, and 301 19th Street)				

SCM Element/ Sub-Element	Description		Data Gap No. and Description	Proposed Investigation	Rationale
	Contaminant Source and Release Information (Continued)				
Free Product	During previous Site investigations, sheen or free product has not been encountered at the Site.		None	NA	NA
Soil	During previous Site investigations including the removal of a UST during development, numerous soil samples have been collected at the Site. Soil samples have been analyzed for TPHg, TPH as diesel (TPHd), TPH as motor oil (TPHmo), BTEX, methyl tert-butyl ether (MTBE), VOCs, metals, polychlorinated biphenyl (PCBs), and semivolatile organic compound (SVOCs) including polyaromatic hydrocarbon (PAHs). With the exception of arsenic and lead, of the compounds detected in soil, no concentrations exceeded their respective Regional Water Quality Control Board San Francisco Bay Region (RWQCB-SF) Environmental Screening Levels (ESLs) for direct contact with soil for the construction exposure scenario. Arsenic was detected in soil at concentrations ranging from 1.8 mg/kg to 5.9 mg/kg, which are well below the regional background arsenic concentration of 11 mg/kg for San Francisco Bay Region. Prior to construction activities, GeoSolve identified four areas of elevated lead at the Site. At these four locations, lead was detected at concentrations that exceed the RWQCB-SF soil ESL of 80 mg/kg for the residential exposure scenario. At two of these four locations, lead was detected at 170 mg/kg and 760 mg/kg, which exceed the RWQCB-SF soil ESL of 160 mg/kg for the construction exposure scenario. Based on a conference call with ACDEH on February 14, 2018, it was agreed that since documentation of soil removal actions and characterization of excavated lead-impact soil was not available, it would be assumed that the lead impacted soil was not removed from the Site and remains in-place.		None	NA	NA

SCM Element/ Sub-Element	Description		Data Gap No. and Description	Proposed Investigation	Rationale
	Contaminant Source and Release Information (Continued)				
Groundwater	During previous Site investigations, including the removal of an UST during development, numerous grab groundwater and groundwater well samples have been collected at the Site. Groundwater samples have been analyzed for TPHg, TPHd, TPHmo, BTEX, MTBE, and VOCs, metals. Three groundwater monitoring wells, A-1, A-2, and A-3, were installed on the Site in April 1998. Groundwater was historically encountered at the Site at depths ranging from 18.81 to 21.65 feet bgs. The most recent groundwater monitoring event coordinated for onsite and offsite wells was in October 2016. Subsequent to this monitoring event, the offsite wells were destroyed. Onsite wells A-1, A-2, and A-3 were gauged and sampled in October 2017, prior to destruction in preparation for redevelopment of the Site. Since the October 2016 monitoring event provides the most recent groundwater monitoring event, where data for LMC's property at 1750 Webster Street and the offsite upgradient properties at 1700-1710 Webster Street and 1721 Webster Street were collected on the same day, the data were used in evaluating the potentiometric surface and isoconcentration contours for chemicals of interest. Groundwater flow direction, based on October 2016 groundwater monitoring wells is to the northeast. Groundwater data from the Site and upgradient monitoring wells indicated the presence of an areal distribution of low concentrations of petroleum-related compounds and tetrachloroethene (PCE) and its daughter products. Based on the known groundwater impacts originating from upgradient sites, local groundwater flow direction, and no known sources identified on the Site, groundwater impacts detected beneath the Site (1750 Webster Street) are likely sourced from an offsite upgradient property.		None	NA	NA

