



**Phase II Site Investigation Report**

**Alameda Street Widening Project**  
(From Anaheim Street to 300 Feet South of  
Pacific Coast Highway)  
**City of Los Angeles, California**

**Converse Project No. 22-41-185-02**

**November 21, 2025**  
**Revised January 19, 2026**

**Prepared For:**

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Geotechnical Engineering, Environmental & Groundwater Science, Inspection & Testing Services

November 21, 2025  
Revised January 19, 2026

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**Subject: Phase II Site Investigation Report**  
Alameda Street Widening Project  
(From Anaheim Street to 300 Feet South of Pacific Coast Highway)  
City of Los Angeles, California  
Converse Project No. 22-41-185-02


Ms. Kocheon:

Converse Consultants (Converse) is pleased to submit the attached report that summarizes the activities and the results of a *Phase II Site Investigation Report* that was conducted at the referenced property.

We appreciate the opportunity to be of service. Should you have any questions or comments regarding this report, please contact either Michael Van Fleet at (626) 930-1267 or Norman Eke at (626) 930-1260.

Sincerely,

## CONVERSE CONSULTANTS

  
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# 1.0 Introduction

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This *Phase II Site Investigation (SI)* report has been prepared by Converse Consultants (Converse), on behalf of Parsons, for the sampling conducted at the Site located in the City of Los Angeles, Los Angeles County, California, referred to as the “Site” in this report. Converse was retained by Parsons to conduct this *Phase II Environmental Site Assessment* at the Site as outlined in our revised proposal dated November 5, 2024.

Converse generally followed the standard practices of the American Society for Testing Materials (ASTM) Designation: E1903-19 *Standard Practice for Environmental Site Assessments (ESA): Phase II Environmental Site Assessment Process* (ASTM, E 1903-



19). The purpose of conducting the assessment in accordance with ASTM E1903-19 is to acquire and evaluate sufficient information to achieve the objective(s) set forth by the User and Converse.

The objectives of this assessment were developed based on the findings of a Phase I ESA report prepared by Converse and dated May 6, 2024, and client input relative to the currently planned project area. The Converse Phase I Report identified potential hazards associated with several Recognized Environmental Concerns (RECs), including the presence of aerially deposited lead (ADL) adjacent to the roadway. Further investigation of the RECs within the project footprint was recommended at locations where ground-disturbing activities are planned and where potential environmental concerns were identified. The resulting data will also be used to evaluate appropriate soil handling and disposal protocols for implementation during construction activities.

The Objectives of this Phase II SI are the following:

- Evaluate the potential for soil, soil vapor, and/or groundwater within the project footprint to have been impacted by aerially deposited lead (ADL) or past on-site/off-site activities, including former fueling stations.
- Determine if contaminants of potential concern identified in the Phase I ESA are present at concentrations that exceed applicable regulatory thresholds.
- Provide the City of Los Angeles with data necessary to plan for safe soil management, handling, and disposal during construction.
- Support CEQA/NEPA environmental review by documenting potential hazardous materials conditions and identifying any mitigation measures that may be required.

## 2.0 Background

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Details in the following sections regarding the Site and surrounding areas were obtained from the Converse Phase I ESA Report, dated May 6, 2024, and from onsite observations.

### 2.1 Site Description and Features

#### 2.1.1 Current Uses of the Site

The Site currently consists of an approximate 0.68-mile long segment of Alameda Street, between East Anaheim Street on the south, to approximately 300 feet south of Pacific Coast Highway on the north (from Mauretania Street south).

The Site is a major arterial roadway connecting the Port of Los Angeles (POLA) and the Port of Long Beach (POLB) to Downtown Los Angeles. The proposed widening of Alameda Street from its current dimensions of two lanes in each direction, to a Boulevard II arterial of three lanes in each direction would include widening the east and west sides of the arterial roadway from its current width of 50 feet to 104 feet.

Businesses paralleling the arterial roadway along the east side consist of commercial, industrial, and railroad right of ways. The Pacific Harbor Lines (PHL) Railroad runs parallel along the west side of Alameda Street. Residential, commercial, and industrial areas parallel the west side of the PHL railroad right-of-way.

#### 2.1.2 Location

The Site is a 0.68-mile long segment of Alameda Street, between East Anaheim Street on the south, to Mauretania Street on the north, in the neighborhoods of Wilmington, City of Los Angeles, Los Angeles County, California.

The Site is located approximately 2.0-miles west of Interstate 710 (Long Beach Freeway). The Site has a slight diagonal direction from northeast to southwest. Eight streets intersect with Alameda Street along the east side including (from northeast to southwest) Mauretania Street, M Street, Robidoux Street, Young Street, Denni Street, Grant Street, East Opp Street, and East I Street. Two major arterial roads including East Anaheim Street along the southern boundary and Henry Ford Avenue, form an irregular intersection with Young Street and Alameda Street. Additionally, two railroad crossings transect Alameda Street, exiting toward the east side of



Alameda Street, forming a triangular junction, called Thernard Junction (Willmington Wye).

The location of the Site is presented in Figure 1 – Site Location Map.

### *2.1.3 Site and Vicinity General Characteristics*

The Site consists of an irregular stretch of land consisting of an approximate 0.68-mile long segment of Alameda Street between East Anaheim Street on the south and Mauritania Street on the north. Alameda Street currently has two lanes in each direction, with varying widths north and south of Henry Ford Avenue (80 feet wide north and 42 feet wide south of Henry Ford Avenue). In addition to the 0.68-mile-long stretch of Alameda Street, approximately ten (10) feet of the PHL Railroad right-of-way, located on the west side of Alameda Street, would also be acquired. Portions of the privately owned commercial/industrial properties located along the east side of Alameda Street would also be acquired with the exception of Hotel Portlight (1050 Alameda Street) and Pacheco's (1100-1102 Alameda Street), which would both be a full acquisition. Ross Place is a city street that is currently used for private purposes (located between Opp Street and I Street). This property is completely fenced off and visual observations of this area could not be conducted.

The general vicinity of the Site is made up of commercial/industrial properties and railroad rights-of-way along Alameda Street.

## **2.2 Physical Setting**

### *2.2.1 Topography*

The Site is located approximately 10 to 40-feet above mean sea level with surface topography sloping gently towards the south-southeast (United States Geological Survey [USGS] Topographic Map, Long Beach, Wilmington, and Torrance, California, 1978 photo revised 1981).

### *2.2.2 Geology*

The geology of the Site is underlain by older alluvium, lake, playa, and terrace deposits (Division of Mines and Geology, Geologic Map of California, 2010).

### *2.2.3 Hydrogeology*

Information regarding regional groundwater was researched on the Regional Water Quality Control Board (RWQCB) Geotracker website. According to the website, the closest site to the south end of the project



area is located south adjacent to the project area at the southeast corner of East Anaheim Street and Alameda Avenue. According to the Second Semi-Annual 2021 Groundwater Monitoring Report for the International Longshoreman Warehouse and Union Dispatch Hall Site, groundwater depth was determined to range from approximately 7.9 feet to approximately 10.6 feet below ground surface (bgs) and is flowing in a general southwest direction.

No recent groundwater data information was obtained for the north end of the project area. However, according to a No Further Action (NFA) letter for the Alameda Corridor Transportation Authority (ACTA) Parcel PCH-1571, depth to groundwater beneath this site was approximately 40 feet bgs. Therefore, the depth to water for the Site ranges from approximately 7 to 40 feet bgs, from south to north.

## **2.3 Site History and Land Use**

From as early as 1896 to 1902, the Site appeared vacant and bordered to the west by a railroad. The Wilmington Wye appeared present and continued on to the east with the Southern Pacific Long Beach Railroad. Adjacent properties appear to be vacant.

By 1921, development within the Site boundaries was evident between Robidou Street and East Anaheim Street. Alameda Street was named Railroad Avenue. Southern Pacific Company railroad appeared along the western boundary. A Pacific Electric Railway Company's right-of-way crosses the Site from west to east, south of I Street. East Anaheim Street to Young Street appeared present within the boundaries of the Site with no structures depicted.

By 1928, Alameda Street, the railroad, east adjacent properties and associated perpendicular streets to Alameda Street were present. Commercial or industrial development was evident north of East Anaheim Street, north of East Opp Street, south of Grant Street, and possibly at the northeast corner of Robidou Street and Alameda Street. Wilmington Wye was present and several small structures appeared within the wye area.

From 1938 to 1943, scattered commercial or industrial type structures appeared east contiguous to Alameda Street except for the area between East I Street and East Opp Street, which appeared mainly as vacant lots. Two Above Ground Storage Tanks (ASTs) appeared southeast of the intersection of East I Street and Alameda Street (current location of propane yard). The adjacent areas east of Alameda Street appeared as vacant lots or commercial/industrial developed lots.



From 1949 to 1952, additional development within the Site boundaries was evident. Railroad Avenue was renamed South Alameda Street. From 1963 to 1972, commercial or industrial development east contiguous to Alameda Street were present. The beginning of a possible junkyard use was evident between East Opp Street and East Anaheim Street. The Site remained unchanged from 1960s maps except for the presence of a gasoline station at the northeast corner of Alameda Street and East Anaheim Street. An auto parts/auto wrecking yard appeared south of Ross Place. A steel drum storage yard appeared north of Ross Place. The welding site south of Grant Street was not occupied by auto junk yards and machine shop.

From 1976 to 1983, many of the adjoining properties located east of Alameda Street appeared as an auto junk or scrap yards. By 1994, a small building was noted at the northeast corner of Alameda and East Anaheim Streets (present day Chevron); and the northwest corner of I Street and Alameda Street was now vacant (remains vacant today); and much of the remaining adjoining properties to the east appeared as junk yards and tank farms. The general vicinity appeared as industrial and residential.

