



SOIL MANAGEMENT PLAN

**Former Leggett and Platt Facility
12352 Whittier Boulevard
Whittier, California 90602
Site Code No. 0601
Geotracker Global ID: SL184731456**

Prepared for submittal to:

**Regional Water Quality Control Board – Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, California 90013**

**Prepared on Behalf of:
PSIF WR WHITTIER LLC
500 Newport Center Drive, Suite #630
Newport Beach, CA 92660**

January 13, 2023

SOIL MANAGEMENT PLAN

Former Leggett and Platt Facility, Whittier, California

1. INTRODUCTION

Hazard Management Consulting, Inc. (HMC) is pleased to present this Soil Management Plan (SMP) for the former L&P Property Management Company Property located at 12352 Whittier Boulevard in Whittier, California (Site; L&P; Figure 1). HMC has prepared this SMP on behalf of PSIF WR WHITTIER LLC, who recently acquired the property for redevelopment. The facility at the Site manufactured bedframes until manufacturing ceased and the facility was used for storage and distribution of the bedframes. The Site is approximately 13-acres is paved and developed with three vacant, attached structures of approximately 213,000 square feet (SF) in a commercial/industrial area of Whittier. The Site is an open case file with the Regional Water Quality Control Board (RWQCB) and has been the subject of numerous assessments and investigations due to releases of diesel fuel and naphtha paint solvent.

The redevelopment plans for the Site call for the demolition of all existing structures on the site followed by grading to create compacted building pads for a future industrial development as shown in Appendix B. As mentioned, there have been extensive subsurface investigations conducted at the Site related to past leaks and known impacts under the oversight of the RWQCB. These investigations have defined areas of elevated concentrations of the Contaminants of Concern (COCs) including petroleum and chlorinated hydrocarbons in soil and soil vapor beneath portions of the Site. The RWQCB is currently evaluating what, if any, remedial requirements will be imposed to address the presence of these COCs in soil. However, those requirements are separate and distinct from the procedures and protocols necessary to handle such soil during the redevelopment process. The SMP provides guidance regarding the health & safety procedures to be implemented to protect workers at the Site; the process for handling and reuse of soil containing elevated concentrations of the COCs on Site; as well as responding to unknowns that may be encountered during grading.

2. OBJECTIVE

The objective of this SMP is to document the procedures that will be used to guide the grading and redevelopment activities at the Site so as to identify and properly manage:

- known soil impacts; and
- potentially unknown impacted soils.

3. SITE AND REMEDIAL HISTORY

The Site is located at 12352 Whittier Boulevard in Whittier, California with the nearest cross street being Baldwin Pl. The Site is located west of Whittier Blvd and has been assigned Assessor Parcel Numbers (APN) 8170-026-011. The Site is approximately 13 acres in size, improved with an industrial building of

approximately 213,000 SF and asphalt parking lot that is currently vacant with no active operations. The Site was used for manufacturing metal bed frames from approximately the 1950s to 2009. After 2009, the Site was used as a warehouse. Site features are visible on Figure 2.

The Site is set in a commercial and industrial area of Whittier, with nearby neighborhoods. Adjacent land uses include:

- Whittier Boulevard followed by several automotive repair shops to the east,
- Oceanic Arts, and Tool and Jig Plating Company to the south,
- PIH Whittier Health and a construction site (formerly Nellis School for Boys) to the west, and,
- Whittier Boulevard and a Public Storage facility to the north.

The Site is relatively flat with an elevation of approximately 220 feet above mean sea level (msl) with a regional slope to the southwest. The direction of groundwater flow beneath the subject property is inferred to be westward and presumed to be present at depth of 80 feet bgs.

3.1 Historic Investigations

The Site has been the subject of numerous assessments and investigations due to a release from former USTs in the late 1980's. The investigation documented the presence of petroleum hydrocarbons in soil, soil gas and groundwater. Remedial action included free product removal of petroleum products from the groundwater as well as soil vapor extraction (SVE) to remove volatile organic compounds (VOCs) from soil and soil gas. Groundwater closure was issued by the RWQCB however soil remains open. The SVE was operated and evidence of chlorinated solvents was noticed in the influent vapor stream to the SVE. The SVE was terminated and L&P has been negotiating closure of the outstanding soil issues with the RWQCB.

Based on these investigations, there are residual concentrations of petroleum hydrocarbons along the northern portion of the Site as well as soil gas containing VOCs including chlorinated solvents along the southern boundary of the Site.

4. ENVIRONMENTAL CONSIDERATIONS

During grading activities, the soil with known impacts as described above will be encountered as part of the grading activities for the Site development. In addition, there is always a chance of encountering previously unknown impacted soil. Given the known conditions and Site history, grading activities will need to take into consideration the South Coast Air Quality Management District's (SCAQMD's) Rule 1166 that requires any "VOC Contaminated soil," be monitored with special handling requirements and off-site disposal. In addition, given the presence of total petroleum hydrocarbons in soil, special handling and reuse criteria may apply to such soil disturbed during grading activities.

Constituents detected in soil vapors above conservative vapor intrusion screening values during the 2021

and 2022 HMC investigations included Benzene, Chloroform, 1,1-Dichloroethene (1,1-DCE), Trichloroethene (TCE), Tetrachloroethene (PCE). These contaminants need to be planned for in both soil handling as well as health & safety procedures.

4.1 Known Soil Impacts

Based on the investigations to date, low concentrations of petroleum hydrocarbons and VOCs in soil have been documented on the Site. Concentrations of metals, petroleum hydrocarbons, and VOCs detected in soil are presented in Tables 1A through 1C, respectively. Residual petroleum hydrocarbons are present in the northern portion of the Site where the USTs formerly existed and the SVE operations were conducted. There is a chance of encountering petroleum containing soil while grading in this area. In addition, low concentrations of chlorinated hydrocarbons were encountered in soil and soil gas samples collected from the southern parking lot. These locations are shown on Figures 2 & 3.

4.2 Unknown Soil Impacts

There is always the potential to encounter unanticipated subsurface features or soil conditions during demolition and grading of an historical industrial Site. Section 9 of this SMP presents the procedures if an unanticipated issue is discovered during grading. Under these conditions, the procedures in Section 10 will be followed to guide the characterization, excavation, and removal processes, as necessary.

5. PROGRAM PARTICIPANTS

5.1 Environmental Consultant

HMC will act as the environmental consultant and provide field oversight and management services for the SMP. HMC personnel will include the following Environmental Program Manager (EPM) and Environmental Field Coordinator (EFC):

- EPM - Mark S. Cousineau, NREP, Hazard Management Consulting
- EFC - To be Determined (TBD)

5.2 Contractor

The general contractor for the project is.:

- Oltmans Construction

5.3 Owner's Participants

The Owner's Project Director is:

- Jeremy Mape:

6. INDIVIDUAL RESPONSIBILITIES

6.1 Environmental Consultant's Program Manager

The EPM will perform for the following tasks:

- Monitor the work of the EFC;
- Communicate field activities to the Owner's Project Director;
- Communicate with the EFC to investigate unknown features and other unknown environmental conditions, if encountered;
- Evaluate results of all soil sampling conducted;
- After consultation with the EFC and the Owner's Project Director, characterize, delineate, and supervise the proper management of unknown features, and other unanticipated environmental conditions;
- Report sample results to RWQCB; and
- Prepare reports of field activities.

6.2 Environmental Field Coordinator (EFC)

The EFC will perform the following tasks:

- Monitor grading operations visually and with the appropriate monitoring equipment to assess potential unknowns in the field and respond to requests based on questions and findings from the contractor's representative;
- Provide oversight of the implementation of the SMP and Health & Safety Plan including air monitoring;
- Collect soil samples and arrange for laboratory analyses if needed;
- Maintain records of soil sample locations;
- Report suspected unknown features and other unanticipated environmental conditions to the EPM. The EPM will initiate and approve all non-emergency contacts with the appropriate agencies; and
- Supervise activities related to investigating and remediating unknown features and other unanticipated environmental conditions.

6.3 Contractor's Field Coordinator

The Contractor's Field Coordinator shall be responsible for the following task:

- Coordinate with the EPM regarding identification and removal of impacted soil or other unknown structures found during grading.

7. **ACTIVITIES BEFORE GRADING**

The Owner's Project Director and the EPM will provide the Contractor and Site workers with this SMP prior to implementation of any applicable field activities. A kickoff meeting will take place with all parties involved in the movement of soil to review the components of the plan. Furthermore, this SMP will be provided to the RWQCB for review and approval.

8. **HEALTH AND SAFETY**

A Health & Safety (H&S) Plan that will govern the work is included in Appendix A. Contractors are required to have their own H&S Plan that at a minimum includes the provisions of this H&S in addition to whatever additional H&S procedures are necessary and required for their specific activity.

All applicable federal, state, and local regulations and codes relating to health and safety shall be adhered to by the Contractor. The Contractor shall adhere to all sections of Cal OSHA regulations contained in Title 8 of the California Code of Regulations (8 CCR) as they apply to the Site activities. Applicable requirements may include but are not limited to the following:

- Injury and Illness Prevention Program (8 CCR 1509 and 8 CCR 3203)
- Hazardous Waste Operations and Emergency Response (8 CCR 5192)
- Hazard Communication (8 CCR 5194)
- Personal Protective Equipment (8 CCR Article 10)
- Respiratory Protective Equipment (8 CCR 5144)
- Control of Noise Exposure (8 CCR 5095-5100)
- Excavations (8 CCR 1503 and 8 CCR 1539- 1547)
- Fire Prevention and Suppression Procedures (8 CCR 4848)
- Portable Fire Extinguishers (8 CCR 6151)
- Cleaning, Repairing, Servicing, and Adjusting Prime Movers, Machinery, and Equipment Lockout/Tagout (8 CCR 3314)
- Medical Services and First Aid (8 CCR 3400).

9. **SOIL MANAGEMENT ACTIVITIES**

The activity taking place that is subject to this SMP is the over excavation and recompaction of shallow

soil for the development of building pads, drive aisles and parking areas of the Site. The conceptual grading plan for the proposed future building is presented in Appendix B.

Soil excavation and grading operations will be conducted in accordance with the following Site-specific soil management protocols, developed after considering the Site history and previous subsurface investigations. These protocols are intended to be followed during all grading activities and cover both known and, if encountered, unanticipated environmental conditions. The EFC will periodically inspect the work locations to assess potential unknowns and monitor general grading practices. The Contractor’s Field Coordinator will notify the EFC if any odorous or discolored soil is encountered. Procedures to be followed if odorous or discolored soil is encountered are presented in Section 9.3.

For clarity, there are three types of soil sampling that may be conducted as part of this plan including:

- **Soil for Off Site Disposal:** Samples will be collected and analyzed as required by the receiving facility to develop an approved “soil profile” for disposal purposes;
- **Imported Fill:** Any imported fill brought to the Site will be tested in accordance with the procedures presented in Section 9.5.
- **Soil to be Reused On-Site:** Excess soil that is placed in stockpiles for potential reuse on Site shall be sampled and evaluated for reuse in accordance with the methodologies presented in US EPA SW-846, guidance presented by the Bay Area RWQCB (2006) and comments from the LARWQCB as further described below. It is anticipated that most of the soil will be reused on the Site. The EFC will be on the Site to assist in segregating impacted soil from non-impacted soil and assisting in selection of potential disposal options should impacted soil be encountered.

9.1 Known Conditions

The concentrations of COCs detected in soil at the Site are below established remedial criteria. However, given the potential to encounter impacted soil in the areas where elevated soil gas concentrations were reported in the southern parking lot and historic SVE operations were conducted along the northern portion of the Site, care will be conducted when soil is disturbed in these areas.