SCM Element/ Sub-Element	Description		Data Gap No. and Description	Proposed Investigation	Rationale
	Contaminant Source and Release Information (Continued)				
Subslab/Soil Gas	During previous Site investigations, soil vapor samples have been collected at 5, 10, and 15 feet bgs. Soil vapor samples have been analyzed for TPHg and VOCs. BTEX, dichlorodifluoromethane, PCE, chloroethane, 1,3-dichlorobenzene, and 1,4-dichlorobenzene were detected in soil vapor. Of the VOCs detected, none exceeded their respective RWQCB-SF soil gas ESL for vapor intrusion for the commercial exposure scenario. RWQCB-SF soil gas ESLs were not available for 1,3-dichlorobenzene and dichlorofluoromethane. The ground level of the future building will include parking, retail, commercial, and utility use. The residential units will be limited to the upper levels of the building. Two elevators will be constructed to service the building occupants. As a precautionary measure, a vapor mitigation system will be installed in the two elevator shaft areas to further reduce the potential for vapor intrusion into upper residential levels. No subslab vapor samples have been collected at the Site.		None	NA	NA
Indoor Air	No indoor air samples have been collected at the Site. The vapor intrusion into indoor air pathway is being evaluated with soil vapor and groundwater data.		None	NA	NA

SCM Element/ Sub-Element	Description		Data Gap No. and Description	Proposed Investigation	Rationale
	Remediation Activities				
Remedial Activities	In September 1991, a 5,000-gallon UST and a two-stage wash-rack water clarifier were removed from 1833 Harrison Street (currently referred to as 301 19th Street). The UST, wash-rack water clarifier, and tank piping were observed to be in good structural condition. The soil surrounding the 5,000-gallon UST and clarifier did not appear to be affected by subsurface release of hydrocarbons. Groundwater was not encountered at the Site during UST removal activities to an explored depth of approximately 18 feet bgs. No evidence of a subsurface release of hydrocarbons was found during the field activities; therefore, closure was recommended (JMM, 1991). On December 27, 2017, a 300-gallon UST was discovered and removed from 301 19th Street. The UST was visually inspected and corrosion and pitting of the steel tank was observed. Soil with evidence of petroleum hydrocarbon-type impacts immediately adjacent and beneath the UST were removed to the extent practical to a depth of approximately 7 feet bgs, where visual/odor and evidence of over-lying impact was lacking. Significant discoloration/contamination of soil was not noted or observed along the sidewalls of the excavation. No further action is warranted with regards to the UST. Shallow and deep soil data for the UST discovery area, UST relocation area, and UST spill area were compared to RWQCB-SF ESLs for Construction Worker Shallow and Deep Soil Exposure Scenario. Metals, TPH, VOCs, PCBs, and SVOCs were not detected above decision objectives (Apex, 2018c). No further action was warranted with regards to shallow and deep soil.		None	NA	NA

SCM Element/ Sub-Element	Description		Data Gap No. and Description	Proposed Investigation	Rationale
	Remediation Activities (Continued)				
Remedial Activities (Continued)	Groundwater data for the UST discovery area and UST spill area were compared with historical groundwater data from the Site and offsite upgradient areas to determine if groundwater concentrations are consistent with regional concentrations. Only three VOCs (PCE, TCE, and chloroform) were detected above the laboratory RL in grab-groundwater samples. These VOCs were not detected above the RWQCB-SF groundwater ESLs for vapor intrusion for the commercial exposure scenario. Additionally, PCE and TCE in groundwater are associated with regional groundwater impacts in the area upgradient of the Site (Apex, 2018c). No further action was warranted with regards to groundwater. No additional remedial actions have been warranted at the Site.				
	Risk Pathways				
Risk Pathway Summary	As defined by USEPA (1989), all of the following four components are necessary for a chemical exposure pathway to be considered complete and for chemical exposure to occur: • A chemical source and a mechanism of chemical release to the environment; • An environmental transport medium (e.g., soil) for the released chemical; • A point of contact between the contaminated medium and the receptor (i.e., the exposure point); and • An exposure route (e.g., dermal contact with chemically-impacted soils) at the exposure point.		None	NA	NA