From 2002 to 2005, the northeast corner of Alameda and East Anaheim Street was now vacant (present day Chevron). Small structures or automobiles now appeared on the vacant lot identified north of I Street in 1994. Buildings associated with auto yards remained on adjoining properties, east contiguous of Alameda Street. The adjacent properties and general vicinity remained as industrial and residential.

From 2009 to 2021, no significant changes to the Site were identified except the building associated with present-day Chevron was now present. The general vicinity was predominantly developed for industrial or commercial uses, with oil tank farms to the northeast and east of the Site and south of Valero Tank Farm. Residential properties remained to the far northwest, west and far west of the Site.

## **2.4 Adjoining Property Land Use**

North: Mauretania Street, followed by Pacific Coast Highway.

South: East Anaheim Street, followed by industrial and commercial properties.

East: Commercial properties, followed by North Henry Ford Avenue.

West: Pacific Harbor Line Railroad, followed by commercial and residential properties.



## 2.5 Summary of Previous Assessment Reports

### **2014 Phase I Environmental Site Assessment**

Pinnacle Environmental Technologies (Pinnacle) performed a Phase I ESA for the Site, dated June 13, 2014. Based on the findings of that assessment, Pinnacle identified the following hazardous materials concerns, or Recognized Environmental Conditions (RECs):

- Buried petroleum pipelines on and west of Alameda Street (south of McFarland Avenue) may have impacted soil and groundwater due to past releases of drilling fluids or petroleum products.
- Four historic oil wells adjacent to the project corridor may produce emissions or seeps from incomplete abandonment.
- Five oil collection tanks near the corridor may have resulted in surface soil impacts.
- Presence of nearby USTs and at least one above-ground storage tank (AST).
- Treated wood stockpiled in the northern segment may contain arsenic, creosote, and/or other polycyclic aromatic hydrocarbons (PAHs).
- The corridor is located within a designated Methane Buffer Zone.

Based on these findings, the 2014 Phase I ESA recommended that soil, soil vapor, and groundwater investigations be conducted along the corridor to assess the extent of hazardous material impacts. A Phase II Site Assessment was completed in 2015 to address this recommendation.

### **2015 Phase II Site Assessment Report**

Pinnacle performed a Phase II Site Assessment for the Site, dated February 17, 2015. The scope of that assessment was based on the findings of their 2014 Phase I ESA, and included the following:

- Twenty (20) borings were completed with hand augers at locations along the west side of Alameda Street with soil samples were collected at depths of 1.0, 2.5, and 5.0 feet bgs. A total of 62 soil samples were collected and analyzed for one or more of the following:

- Total Recoverable Petroleum Hydrocarbons (TRPH)
- Total Petroleum Hydrocarbons (TPH)
- Volatile Organic Compounds (VOCs) and fuel oxygenates
- Semi-volatile Organic Compounds (SVOCs)
- Polychlorinated Biphenyls (PCBs)
- Organochlorine Pesticides (OCPs)





- None of the soil samples contained significant volatile hydrocarbon vapors.
- No groundwater was sampled as saturated conditions were not encountered in any of the boreholes.
- VOCs, fuel oxygenates, SVOCs, and herbicides were not detected in the analyzed soil samples.

Key findings of that assessment include:

- Eight (8) soil samples contained one variety of PCB at a concentration ranging from 13 to 134 micrograms per kilogram (µg/kg). Samples with PCBs extended the length of Alameda Street with heavier concentrations from East Grant Street to south of East Young Street. It was suggested that the oils containing PCB had been used in the past for weed control along the rail line.
- Six (6) soil samples contained at least one OCP at a concentration ranging from 1 to 18 µg/kg.
- Petroleum hydrocarbon concentrations exceeded a typical action level of 1,000 milligrams per kilogram (mg/kg) at three (3) of the analyzed boring locations. However, the highest petroleum hydrocarbon concentrations and the highest frequency of petroleum hydrocarbon impacted soil were not always at the shallowest sampling interval. Based on these results and at this action level, Pinnacle concluded that soils along approximately 15 percent of the Alignment (a maximum of 1,000 cubic yards, depending on the depth of excavation) exceeded the action level and recommended the soils be removed from the Site during road construction.
- Soluble lead concentrations exceeding the State regulatory limit were identified at two (2) non-contiguous boring locations. However, the lateral extent of impacted soil along the Alignment (identified as California hazardous waste based on results) was not known. Pinnacle stated that if a lateral distance on the Site of 20 feet from each location is projected and an average depth of 2.5 feet is given, approximately 100 cubic yards of shallow lead-impacted soil would be present. The vertical extent of soluble lead was not defined at boring location PBN16, where it was detected at a depth of 5 feet bgs.

Based on these findings, Pinnacle concluded the following:

- Because groundwater was not encountered in the borings, groundwater would not be expected to be reached during construction at depths up to 5 feet bgs.

- Material to be uncovered at two (2) non-contiguous locations along the Alignment do contain sufficient concentrations of soluble lead to be regarded as hazardous. The lateral extent is not known. However, an estimated soil volume of 100 cubic yards, impacted with lead, is located at boring location PBN8.
- Petroleum hydrocarbons were detected at many of the boring locations, but not all hydrocarbon concentrations were above action levels requiring transport and disposal. Most of the hydrocarbon above the action level was confined to the upper 2.5 feet of soil. The hydrocarbon was heavy-end, and did not contain VOCs or SVOCs. Pinnacle estimated that 10 percent of the material extending to 2.5 feet would require transport and disposal due to petroleum hydrocarbon at an action level above 1,000 mg/kg.

### ***2024 Phase I Environmental Site Assessment***

Converse Consultants performed a Phase I ESA, dated May 6, 2024. Based on the findings of that assessment, Converse recommended the following:

- A Phase II ESA investigation to include soil and soil vapor investigation, and groundwater if deemed warranted, to address historic gasoline stations, tank farm, petroleum and gas pipelines, well and collection tanks, and previously confirmed high levels of Polychlorinated Biphenyls (PCBs), soluble lead and petroleum hydrocarbons concentrations in soil. Aerially deposited lead (ADL) in soil should also be addressed due to the presence of heavily traveled roads and highways that occupy the Site. The mounded sand and debris piles, including asphalt and concrete, should be tested for contaminants and based on the findings disposed accordingly.
- A Soil Management Plan (SMP) should be generated and implemented during the planned development. The SMP should include discussions of the site conditions, excavation of unanticipated contaminated soil; general management procedures for the excavated soil; exported soil management; soil disposal; and encountering groundwater and the procedures that should be followed.



## 3.0 Work Performed and Rationale

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### 3.1 *Scope of Assessment*

Converse prepared a Phase II ESA Workplan, dated September 22, 2025 (Workplan), that detailed the proposed assessment activities. The Workplan was reviewed and approved by Caltrans. The scope of work outlined in that Workplan was implemented on October 7 and 8, 2025.

A conceptual model was also developed based on data presented regarding the historic use of the Site.

#### 3.1.1 *Target Analytes*

The Site is being screened for Aerially Deposited Lead (ADL). Additional boring locations are also being screened for metals, Total Petroleum Hydrocarbons (TPH), and Volatile Organic Compounds (VOCs), Semi-volatile Organic Compounds (SVOCs), Polychlorinated Biphenyls (PCBs), and Organochlorine Pesticides (OCPs) in relation to historical operations on and/or adjacent to the Site.

#### 3.1.2 *Target Analytes First Entered the Environment*

Target analytes would have first entered the environment through spills and/or releases to the surface soils from either on or off-site sources.

#### 3.1.3 *Environmental Media and Locations Most Likely to Have the Highest Concentrations of Target Analytes*

Soil, soil vapors, and groundwater would be the most likely mediums impacted by target analytes.

Prior to initiating field activities Converse conducted a project level safety meeting with all staff involved in the project to brief team members of safety concerns, procedures, and required PPE. Additionally, prior to beginning field activities each day a field-level safety meeting was conducted onsite with all personnel, including subcontractors. A copy of the health and safety plan (HASP), an appendix of the Workplan, was maintained onsite. Converse reviewed the permitting requirements of local agencies, and determined that no permits were necessary for the proposed scope of work. Access to properties for the REC borings was arranged with the property owners.



The *Geophysical Survey* consisted of the following primary elements:

- A geophysical survey was conducted prior to drilling activities to investigate subsurface conditions at each proposed boring location for potential utility conflicts (e.g. electrical, communication).

The *Soil Screening* consisted of the following primary elements:

- Soil borings were advanced at 15 locations (A1 through A15) for ADL samples, and an additional four (4) locations (R1 through R4) for other RECs. Borings were completed to maximum depths ranging from 3-feet to 15-feet bgs using either hand auger or direct-push methods.
- ADL borings were distributed along the east and west sides of Alameda Street, spaced approximately 200-300 feet between borings.

The REC-related borings were located at the following locations:

- R1-Wilmington Wye (at or adjacent to 1150 Alameda Street)
- R2-1120 North Henry Ford Avenue (Wilmington Recyclers)
- R3-1102 Alameda Street (Pacheco Services)
- R4-1050 Alameda Street (Hotel Portlight)

Boring locations are indicated on Figure 2A through 2E.

- ADL samples were collected at intervals of 0.5 to 1.0, 1.5 to 2.0, and 2.5 to 3.0 feet bgs. Soil samples from REC borings were collected at depths of 1, 2, 5, 10, and/or 15 feet bgs. Samples were transferred from the bucket of the auger into laboratory-provided 4-ounce glass jars, or were collected directly into acetate sleeves. Sub-samples for analysis of volatile compounds were collected from select samples in accordance with EPA Method 5035 using Encore sample containers. Samples were labelled and placed on ice for transport to a National Environmental Laboratory Accreditation Program (NELAP) certified laboratory (Jones Environmental) for analysis. A portion of each soil sample was screened in the field for the presence of VOCs using a photoionization device (PID).