The following reuse criteria are proposed to guide decisions regarding off site disposal or reuse of soil:

Contaminant	Industrial Soils Reuse Threshold mg/kg
TPH-GRO	100.
TPH-DRO	100.
TPH-MO	10,000.
Benzene	0.0026
1,1-DCA	0.0014
1,1-DCE	0.0025
Methylene-Chloride	0.0013

Contaminant	Industrial Soils Reuse Threshold mg/kg
Naphthalene	0.042
PCE	0.0023
Toluene	0.690
1,1,1-TCA	0.070
1,1,2-TCA	0.0016
TCE	0.0018
Xylenes	9.9

9.2 South Coast Air Quality Management District Rule 1166

Soil movement at the Site will require monitoring in accordance with SCAQMD Rule 1166. Monitoring for the presence of “VOC-Contaminated” soil as that term is defined and implementing a VOC-impacted soil mitigation plan approved by the SCAQMD Executive Officer will be required if VOC-impacted soil is encountered during grading and excavation work. A copy of the plan must be on the Site during the entire excavation period, and the provisions for monitoring and reporting under the Rule 1166 permit/plan must be implemented. The following vapor or odor mitigation measures may be implemented if real-time air monitoring exceeds an action level or if odors are encountered that requires mitigation from a health and safety perspective:

- Cover subject soil with clean soil or plastic sheeting;
- Reduce the pace of work;
- Reduce size of area being excavated; and/or
- Apply vapor suppression.

Construction procedures or vapor/odor control measures may be altered based on observations of the effectiveness of such measures. Work must stop until such measures are improved or additional or more effective measures are employed. Additional air monitoring may be conducted to confirm the effectiveness of emission reduction activities.

9.3 Unanticipated Environmental Conditions

The following process will be followed if unanticipated environmental conditions are encountered, including unusual odors, sustained elevated OVA readings (greater than 25 parts per million), pH less than 2, unusual staining or discoloration, or other characteristics judged by the EFC to not be representative of previously assessed Site conditions:

1. The Contractor will discontinue work in the area immediately and notify the EFC. The suspect area will be delineated with caution tape to prevent unauthorized entry.
2. The EFC will notify the EPM who will communicate to the RWQCB that unanticipated impacted

soil has been encountered.

3. The Contractor shall not move potentially impacted soil, or other materials, such as debris, from the suspect area to other parts of the Site unless otherwise directed by the EFC.
4. The EFC will collect samples of the potentially impacted soil and document the location. Soil sampling methodologies are included in Appendix C.

Volume of Stockpile	Number of Samples per Volume
Up to 1,000 cubic yards	1 sample per 250 cubic yards
1,000 to 5,000 cubic yards	4 samples for first 1,000 cubic yards +1 sample per each additional 500 cubic yards
Greater than 5,000 cubic yards	12 samples for first 5,000 cubic yards +1 sample per each additional 1,000 cubic yards

5. Depending on the nature of impact, soil samples will be analyzed for some or all the following: TPH-GRO, TPH-DRO, and TPH-MO by USEPA Method 8015M, VOCs by USEPA Method 8260 and metals.
6. Once the analytical results are obtained, the EPM will compare the results to the soil screening criteria to assess whether further action is warranted and, if so, what action is appropriate under the circumstances, including further appropriate agency notifications.
7. Grading in any suspect area will not continue until any required remediation or removal is complete and only with the approval of the EFC or EPM.

In the event that an unknown subsurface structure (e.g. underground storage tank or sump) is encountered during grading, the structure will be removed under city, county, or regional water board oversight, as necessary. Potentially impacted soils associated with the structure may need to be segregated and sampled, in accordance with the above procedures.

9.4 Soil Stockpiling

Soil to be stockpiled from areas known to be impacted or soil that is potentially impacted based on field observations shall be segregated from other soils, placed on plastic sheeting, and covered at the end of each workday. Stockpiled soil awaiting characterization shall be treated as impacted soil until results are obtained. Daily cover and dust control shall be provided. Storm water management practices shall be consistent with Storm Water Management Protection Plan issued to the Site.

9.5 Off-Site Disposal

Soil to be disposed of off the Site shall be characterized to determine if it is a hazardous waste in accordance with California Code of Regulations (CCR), Title 22, and to respond to the requirements of the accepting disposal facility (e.g., hazardous, non-hazardous, or recycling). All soil will be handled and disposed of according to current regulatory guidelines.

9.6 Imported Fill Material

Imported fill material must meet the minimum requirements for soil sampling and analysis outlined in the DTSC's October 2001 *Information Advisory, Clean Imported Fill Material* to avoid the placement of chemically impacted soil on the Site. Imported fill material will be sampled in general accordance with the requirements for soil sampling and analysis outlined in the DTSC's October 2001 *Information Advisory, Clean Imported Fill Material* to avoid the placement of chemically impacted soil on the Site. The import fill material will be analyzed for the chemical parameters based on the nature and use of the Source location consistent with the procedures specified in the DTSC guidance.

The following sampling frequency:

Area of Individual Borrow Area	Sampling Requirements
2 acres or less	Minimum of 4 samples
2 to 4 acres	Minimum of 1 sample every ½ acre
4 to 10 acres	Minimum of 8 samples
Greater than 10 acres	Minimum of 8 locations with 4 sub-samples per location (32 total samples)
Volume of Borrow Area Stockpile	Number of Samples per Volume
Up to 1,000 cubic yards	1 sample per 250 cubic yards
1,000 to 5,000 cubic yards	4 samples for first 1,000 cubic yards +1 sample per each additional 500 cubic yards
Greater than 5,000 cubic yards	12 samples for first 5,000 cubic yards +1 sample per each additional 1,000 cubic yards

9.7 Dust Control and Air Monitoring

Any chemically affected soil brought to the surface by grading shall be managed in accordance with all applicable provisions of the State of California and/or federal law. For example, excavation of soil will require dust control measures, such as the application of water to exposed areas, in accordance with California Occupational Safety and Health Administration (Cal OSHA) and SCAQMD requirements.

The Contractor shall be responsible for the mitigation of dust during construction activities. If visible dust is observed at the perimeter of the Site boundaries because of construction activities at the Site, the Contractor shall enhance mitigation measures to eliminate the presence of visible dust at the Site

boundary. Additional dust control measures that may be implemented, if necessary, include:

- Increased watering of the work area;
- Covering of stockpiles;
- Decreasing drop heights; and/or
- Use of dust palliatives.

The EFC will monitor Site conditions and evaluate what dust control measures (e.g., water application) will be implemented, as needed.

9.8 Equipment Cleaning

Track out of soil or other materials from the project Site is prohibited. Soil or other materials adhered to vehicles shall be removed via brushing or washing before exiting the Site.

If water is used for washing; it shall be collected and contained on the Site. Sampling may be needed prior to disposal in compliance with any sewer discharge permit(s). Sampling and compliance shall be the responsibility of the Contractor.

9.9 Soil Sampling Procedures

Soil samples may be collected using hand tools or a direct push drill rig. Soil sampling and sample handling procedures are presented in Appendix C.

9.10 Notifications

Should any notifications be necessary to involved agencies such as the RWQCB or City of Whittier, they shall be made by the owner in coordination with the EPM.

10. REPORTING

Upon completion of the initial soil removal activity, a report outlining the work undertaken will be prepared and submitted to the RWQCB. The report will provide a summary of the work conducted, results of confirmation sampling and will contain copies of all daily field logs including all OVA monitoring results, laboratory results, and manifests used to dispose of soil from the Site. Upon completion of all grading and soil movement activity, a final SMP Implementation Report will be prepared to document the balance of the work that was conducted including whether any unknown conditions were encountered and how they were addressed.

11. REFERENCES

AMEC. 2012. Phase I Environmental Site Assessment: 12532 Whittier Boulevard, Whittier, CA 92660. September 28, 2012.

Hazard Management Consulting, Inc. (HMC). 2019. Phase I Environmental Site Assessment: 12532 Whittier Boulevard, Whittier, CA 92660. December 19, 2019.

Hazard Management Consulting, Inc. (HMC). 2021. Soil and Soil Vapor Investigation: 12352 East Whittier Boulevard, Whittier, CA 92660. April 13, 2021.

TABLES

Table 1A
Summary of Detections in Soil – Metals
12352 East Whittier Boulevard, Whittier, California

