

## **APPENDIX G – PHASE II ENVIRONMENTAL SITE ASSESSMENT**



**Phase II Environmental Site Assessment  
Prospective Development Site  
12121 Foothill Blvd.  
Sylmar, California**

**Prepared for:**

**Banner SoCal Developer, LLC  
500 Skokie Blvd.  
Northbrook, Illinois 60062**

**Prepared by:**

**Cascadia Associates, LLC  
5820 S Kelly Avenue, Suite B  
Portland, Oregon 97239**

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**Phase II Environmental Site Assessment  
Prospective Development Site  
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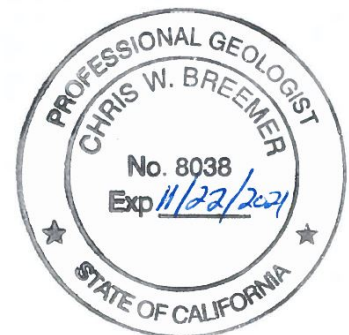
*Prepared for:*

**Banner SoCal Developer, LLC  
500 Skokie Blvd.  
Northbrook, Illinois 60062**

*Prepared by:*



**Joel Mattechek  
Project Manager, Cascadia Associates**



**Chris Breemer, RG  
Principal Geologist, Cascadia Associates**

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## APPENDICES

- Appendix A    Standard Operating Procedures  
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# 1.0 INTRODUCTION

## 1.1 PURPOSE

Cascadia Associates, LLC (Cascadia) prepared this report to describe the scope and results of a Phase II environmental site assessment (ESA) that was completed on April 26, 2021 at the approximately two-acre property addressed as 12121 Foothill Blvd., Los Angeles, California (the Site). The Los Angeles County tax lot identification number for the Site is 2531-006-004. The Site location is shown on Figure 1. The Site layout and exploration locations are shown on Figures 2.

## 2.0 BACKGROUND

The Site is approximately two acres and currently is in use for storage of equipment and materials for Superior Gunitite, a shotcrete contractor. Superior Gunitite also occupies the property adjacent and northwest of the Site. The Site is developed with an approximately 2,500 square-foot dwelling, an approximately 1,100 square-foot shop building, and an approximately 650 square-foot storage building. The ground surface at the Site consists of bare soil and crushed rock at most areas.

As part of a Phase I Environmental Site Assessment completed by Cascadia for the Site<sup>1</sup>, a site inspection was performed on March 11, 2021. At that time, multiple vehicles and additional equipment associated with the adjacent Superior Gunitite business were observed near the northeast, southeast, and southwest perimeter of the Site. An approximately 250-gallon diesel aboveground storage tank (AST), an approximately 1,000-gallon AST with unknown contents, and an approximately 500-gallon gasoline AST were observed at the south side of the Site. Twenty 55-gallon drums, apparently full, were observed in an enclosed shipping container at the south corner of the Site. The drums were unlabeled except for a hand painted label on one drum indicating it contains "Gas Products". Two 55-gallon drums of transmission and hydraulic fluid were observed in the shop structure, and multiple 55-gallon drums containing concrete curing chemicals were observed on the north portion of the Site. The polyethylene drums containing concrete curing chemicals were full, sealed, and in moderate to poor condition. Staining was observed on the flatbed truck beneath the 250-gallon diesel AST and on the floor of the shipping container housing the twenty 55-gallon drums. Additional staining was observed on the concrete floor near the 55-gallon drums of transmission and hydraulic fluid in the shop structure and near a small floor drain located in a concrete slab adjacent to the shop structure. Treated wooden railroad ties and refuse, including empty containers for fuel, rubbing compound, diesel injector cleaner, and paint, were observed on bare soil near the southeast and northeast corners of the Site.

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<sup>1</sup> Cascadia Associates (Cascadia), 2021. Phase I Environmental Site Assessment, 12121 Foothill Blvd., Los Angeles, California. April 2021.

Based on the observations described above, one Recognized Environmental Condition (REC) was identified during the Phase I ESA:

- The current and historical uses of the Site for storage of industrial materials and equipment, including hazardous substances (petroleum mixtures) in drums and ASTs, and associated staining on the ground surface and floor surfaces in the vicinity of stored chemicals is considered an REC in connection with the Site.

The Phase II ESA services described herein were performed specifically to evaluate whether soil at the Site has been significantly affected by the current and historical use of the Site.