The *Soil Vapor Screening* consisted of the following primary elements:

- Temporary soil vapor probes were installed in borings R1 and R3 at depths of 5 feet bgs (identified as SV1-5 and SV3-5), at a depth of 4.5-feet at R2 (identified as SV2-4.5), and at 5 and 12 feet bgs at location R4 (identified as SV4-5 and SV4-12).

Temporary probes were allowed to equilibrate for a minimum period of 120 minutes before beginning the sampling process. Probes were initially purged of stagnant vapor by attaching a syringe to the probe tubing and removing



approximately 0.5-liters of air prior to sample collection. Soil vapor samples were collected in 1-liter Summa canisters.

The installation and sampling of the probes was completed in general accordance with the Department of Toxic Substances Control (DTSC) Advisory on Active Soil Gas Investigations (July 2015).

The Groundwater *Screening* consisted of the following primary elements:

- Groundwater was encountered at location R4 at a depth of 13.2-feet bgs. Groundwater was not encountered in any of the other boreholes.
- Perforated PVC pipe was placed in the boring to protect against the borehole collapsing. Groundwater within the open borehole was then allowed to equilibrate for 60 minutes prior to sample collection.
- A sample of groundwater was collected from boring R-4 using a bailer. The sample was transferred from the bailer to laboratory supplied containers (4 VOAs preserved with HCl, and 1 amber glass container).
- Upon the completion of sample collection, all probes were removed, and the ground surface was filled to match existing grade.

### **3.2 Field Quality Assurance/Quality Control**

The following are the quality assurance and quality control measures that were taken to evaluate the quality of the data generated:

- Standard EPA sample handling protocol, including chain-of-custody control was followed.
- New, dedicated sampling equipment (glass jars, nitrile gloves, Teflon tubing, bailers) were used for the collection of each sample.
- Non-dedicated sampling equipment (Geoprobe rods) were decontaminated between borings.

### **3.3 Chemical Analytical Methods**

All soil, soil vapor, and groundwater samples collected were delivered under chain of custody documentation to Jones Environmental, located in Santa Fe Springs, California. Samples not initially analyzed were archived by the laboratory for potential future use.



All soil samples collected from locations A1 through A15 were initially analyzed for Total Lead by EPA Method 6010. Select samples were further analyzed based on criteria specified in the Workplan. Additional analyses included soluble lead by the soluble threshold limit concentration (STLC) and toxicity characteristic leaching procedure (TCLP) methods, title 22 metals, and/or pH by methods 6010 or 9045C. Select soil samples collected from the REC borings (R1 through R4) were analyzed for metals, VOCs, and TPH by EPA Methods 6010/7471, 8260B, and 8015M respectively. Select samples from REC boring R4 were additionally analyzed for SVOCs, PCBs, and OCPs, by EPA Methods 8270, 8082, and 8081 respectively. All soil vapor samples were analyzed for VOCs and gasoline range hydrocarbons by EPA Method 8260. The groundwater samples from location R4 were analyzed for VOCs by EPA Method 8260.



## 4.0 Presentation and Evaluation of Results

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### 4.1 Analytical Results

A summary of the results is provided below. Analytical results were compared to screening levels (SLs) based on the RWQCB Environmental Screening Levels (ESLs), USEPA Regional Screening Levels (RSLs), and/or DTSC Human Health Risk Assessment (HHRA) Notes. Copies of the laboratory analytical reports are included in Appendix A. Results for soil and soil vapor samples are summarized on Tables 1, 2, and 3.

#### ADL Soil Samples:

- Lead was reported in all samples, ranging in concentrations from 1.2 to 69.7 milligram per kilogram (mg/kg).
- All samples reported lead at concentrations below the screening levels established by California Department of Toxic Substances Control (DTSC) of 80 mg/kg for residential use, and 320 mg/kg for industrial use.
- Two (2) samples (A14-0.5 and Dup14-0.5) reported lead concentrations above 50 mg/kg and were further analyzed for soluble lead concentrations in accordance with the Soluble Threshold Limit Concentration (STLC) and Toxicity Characteristic Leaching Procedure (TCLP) procedures. Three additional samples were analyzed in accordance with the TCLP method for total lead (for a total of 10% of the samples analyzed for total lead). Soluble lead was reported at maximum concentrations of 4.57 milligrams per liter (mg/L) by STLC, and 0.43 mg/L by TCLP. All soluble lead concentrations are below the hazardous waste threshold values of 5.0 mg/L.
- Eight (8) samples (6 primary and 2 duplicates) with the highest reported lead concentrations were also analyzed for Title 22 Metals (CAM 17 Metals). With the exception of arsenic in sample A7-2.5, all other reported metals concentrations were less than their respective background or residential and commercial screening levels. All reported metals concentrations are also less than their respective hazardous waste threshold limits.
  - The reported arsenic concentration of 79.2 mg/kg in sample A7-2.5 exceeds the regional background screening level of 12 mg/kg. However, it is noted that the arsenic concentration of 7.8 mg/kg in the shallower sample from this location (A5-1.5) is less than the background level.
  - Sample A7-25 was analyzed for soluble arsenic by the STLC method, and the reported concentration of 2.5 mg/L is less than the hazardous waste threshold value of 5 mg/L.





- Benzene was reported at concentrations of 8 and 152 micrograms per cubic meter (ug/m<sup>3</sup>) in samples SV1-5 and SV3-5 respectively. Both of these reported concentrations exceed the ESL Residential SL of 3.2 ug/m<sup>3</sup>, with sample SV3-5 also exceeding commercial screening level of 14 ug/m<sup>3</sup>.

A total of nine (9) VOCs and gasoline range organics (GRO) were reported in the six (6) soil vapor samples. With the exception of benzene, 1,1-Dichloroethene, Tetrachloroethane (PCE), and Trichloroethene (TCE), all other reported VOCs were detected at maximum concentrations less than their respective screening levels for both commercial and residential land uses. Benzene was the only compound reported at a concentration in excess of its respective screening level for a commercial land use.

### Soil Vapor Samples:

- SVOCs were reported as non-detect in all samples analyzed.
- PCBs were reported as non-detect in all samples analyzed.
- OCPs were reported as non-detect in all samples analyzed.
- TPH in the gasoline range (TPH-G) was not reported in any of the samples analyzed. TPH in the diesel range (TPH-D) was reported in one sample at a concentration of 400 mg/kg, which exceeds the residential screening level of 260 mg/kg, but is less than the commercial screening level of 1,200 mg/kg. TPH in the oil range (TPH-O) was reported in four (4) samples at a maximum concentration of 3,610 mg/kg, which is less than the residential screening level of 12,000 mg/kg.
- VOCs were reported as non-detect in all analyzed soil samples analyzed.

- The reported arsenic concentrations of 31.1 and 41.9 mg/kg in sample R1-1 and R1-2, respectively, exceed the regional background screening level of 12 mg/kg. It is noted that arsenic was reported as ND in the sample from 5 feet bgs at this location (R1-5).
- Metals: With the exception of arsenic in samples from 1 and 2 feet bgs at location R1, all other reported metals concentrations were less than their respective background or residential and commercial screening levels. All reported metals concentrations are also less than their respective hazardous waste threshold limits.

### REC Soil Samples:

- pH was measured in the six (6) samples with the highest reported lead concentrations, and the reported values ranged from 6.74 to 9.28. All reported concentrations are greater than the minimum level of 5.0 required by Caltrans. They are all also within the range to not exceed hazardous waste threshold values (<2.0 or >12.5).



The analytical methodologies selected for this Phase II SI have been deemed appropriate based on the rationale and ability of the method to provide data for use in the screening evaluation.

#### 4.2.1 Evaluation of Analytical Methods

During this investigation, a variety of data was collected. Each sample collected was analyzed for a number of different constituents, depending on the rationale for sample collection. However, not all chemicals detected can be attributable to an on-site release and not all of the data is of equal quality. Data collected has been evaluated to determine which of the chemicals identified are likely to be Site-related and to assess whether the reported concentrations for these chemicals are of acceptable quality for use in the screening evaluation. The following sections present a discussion of the evaluations conducted.

### 4.2 Data Quality Assurance/Quality Control

Concentrations of VOCs and gasoline range hydrocarbons were reported as non-detect in both the primary and duplicate samples collected from location R4. No other groundwater samples were collected.

#### Groundwater Samples

Soil vapor probes were also screened in the field for the presence of methane and hydrogen sulfide. All probes were found to contain methane concentrations of 0.30%, which is less than the lower explosive limit for methane of 5.3%. Hydrogen sulfide was detected in only two (2) of the six (6) probes at concentrations of 1 part per million (ppm).

commercial SL of 100 ug/m<sup>3</sup>. All other samples reported TCE as non-detect.

which exceeds the residential land use SL of 16 ug/m<sup>3</sup> and is below the TCE was reported in one (1) sample (SV3-5) at a concentration of 39 ug/m<sup>3</sup>, residential and commercial land use SLs.

level of 15 ug/m<sup>3</sup> and below the commercial land use screening level of 67 ug/m<sup>3</sup>. All other reported PCE concentrations were below both the 54 ug/m<sup>3</sup>. Samples SV1-5 and SV3-5 reported PCE at concentrations of 22 and 54 ug/m<sup>3</sup> respectively, which exceed the residential land use screening level of 15 ug/m<sup>3</sup> and below the commercial land use screening level of 67 ug/m<sup>3</sup>. All other reported PCE concentrations were below both the residential and commercial land use SLs.