Sample ID	Depth (ft bgs)	Date Collected	USEPA Test Method 6010 B															USEPA Test Method 7471A	
			Results in milligrams per kilogram (mg/kg)																
			Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Mercury
DTSC Human Health Screening Levels			--	12*	--	230	780	--	--	--	320	--	11,000	--	--	--	--	--	4.4
USEPA Human Health RSLs			470	--	220,000	--	--	--	350	47,000	--	5,800	--	5,800	5,800	--	5,800	350,000	--
Hazardous TTLC Limit for Metals			500	500	10,000	75	100	2,500	8,000	2,500	1,000	3,500	2,000	100	500	700	2,400	5,000	20
Run STLC & TCLP analysis for Metals			150	50	1,000	7.5	10	50	800	250	50	3,500	200	10	50	70	240	2,500	2.0
SB-1-1	1	07/28/22	ND<10.1	4.77	116	ND<0.505	0.997	13.4	6.67	16.7	4.49	2.16	17.7	ND<3.03	ND<1.52	ND<10.1	30.3	38.9	ND<0.0868
SB-1-5	5	07/28/22	ND<9.90 ^6+	4.78	141	ND<0.495	1.15	15.9	7.52	19.3	4.03	ND<1.98	19.7	ND<2.97	ND<1.49	ND<9.90	34.5	44.6	ND<0.0850
SB-2-1	1	07/28/22	ND<9.80	ND<2.94	62.3	ND<0.490	0.539	7.48	3.93	9.80	2.17	ND<1.96	9.73	ND<2.94	ND<1.47	ND<9.80	17.6	23.7	ND<0.0801
SB-2-5	5	07/28/22	ND<10.2	3.25	93.0	ND<0.508	1.32	8.87	5.49	11.6	2.89	2.14	15.1	ND<3.05	ND<1.52	ND<10.2	21.8	28.1	ND<0.0833
SB-3-1	1	07/28/22	ND<9.85	4.45	97.0	ND<0.493	0.837	11.5	5.86	13.1	3.21	2.02	14.4	ND<2.96	ND<1.48	ND<9.85	24.5	32.3	ND<0.0850
SB-3-5	5	07/28/22	ND<10.1	ND<3.02	136	ND<0.503	1.03	6.82	2.89	6.76	ND<2.01	ND<2.01	6.56	ND<3.02	ND<1.51	ND<10.1	13.9	15.7	ND<0.0850
SB-4-1	1	07/28/22	ND<10.0	3.93	108	ND<0.500	1.55	12.1	5.98	14.7	2.74	2.01	15.3	ND<3.00	ND<1.50	ND<10.0	26.4	34.6	ND<0.0801
SB-4-5	5	07/28/22	ND<10.1	4.42	104	ND<0.503	0.905	12.6	8.03	14.5	3.32	ND<2.01	19.0	ND<3.02	ND<1.51	ND<10.1	26.7	39.2	ND<0.0833
SB-5-1	1	07/28/22	ND<10.1 ^6+	4.42	119	ND<0.505	1.20	15.2	6.78	20.5	14.3	ND<2.02	18.8	ND<3.03	ND<1.52	ND<10.1	32.6	55.7	ND<0.0833
SB-5-5	5	07/28/22	ND<10.1 ^6+	ND<3.03	127	ND<0.505	1.07	14.6	6.94	17.6	4.72	ND<2.02	18.7	ND<3.03	ND<1.52	ND<10.1	32.1	40.6	ND<0.0833
SB-6-1	1	07/28/22	ND<10.2	5.48	97.1	ND<0.510	0.791	21.1	5.89	19.4	22.9	2.21	14.5	ND<3.06	ND<1.53	ND<10.2	25.1	74.3	ND<0.0833
SB-6-5	5	07/28/22	ND<10.1	5.18	145	ND<0.503	1.06	15.8	7.51	20.0	7.11	2.41	21.2	ND<3.02	ND<1.51	ND<10.1	36.0	47.0	ND<0.0833
SB-8-1	1	07/28/22	ND<10.1	3.71	90.3	ND<0.503	0.716	11.1	5.72	12.7	2.88	ND<2.01	13.8	ND<3.02	ND<1.51	ND<10.1	23.5	32.9	ND<0.0817
SB-8-5	5	07/28/22	ND<9.90	2.97	75.1	ND<0.495	0.656	8.89	5.25	9.96	2.66	ND<1.98	11.7	ND<2.97	ND<1.49	ND<9.90	20.5	25.6	ND<0.0833
SV-3A-1	1	07/27/22	ND<9.90 ^6+	ND<2.97	143	ND<0.495	1.20	16.0	7.52	20.6	9.07	ND<1.98	20.2	ND<2.97	ND<1.49	ND<9.90	36.4	47.6	ND<0.0817
SV-3A-5	5	07/27/22	ND<9.95 ^6+ F1	4.13	117	ND<0.498	1.12	12.6	6.14	15.8	3.12	ND<1.99	16.4	ND<2.99	ND<1.49	ND<9.95	29.1	36.8	ND<0.0850
SV-3B-1	1	07/27/22	ND<10.1 ^6+	ND<3.03	132	ND<0.505	0.694	12.7	5.97	15.6	26.5	ND<2.02	13.6	ND<3.03	ND<1.52	ND<10.1	27.2	53.5	ND<0.0850
SV-3B-5	5	07/27/22	ND<9.95 ^6+	4.49	118	ND<0.498	1.18	14.1	6.93	17.8	3.18	ND<1.99	19	ND<2.99	ND<1.49	ND<9.95	31.0	41.3	ND<0.0833
SV-9CI-1	1	07/27/22	ND<9.80 ^6+	3.97	114	ND<0.490	1.21	12.5	6.54	17.6	3.76	ND<1.96	18.2	ND<2.94	ND<1.47	ND<9.80	30.3	39.5	ND<0.0850
SV-9CI-5	5	07/27/22	ND<10.2 ^6+	4.26	105	ND<0.508	1.03	13.0	6.59	16.0	3.60	ND<2.03	17.5	ND<3.05	ND<1.52	ND<10.2	28.8	39.0	ND<0.0833
SV-9E1-1	1	07/26/22	ND<9.85 ^6+	3.72	120	ND<0.493	0.887	12.4	5.71	16.0	35.8	ND<1.97	14.0	ND<2.96	ND<1.48	ND<9.85	27.4	45.9	ND<0.0801
SV-9E1-5	5	07/26/22	ND<9.80 ^6+	3.13	104	ND<0.490	1.18	11.0	5.66	14.2	2.98	ND<1.96	16.2	ND<2.94	ND<1.47	ND<9.80	26.2	33.1	ND<0.0833
SV-9E2-1	1	07/26/22	ND<10.1 ^6+	ND<3.03	125	ND<0.505	0.909	13.6	5.92	18.1	19.7	ND<2.02	15.0	ND<3.03	ND<1.52	ND<10.1	30.4	47.6	ND<0.0850
SV-9E2-5	5	07/26/22	ND<10.0 ^6+	ND<3.00	101	ND<0.500	1.05	12.3	5.44	14.5	3.21	ND<2.00	15.9	ND<3.00	ND<1.50	ND<10.0	27.6	34.2	ND<0.0833
SV-9F-1	1	07/26/22	ND<9.80 ^6+	3.14	95.9	ND<0.490	0.956	10.3	5.82	13.6	2.90	ND<1.96	15.5	ND<2.94	ND<1.47	ND<9.80	24.6	32.2	ND<0.0850
SV-9F-5	5	07/26/22	ND<9.85 ^6+	3.28	124	ND<0.493	1.18	15.3	7.11	19.7	3.63	ND<1.97	20.4	ND<2.96	ND<1.48	ND<9.85	33.4	44.7	ND<0.0868
SV-9G-1	1	07/26/22	ND<9.80 ^6+	3.64	126	ND<0.490	1.07	14.8	6.81	18.0	3.77	ND<1.96	18.7	ND<2.94	ND<1.47	ND<9.80	34.2	40.0	ND<0.0817
SV-9G-5	5	07/26/22	ND<10.2 ^6+	4.17	90.7	ND<0.510	0.906	11.6	5.32	13.6	3.25	ND<2.04	14.8	ND<3.06	ND<1.53	ND<10.2	26.9	35.5	ND<0.0833
SV-9H-1	1	07/26/22	ND<10.2 ^6+	4.47	128	ND<0.508	1.42	14.0	7.03	18.0	3.64	ND<2.03	19.4	ND<3.05	ND<1.52	ND<10.2	32.8	42.0	ND<0.0801
SV-9H-5	5	07/26/22	ND<9.95 ^6+	3.20	121	ND<0.498	1.01	14.9	7.79	18.1	3.83	ND<1.99	18.8	ND<2.99	ND<1.49	ND<9.95	32.1	43.8	ND<0.0850

**Table 1A
Summary of Detections in Soil – Metals
12352 East Whittier Boulevard, Whittier, California**

Sample ID	Depth (ft bgs)	Date Collected	USEPA Test Method 6010 B															USEPA Test Method 7471A	
			Results in milligrams per kilogram (mg/kg)																
			Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Mercury
DTSC Human Health Screening Levels			--	12*	--	230	780	--	--	--	320	--	11,000	--	--	--	--	4.4	
USEPA Human Health RSLs			470	--	220,000	--	--	--	350	47,000	--	5,800	--	5,800	5,800	--	5,800	350,000	--
Hazardous TTLC Limit for Metals			500	500	10,000	75	100	2,500	8,000	2,500	1,000	3,500	2,000	100	500	700	2,400	5,000	20
Run STLC & TCLP analysis for Metals			150	50	1,000	7.5	10	50	800	250	50	3,500	200	10	50	70	240	2,500	2.0
SV-9I-1	1	07/26/22	ND<10.0 ^6+	4.18	108	ND<0.500	0.963	13.3	6.19	16.7	3.11	ND<2.00	16.8	ND<3.00	ND<1.50	ND<10.0	30.9	37.8	ND<0.0850
SV-9I-5	5	07/26/22	ND<9.85 ^6+	ND<2.96	48.3	ND<0.493	0.530	6.44	2.99	7.93	ND<1.97	ND<1.97	7.60	ND<2.96	ND<1.48	ND<9.85	15.1	20.2	ND<0.0817

Notes:

1. California Department of Toxic Substances (DTSC) screening levels for human health are found in the Human Health Risk Assessment (HHRA) Note 3 (2020 Update) for Commercial Industrial Soil.
2. United States Environmental Protection Agency (USEPA) screening levels for human health are found in the Regional Screening Level (RSL) Table for Composite Workers (May 2022 Update).
3. Total Threshold Limit Concentration (TTLC) screening values indicate a concentration at which the soil becomes classified as a California (non-RCRA) hazardous waste.
4. Concentration ten times the Soluble Threshold Limit Concentration (STLC) screening value. This is typically considered a trigger number at which STLC and TCLP analyses should be run on the sample to determine solubility.

Detections shown in **BOLD**

bgs = Below ground surface

ND< = Not detected at or above the associated reporting limit

^6+ = Interference Check Standard (ICSA and/or ICSAB) is outside acceptable limits, high biased

F1 = Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) recovery exceeds control limits

* Arsenic is a naturally occurring material that is also used in industrial processes. The background value for arsenic in southern California soils as established by the DTSC as part of the “schools program” is generally considered to be approximately 12 ppm.

Table 1B
Summary of Detections in Soil -Total Petroleum Hydrocarbons
12352 East Whittier Boulevard, Whittier, California

Sample ID	Depth (ft bgs)	Date Collected	USEPA Test Method 8015B Results in milligrams per kilogram (mg/Kg)	
			TPH as Gasoline (C4-C12)	TPH as Diesel (C13-C22)
Soil to Groundwater Screening Levels			100	100
SB-1-1	1	7/28/2022	NA	9.0
SB-1-5	5	7/28/2022	NA	ND<4.9
SB-1-10	10	7/28/2022	NA	ND<4.9
SB-2-1	1	7/28/2022	NA	7.8
SB-2-5	5	7/28/2022	NA	ND<4.9
SB-2-10	10	7/28/2022	NA	ND<4.9
SB-3-1	1	7/28/2022	NA	ND<4.9
SB-3-5	5	7/28/2022	NA	ND<4.9
SB-3-10	10	7/28/2022	NA	12
SB-4-1	1	7/28/2022	NA	ND<4.9
SB-4-5	5	7/28/2022	NA	ND<4.9
SB-4-10	10	7/28/2022	NA	ND<4.9
SB-5-1	1	7/28/2022	NA	11
SB-5-5	5	7/28/2022	NA	16
SB-5-10	10	7/28/2022	NA	ND<4.9
SB-6-1	1	7/28/2022	NA	41
SB-6-5	5	7/28/2022	NA	ND<4.9
SB-6-10	10	7/28/2022	NA	12
SB-8-1	1	7/28/2022	NA	17
SB-8-5	5	7/28/2022	NA	10
SB-8-10	10	7/28/2022	NA	14
SB-8-15	15	7/28/2022	NA	ND<4.9
SV-02-1	1	1/28/2021	ND<0.076	9.9
SV-02-5	5	1/28/2021	ND<0.084	ND<5.0
SV-02-10	10	1/28/2021	ND<0.076	ND<5.0
SV-03-1	1	1/28/2021	ND<0.11	5.4
SV-03-5	5	1/28/2021	ND<0.075	130
SV-03-10	10	1/28/2021	ND<0.080	ND<4.9
SV-3A-1	1	7/27/2022	NA	ND<4.9
SV-3A-5	5	7/27/2022	NA	ND<4.9
SV-3A-10	10	7/27/2022	NA	ND<4.9
SV-3B-1	1	7/27/2022	NA	ND<4.9
SV-3B-5	5	7/27/2022	NA	ND<4.9
SV-3B-10	10	7/27/2022	NA	ND<4.9
SV-9A-1	1	3/12/2021	ND<0.080	NA
SV-9A-5	5	3/12/2021	ND<0.093	NA
SV-9A-10	10	3/12/2021	ND<0.081	NA

Table 1B
Summary of Detections in Soil -Total Petroleum Hydrocarbons
12352 East Whittier Boulevard, Whittier, California

Sample ID	Depth (ft bgs)	Date Collected	USEPA Test Method 8015B Results in milligrams per kilogram (mg/Kg)	
			TPH as Gasoline (C4-C12)	TPH as Diesel (C13-C22)
Soil to Groundwater Screening Levels			100	100
SV-9B-1	1	3/12/2021	ND<0.081	NA
SV-9B-5	5	3/12/2021	ND<0.087	NA
SV-9B-10	10	3/12/2021	ND<0.085	NA
SV-9C-1	1	3/12/2021	ND<0.082	NA
SV-9C-5	5	3/12/2021	ND<0.086	NA
SV-9C-10	10	3/12/2021	ND<0.087	NA
SV-9CI-1	1	7/27/2022	NA	ND<4.9
SV-9CI-5	5	7/27/2022	NA	ND<4.9
SV-9CI-10	10	7/27/2022	NA	ND<4.9
SV-9CI-15	15	7/27/2022	NA	ND<4.9
SV-9CI-20	20	7/27/2022	NA	ND<4.9
SV-9D-1	1	3/12/2021	ND<0.083	NA
SV-9D-5	5	3/12/2021	ND<0.081	NA
SV-9D-10	10	3/12/2021	ND<0.078	NA
SV-9E-1	1	3/12/2021	ND<0.076	NA
SV-9E-5	5	3/12/2021	ND<0.082	NA
SV-9E-10	10	3/12/2021	ND<0.090	NA
SV-9E1-1	1	7/26/2022	NA	ND<4.9
SV-9E1-5	5	7/26/2022	NA	ND<4.9
SV-9E1-10	10	7/26/2022	NA	ND<4.9
SV-9E1-15	15	7/26/2022	NA	ND<4.9
SV-9E1-20	20	7/26/2022	NA	ND<4.9
SV-9E2-1	1	7/26/2022	NA	ND<5.0
SV-9E2-5	5	7/26/2022	NA	ND<4.9
SV-9E2-10	10	7/26/2022	NA	ND<4.9
SV-9E2-15	15	7/26/2022	NA	ND<5.0
SV-9E2-20	20	7/26/2022	NA	ND<4.9
SV-9F-1	1	7/26/2022	NA	ND<4.9
SV-9F-5	5	7/26/2022	NA	ND<4.9
SV-9F-10	10	7/26/2022	NA	ND<4.9
SV-9F-15	15	7/26/2022	NA	ND<4.9
SV-9F-20	20	7/26/2022	NA	ND<4.9
SV-9G-1	1	7/26/2022	NA	ND<4.9
SV-9G-5	5	7/26/2022	NA	ND<4.9
SV-9G-15	15	7/26/2022	NA	ND<4.9
SV-9G-16	16	7/26/2022	NA	ND<4.9
SV-9G-20	20	7/26/2022	NA	ND<4.9