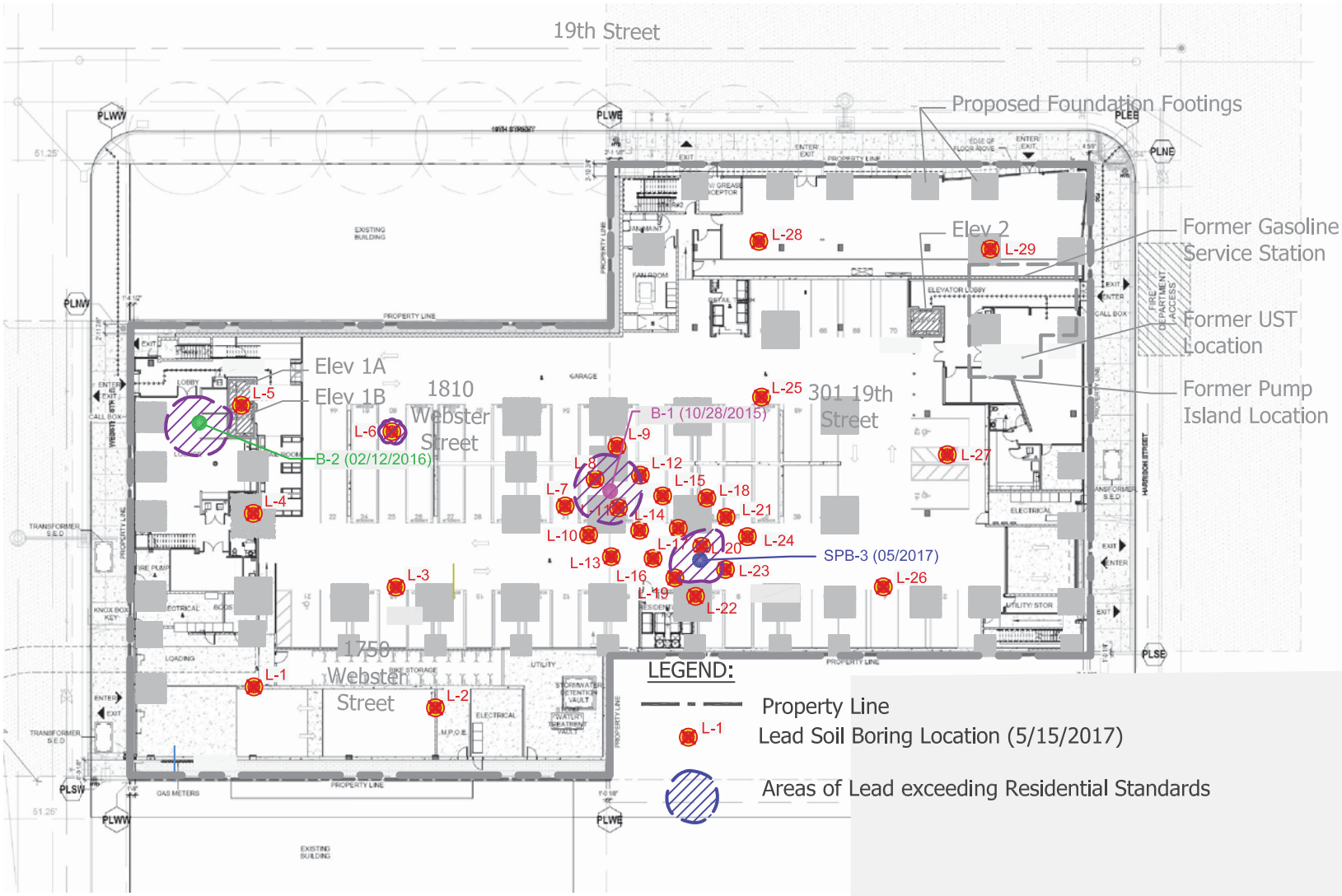
SCM Element/ Sub-Element	Description		Data Gap No. and Description	Proposed Investigation	Rationale
	Risk Pathways (Continued)				
Risk Pathway Summary (Continued)	The first two components are described under the Contaminant Source and Release Information above. The third and fourth component are described below. Redevelopment plans included construction of a seven-story mixed-use commercial retail and residential building, with the ground level consisting of parking, retail, commercial, and mechanical/utility space. Multi-family residential use will be limited to upper levels of the building. The building is currently in the process of being constructed. The surrounding area is commercial/retail and multi-family residential. Hypothetical human receptors were identified on the basis of proximity to the Site, proposed activities that could possibly result in direct or indirect contact with Site-related chemicals, and Site use. The ground level of the future building will include parking, retail, commercial, and utility use. No residential receptors will occupy the ground level. Two elevators will be constructed to service the building occupants. The following hypothetical human receptors were evaluated in this risk assessment: • Hypothetical Onsite Construction Worker Receptor; • Hypothetical Onsite Commercial/Retail Worker Receptor; and • Hypothetical Onsite Resident Receptor.				