Dichloroethene as non-detect.

residential screening level of 58 ug/m<sup>3</sup> and is below the commercial land use screening level of 256 ug/m<sup>3</sup>. All other samples reported 1,1-Dichloroethene was reported in one (1) sample (SV3-5) at a concentration of 109 ug/m<sup>3</sup>. This reported concentration exceeds the residential screening level of 58 ug/m<sup>3</sup> and is below the commercial land use screening level of 256 ug/m<sup>3</sup>. All other samples reported 1,1-

All samples were collected under the supervision of a California Professional Geologist. Samples were transported under chain of custody control to Jones Environmental for analysis and were extracted and processed within the appropriate hold times.

The reporting limits (RLs) for the various analyses conducted were as follows:

- Metals in soils - RLs ranged from 0.5 to 5.0 mg/kg.
- VOCs in soils – RLs range from 0.20 to 50.0 ug/kg.
- OCPs in soil – RLs ranged from 10.0 to 20.0 ug/kg.
- PCBs in soil – the RLs were 50.0 ug/kg.
- SVOCs in soil – the RLs were 200 ug/kg.
- TPH in soil – the RLs were 10.0 mg/kg.
- VOCs and GRO in soil vapor – RLs range from 8 to 2,000  $\mu\text{g}/\text{m}^3$ .
- VOCs and GRO in groundwater – RLs range from 0.1 to 25 micrograms per liter (ug/L).

The reporting limits for all compounds were less than their respective screening levels for commercial land uses or regional background levels.

#### QA/QC Samples and Procedures

The following quality assurance and quality control (QA/QC) samples were collected:

- With the exception of total (TTLC) lead, duplicate samples were analyzed for at least 10% of the primary samples for each analytical method and sample matrix. A total of five (5) duplicate samples were analyzed for total lead which is equal to 8% of the 63 primary samples.
- Based on the reported concentrations of total lead in ADL samples, further analysis of samples was conducted as outlined in the Workplan to evaluate for concentrations of soluble lead, Title 22 Metals, and/or pH.

The following QA/QC sampling procedures were followed:

- Sample locations were verified prior to collection.
- All sampling and drilling equipment was decontaminated between uses to avoid cross contamination between borings and samples.



- Prior to soil vapor sampling, a shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system and watching the vacuum for at least one minute. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably.
- Laboratory quality control procedures included the analysis of surrogates, preparation, and analysis of a method blank and a sampling blank, laboratory control samples and laboratory control sample duplicates. Quality Control Reports and an explanation of reportable limits of quantification are included with the analytical reports in Appendix A.

### Evaluation of Qualified Data

For analytical results, various qualifiers pertaining to the quality of the data are attached to certain data by the laboratories conducting the analysis. No qualifiers were attached to the data.

#### *4.2.2 Data Quality Objectives*

The project has incorporated certain specified protocols to document the quality of the data collected during this investigation. Soil vapor samples were collected in compliance with Cal EPA Advisory – Active Soil Gas Investigations, dated July 2015. Soil and groundwater samples were collected in accordance with EPA and DTSC field sampling protocols including decontamination and the collection of duplicate samples. Samples collected for analysis for volatile compounds were collected in accordance with EPA method 5035 using 5-gram Encore containers.

The use of these Data Quality Objectives is to produce data that are suitable for use. The objectives of precision, accuracy, completeness, representativeness and comparability typically define the data quality.

**Precision** is the degree of agreement between independent measurements. Precision can be evaluated through the use of duplicate or replicate samples by calculating a relative percent difference (RPD) between the primary and duplicate samples. Precision between duplicate or co-located soil samples can vary due to the inherent heterogeneity of soil. See Table 4 for RPD calculations.



The relative percent difference (RPD) between reported concentrations in all analyzed sample pairs were within acceptable ranges (less than 100 for soil and less than 40 for soil vapor).

**Accuracy** is the degree of agreement of a measured value with true or expected value. Accuracy can be measured using percent recovery data in the laboratory using spiked concentrations. In cases where the percent recovery exceeded the acceptable range, other QA/QC procedures such as laboratory control spike and surrogates were used to validate the data. The accuracy of the laboratory reported values were generally found to be acceptable.

**Completeness** is the percent of measurements made which are judged to be valid. Completeness can be measured by dividing the number of samples that are judged to be valid by the number of total samples.

Based upon the data reviewed, all samples were judged to be useable for the intended purpose.

**Representativeness** is the degree to which the sample data represent the characteristics of a population. Representativeness is a qualitative parameter that addresses the design of the sampling program. An example of representativeness is to evaluate if the number and locations of samples are sufficient for the purposes of this assessment. The degree to which representativeness is achieved will be evaluated upon review of the data and will be used to determine whether additional investigation is required.

Based upon the objectives of this investigation the site appears to be adequately assessed.

**Comparability** is a qualitative parameter that evaluates the confidence with which one data set can be compared to another. Comparability can be enhanced by using standard analytical methods performed by certified laboratories. Standard EPA analytical methods, performed by State of California certified analytical laboratories were utilized in this investigation. Evaluation of the data collected during this investigation indicates that the level of confidence of the compared data sets is acceptable.



## 5.0 Interpretation and Conclusions

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### 5.1 RECs and Potential Release Area(s)

Converse previously completed a Phase I ESA, dated May 6<sup>th</sup>, 2024, at the Site. The Phase I ESA indicated that historic gasoline stations, tank farm, petroleum and gas pipelines, well and collection tanks were RECs and/or potential release areas relative to the Site. Additionally, historic motor vehicle operations along the Alignment are potential sources for aerially deposited lead in soils surrounding the roadway.

### 5.2 Conceptual Model Validation/Adequacy of Investigations

It is our opinion that the field and analytical data validated the conceptual model, and the investigation adequately evaluated the identified objectives of this *Phase II Environmental Site Assessment Report*.

### 5.3 Absence, Presence, Degree, Extent of Target Analytes

#### *ADL Soil Samples*

- All reported concentrations of total lead were below residential and commercial land use screening levels of 80 and 320 mg/kg respectively.
- All reported concentrations of soluble lead were below the STLC and TCLP hazardous waste threshold values of 5 mg/L.
- Arsenic was the only reported metal to exceed a background or residential land use screening level. The sample from location A7 at a depth of 2.5 feet bgs (A7-2.5) was reported with an arsenic concentration of 79.2 mg/kg, which exceeds the background level of 12 mg/kg. It is noted that in the shallower sample from 1.5 feet at the same location (A7-1.5) the arsenic concentration of 7.8 mg/kg is less than the background level. Additionally, the soluble arsenic concentration of 2.5 mg/L is less than the STLC hazardous waste threshold value of 5 mg/L.

#### *REC Soil Samples*

- Arsenic was reported to exceed the background level of 12 mg/kg in two (2) samples (R1-1 and R1-2 at 31.1 and 41.9 mg/kg, respectively). All other detected arsenic and metals concentrations were reported at concentrations below their respective background or residential land use SLs. All reported metals concentrations were less than their respective hazardous waste threshold levels.



- TPH in the diesel range was reported to exceed residential land use screening level of 260 mg/kg in one (1) sample (R3-1 at 400 mg/kg), but was less than the commercial screening level of 1,200 mg/kg. All other detected TPH concentrations were reported at levels below their respective residential and commercial land use SLS.
  - VOCs, SVOCs, OCPs, and PCBs were reported as non-detect in all samples analyzed.
- Groundwater Samples*
- VOCs and GRO were reported as non-detect in the groundwater sample analyzed.
- Soil Vapor Samples*
- A total of nine (9) VOCs and GRO were reported in the six (6) soil vapor samples. One (1) reported concentration of benzene (152 ug/m<sup>3</sup> in sample SV3-5) exceeded the commercial SL of 14 ug/m<sup>3</sup>. All other reported VOC concentrations were less than their respective commercial SLS.

## **5.4 Other Concerns**

### *5.4.1 Significant Assumptions*

No significant assumptions were encountered during this assessment.

### *5.4.2 Limitations and Exceptions*

During drilling activities, the underlying lithology of the Site consisted of sands with large rocks and gravel at all boring locations. Due to these conditions, target depths were not able to be reached at locations R1 and R2. The deepest soil sample from location R1 was collected from 7 feet bgs instead of the planned depth of 10 feet bgs. No 10-foot soil sample was able to be collected from location R2, and the deepest soil sample from this location was collected from 4 feet bgs instead of 5 feet bgs. Additionally, the soil vapor probe at location R2 was installed at a depth of 4.5 feet bgs, instead of the planned depth of 5 feet bgs. Based on the reported analytical results from these borings, the lack of deeper samples is not considered to be a limiting condition.

No other limitations or exceptions were encountered during this assessment.



### 5.4.3 Special Terms and Conditions

No special terms or conditions need to be noted in this *Limited Phase II SI Report*.

## 5.5 Conclusions/Objectives Met

Converse has performed a *Phase II SI* at the Site (along Alameda Street, from Anaheim Avenue to 300 feet south of Pacific Coast highway), in the City of Los Angeles, California, in general conformance with the scope and limitations of ASTM E1903-19 and the following objectives:

- Evaluate the potential for soil, soil vapor, and/or groundwater within the project footprint to have been impacted by ADL or past on-site/off-site activities, including former fueling stations.
- Determine if contaminants of potential concern identified in the Phase I ESA (Converse, 2024) are present at concentrations that exceed applicable regulatory thresholds.
- Provide the City of Los Angeles with data necessary to plan for safe soil management, handling, and disposal during construction.
- Support CEQA/NEPA environmental review by documenting potential hazardous materials conditions and identifying any mitigation measures that may be required.