Table 1B
Summary of Detections in Soil -Total Petroleum Hydrocarbons
12352 East Whittier Boulevard, Whittier, California

Sample ID	Depth (ft bgs)	Date Collected	USEPA Test Method 8015B Results in milligrams per kilogram (mg/Kg)	
			TPH as Gasoline (C4-C12)	TPH as Diesel (C13-C22)
Soil to Groundwater Screening Levels			100	100
SV-9H-1	1	7/26/2022	NA	ND<4.9
SV-9H-5	5	7/26/2022	NA	ND<4.9
SV-9H-10	10	7/26/2022	NA	ND<4.9
SV-9H-15	15	7/26/2022	NA	ND<4.9
SV-9H-20	20	7/26/2022	NA	ND<4.9
SV-9I-1	1	7/26/2022	NA	ND<4.9
SV-9I-5	5	7/26/2022	NA	ND<4.9
SV-9I-10	10	7/26/2022	NA	ND<4.9
SV-9I-15	15	7/26/2022	NA	ND<4.9
SV-9I-20	20	7/26/2022	NA	ND<4.9
SV-12-1	1	1/27/2021	ND<0.084	11
SV-12-5	5	1/27/2021	ND<0.093	ND<5.0
SV-12-10	10	1/27/2021	ND<0.086	ND<5.0
SV-13-1	1	1/27/2021	ND<0.085	ND<5.0
SV-13-5	5	1/27/2021	ND<0.085	ND<5.0
SV-13-10	10	1/27/2021	ND<0.088	ND<5.1
SV-14-1	1	1/28/2021	ND<0.082	ND<5.0
SV-14-5	5	1/28/2021	ND<0.082	ND<4.9
SV-14-10	10	1/28/2021	ND<0.094	ND<5.0
SV-16-1	1	1/28/2021	ND<0.092	ND<4.9
SV-16-5	5	1/28/2021	ND<0.11	ND<5.0
SV-16-10	10	1/28/2021	ND<0.11	ND<5.0
SV-17-1	1	1/28/2021	ND<0.087	ND<5.0
SV-17-5	5	1/28/2021	ND<0.088	ND<5.0
SV-17-10	10	1/28/2021	ND<0.087	ND<5.0
SV-18-1	1	1/28/2021	ND<0.092	ND<5.0
SV-18-5	5	1/28/2021	ND<0.093	43
SV-18-10	10	1/28/2021	ND<0.093	ND<5.0

Notes:

1. Calculated values shown to match the carbon chain fractions associated with the Soil to Groundwater screening values presented in Table 2 of the Regional Board Guidance for Petroleum Impacted Sites (1996).

Detections shown in **BOLD**

USEPA = United States Environmental Protection Agency

bgs = Below ground surface

NA = Not analyzed

ND< = Not detected at or above the associated reporting limit

 Detection exceeds the Soil to Groundwater screening values.

Table 1C
Summary of Detections in Soil - Volatile Organic Compounds
12352 East Whittier Boulevard, Whittier, California

Sample ID	Depth	Date Collected	USEPA Test Method 8260B Results in micrograms per kilogram (µg/kg)						
			1,1-Dichloroethene	Acetone	Benzene	Ethanol	Tetrachloroethene	Toluene	Trichloroethene
DTSC Human Health Screening Levels			350,000	--	1,400	--	2,700	5,300,000	6,100
USEPA Human Health Screening Levels			1,000,000	1,100,000,000	5,100	--	100,000	47,000,000	6,000
USEPA Soil to Groundwater RSLs			2.5	--	2.6	--	2.3	690	1.8
SB-1-1	1	7/28/2022	ND<0.88	ND<18	ND<0.88	ND<220	ND<0.88	ND<0.88	ND<1.8
SB-1-5	5	7/28/2022	ND<1.1	ND<22	ND<1.1	ND<280	ND<1.1	ND<1.1	ND<2.2
SB-1-10	10	7/28/2022	ND<0.90	ND<18	ND<0.90	ND<220	ND<0.90	ND<0.90	ND<1.8
SB-2-1	1	7/28/2022	ND<1.3	ND<25	ND<1.3	ND<310	ND<1.3	ND<1.3	ND<2.5
SB-2-5	5	7/28/2022	ND<1.3	33	ND<1.3	ND<330	ND<1.3	ND<1.3	ND<2.6
SB-2-10	10	7/28/2022	ND<0.87	19	ND<0.87	ND<220	ND<0.87	ND<0.87	ND<1.7
SB-3-1	1	7/28/2022	ND<0.96	ND<19	ND<0.96	ND<240	ND<0.96	ND<0.96	ND<1.9
SB-3-5	5	7/28/2022	ND<0.90	ND<18	ND<0.90	ND<220	ND<0.90	ND<0.90	ND<1.8
SB-3-10	10	7/28/2022	ND<0.89	27	ND<0.89	ND<220	ND<0.89	ND<0.89	ND<1.8
SB-4-1	1	7/28/2022	ND<1.1	87	ND<1.1	ND<280	1.2	ND<1.1	ND<2.3
SB-4-5	5	7/28/2022	ND<0.82	ND<16	ND<0.82	ND<200	1.3	ND<0.82	ND<1.6
SB-4-10	10	7/28/2022	ND<0.79	ND<16	ND<0.79	ND<200	ND<0.79	ND<0.79	ND<1.6
SB-5-1	1	07/28/22	ND<0.76	ND<15	ND<0.76	ND<190 *1	ND<0.76	ND<0.76	ND<1.5
SB-5-5	5	07/28/22	ND<1.2	31	ND<1.2	ND<310 *1	ND<1.2	ND<1.2	ND<2.5
SB-5-10	10	07/28/22	ND<0.79	38	ND<0.79	290 *1	ND<0.79	ND<0.79	ND<1.6
SB-6-1	1	7/28/2022	ND<0.94	42	ND<0.94	ND<240	ND<0.94	ND<0.94	ND<1.9
SB-6-5	5	7/28/2022	ND<0.92	ND<18	ND<0.92	ND<230	ND<0.92	ND<0.92	ND<1.8
SB-6-10	10	7/28/2022	ND<0.82	25	ND<0.82	ND<200	ND<0.82	ND<0.82	ND<1.6
SB-8-1	1	7/28/2022	ND<0.93	23	ND<0.93	ND<230	ND<0.93	ND<0.93	ND<1.9
SB-8-5	5	7/28/2022	ND<1.4	35	ND<1.4	ND<360	ND<1.4	ND<1.4	ND<2.9
SB-8-10	10	7/28/2022	ND<2.0	49	ND<2.0	ND<500	ND<2.0	ND<2.0	ND<4.0
SB-8-15	15	7/28/2022	ND<1.1	ND<21	ND<1.1	ND<260	ND<1.1	ND<1.1	ND<2.1
SV-02-1	1	01/28/21	ND<0.81	ND<16	0.83	ND<200	ND<0.81	ND<0.81	ND<0.81
SV-02-5	5	01/28/21	ND<0.89	ND<18	ND<0.89	ND<220	ND<0.89	ND<0.89	ND<1.8
SV-02-10	10	01/28/21	ND<0.81	56	ND<0.81	ND<200	ND<0.81	ND<0.81	ND<1.6
SV-03-1	1	01/28/21	ND<52	ND<1000	ND<52	ND<13000	ND<52	ND<52	ND<100
SV-03-5	5	01/28/21	ND<0.84	46	0.88	210	ND<0.84	ND<0.84	ND<1.7
SV-03-10	10	01/28/21	ND<0.81	ND<16	ND<0.81	ND<200	ND<0.81	ND<0.81	ND<1.6
SV-3A-1	1	07/27/22	ND<0.87	36	ND<0.87	ND<220	ND<0.87	ND<0.87	ND<1.7
SV-3A-5	5	07/27/22	ND<0.89	27	ND<0.89	ND<220	ND<0.89	ND<0.89	ND<1.8
SV-3A-10	10	07/27/22	ND<0.95	30	ND<0.95	ND<240	ND<0.95	ND<0.95	ND<1.9
SV-3B-1	1	07/27/22	ND<0.98	49	ND<0.98	ND<250	ND<0.98	ND<0.98	ND<2.0
SV-3B-5	5	07/27/22	ND<0.97	21	ND<0.97	ND<240	ND<0.97	ND<0.97	ND<1.9
SV-3B-10	10	07/27/22	ND<0.96	20	ND<0.96	ND<240	ND<0.96	ND<0.96	ND<1.9
SV-9A-1	1	03/12/21	1.5	ND<16	ND<0.82	ND<200	39	ND<0.82	3.2

Table 1C
Summary of Detections in Soil -Volatile Organic Compounds
12352 East Whittier Boulevard, Whittier, California