### 3.0 FIELD INVESTIGATION

Field activities were performed on April 26, 2021. The following tasks were completed:

- A site-specific health and safety plan was prepared to govern the activities of Cascadia staff.
- The Site was inspected to observe changes that occurred in the period between the Phase I ESA inspection and the Phase II ESA field activities.
- Cascadia advanced seven soil explorations, using hand equipment at the locations shown on Figure 2. The borings were advanced approximately 1.5 to 2 feet below ground surface (bgs) at locations where hazardous substances were observed during the Phase I ESA and in areas that may have been affected by current and historical industrial uses of the Site.
- Soil was collected from the borings and subsurface conditions were logged in general accordance with ASTM D2488. Soil samples were field screened for indications of contamination. Field screening methods included visual examination for unusual colors or stains and headspace vapor screening using a photoionization detector (PID).
- A discrete soil sample was collected from each boring at depths ranging from 1.5 to 2.0 feet bgs.
- The soil samples were submitted to an accredited analytical laboratory for analysis of California Administrative Manual (CAM) 17 metals, gasoline-, diesel-, and oil-range hydrocarbons by CAL-LUFT methods, VOCs by U.S. Environmental Protection Agency (EPA) Method 8260B/C, and/or polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270C.
- The soil borings were backfilled to match the surrounding area.
- Sample locations were recorded by measuring with a sub-meter grade Global Positioning System (GPS) instrument.

The field activities are described in more detail below.

### 3.1 OBSERVATIONS

At the time of the April 26, 2021 Phase II ESA field investigation, the shop building, storage building, and 55-gallon drums that had been observed during the Phase I ESA reconnaissance had been removed from the Site. The storage containers, ASTs, concrete debris, treated railroad ties, refuse, and other equipment associated with Superior Gunitite's operations also had been removed from the Site. The dwelling at the southwest portion of the Site remained in place, along with a small number of automobiles and trucks.

### 3.2 SOIL EXPLORATIONS

Seven borings were completed at the Site. The locations of the borings are shown on Figure 2. Borings B1 and B2 were completed at the northwest portion of the Site in the vicinity of the shop building, storage building, and near a 55-gallon drum storage area. Borings B3 and B4 were advanced at the north and northeast portions of the Site in an area where treated railroad ties and refuse were previously observed, and borings B5 through B7 were advanced at the south and southeast portions of the Site where a storage container containing 55-gallon drums and ASTs were observed.

#### 3.2.1 Soil Sampling Procedures

Soil borings were completed by Cascadia staff, using hand exploration equipment. Cascadia staff field screened soil for indications of contamination and collected soil samples for laboratory analysis.

#### 3.2.2 Soil Sampling

Soil samples were continuously collected from the borings. The soils were described using the Unified Soil Classification System (USCS) and field screened by measuring headspace vapor concentrations using a photoionization detector (PID) calibrated to isobutylene. Soil was logged and field screened in accordance with Standard Operating Procedures (SOPs) included in Appendix A. Discrete soil samples were placed directly in new laboratory-supplied sample containers. Sample containers were stored in an iced cooler under chain-of-custody control. When sampling was complete, the borings were backfilled with native soil.

#### 3.2.3 Field Screening Results

Field indications of contamination were not observed in the borings.



## 4.0 LABORATORY ANALYTICAL PROGRAM

The soil samples were submitted to Pace National Lab of Mount Juliet, Tennessee, a California Environmental Laboratory Accreditation Program (ELAP) accredited laboratory, for the following chemical analyses:

- CAM17 Metals by EPA Method 6010D;
- VOCs by EPA Method 8260B/C;
- Gasoline-, diesel-, and oil-range hydrocarbons by CA-LUFT Methods; and/or
- PAHs by EPA Method 8270C.

The laboratory reports are included in Appendix B. Soil analytical data for CAM17 metals are listed in Table 1. Soil chemical analytical data for VOCs and gasoline-, diesel-, and oil-range hydrocarbons are listed in Table 2. PAHs data are listed in Table 3.

## 5.0 RESULTS

### 5.1 SOIL CONDITIONS

Soil encountered in the borings consisted of dry, light brown silt and gravel. Groundwater was not encountered in the borings.

### 5.2 SCREENING LEVELS

To provide a framework for evaluating the significance of soil laboratory analytical data, the data were compared to California Department of Toxic Substance Control (DTSC) screening levels for Human Health Risk Assessment (HHRA). The screening levels are discussed below and are listed in Tables 1 through 3.