Converse presented the following findings from this assessment:

- All concentrations of lead reported in ADL soil samples were less than residential land use screening levels, and hazardous waste disposal threshold criteria.
- Arsenic was reported at concentrations exceeding the regional background level of 12 mg/kg in three (3) samples (A7-2.5, R1-1 and R1-2) at concentrations of 79.2, 31.1 and 41.9 mg/kg, respectively. Concentrations of arsenic in other samples from these same locations were less than the background level. All reported arsenic concentrations (including the soluble level in sample A7-2.5) are less than hazardous waste disposal threshold criteria.
- All other reported metals concentrations are less than their respective residential screening levels and hazardous waste disposal threshold criteria.
- TPH in the diesel range was reported in one (1) sample (R3-1 at 400 mg/kg) at a concentration greater than the residential screening level of 260 mg/kg, but was less than the commercial screening level of 1,200 mg/kg. All reported concentrations of TPH in the oil range are less than the residential screening level.





- Concentrations of TPH in the gasoline range, VOCs, SVOCs, PCB, and OCPs were reported as non-detect in all soil samples analyzed.
  - One (1) reported concentration of benzene (152 ug/m<sup>3</sup> in sample SV3-5) exceeded the commercial SL of 14 ug/m<sup>3</sup>. All other reported VOC concentrations were less than their respective commercial SLs.
  - Benzene was the only VOC detected in soil vapor samples at concentrations greater than the respective commercial screening levels. The reported benzene concentration of 152 ug/m<sup>3</sup> in sample SV3-5 exceeded the commercial SL of 14 ug/m<sup>3</sup>.
  - Soil vapor samples were identified to contain relatively low concentrations of methane, but all were significantly less than the lower explosive limit. Hydrogen sulfide was detected at trace levels in a limited number of samples.
  - VOCs and GRO were reported as non-detect in the groundwater samples analyzed.
- Based on the findings of this assessment Converse concludes the following:
- Soils tested during this investigation along the Site have not been significantly impacted from Aerially Deposited Lead or other chemicals of concern. All reported lead concentrations (both total and soluble) from this investigation meet the Caltrans requirements for reuse without restriction.
  - The previous investigation performed in 2015 by Pinnacle identified areas along the Site where soils were a California Hazardous Waste and must be disposed of accordingly.
  - Arsenic concentrations in three (3) of the 18 samples analyzed (A7-2.5, R1-1, and R1-2) were reported to be greater than the regional background level, but all reported arsenic concentrations are less than hazardous waste threshold values. It may be acceptable to leave the reported arsenic concentrations onsite under the proposed roadway.
  - Soils along the Site would be classified as non-hazardous for transportation and disposal purposes, except as where previously noted. Although soil samples were reported at or below residential criteria in this investigation, per Caltrans guidance non-hazardous waste unsuitable for onsite reuse should be taken to a licensed soil recycling or disposal facility.
  - Groundwater in the area sampled was not found to be impacted with TPH or GRO.
  - The concentrations of methane detected in all soil vapor probes were significantly less than the LEL value. However, since the Site is located within a City of Los Angeles Methane Zone, it may be subject to requirements of the City's Methane Ordinance.
  - The impacts to the soil vapor are considered to be relatively minor, with only one (1) compound in one (1) sample reported at a concentration greater than

the corresponding screening level for commercial land use. The reported concentrations do not appear to indicate that any significant releases of VOCs have occurred in the vicinity of the project area. Additionally, based on the lack of occupied structures associated with the proposed project, the reported concentrations of VOCs in soil vapor do not pose a significant vapor intrusion risk to Site users.

Based on the findings of this assessment, the objectives of this *Phase II SI Report* were completed.



## 6.0 Recommendations

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Based on the findings of this assessment, no further assessment is recommended at this time. However, Converse does recommend that a hazardous materials contingency plan (HMCP) be developed for the project, which should outline procedures for identifying, evaluating, handling, removing, and disposing of potentially hazardous materials that may be encountered during construction. The HMCP should also address the potential worker exposure to elevated levels of chemicals of potential concern (including arsenic, lead, and benzene) in soil or soil vapor during construction, establish emergency response protocols, and ensure compliance with applicable health and safety code requirements.

Project plans may need to comply with the City of Los Angeles Methane Ordinance (No. 175790) since the Site is located within a Methane Zone. This may include the need for further testing, or incorporation of mitigation measures (such as conduit seals) into project plans.



## 7.0 Reliance

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This report is for the sole benefit and exclusive use of Parsons on behalf of the City of Los Angeles Bureau of Engineering in accordance with the terms and conditions under which these services have been provided. The preparation of this report has been in accordance with generally accepted environmental practices. No other warranty, either express or implied, is made. This report should not be regarded as a guarantee that no further contamination beyond that which could be detected within the scope of this assessment is present at the Site.

This report should not be regarded as a guarantee that no further contamination, beyond that which could be detected within the scope of this assessment, is present at the Site. Converse makes no warranties or guarantees as to the accuracy or completeness of information provided or compiled by others. It is possible that information exists beyond the scope of this assessment. It is not possible to absolutely confirm that no hazardous materials and/or substances exist at the Site. If none are identified as part of a limited scope of work, such a conclusion should not be construed as a guaranteed absence of such materials, but merely the results of the evaluation of the Site at the time of the assessment. Also, events may occur after the Site visit, which may result in contamination of the Site. Additional information, which was not found or available to Converse at the time of report preparation, may result in a modification of the conclusions and recommendations presented.

Any reliance on this report by Third Parties shall be at the Third Party's sole risk. Should the User wish to identify any additional relying parties not previously identified, a completed Application of Authorization to Use (see following page) must be submitted to Converse Consultants.





## Application for Authorization to Use

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717 South Myrtle Avenue  
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Project Title & Date:

Project Address:

FROM: (Please identify name & address of person/entity applying for permission to use the referenced report.)

Applicant \_\_\_\_\_ hereby applies for permission to use the referenced report in order to:

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Title:

Date:



## 8.0 References and Sources of Information

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*CalEPA, DTSC/Los Angeles Regional Water Quality Control Board (LARWQCB), Advisory - Active Soil Gas Investigations, July 2015.*

Converse Consultants, Phase I Environmental Site Assessment, Alameda Street Widening Project, Los Angeles, California, May 6, 2024.

Converse Consultants, Workplan – Phase II Environmental Site Assessment, Alameda Street Widening Project, Los Angeles, California, September 22, 2025

*DTSC Human Health Risk Assessment (HHRA) Note #3, DTSC-modified Screening Levels (DTSC-SLs), April 2025.*

*DTSC HHRA Note #11, Southern California Ambient Arsenic Screening Level, dated December 2020.*

Pinnacle Environmental Technologies, Phase I Environmental Site Assessment Report, Alameda Street Widening Project, 300 Feet South of Pacific Coast Highway to Anaheim Street, Wilmington, California, June 13, 2014.

Pinnacle Environmental Technologies, Phase II Site Assessment Report, Alameda Street Widening Project, Anaheim Street to Pacific Coast Highway, North Segment, Wilmington, California, February 17, 2015.

*San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, November 2024.*

*United States Environmental Protection Agency (EPA), Regional Screening Levels, July 2025.*