Sample ID	Depth	Date Collected	USEPA Test Method 8260B Results in micrograms per kilogram (µg/kg)						
			1,1-Dichloroethene	Acetone	Benzene	Ethanol	Tetrachloroethene	Toluene	Trichloroethene
DTSC Human Health Screening Levels			350,000	--	1,400	--	2,700	5,300,000	6,100
USEPA Human Health Screening Levels			1,000,000	1,100,000,000	5,100	--	100,000	47,000,000	6,000
USEPA Soil to Groundwater RSLs			2.5	--	2.6	--	2.3	690	1.8
SV-9A-5	5	03/12/21	ND<0.88	ND<18	ND<0.88	ND<220	14	ND<0.88	ND<1.8
SV-9A-10	10	03/12/21	0.90	ND<17	ND<0.87	ND<220	18	ND<0.87	2.0
SV-9B-1	1	03/12/21	ND<0.84	ND<17	ND<0.84	ND<210	1.7	ND<0.84	ND<1.7
SV-9B-5	5	03/12/21	ND<0.82	ND<16	0.82	ND<200	2.9	ND<0.82	ND<1.6
SV-9B-10	10	03/12/21	ND<0.79	ND<16	1.1	ND<200	2.2	ND<0.79	ND<1.6
SV-9C-1	1	03/12/21	ND<0.89	20	ND<0.89	ND<220	9.5	ND<0.89	ND<1.8
SV-9C-5	5	03/12/21	ND<0.85	ND<17	ND<0.85	ND<210	6.0	ND<0.85	ND<1.7
SV-9C-10	10	03/12/21	ND<0.85	ND<17	1.3	ND<210	7.5	ND<0.85	ND<1.7
SV-9CI-1	1	07/27/22	ND<0.91	22	0.96	ND<230	ND<0.91	ND<0.91	ND<1.8
SV-9CI-5	5	07/27/22	ND<1.7	38	ND<1.7	ND<430 *1	ND<1.7	ND<1.7	ND<3.5
SV-9CI-10	10	07/27/22	ND<0.90	ND<18	1.2	ND<230 *1	1.0	ND<0.90	ND<1.8
SV-9CI-15	15	07/27/22	ND<0.85	ND<17	ND<0.85	ND<210	1.6	ND<0.85	2.3
SV-9CI-20	20	07/27/22	ND<0.84	ND<17	ND<0.84	ND<210 *1	1.1	ND<0.84	1.8
SV-9D-1	1	03/12/21	ND<0.77	ND<15	ND<0.77	ND<190	15	ND<0.77	ND<1.5
SV-9D-5	5	03/12/21	ND<0.87	ND<17	ND<0.87	ND<220	8.3	ND<0.87	ND<1.7
SV-9D-10	10	03/12/21	ND<0.83	ND<17	1.0	ND<210	13	ND<0.83	ND<1.7
SV-9E-1	1	03/12/21	ND<0.79	ND<16	ND<0.79	ND<200	9.5	ND<0.79	ND<1.6
SV-9E-5	5	03/12/21	ND<0.80	ND<16	1.0	ND<200	3.6	0.84	ND<1.6
SV-9E-10	10	03/12/21	ND<0.85	ND<17	ND<0.85	ND<210	4.2	ND<0.85	ND<1.7
SV-9E1-1	1	07/26/22	ND<0.89	50	ND<0.89	ND<220	ND<0.89	ND<0.89	ND<1.8
SV-9E1-5	5	07/26/22	ND<1.0	ND<21	ND<1.0	ND<260 *1	ND<1.0	ND<1.0	ND<2.1
SV-9E1-10	10	07/26/22	ND<1.3	46	ND<1.3	ND<340 *1	ND<1.3	ND<1.3	ND<2.7
SV-9E1-15	15	07/26/22	ND<0.81	18	1.0	ND<200	ND<0.81	ND<0.81	ND<1.6
SV-9E1-20	20	07/26/22	ND<0.72	24	1.6	ND<180	ND<0.72	ND<0.72	ND<1.4
SV-9E2-1	1	07/26/22	ND<0.82	36	ND<0.82	ND<200	3.4	ND<0.82	ND<1.6
SV-9E2-5	5	07/26/22	ND<1.1	ND<22	ND<1.1	ND<270 *1	ND<1.1	ND<1.1	ND<2.2
SV-9E2-10	10	07/26/22	ND<0.82	23	ND<0.82	ND<200	ND<0.82	ND<0.82	ND<1.6
SV-9E2-15	15	07/26/22	ND<0.79	21	ND<0.79	ND<200	0.86	ND<0.79	ND<1.6
SV-9E2-20	20	07/26/22	ND<0.91	35	1.5	ND<230	1.3	ND<0.91	ND<1.8
SV-9F-1	1	07/26/22	ND<0.86	19	ND<0.86	ND<220 *1	ND<0.86	ND<0.86	ND<1.7
SV-9F-5	5	07/26/22	ND<1.2	48	1.2	ND<310	ND<1.2	ND<1.2	ND<2.5
SV-9F-10	10	07/26/22	ND<1.2	41	2.4	ND<300	2.1	ND<1.2	ND<2.4
SV-9F-15	15	07/26/22	ND<1.0	ND<20	1.3	ND<260 *1	1.7	ND<1.0	ND<2.0
SV-9F-20	20	07/26/22	ND<0.83	24	ND<0.83	ND<210 *1	0.90	ND<0.83	ND<1.7
SV-9G-1	1	07/26/22	ND<1.1	43	ND<1.1	ND<280	10	ND<1.1	ND<2.3

Table 1C
Summary of Detections in Soil - Volatile Organic Compounds
12352 East Whittier Boulevard, Whittier, California

Sample ID	Depth	Date Collected	USEPA Test Method 8260B Results in micrograms per kilogram (µg/kg)						
			1,1-Dichloroethene	Acetone	Benzene	Ethanol	Tetrachloroethene	Toluene	Trichloroethene
DTSC Human Health Screening Levels			350,000	--	1,400	--	2,700	5,300,000	6,100
USEPA Human Health Screening Levels			1,000,000	1,100,000,000	5,100	--	100,000	47,000,000	6,000
USEPA Soil to Groundwater RSLs			2.5	--	2.6	--	2.3	690	1.8
SV-9G-5	5	07/26/22	ND<0.76	20	ND<0.76	ND<190	3.2	ND<0.76	ND<1.5
SV-9G-15	15	07/26/22	ND<1.0	ND<20	1.0	ND<250 *1	6.2	ND<1.0	ND<2.0
SV-9G-16	16	07/26/22	ND<0.89	27	ND<0.89	ND<220	4.4	ND<0.89	ND<1.8
SV-9G-20	20	07/26/22	ND<0.98	31	1.1	ND<250	10	ND<0.98	ND<2.0
SV-9H-1	1	07/26/22	ND<0.99	23	ND<0.99	ND<250	ND<0.99	ND<0.99	ND<2.0
SV-9H-5	5	07/26/22	ND<1.3	61	ND<1.3	ND<320	ND<1.3	ND<1.3	ND<2.6
SV-9H-10	10	07/26/22	ND<0.83	20	1.4	ND<210	0.85	ND<0.83	ND<1.7
SV-9H-15	15	07/26/22	ND<0.77	21	ND<0.77	ND<190	0.82	ND<0.77	ND<1.5
SV-9H-20	20	07/26/22	ND<0.82	ND<16	ND<0.82	ND<200 *1	ND<0.82	ND<0.82	ND<1.6
SV-9I-1	1	07/26/22	ND<0.92	ND<18	ND<0.92	ND<230 *1	2.6	ND<0.92	ND<1.8
SV-9I-5	5	07/26/22	ND<1.1	36	ND<1.1	ND<280	ND<1.1	ND<1.1	ND<2.3
SV-9I-10	10	07/26/22	ND<0.77	ND<15	ND<0.77	ND<190	9.6	ND<0.77	ND<1.5
SV-9I-15	15	07/26/22	ND<0.89	22	ND<0.89	ND<220 *1	10	ND<0.89	ND<1.8
SV-9I-20	20	07/26/22	ND<0.75	19	ND<0.75	ND<190	12	ND<0.75	ND<1.5
SV-12-1	1	01/27/21	ND<0.83	ND<17	ND<0.83	ND<210	ND<0.83	ND<0.83	ND<1.7
SV-12-5	5	01/27/21	ND<0.84	ND<17	ND<0.84	ND<210	1.3	ND<0.84	ND<1.7
SV-12-10	10	01/27/21	ND<0.84	ND<17	1.1	ND<210	1.1	ND<0.84	ND<1.7
SV-13-1	1	01/27/21	ND<0.83	24	ND<0.83	ND<210	ND<0.83	ND<0.83	ND<1.7
SV-13-5	5	01/27/21	ND<0.88	ND<18	ND<0.88	ND<220	ND<0.88	ND<0.88	ND<1.8
SV-13-10	10	01/27/21	ND<0.83	ND<17	ND<0.83	ND<210	ND<0.83	ND<0.83	ND<1.7
SV-14-1	1	01/28/21	ND<0.81	ND<16 *1	1.0	ND<200	ND<0.81	ND<0.81	ND<1.6
SV-14-5	5	01/28/21	ND<0.89	ND<18 *1	ND<0.89	ND<220	1.1	ND<0.89	ND<1.8
SV-14-10	10	01/28/21	ND<0.95	ND<19 *1	1.0	ND<240	1.2	ND<0.95	ND<1.9
SV-16-1	1	01/28/21	ND<1.1	ND<16	ND<1.1	ND<290	ND<1.1	ND<1.1	ND<2.3
SV-16-5	5	01/28/21	ND<1.1	ND<23	1.3	ND<280	ND<1.1	1.1	ND<2.2
SV-16-10	10	01/28/21	ND<1.1	23	ND<1.1	ND<280	ND<1.1	ND<1.1	ND<2.2
SV-17-1	1	01/28/21	ND<0.90	ND<18 *1	1.1	ND<220	ND<0.90	0.93	ND<1.8
SV-17-5	5	01/28/21	ND<0.89	ND<18 *1	ND<0.89	ND<220	ND<0.89	ND<0.89	ND<1.8
SV-17-10	10	01/28/21	ND<0.82	ND<16 *1	0.83	ND<210	ND<0.82	ND<0.82	ND<1.6

Table 1C
Summary of Detections in Soil -Volatile Organic Compounds
12352 East Whittier Boulevard, Whittier, California

Sample ID	Depth	Date Collected	USEPA Test Method 8260B Results in micrograms per kilogram (µg/kg)						
			1,1-Dichloroethene	Acetone	Benzene	Ethanol	Tetrachloroethene	Toluene	Trichloroethene
DTSC Human Health Screening Levels			350,000	--	1,400	--	2,700	5,300,000	6,100
USEPA Human Health Screening Levels			1,000,000	1,100,000,000	5,100	--	100,000	47,000,000	6,000
USEPA Soil to Groundwater RSLs			2.5	--	2.6	--	2.3	690	1.8
SV-18-1	1	01/28/21	ND<0.92	20	1.0	ND<230	ND<0.92	ND<0.92	ND<1.8
SV-18-5	5	01/28/21	ND<0.83	ND<17	ND<0.83	ND<210	ND<0.83	ND<0.83	ND<1.7
SV-18-10	10	01/28/21	ND<0.87	ND<17 *1	ND<0.87	ND<220	ND<0.87	ND<0.87	ND<1.7

Notes:

1. Only analytes with detections are shown. All other results are provided in the laboratory reports in Appendix C.
2. Human Health screening levels are from the California Department of Toxic Substances (DTSC) Human Health Risk Assessment (HHRA) Note 3 (2020 Update) for Commercial Industrial/Soil.
3. United States Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) used for Industrial Soil human health screening levels (November 2022 Update).
4. Soil to Groundwater screening levels are from the USEPA RSLs, November 2022 Update, for Maximum Contaminant Level (MCL) based soil screening.

Detections shown in **BOLD**

bgs = Below ground surface

ND< = Not detected at or above the associated reporting limit

*1 = Laboratory Control Sample (LCS)and/or Laboratory Control Sample Duplicate (LCSD) Relative Percent Difference (RPD) exceeds control limits

Table 2
Summary of Detections in Soil Vapor
12352 E Whittier Blvd.
Whittier, California