Because screening levels are based on several conservative assumptions (e.g., duration and type of exposure), exceeding one of the screening levels does not necessarily indicate that additional investigation or remediation is required. In general, DTSC considers chemical concentrations less than the screening levels to be protective of human health.

Under current development plans, the Site will be redeveloped and most of the Site will be covered with either asphalt/concrete surfaces or a building. Users of the Site would consist of workers and customers. No residential uses are anticipated. Based on these development assumptions, soil concentrations were compared to screening levels established for commercial/industrial exposure scenarios.

### 5.3 SOIL DATA

This section discusses the results of soil samples collected and analyzed to evaluate the RECs discussed in Section 2.

## *Metals*

Five soil samples (B1 through B5) were submitted for analysis of CAM17 Metals. The CAM17 metals list includes antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, molybdenum, nickel, selenium, silver, thallium, vanadium, zinc, and mercury. With the exception of antimony, silver, and thallium, the remaining metals were detected in one or more of the samples submitted for analysis. Metals were not detected at concentrations exceeding screening levels for commercial/industrial exposure scenarios, except for arsenic. Arsenic was detected in samples B1 through B5 at concentrations ranging from 2.09 to 4.25 milligrams per kilogram (mg/kg), which exceeds the DTSC lead screening level of 0.36 mg/kg for the commercial/industrial exposure scenario. However, as discussed below in Section 6, the detected concentrations of arsenic appear to be naturally occurring.

## *VOCs*

Six soils samples (B1, B2, B4, B5, B6, and B7) were submitted for VOC analysis. 2-buatanone, styrene, toluene, toluene, and/or xylenes were detected in samples B4, B5, B6, and B7. VOCs were not detected in samples B1 and B2. The detected concentrations of VOCs in the soil samples do not exceed screening levels for commercial and industrial exposure scenarios.

## *Gasoline-, Diesel-, and Oil-range Hydrocarbons*

Five samples (B1, B2, B5, B6, and B7) were submitted for analysis of gasoline-, diesel-, and oil-range hydrocarbons. Gasoline-, diesel-, oil-, and/or residual-range hydrocarbons were detected in all the samples submitted for analysis. The hydrocarbon ranges reported by the laboratory do not precisely correspond with the hydrocarbon ranges used by DTSC for risk screening. For example, the laboratory reported diesel-range hydrocarbons in the C12-C22 range, whereas DTSC screening criteria are in the C17-C32 range. These hydrocarbon range differences make it difficult to make a direct comparison between laboratory data and DTSC screening levels.

Gasoline-range hydrocarbons (TPHg), defined as the C5-C12 hydrocarbon range by the analytical laboratory, were detected at concentrations of 1.88 mg/kg to 2.42 mg/kg. These concentrations are well below the most applicable DTSC screening level (500 mg/kg for TPH within the C9-C16 hydrocarbon range). TPH in the C12-C22 hydrocarbon range was detected at concentrations of 4.74 to 46.7 mg/kg. These concentrations are lower than the most applicable DTSC screening level (18,000 mg/kg for TPH within the C12-C22 hydrocarbon range).

Oil-range hydrocarbons, defined as the C22-C32 hydrocarbon range by the analytical laboratory, were detected at a concentration of 1.47 mg/kg to 604 mg/kg. These concentrations are much lower than the most applicable DTSC commercial/industrial screening level (18,000 mg/kg for TPHd within the C17-C32 hydrocarbon range). Residual-range hydrocarbons, defined as the C32-C40 hydrocarbon range by the analytical laboratory, were detected at a concentration of 58 mg/kg to 947 mg/kg. These concentrations are also much lower than the most applicable DTSC commercial/industrial screening level (18,000 mg/kg for TPHd within the C17-C32 hydrocarbon range).

## PAHs

Four samples (B3, B5, B6, and B7) were submitted for analysis of PAHs. Multiple PAHs, including: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene were detected in samples B5, B6, and B7. PAHs were not detected in samples B3. The detected concentrations of PAHs do not exceed screening levels established by DTSC for industrial and commercial exposure scenarios.