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## Figures

# Figures



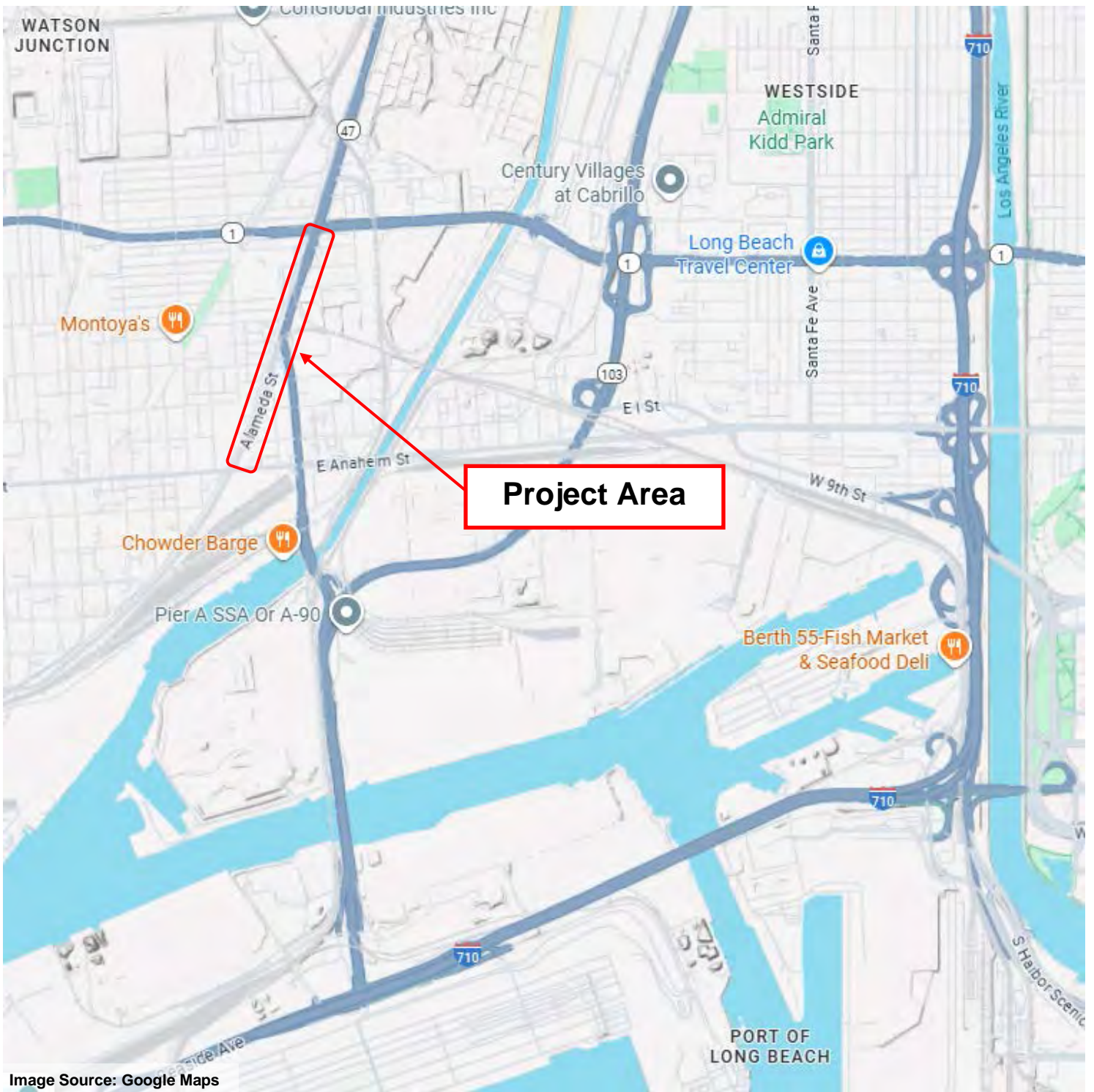


Image Source: Google Maps

## SITE LOCATION MAP

Alameda Street Widening Project  
Alameda Street  
Wilmington, California

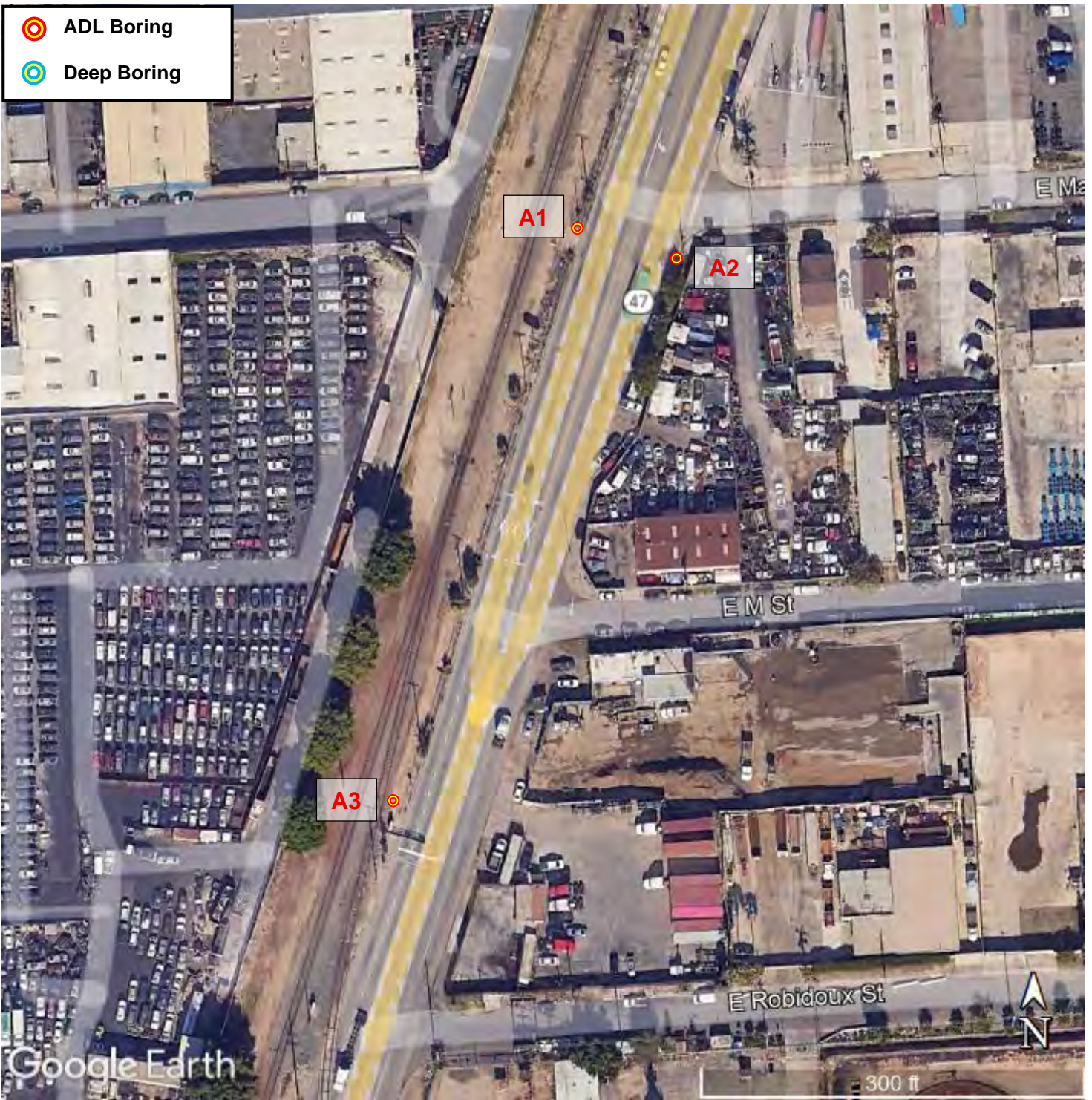
Project No:

22-41-185-02



**Converse Consultants**

FIGURE 1



## BORING LOCATIONS

Parsons  
 Alameda Street Widening Project  
 Los Angeles, California

Project No:

22-41-185-02



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FIGURE 2A



## BORING LOCATIONS

Parsons  
 Alameda Street Widening Project  
 Los Angeles, California

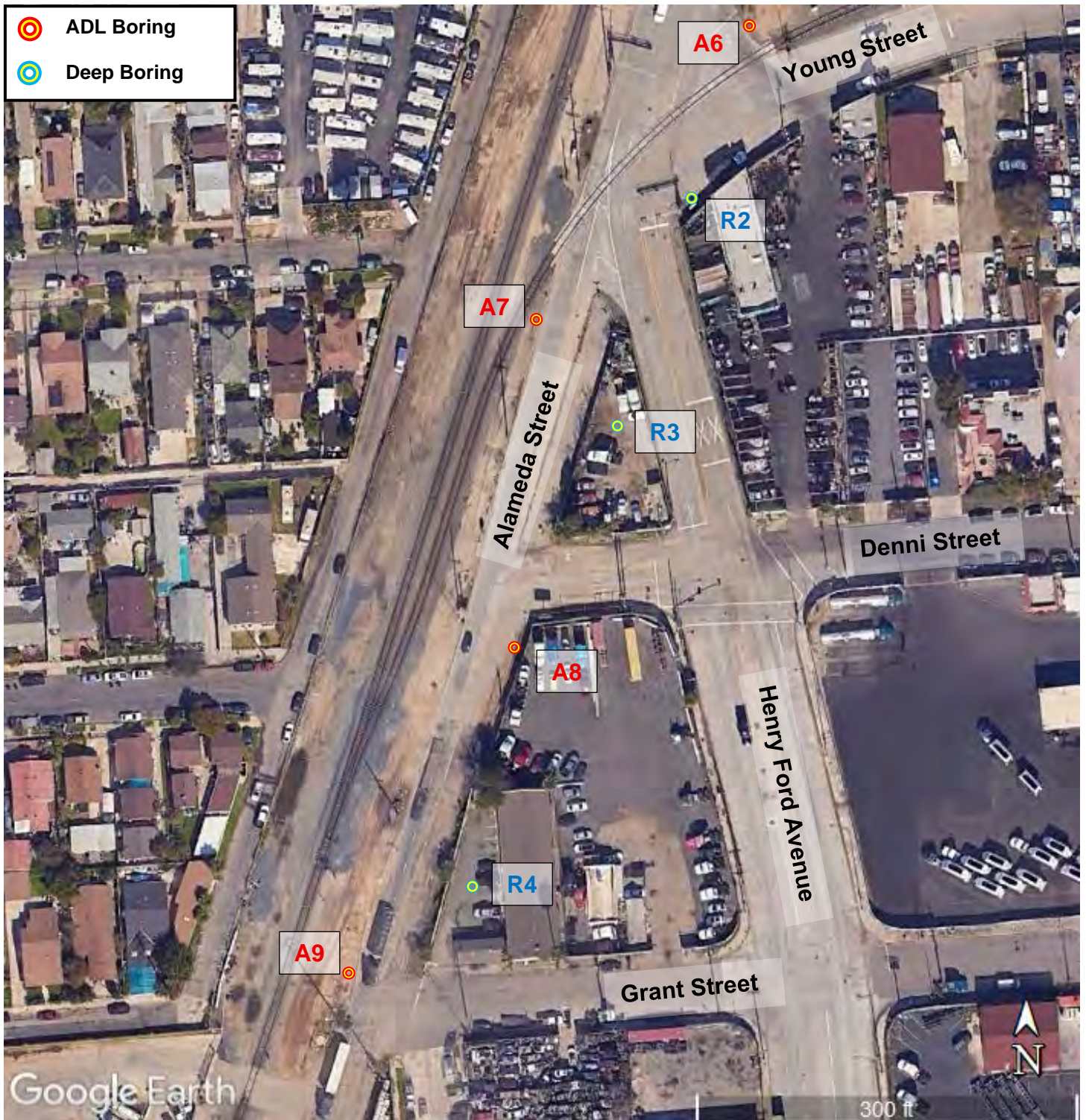
Project No:

22-41-185-02



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FIGURE 2B



## BORING LOCATIONS

Parsons  
 Alameda Street Widening Project  
 Los Angeles, California

Project No:  
 22-41-185-02



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FIGURE 2C



## BORING LOCATIONS

Parsons  
 Alameda Street Widening Project  
 Los Angeles, California

Project No:

22-41-185-02



**Converse Consultants**

FIGURE 2D



## BORING LOCATIONS

Parsons  
 Alameda Street Widening Project  
 Los Angeles, California

Project No:

22-41-185-02



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FIGURE 2E

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**Tables**

# Tables



**Table 1**  
**Summary of ADL Soil Sample Results**  
 Alameda Street Widening Project  
 Los Angeles, California

Boring Locations	Sample Depth (feet bgs)	Sample ID	Sample Date	Lead			Other Metals (mg/kg)											pH
				Total TLC (mg/kg)	Soluble STLC (mg/L)	Soluble TCLP (mg/L)	Arsenic	Barium	Chromium	Cobalt	Copper	Mercury	Molybdenum	Nickel	Vanadium	Zinc	All Other Metals	
A1	0.5	A1-0.5	10/8/25	7.1	-	-												
		Dup1-0.5	10/8/25	7.8	-	-												
	1.5	A1-1.5	10/8/25	1.4	-	-												
	2.5	A1-2.5	10/8/25	1.2	-	-												
A2	0.5	A2-0.5	10/8/25	34.6	-	0.03	ND	62.6	11.1	2.8	22.0	ND	0.7	9.1	19.6	67.6	ND	6.74
		Dup2-0.5	10/8/25	36.4	-	ND <0.01	ND	63.4	10.6	2.7	36.7	0.024	0.6	8.2	17.4	65.1	ND	7.62
	1.5	A2-1.5	10/8/25	2.3	-	-												
	2.5	A2-2.5	10/8/25	2.2	-	-												
A3	0.5	A3-0.5	10/8/25	2.6	-	-												
	1.5	A3-1.5	10/8/25	2.5	-	-												
	2.5	A3-2.5	10/8/25	2.1	-	-												
A4	0.5	A4-0.5	10/8/25	3.9	-	-												
	1.5	A4-1.5	10/8/25	2.6	-	-												
	2.5	A4-2.5	10/8/25	2.6	-	-												
A5	0.5	A5-0.5	10/8/25	27.3	-	-	ND	77.0	11.3	3.4	21.2	0.048	ND	8.9	23.4	60.8	ND	-
	1.5	A5-1.5	10/8/25	4.8	-	-												
		Dup5-1.5	10/8/25	5.3	-	-												
	2.5	A5-2.5	10/8/25	3.0	-	-												
A6	0.5	A6-0.5	10/8/25	15.7	-	-												
		Dup6-0.5	10/8/25	21.3	-	-												
	1.5	A6-1.5	10/8/25	2.1	-	-												
	2.5	A6-2.5	10/8/25	2.6	-	-												
A7	0.5	A7-0.5	10/8/25	6.1	-	-												
	1.5	A7-1.5	10/8/25	39.0	-	ND <0.01	7.8	59.2	15.6	4.4	21.0	0.032	0.7	10.3	26.4	68.1	ND	8.12
	2.5	A7-2.5	10/8/25	37.9	-	-	79.2	71.2	11.2	4.3	44.4	0.045	ND	8.6	22.4	146	ND	7.86
A8	0.5	A8-0.5	10/8/25	22.6	-	-												
	1.5	A8-1.5	10/8/25	3.9	-	-												
	2.5	A8-2.5	10/8/25	5.4	-	-												
A9	0.5	A9-0.5	10/8/25	23.6	-	-												
	1.5	A9-1.5	10/8/25	5.5	-	-												
	2.5	A9-2.5	10/8/25	6.1	-	-												
A10	0.5	A10-0.5	10/8/25	15.2	-	-												
	1.5	A10-1.5	10/8/25	18.9	-	-												
	2.5	A10-2.5	10/8/25	11.6	-	-												

**Table 1**  
**Summary of ADL Soil Sample Results**  
 Alameda Street Widening Project  
 Los Angeles, California

Boring Locations	Sample Depth (feet bgs)	Sample ID	Sample Date	Lead			Other Metals (mg/kg)											pH
				Total TTLC (mg/kg)	Soluble STLC (mg/L)	Soluble TCLP (mg/L)	Arsenic	Barium	Chromium	Cobalt	Copper	Mercury	Molybdenum	Nickel	Vanadium	Zinc	All Other Metals	
A11	0.5	A11-0.5	10/8/25	27.2	-	-	ND	121	25.1	7.4	29.5	0.061	ND	17.8	39.8	84.6	ND	-
	1.5	A11-1.5	10/8/25	4.4	-	-												
	2.5	A11-2.5	10/8/25	4.6	-	-												
A12	0.5	A12-0.5	10/8/25	13.7	-	-												
	1.5	A12-1.5	10/8/25	6.2	-	-												
	2.5	A12-2.5	10/8/25	4.9	-	-												
A13	0.5	A13-0.5	10/8/25	20.0	-	-												
	1.5	A13-1.5	10/8/25	4.5	-	-												
	2.5	A13-2.5	10/8/25	7.1	-	-												
A14	0.5	A14-0.5	10/8/25	69.7	4.57	0.43	ND	58.0	29.3	3.4	23.6	0.039	1.5	15.8	22.6	341	ND	9.28
		Dup14-0.5	10/8/25	53.8	2.03	ND <0.01	ND	75.6	24.0	4.9	29.7	0.039	1.7	14.0	27.2	249	ND	9.03
	1.5	A14-1.5	10/8/25	5.5	-	-												
	2.5	A14-2.5	10/8/25	5.8	-	-												
A15	0.5	A15-0.5	10/8/25	14.8	-	-												
	1.5	A15-1.5	10/8/25	4.1	-	-												
	2.5	A15-2.5	10/8/25	6.5	-	-												
<b>Number of Detections</b>				50	2	2	2	2	2	2	8	8	8	8	7	5	0	6
<b>Maximum Concentration</b>				69.7	4.57	0.43	79.2	121	29	7.4	44	0.061	1.7	17.8	39.8	341	--	9.28
<b>Average Concentration</b>				12.8	3.30	0.23	43.5	73.5	17.3	4.2	28.5	0.041	1.0	11.6	24.9	135.3	--	--
<b>Standard Deviation</b>				15	-	-	-	-	-	-	-	-	-	-	-	-	--	--
<b>95% UCL</b>				16.9	-	-	-	-	-	-	-	-	-	-	-	-	--	--
<b>Screening Levels</b>		Residential		80	-	-	12	15,000	120,000	23	3,100	1.0	390	15,000	390	23,000	--	>5.0
		Commercial		500	-	-		220,000	1,800,000	350	47,000	4.4	5,800	64,000	5,800	350,000	--	
		Source	Note 3	Note 3	Note 11	RSLs	RSLs	RSLs	RSLs	Note 3	RSLs	Note 3	RSLs	RSLs	--	Caltrans		
<b>Regulatory Thresholds</b>		TTLC		1,000	-	-	500	10,000	2,500	8,000	2,500	20	3,500	2,000	2,400	5,000	--	--
		STLC*		-	5	-	5	100	5	80	25	0.2	350	20	24	250	--	--
		TCLP*		-	-	5	5	100	5	--	--	0.2	--	--	--	--	--	--

bgs: below ground surface  
 mg/kg: milligrams per kilogram

\*: concentrations in milligrams per liter (mg/L)

Highlighted values exceed residential screening level or background level

TTLC: Total Threshold Limit Concentration

STLC: Soluble Threshold Limit Concentration

TCLP: Toxicity Characteristic Leaching Procedure

**Table 2**  
**Summary of REC Soil Sample Results**  
 Alameda Street Widening Project  
 Los Angeles, California

Boring Locations	Sample Depth (feet bgs)	Sample ID	Sample Date	Metals (mg/kg)													VOCs (ug/kg)	TPH (mg/kg)			SVOCs (ug/kg)	PCBs (ug/kg)	OCPs (ug/kg)
				Arsenic	Barium	Berilyum	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Vanadium	Zinc	All Other Metals	All VOCs	Gasoline	Diesel	Oil	All SVOCs	All PCBS	All OCPs
R1	1	R1-1	10/8/25	31.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2	R1-2	10/8/25	41.9	58.8	ND	11.8	3.2	10.2	4.8	ND	0.8	6.8	20.3	41.7	ND	ND	ND	ND	ND	--	--	--
	5	R1-5	10/8/25	ND	43.0	ND	11.0	3.2	6.2	2.5	ND	ND	6.0	20.0	18.4	ND	ND	ND	ND	16.7	--	--	--
R2	1	R2-1	10/8/25	ND	96.4	ND	20.4	5.7	23.9	13.2	0.033	1.4	13.3	33.8	126	ND	ND	ND	ND	13.8	--	--	--
	2	R2-2	10/8/25	ND	85.0	ND	34.8	5.5	36.1	22.3	0.046	1.7	15.8	29.9	192	ND	ND	ND	ND	10.1	--	--	--
R3	1	R3-1	10/8/25	ND	45.0	ND	8.2	2.7	12.3	7.4	0.080	1.4	14.0	33.1	34.5	ND	ND	ND	400	3,610	--	--	--
	5	R3-5	10/8/25	6.3	77.1	0.6	28.4	10.0	20.2	6.1	0.050	ND	19.4	42.9	45.7	ND	ND	ND	ND	ND	--	--	--
R4	2	R4-2	10/8/25	8.2	90.3	0.6	27.1	10.4	22.6	6.2	0.036	ND	20.0	46.8	50.9	ND	ND	ND	ND	ND	ND	ND	ND
		Dup4-2	10/8/25	10.2	105	0.7	30.6	10.5	25.4	6.6	0.065	ND	22.2	52.1	55.3	ND	-	-	-	-	ND	ND	ND
	10	R4-10	10/8/25	5.4	38.7	ND	11.2	2.7	5.1	1.9	0.068	0.5	5.1	20.5	16.4	ND	ND	ND	ND	ND	ND	ND	ND
<b>Number of Detections</b>				5	9	3	9	9	9	9	7	5	9	9	9	0	0	0	1	4	--	--	--
<b>Maximum Concentration</b>				41.9	105	0.7	34.8	10.5	36.1	22.3	0.080	1.7	22.2	52.1	192	ND	ND	ND	400	3,610	--	--	--
<b>Average Concentration</b>				17.2	71.0	0.6	20.4	6.0	18.0	7.9	0.054	1.2	13.6	33.3	64.5	--	--	--	400	913	--	--	--
<b>Standard Deviation</b>				15	25	0.06	10.1	3.4	10.3	6	0.018	0.5	6.4	12.0	58	--	--	--	--	--	--	--	--
<b>95% UCL</b>				30.7	87.5	-	27.0	8.2	24.7	12.0	0.067	1.6	17.8	41.1	102.2	--	--	--	--	--	--	--	--
<b>Screening Levels</b>		Residential	12	15,000	1,591	120,000	23	3,100	80	1.0	390	15,000	390	23,000	--	--	430	260	12,000	--	--	--	
		Commercial		220,000	6,950	1,800,000	350	47,000	500	4.4	5,800	64,000	5,800	350,000	--	--	2,000	1,200	180,000	--	--	--	
		Source	Note 11	RSLs	ESL	RSLs	RSLs	RSLs	Note 3	Note 3	RSLs	Note 3	RSLs	RSLs	--	--	ESLs	ESLs	ESLs	--	--	--	
<b>Regulatory Thresholds</b>		TTLC	500	10,000	75	2,500	8,000	2,500	1,000	20	3,500	2,000	2,400	5,000	--	--	--	--	--	--	--	--	
		STLC*	5	100	0.75	5	80	25	5	0.2	350	20	24	250	--	--	--	--	--	--	--	--	
		TCLP*	5	100	--	5	--	--	5	0.2	--	--	--	--	--	--	--	--	--	--	--	--	