Sample ID	Depth (ft bgs)	Date Collected	United States Environmental Protection Agency (USEPA) Test Method 8260B																						
			Results in micrograms per liter (µg/L)																						
			Tetrachloroethane	Trichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Difluoroethane	1,2,4-Trimethylbenzene	1,2,5-Trimethylbenzene	Freon-113	2-Branonone	4-Ethyltoluene	Acetone	Benzene	Carbon tetrachloride	Chloroform	Dichlorodifluoromethane	Ethylbenzene	Isopropanol	Methylene Chloride	tert-Butyl alcohol	Toluene	m,p-Xylene	o-Xylene	Xylenes, Total
2019 ESLs (Residential)			0.015	0.016	0.058	2.4	-	-	-	-	170	-	1,100	0.0032	0.016	0.0041	-	0.037	-	0.034	-	10	3.5	3.5	3.5
2019 ESLs (Commercial/Industrial)			0.067	0.1	0.26	10	-	-	-	-	730	-	4,500	0.014	0.068	0.018	-	0.16	-	0.41	-	44	15	15	15
SV-1-5	5	1/31/2021	ND<0.034	ND<0.027	ND<0.020	ND<0.020	ND<0.14	ND<0.024	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.025	ND<0.022	ND<0.12	0.017	ND<0.015	0.037	ND<0.022	ND<0.022	ND<0.022
SV-2-5	5	1/31/2021	ND<0.034	ND<0.027	ND<0.020	ND<0.020	ND<0.14	ND<0.025	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.025	ND<0.022	ND<0.12	ND<0.017	ND<0.015	0.042	ND<0.022	ND<0.022	ND<0.022
SV-3-5	5	1/31/2021	0.040	ND<0.027	ND<0.020	ND<0.020	ND<0.14	ND<0.024	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.025	ND<0.022	ND<0.12	0.018	ND<0.015	0.050	ND<0.022	ND<0.022	ND<0.022
SV-4-5	5	1/31/2021	0.048	ND<0.027	ND<0.020	ND<0.020	ND<0.14	ND<0.025	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.025	ND<0.022	ND<0.12	ND<0.017	ND<0.015	0.042	ND<0.022	ND<0.022	ND<0.022
SV-6-5	5	1/31/2021	ND<0.039	ND<0.031	ND<0.023	ND<0.023	ND<0.15	ND<0.028	ND<0.028	0.049	NA	ND<0.028	NA	ND<0.018	ND<0.036	ND<0.028	ND<0.028	ND<0.025	ND<0.14	ND<0.020	ND<0.017	0.12	ND<0.025	ND<0.025	ND<0.025
SV-7-5	5	1/31/2021	ND<0.034	ND<0.027	ND<0.020	ND<0.020	ND<0.14	ND<0.025	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.025	ND<0.022	ND<0.12	ND<0.017	ND<0.015	0.043	ND<0.022	ND<0.022	ND<0.022
SV-8-5	5	1/31/2021	ND<0.034	ND<0.027	ND<0.020	ND<0.020	ND<0.14	ND<0.024	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.025	ND<0.022	ND<0.12	0.026	ND<0.015	0.076	ND<0.022	ND<0.022	ND<0.022
SV-8-5 (DUP-1)	5	1/31/2021	ND<0.16	ND<0.13	ND<0.095	ND<0.093	ND<0.63	ND<0.12	ND<0.12	ND<0.18	NA	ND<0.12	NA	ND<0.075	ND<0.15	ND<0.11	ND<0.18	ND<0.10	ND<0.56	ND<0.082	ND<0.071	ND<0.089	ND<0.10	ND<0.10	ND<0.10
SV-9-5	5	1/31/2021	45 H	3.6 H	0.036	7.4 H	ND<0.14	ND<0.025	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	0.066	ND<0.038	ND<0.022	ND<0.12	ND<0.12	0.038	ND<0.017	0.035	ND<0.022	ND<0.022	ND<0.022
SV-9A-5	5	3/12/2021	32	5.5	0.023	14	ND<0.0054	0.0088	0.0025	ND<0.011	0.027	0.0030	0.080 *1	0.0160	0.0036	0.063	0.004	0.0032	0.028	ND<0.017	ND<0.0061	0.012	0.0098	0.0048	0.015
SV-9A-15	15	3/12/2021	41	7.5	0.046	19	ND<0.011	ND<0.015	ND<0.0049	ND<0.023	0.029	ND<0.0049	0.13 *1	0.028	0.0066	0.090	ND<0.0049	ND<0.0043	0.042	ND<0.035	ND<0.012	0.017	ND<0.017	0.0054	ND<0.022
SV-9B-5	5	3/12/2021	2.9	0.38	ND<0.040	3.2	ND<0.11	ND<0.15	ND<0.049	ND<0.23	ND<0.088	ND<0.049	ND<0.095	ND<0.032	ND<0.063	ND<0.049	ND<0.049	ND<0.043	ND<0.25	ND<0.35	ND<0.12	ND<0.038	ND<0.17	ND<0.043	ND<0.22
SV-9B-15	15	3/12/2021	2.2	0.34	ND<0.040	4.1	ND<0.11	ND<0.15	ND<0.049	ND<0.23	ND<0.088	ND<0.049	ND<0.095	ND<0.032	ND<0.063	ND<0.049	ND<0.049	ND<0.043	ND<0.25	ND<0.35	ND<0.12	ND<0.038	ND<0.17	ND<0.043	ND<0.22
SV-9C-5	5	3/12/2021	1.8	2.1	ND<0.040	7.7	ND<0.11	ND<0.15	ND<0.049	ND<0.23	ND<0.088	ND<0.049	ND<0.095 *1	ND<0.032	ND<0.063	ND<0.049	ND<0.049	ND<0.043	ND<0.25	ND<0.35	ND<0.12	ND<0.038	ND<0.17	ND<0.043	ND<0.22
SV-9C-15	15	3/12/2021	1.7	0.34	0.0039	3.8	ND<0.0054	ND<0.0074	ND<0.0025	ND<0.011	0.024	ND<0.0025	0.089	0.0073	0.0071	0.014	0.0027	ND<0.0022	0.022	0.019	ND<0.0061	0.0093	ND<0.0087	0.0028	ND<0.011
SV-9D-5	5	3/12/2021	12	1.9	0.015	3.2	0.0079	ND<0.0074	ND<0.0025	ND<0.011	0.014	ND<0.0025	0.045 *1	0.0082	ND<0.0031	0.033	0.0029	0.0029	0.019	ND<0.017	0.026	0.020	0.0095	0.0044	0.014
SV-9D-15	15	3/12/2021	4.5	1.2	ND<0.040	3.4	ND<0.11	ND<0.15	ND<0.049	ND<0.23	ND<0.088	ND<0.049	ND<0.095 *1	ND<0.032	ND<0.063	ND<0.049	ND<0.049	ND<0.043	ND<0.25	ND<0.35	ND<0.12	ND<0.038	ND<0.17	ND<0.043	ND<0.22
SV-9E-5	5	3/12/2021	5.9	0.55	ND<0.040	1.6	ND<0.11	ND<0.15	ND<0.049	ND<0.23	ND<0.088	ND<0.049	ND<0.095	ND<0.032	ND<0.063	ND<0.049	ND<0.049	ND<0.043	ND<0.25	ND<0.35	ND<0.12	ND<0.038	ND<0.17	ND<0.043	ND<0.22
SV-9E-5 (SV-9E-20)	5	3/12/2021	6.5	0.59	ND<0.040	1.6	ND<0.11	ND<0.15	ND<0.049	ND<0.23	ND<0.088	ND<0.049	ND<0.095	ND<0.032	ND<0.063	ND<0.049	ND<0.049	ND<0.043	ND<0.25	ND<0.35	ND<0.12	ND<0.038	ND<0.17	ND<0.043	ND<0.22
SV-9E-15	15	3/12/2021	1.3	0.12	ND<0.040	0.9	ND<0.11	ND<0.15	ND<0.049	ND<0.23	ND<0.088	ND<0.049	ND<0.095	ND<0.032	ND<0.063	ND<0.049	ND<0.049	ND<0.043	ND<0.25	ND<0.35	ND<0.12	ND<0.038	ND<0.17	ND<0.043	ND<0.22
SV-10-5	5	1/31/2021	0.30	0.033	ND<0.020	ND<0.020	ND<0.14	ND<0.025	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.025	ND<0.022	ND<0.12	0.020	ND<0.015	0.031	0.038	ND<0.022	0.038
SV-11-5	5	1/31/2021	0.67	ND<0.027	ND<0.020	ND<0.020	ND<0.14	ND<0.025	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.025	ND<0.022	ND<0.12	0.019	ND<0.015	0.031	ND<0.022	ND<0.022	ND<0.022
SV-12-5	5	1/31/2021	1.2 H	0.16	ND<0.020	0.24	ND<0.14	ND<0.025	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.025	ND<0.022	ND<0.12	ND<0.017	ND<0.015	0.032	ND<0.022	ND<0.022	ND<0.022
SV-13-5	5	1/31/2021	2.1 H	0.053	ND<0.020	0.13	ND<0.14	ND<0.025	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.025	ND<0.022	ND<0.12	0.024	ND<0.015	0.031	ND<0.022	ND<0.022	ND<0.022
SV-14-5	5	1/31/2021	0.58	ND<0.027	ND<0.020	ND<0.020	ND<0.14	ND<0.024	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.028	ND<0.022	ND<0.12	0.032	ND<0.015	0.051	ND<0.022	ND<0.022	ND<0.022
SV-15-5	5	1/31/2021	0.050	ND<0.027	ND<0.020	ND<0.020	ND<0.14	ND<0.025	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.025	ND<0.022	ND<0.12	0.018	ND<0.015	ND<0.019	ND<0.022	ND<0.022	ND<0.022
SV-16-5	5	1/31/2021	0.28	ND<0.027	ND<0.020	ND<0.020	ND<0.14	ND<0.025	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.025	ND<0.022	ND<0.12	0.017	ND<0.015	0.093	ND<0.022	ND<0.022	ND<0.022
SV-17-5	5	1/31/2021	ND<0.034	ND<0.027	ND<0.020	ND<0.020	ND<0.14	ND<0.025	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.025	ND<0.022	ND<0.12	0.018	ND<0.015	0.093	ND<0.022	ND<0.022	ND<0.022
SV-18-5	5	1/31/2021	0.089	ND<0.027	ND<0.020	ND<0.020	ND<0.14	ND<0.025	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.028	ND<0.022	ND<0.12	0.020	ND<0.015	0.070	ND<0.022	ND<0.022	ND<0.022
SV-19-5	5	1/31/2021	ND<0.034	ND<0.027	ND<0.020	ND<0.020	ND<0.14	ND<0.025	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.025	ND<0.022	ND<0.12	0.021	ND<0.015	0.055	ND<0.022	ND<0.022	ND<0.022
SV-20-5	5	1/31/2021	ND<0.034	ND<0.027	ND<0.020	ND<0.020	ND<0.14	ND<0.025	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.025	ND<0.022	ND<0.12	0.027	ND<0.015	0.068	ND<0.022	ND<0.022	ND<0.022
SV-21-5	5	1/31/2021	0.18	ND<0.027	ND<0.020	ND<0.020	ND<0.14	ND<0.025	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.025	ND<0.022	ND<0.12	0.019	ND<0.015	0.023	ND<0.022	ND<0.022	ND<0.022
SV-21-5 (DUP-2)	5	1/31/2021	0.094	ND<0.027	ND<0.020	ND<0.020	ND<0.14	ND<0.025	ND<0.025	ND<0.038	NA	ND<0.025	NA	ND<0.016	ND<0.031	ND<0.024	ND<0.025	ND<0.022	ND<0.12	0.026	ND<0.015	ND<0.019	ND<0.022	ND<0.022	ND<0.022

Notes:
1. Sublab/Soil Gas Vapor Intrusion Human Health Risk Levels for residential and commercial/industrial areas from San Francisco Regional Water Quality Control Board (SFRWQCB) Summary of Vapor Environmental Screening Levels (ESLs), January 2019

Only analytes with detections are shown. See laboratory report for a complete list of analytical results.