## 6.0 DISCUSSION AND CONCLUSIONS

Low concentrations of VOCs, gasoline-, diesel-, and oil-range organics, metals, and PAHs were detected in soil samples collected at the Site. The source(s) of chemicals in soil are unknown; however, in our experience, low concentrations of VOCs, petroleum-range organics, metals, and PAHs are common in urban soil, particularly at sites that have been developed for nearly a century, such as the subject Site.

The chemical concentrations detected in soil do not exceed screening levels for commercial or industrial exposure scenarios, except for arsenic in samples B1 through B5. The concentrations of arsenic detected in soil samples B1 through B5 exceed the DTSC screening level of 0.36 mg/kg for the commercial/industrial exposure scenario. The concentrations of arsenic detected in Site soil appear to be naturally occurring and unrelated to historical activities at the Site.

DTSC has concluded that 12 mg/kg is the “upper-bound estimate” for naturally occurring arsenic in southern California (Los Angeles, Orange, Riverside, San Bernadino, and San Diego Counties)<sup>2</sup>. The U.S. Geological Survey (USGS) published Geochemical and Mineralogical Data for Soils of the Conterminous United States in 2013. That document included arsenic data for hundreds of locations in the U.S., including Los Angeles County. The nine surface soil samples closest to the subject Site exhibited an average concentration of 4.5 mg/kg. Overall, these data suggest that Site soil has not been impacted by arsenic used or released at the Site. In general, DTSC does not require remediation of soil that contains naturally occurring concentrations of arsenic that exceed DEQ human health criteria.

The post-development human health risks associated with arsenic in Site soil are expected to be low because most of the Site is expected to be covered with asphalt-concrete or Portland cement concrete surfaces, which will prevent exposure to underlying soil.

### 6.1 MANAGEMENT OF SOIL DURING DEVELOPMENT

Soil analytical data indicate that Site chemicals in Site soil do not pose a significant risk to human health for workers (current and future) and future customers. However, due to the presence of low

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<sup>2</sup> California Department of Toxic Substances Control (DTSC) Human Health Risk Assessment, 2020. Southern California Ambient Arsenic Screening Level. DTSC, 2020.

concentrations of hazardous substances, soil scheduled for export from the Site, if any, should be profiled prior to off-site transport and disposed of only at a licensed facility.

The Site is occupied with a dwelling and outbuildings. It is likely that the sanitary waste was historically discharged to one or more on-site septic systems and remnants of the septic system remain in place at the Site. Contingencies should be established for decommissioning septic systems if encountered during redevelopment.

Geophysical surveying performed on behalf of Banner SoCal Developer, LLC did not identify the presence of large scale or widespread buried materials or debris at the Site. However, the Site has been developed for approximately a century; thus, it is possible that materials not detected using geophysical methods are present at the Site. Contingencies should be established for addressing buried materials if encountered during construction.

## 7.0 REFERENCES

Cascadia Associates (Cascadia), 2021. *Phase I Environmental Site Assessment, 12121 Foothill Blvd., Los Angeles, California*. April 2021.

California Department of Toxic Substances Control (DTSC) Human Health Risk Assessment, 2020. *Toxicity Criteria for Human Health Risk Assessments, Screening Levels, and Remediation Goals*. DTSC, 2018; Updated 2020.

California Department of Toxic Substances Control (DTSC) Human Health Risk Assessment, 2020. *Southern California Ambient Arsenic Screening Level*. DTSC, 2020.

United States Geological Survey (USGS), 2013. *Geochemical and Mineralogical Data for Soils of the Conterminous United States*. USGS, 2013.

## 8.0 RELIANCE, SIGNIFICANT ASSUMPTIONS AND LIMITATIONS

### 8.1 RELIANCE

This Phase II ESA is intended to be used by Banner SoCal Developer, LLC only for the Site identified in Section 1 of this report. This report may not be relied upon by other parties without the express written consent of the User and upon written acceptance of our Terms and Conditions through a third-party reliance agreement. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of the third party. With respect to third parties, Cascadia has no liability or responsibility for losses of any kind whatsoever, including direct or consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

## 8.2 SIGNIFICANT ASSUMPTIONS

Findings in this report are presented as professional judgments expressed herein and are based on the facts currently available to Cascadia. The information presented herein is intended solely to provide guidance to the User and is not necessarily a firm course of action, except where explicitly stated.

## TABLES

## FIGURES

**APPENDIX A**  
**STANDARD OPERATING PROCEDURES**



**APPENDIX B**  
**LABORATORY REPORTS**