bgs: below ground surface  
 mg/kg: milligrams per kilogram  
 ug/kg: micrograms per kilogram  
 \*: concentrations in milligrams per liter (mg/L)

Highlighted values exceed residential screening level or background level

TTLC: Total Threshold Limit Concentration  
 STLC: Soluble Threshold Limit Concentration  
 TCLP: Toxicity Characteristic Leaching Procedure

VOCs: Volatile Organic Compounds  
 SVOCs: Semi-Volatile Organic Compounds  
 PCBs: Polychlorinated Biphenyls  
 OCPs: Organochlorine Pesticides  
 TPH: Total Petroleum Hydrocarbons

**Table 3**  
**Summary of Soil Vapor Sample Results**  
 Alameda Street Widening Project  
 Los Angeles, California

Location	Depth	Date	VOCs (ug/m <sup>3</sup> )										Field Readings	
			Benzene	Ethylbenzene	1,1-Dichloroethene	4-Isopropyltoluene	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Toluene	m,p-Xylenes	o-Xylene	Gasoline Range Organics (GRO)	Methane (% volume)	Hydrogen Sulfide (ppm)
SV1	5	10/8/2025	8	ND	ND	ND	22	ND	26	ND	ND	ND	0.30	0
SV2	4.5	10/8/2025	ND	ND	ND	ND	12	ND	ND	ND	ND	ND	0.30	0
	4.5 Dup	10/8/2025	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	0.30	0
SV3	5	10/8/2025	152	26	109	12	54	39	214	46	17	6,870	0.30	1
SV4	5	10/8/2025	ND	ND	ND	ND	ND	ND	14	ND	ND	ND	0.30	1
	12	10/8/2025	ND	ND	ND	ND	ND	ND	10	ND	ND	ND	0.30	0
<b>Number of Detections</b>			2	1	1	1	4	1	4	1	1	1	6	2
<b>Maximum Concentration</b>			152	26	109	12	54	39	214	46	17	6,870	0.30	1
<b>Screening Levels (SLs)</b>		<b>Residential</b>	3.2	37	58	--	15	16	10,333	3,500	3,500	20,000	-	-
		<b>Commercial / Industrial</b>	14	160	256	--	67	100	43,333	15,000	15,000	83,000	-	-
<b>Source</b>			ESL	ESL	ESL	--	Note 3	ESL	Note 3	ESL	ESL	ESL	-	-

(ug/m<sup>3</sup>) = Micrograms per cubic meter

  Highlighted value exceeds Residential screening level (DTSC SLs, RWQCB ESLs, or USEPA RSLs)

  Highlighted value exceeds Commercial screening level (DTSC SLs, RWQCB ESLs, or USEPA RSLs)

**Table 4**  
**QAQC Sample Evaluation**  
 Alameda Street Widening Project  
 Los Angeles, California

Boring Location	Sample Depth (feet bgs)	Sample Date	Volatile Organic Compounds in Soil Vapor (ug/m <sup>3</sup> )									Gasoline Range Organics (GRO)	
			Tetrachloroethene (PCE)	Benzene	Ethylbenzene	1,1-Dichloroethene	4-Isopropyltoluene	Trichloroethene (TCE)	Toluene	m,p-Xylenes	o-Xylene		
SV2	4.5	10/8/2025	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4.5 Dup	10/8/2025	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		<b>RPD</b>	<b>-15.4</b>										

Boring Locations	Sample Depth (feet bgs)	Sample Date	Lead in Soil			Other Metals in Soil (mg/kg)											
			Total TTLC (mg/kg)	Soluble STLC (mg/L)	Soluble TCLP (mg/L)	Arsenic	Barium	Chromium	Cobalt	Copper	Mercury	Molybdenum	Nickel	Vanadium	Zinc	All Other Metals	
A1	0.5	10/8/25	7.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.5 Dup	10/8/25	7.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		<b>RPD</b>	<b>-9.4</b>														
A2	0.5	10/8/25	34.6	-	0.03	ND	62.6	11.1	2.8	22.0	ND	0.7	9.1	19.6	67.6	ND	
	0.5 Dup	10/8/25	36.4	-	ND	ND	63.4	10.6	2.7	36.7	0.024	0.6	8.2	17.4	65.1	ND	
		<b>RPD</b>	<b>-5.1</b>					<b>-1.27</b>	<b>4.61</b>	<b>3.64</b>	<b>-50.09</b>		<b>15.38</b>	<b>10.40</b>	<b>11.89</b>	<b>3.77</b>	
A5	1.5	10/8/25	4.8	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1.5 Dup	10/8/25	5.3	-	-	-	-	-	-	-	-	-	-	-	-	-	
		<b>RPD</b>	<b>-9.9</b>														
A6	0.5	10/8/25	15.7	-	-	-	-	-	-	-	-	-	-	-	-	-	
	0.5 Dup	10/8/25	21.3	-	-	-	-	-	-	-	-	-	-	-	-	-	
		<b>RPD</b>	<b>-30.3</b>														
A14	0.5	10/8/25	69.7	4.57	0.43	ND	58.0	29.3	3.4	23.6	0.039	1.5	15.8	22.6	341	ND	
	0.5 Dup	10/8/25	53.8	2.03	ND	ND	75.6	24.0	4.9	29.7	0.039	1.7	14.0	27.2	249	ND	
		<b>RPD</b>	<b>25.7</b>	<b>76.97</b>				<b>-26.35</b>	<b>19.89</b>	<b>-36.14</b>	<b>-22.89</b>	<b>0.00</b>	<b>-12.50</b>	<b>12.08</b>	<b>-18.47</b>	<b>31.19</b>	
R4	2	10/8/25	6.2	-	-	-	-	-	-	-	0.036	ND	20.0	46.8	51	ND	
	2 Dup	10/8/25	6.6	-	-	-	-	-	-	-	0.065	ND	22.2	52.1	55	ND	
		<b>RPD</b>	<b>-6.2</b>								<b>-57.43</b>		<b>-10.43</b>	<b>-10.72</b>	<b>-8.29</b>		

Boring Locations	Sample Depth (feet bgs)	Sample Date	pH	VOCs (ug/kg)	TPH (mg/kg)			SVOCs (ug/kg)	PCBs (ug/kg)	OCPs (ug/kg)
				All VOCs	Gasoline	Diesel	Oil	All SVOCs	All PCBs	All OCPs
A2	0.5	10/8/25	6.7	-	-	-	-	-	-	-
	0.5 Dup	10/8/25	7.6	-	-	-	-	-	-	-
		<b>RPD</b>	<b>-12.3</b>							
A14	0.5	10/8/25	9.3	-	-	-	-	-	-	-
	0.5 Dup	10/8/25	9.0	-	-	-	-	-	-	-
		<b>RPD</b>	<b>2.7</b>							
R4	2	10/8/25	-	ND	ND	ND	ND	ND	ND	ND
	2 Dup	10/8/25	-	-	-	-	-	ND	ND	ND
		<b>RPD</b>								

TTLC: Total Threshold Limit Concentration  
 STLC: Soluble Threshold Limit Concentration  
 TCLP: Toxicity Characteristic Leaching Procedure  
 mg/kg: milligrams per kilogram  
 ug/kg: micrograms per kilogram  
 ug/m<sup>3</sup>: micrograms per cubic meter  
 bgs: Below ground surface

VOCs: Volatile Organic Compounds  
 SVOCs: Semi-Volatile Organic Compounds  
 PCBs: Polychlorinated Biphenyls  
 OCPs: Organochlorine Pesticides  
 TPH: Total Petroleum Hydrocarbons  
 RPD: Relative percent difference

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## Analytical Reports

# Appendix A