Detections shown in **Bold**

Orange = Above 2019 SFRWQCB ESLs (Commercial/Industrial)

ND<0.0

FIGURES

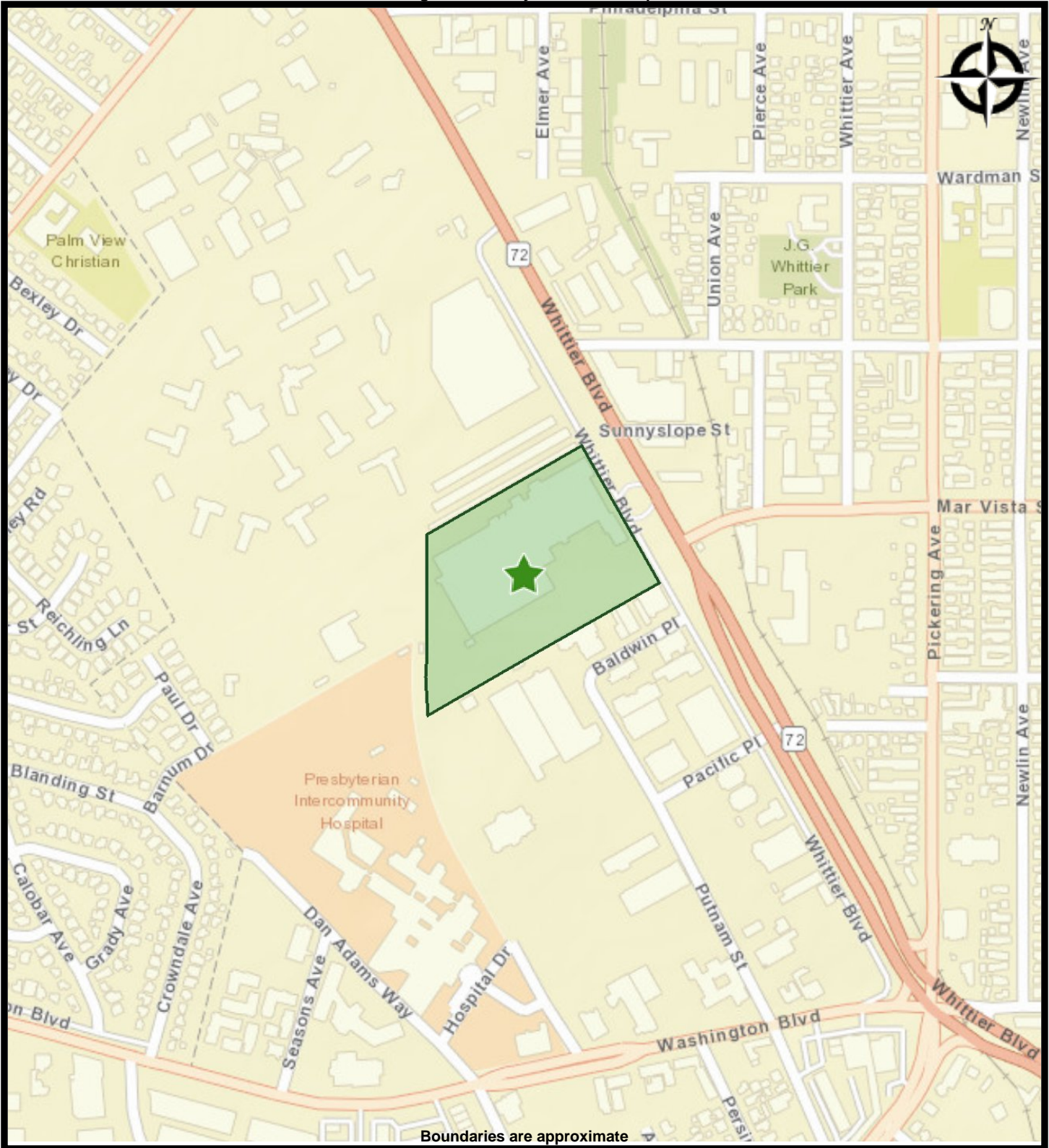


Figure 1

12352 E Whittier Blvd
Whittier, California 90602

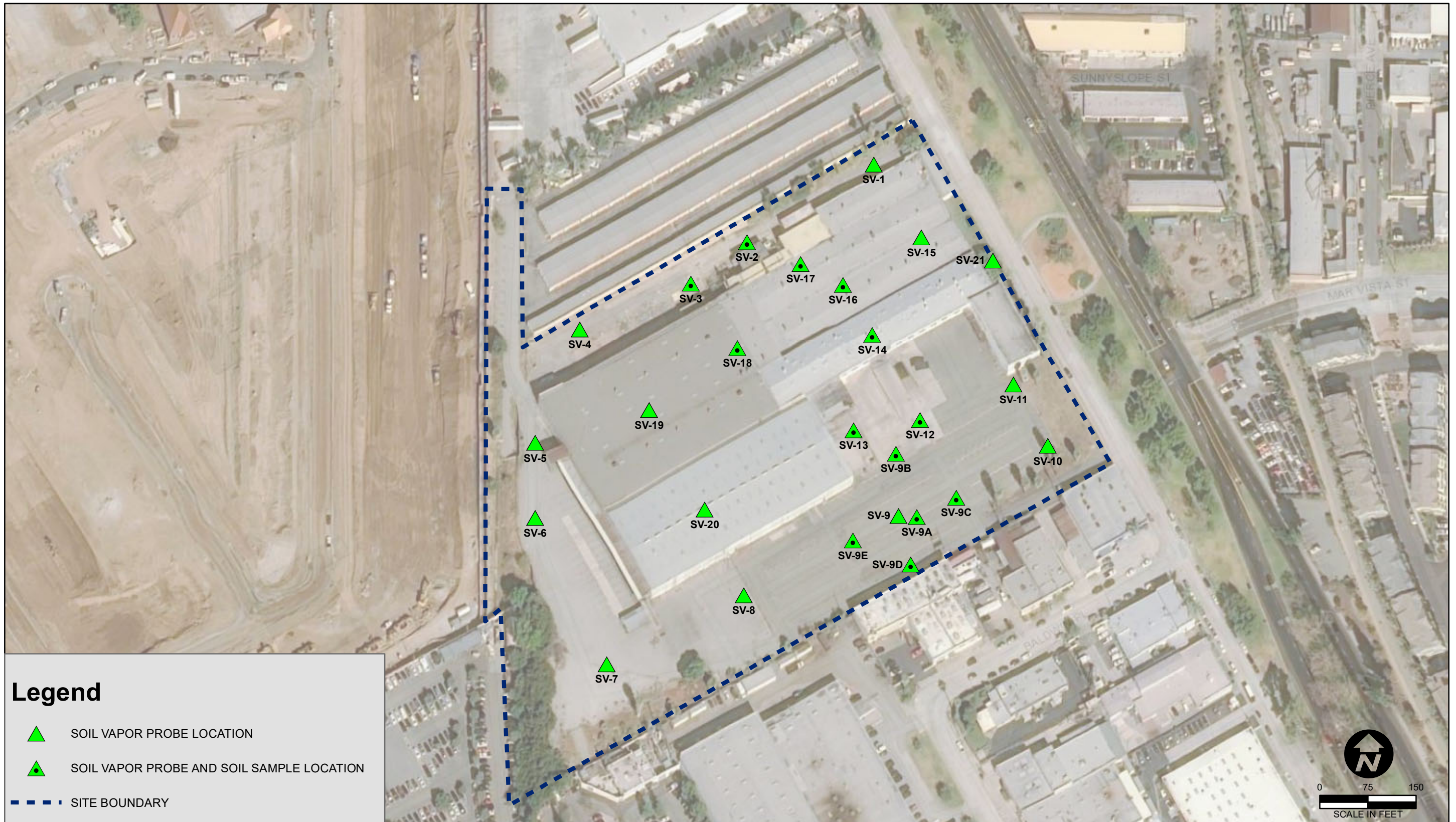







Figure 2

12352 E Whittier Blvd
Whittier, California 90602





Legend

-  SOIL VAPOR PROBE LOCATION
-  SOIL VAPOR PROBE AND SOIL SAMPLE LOCATION
-  SITE BOUNDARY



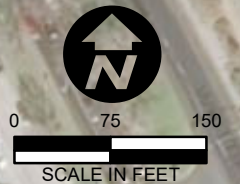
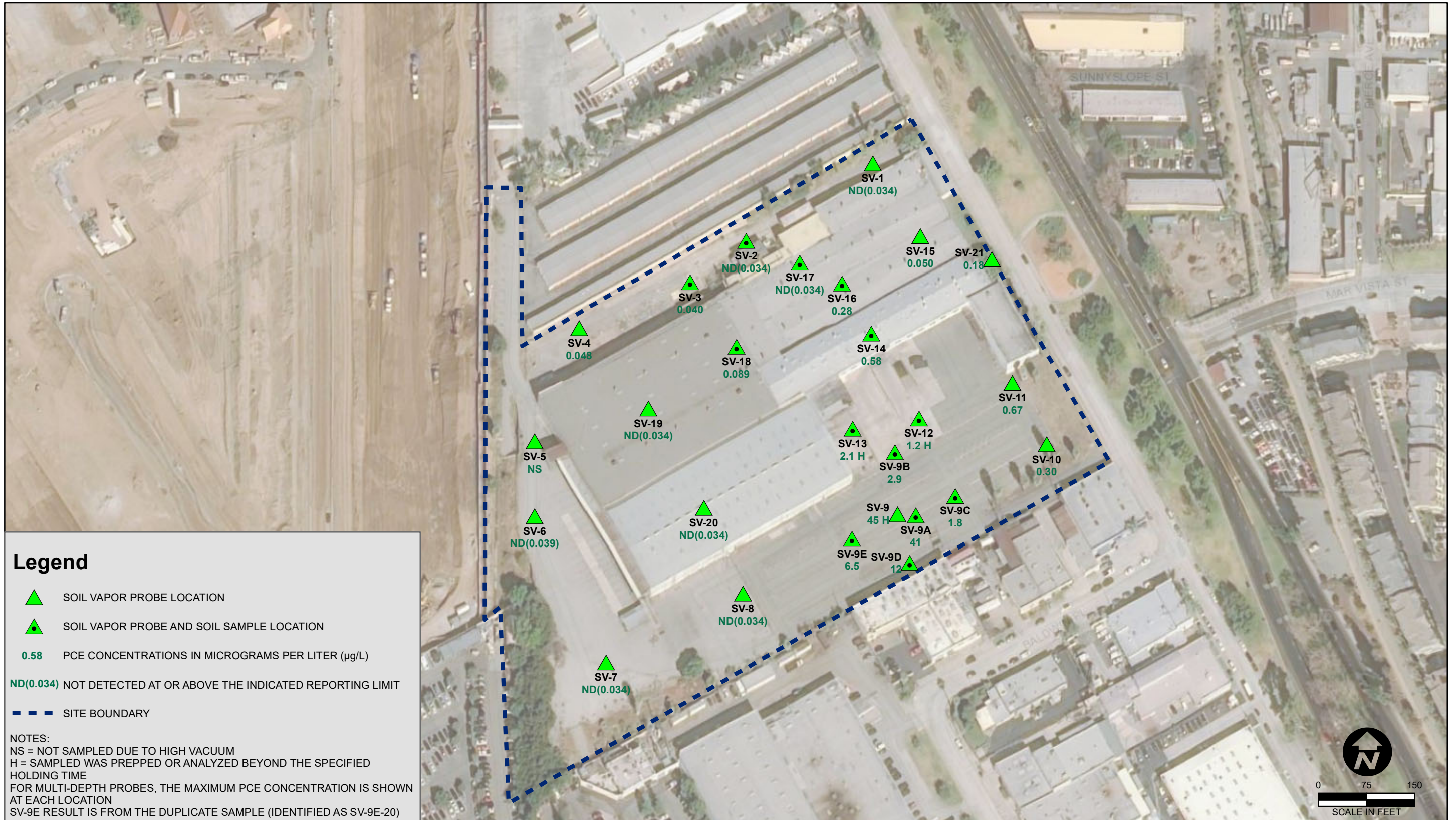
FILE NAME:
SOIL VAPOR LOCATIONS.MXD

DRAWN BY: KG
 CHECKED BY: RWB
 DATE: FEBRUARY 2021

SOIL AND SOIL VAPOR PROBE LOCATIONS

12352 E Whittier Blvd.
Whittier, California

FIGURE:
3



	DRAWN BY: KG	TETRACHLOROETHENE (PCE) - SOIL VAPOR RESULTS	FIGURE: 4
	CHECKED BY: RWB		
FILE NAME: PLATE 1- PCE IN SOIL VAPOR.MXD	DATE: FEBRUARY 2021		

APPENDIX A



Zero Accidents Safety - First and Always

HEALTH AND SAFETY PLAN
Former Leggett and Platt Facility
Structure Demolition
12352 Whittier Boulevard
Whittier, California 90602

June 1, 2021

Prepared for:

Western RealCo

500 Newport Center Drive, Suite #630
Newport Beach, CA 92660

Prepared by:

HMC INC.