SCM Element/ Sub-Element	Description		Data Gap No. and Description	Proposed Investigation	Rationale
	Risk Pathways (Continued)				
Risk Pathway Summary (Continued)	The exposure pathways considered to be potentially complete and significant for each receptor are summarized below: <u>Hypothetical Onsite Construction Worker Receptor</u> • Incidental ingestion of soil; • Dermal contact with soil; and • Inhalation of dust/vapors in outdoor air. <u>Hypothetical Onsite Commercial/Retail Worker Receptor</u> • Inhalation of vapors in indoor air. <u>Hypothetical Onsite Resident Receptor</u> • Inhalation of vapors in indoor air via the elevator shaft. The resident receptors will not occupy the first/ground level; therefore, the only potential exposure pathway to the upper residential levels would be inhalation of vapors in indoor air that are transported via the elevator shaft. Although this is a potentially complete exposure pathway, there is no known regulatory-recommended or approved method to evaluate this exposure pathway. As a precautionary measure, a vapor mitigation system will be installed in the two elevator shaft areas to further reduce the potential for vapor intrusion into upper residential levels. Although inhalation of vapors in outdoor air may be complete, outdoor air concentrations are typically lower than indoor air concentrations due to dispersion; such relatively minor exposures are subsumed by the assumption that all exposure is from indoor air.				

SCM Element/ Sub-Element	Description		Data Gap No. and Description	Proposed Investigation	Rationale
	Risk Pathways (Continued)				
Risk Pathway Summary (Continued)	Current development plans include a building foundation across the entire Site; therefore, direct contact with soil exposure pathway (i.e., incidental ingestion, dermal contact, and dust inhalation) is considered incomplete for future onsite commercial and resident receptors. However, during redevelopment of the Site, an onsite construction worker receptor may be directly exposed to onsite soil. The building footprint and pavement will generally preclude leaching of surface water through impacted subsurface soil; therefore, leaching is not expected to occur at the Site to any significant extent. Drinking water at the Site is serviced by a public water supply for beneficial use; therefore, direct contact with groundwater exposure pathway is considered incomplete for receptors at the Site.				

APPENDIX C

LEAD SOIL BORING LOCATIONS



Source: LPAS Site Plan Ground Level A1.001, 10/06/16

GeoSolve, Inc.
Geoscience solutions rather than Status-Quo
Address: 1807 Santa Rita Rd, Suite D-165
Pleasanton, California 94566
Visit us at www.geosolve-inc.com

LOCATION OF BORINGS L1 -L29

LENNAR MULTIFAMILY COMMUNITIES
SUMMARY OF ENVIRONMENTAL ACTIVITIES
1750 and 1810 WEBSTER STREET and 301 19th STREET
OAKLAND, CALIFORNIA

Project No.	Drawn by:
2015-29	GC
Scale:	Date:
AS SHOWN	10/2017

Figure No.
A

APPENDIX D

GRAFCON AND APEX LETTER TITLED: *SUFFICIENCY OF VAPOR MITIGATION, ALAMEDA COUNTY CLEANUP CASE NO. RO0003229; 1750 WEBSTER STREET, OAKLAND, CA*, DATED MARCH 9, 2018

GrafCon

APEX

March 9, 2018
Ms. Dilan Roe
Chief – Land Water Division
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA

Subject: Sufficiency of Vapor Mitigation
Alameda County Cleanup Case No. RO0003229; 1750 Webster Street, Oakland, CA

Dear Ms. Roe,

As requested, the undersigned have reviewed existing data for the subject site (the Site) in regards to residual vapors in soil and extent of mitigation required to reduce the vapor intrusion risk to occupants of the new building to acceptable risk levels.

Existing Site data is summarized in the October 24, 2017 *Construction Soil and Groundwater Management Plan, Proposed Multifamily Development 1750 Webster Street, 1810 Webster Street and 301 19th Street, Oakland, California,* by GrafCon. Additional data presented in the November 14, 2016 *Groundwater Monitoring Report: October 2016, 1700 through 1750 Webster Street, Oakland, California* provides information on the existence of halogenated volatile organic compounds (HVOCs) in groundwater upgradient of the Site. Both of these reports are in the Site Geotracker file. Proposed construction plans for the Site include a mixed-use multi-story building constructed over the entire Site. No parking or open space will be available onsite. The ground level of the proposed onsite building will consist of retail/commercial space only. Residential units will be limited to upper levels of the building, accessible via elevators and stairways.

Soil vapor data collected at the Site indicates the existence of low concentrations of residual tetrachloroethylene (PCE) below the Water Board environmental screening levels (ESLs) for both residential and commercial development, and benzene below the Water Board ESL for commercial development. The detections of PCE were measured at a depth of 10 to 15 feet below grade. Soil vapor samples collected at a depth of 5 feet at the same location were non-detect for PCE, indicating attenuation of vapors from the underlying low concentrations of PCE in groundwater. Soil at the Site at the one location benzene was measured did not show residual petroleum hydrocarbons in soil and oxygen concentrations measured across the Site were well above 4%, indicating that significantly higher benzene concentrations are below Water Board levels of concern (November 3, 2016 Water Board letter to GrafCon, *Consideration of Biodegradation for Site-Specific Vapor Intrusion Evaluations at Petroleum Sites*).

P.O. Box 1105, Tiburon, CA 94920 Phone: 415.290.5034

Sampling of soil at the Site during due diligence and following removal of an underground storage tank encountered during site development did not indicate residual sources of VOCs at the Site.

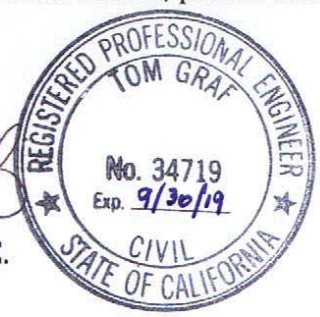
Groundwater samples collected from the Site and upgradient of the Site show an areal distribution of low concentrations of PCE, TCE, and their daughter products. The presence of gasoline-related chemicals in groundwater samples has required detection limits above the typically low HVOC concentrations that have been detected. The presence of the gasoline-related chemicals typically assists with the ongoing degradation of the remaining HVOCs in groundwater.

Based on the above, it is our opinion that sub-slab vapor mitigation is not warranted for the limited VOCs measured in the subsurface at the Site. As a precautionary measure, vapor mitigation will be installed in elevator shaft areas to further reduce the potential for vapor intrusion to upper residential use areas.

GrafCon and Apex have exercised professional judgment in reviewing previous investigation data. These opinions expressed are based on the reported conditions of the Site existing at the time of the investigation and current regulatory requirements. The presented findings in this letter are intended to be taken in their entirety to assist LMC and ACDEH personnel in making decisions related to the property. If you have questions or require additional details, please contact the undersigned at your earliest convenience.

Sincerely,

GrafCon



Tom Graf, P.E.
Principal

Apex Companies, LLC

Ivy Inouye
Senior Toxicologist

cc: Ms. Karel Detterman, ACDEH
Mr. Tyler Wood, LMC