211 Avenida Cordoba, Suite 200 San Clemente, California 92672

HMC Inc is dedicated to providing a safe and healthful environment for employees, contractors and subcontractors, and protecting our clients' employees and assets, as well as the public. The guidelines set forth in this Health and Safety Plan summarize the minimum mandatory standards, requirements, and expectations to ensure the protection and safety of all HMC Inc team members while conducting environmental consulting activities at the Prairie Property Project Site. Each contractor or subcontractor must assume direct responsibility for their own employees' health and safety. Please note: **You are the person most responsible for safety in the workplace. You are encouraged to fully accept this responsibility and to be continuously aware of the conditions and situations that may compromise safety. No job is so urgent that it cannot be conducted safely.**

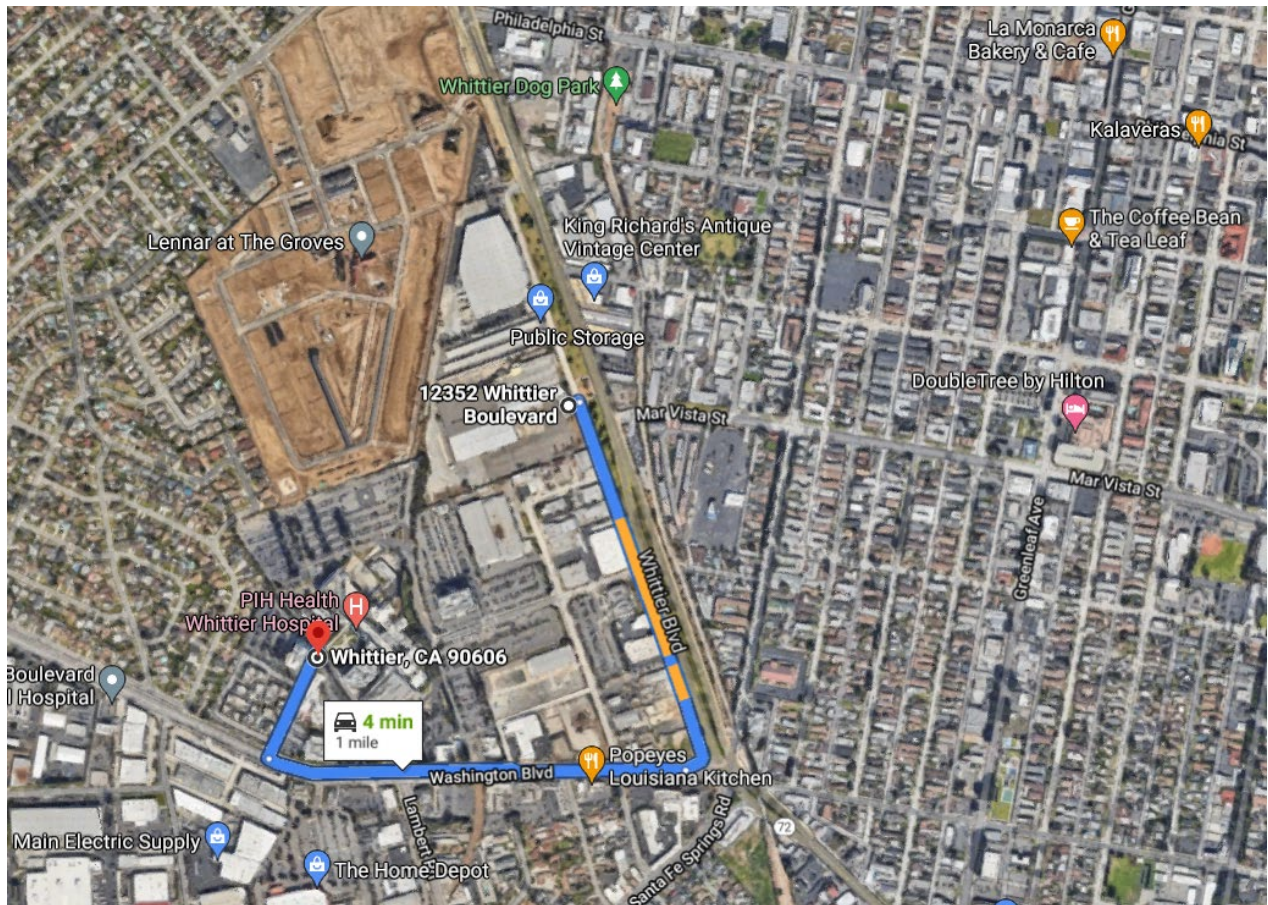
ORANGE COUNTY OFFICE CORPORATE OFFICE

211 W. Avenida Cordoba, Suite 200 San Clemente, CA 92672 tel 949/361/3902 fax 949/361/3697

Emergency Contact Information

Title	Name	Phone & PagerNumber
<i>Emergency – Call 911</i>		
Ambulance		911
Police		911
Fire		911
Local Hospital	PIH Health Whittier Hospital 12401 Washington Blvd, Whittier, CA 90602	+15626980811
Emergency Coordinators	Pat Stich (HMC)	(949) 705-8055 cell
Alternate Emergency Coordinator		
<i>Project/Business</i>		
Project Manager / Designated Health and Safety Officer (DHSO)	Mark Cousineau (HMC)	(949) 361-3902
Field Supervisors / Site Health and Safety Officer (SHSO)	Pat Stich (HMC)	(949) 366-0277
Client Contact	Mark Cousineau (HMC)	(949) 361-3902

ROUTE TO HOSPITAL: \



Head southeast on Whittier Blvd toward Baldwin Pl
0.4 mi

Turn right onto Washington Blvd
Pass by Carl's Jr (on the left in 0.4 mi)
0.4 mi

Turn right onto Seasons Ave
0.1 mi

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	IMPLEMENTATION AND MODIFICATION OF THE HASP	2
1.2	PROJECT SPECIFIC TASKS COVERED BY THIS HEALTH AND SAFETY PLAN	2
2.0	ORGANIZATION, QUALIFICATIONS, AND RESPONSIBILITIES	3
2.1	ALL PERSONNEL	3
2.2	PROJECT MANAGER	3
2.3	FIELD SUPERVISOR	3
2.4	SITE HEALTH AND SAFETY OFFICER (SHSO)	4
2.5	DESIGNATED HEALTH AND SAFETY OFFICER (DHSO)	5
2.6	SUBCONTRACTORS, VISITORS AND OTHER ON-SITE PERSONNEL.....	5
3.0	HAZARD ASSESSMENT	6
3.1	PHYSICAL HAZARD ASSESSMENT	6
3.2	CHEMICAL HAZARD ASSESSMENT	6
4.0	PERSONAL PROTECTIVE EQUIPMENT	9
5.0	EXPOSURE MONITORING	11
5.1	AIR MONITORING AND SAMPLING PROGRAM	11
5.2	EXPLOSION HAZARDS.....	14
5.3	NOISE 14	
5.4	HEAT STRESS MONITORING	15
6.0	MEDICAL MONITORING, SANITATION AND HYGIENE PRACTICES.....	18
6.1	MEDICAL SURVEILLANCE PROGRAM	18
6.2	SANITATION AND PERSONAL HYGIENE	18
6.3	DRINKING WATER	18
7.0	TRAINING	19
8.0	CONTINGENCY PLAN AND EMERGENCY EVACUATION PLAN	20
9.0	DECONTAMINATION PROCEDURES.....	21
9.1	EQUIPMENT DECONTAMINATION AND DISPOSAL OF CONTAMINATED MATERIALS.....	21
10.0	SITE AND TRAFFIC CONTROL PLAN.....	22
10.1	TRAFFIC CONTROL.....	22

TABLES

Table 1	Physical Hazard Assessment
Table 2A	Summary of Contaminants Present in Soil
Table 2B	Summary of Contaminants Present in Soil Vapor
Table 3	Anticipated Personnel Protective Equipment Requirements
Table 4	Air Monitoring Action Levels and PPE Upgrade Requirements
Table 5	Air Monitoring Program Minimum Requirements
Table 6	Noise Monitoring Action Levels
Table 7	Heat Stress Monitoring Frequency
Table 8	Heat Exhaustion Versus Heat Stroke Symptoms

APPENDICES

Appendix A	General Code of Safe Practices
------------	--------------------------------

1.0 INTRODUCTION

This Health and Safety Plan document (HASP) has been developed to support assessment and remediation activities to be conducted by Hazard Management Consulting Inc (HMC Inc) and sub-contractor personnel at the Former Campbell's Soup Facility Project Site.

This HASP establishes the responsibilities, requirements and procedures for the protection of personnel while conducting on-site work. Working conditions may necessitate modification of this plan. Except in emergencies, no deviations from this plan may be implemented without the prior notification and approval by the Project Manager with consultation from the Designated Health and Safety Officer (DHSO). The specific requirements of this HASP apply to HMC employees, contractors and subcontractors involved in implementing the described scope of work. It is not applicable to other contractors and/or site tasks unless specifically authorized in writing for such use by a designated HMC representative.

The health and safety protocols outlined in this plan are designed to ensure compliance with Federal, State and local regulations governing worker safety on hazardous waste sites. Incorporated in this HASP by either direct or indirect reference are all appropriate and applicable sections of the *HMC Safety and Health Program Manual*. In the case where an apparent conflict exists between what is presented in the HASP and the above referenced document the most conservative of the documents will initially be followed. The apparent conflict will be brought to the attention of the Project Manager and with consultation from the DHSO, and as appropriate the Client and/or Site Contact, a written resolution presented in the form of an addendum to this HASP prepared and presented to all field staff.

HMC's intent is to provide a safe and healthful work environment for all employees and subcontractors. This HASP has been developed to fulfill the following objectives:

- Perform a hazard assessment to identify and assess health and safety hazards associated with project tasks and activities.
- Specify and establish procedures and practices to provide a safe and healthful workplace for employees, subcontractors, and site visitors.
- Detail personal protective equipment needed to protect employees and subcontractors conducting field task activities.
- Instruct employees, subcontractors and site visitors on procedures to minimize the potential for injury or exposure to a hazardous condition.
- Train employees and subcontractors on the proper action to be taken if a hazardous condition cannot be avoided by engineering controls.
- Provide guidelines for emergency response for known hazards and hazardous situations.
- Establish procedures to minimize or prevent adverse impact to employees, subcontractors, site visitors and the surrounding environment and community in the event of a release of a toxic chemical or substance.

1.1 IMPLEMENTATION AND MODIFICATION OF THE HASP

This HASP and other referenced documents are to be read and understood by all on-site field personnel. Site personnel are required to complete and sign a Personnel Acknowledge Form indicating acknowledgment, agreement, acceptance, and understanding of the contents of all appropriate health and safety documentation including but not limited to this HASP and HASP addendums.

All persons entering the site will receive a safety and health indoctrination/overview of the site that discusses site health and safety issues. Site workers and long-term visitors are required to read this HASP and sign and date the log as having read and understood the provisions of the HASP. Before any field activities begin, weekly, to discuss HASP addendums, and/or as conditions warrant health and safety tailgate meetings will be held with on-site field personnel to discuss safety procedures and to familiarize personnel with the potential hazards of the site. The Site Health and Safety Officer (SHSO) will document all tailgate and/or other health and safety meetings in a logbook. The SHSO will conduct routine (e.g., daily) assessments of the work area and on-site field personnel to ensure that the documented health and safety procedures are implemented and adequate. If any operation, practice, and/or equipment are not adequate, based on the SHSOs assessment, the SHSO will document the item in a logbook and notify the DSHO. Operations will cease or the faulty equipment will be removed and replaced, as appropriate.

Unacceptable practices and/or faulty equipment will be remedied immediately, and the HASP will be modified to correct any deficiencies in the effectiveness of the Plan.

As, and if, required this HASP may be modified. The HASP will be modified in writing by preparing an addendum. Each addendum will be reviewed and approved by the Project Manager with consultation from the DSHO.

1.2 PROJECT SPECIFIC TASKS COVERED BY THIS HEALTH AND SAFETY PLAN

This HASP covers the following environmental consulting activities to be conducted by HMC at the SBL associated areas at the PRAIRIE Facility.

Tasks to be conducted include

- Conduct Tailgate Safety Meeting
- Mark and Clear Borehole Locations
- Drill, Sample, and Abandon Soil Borings
- Operate and Maintain Remediation Equipment
- Soil Loading Operations and Truck Traffic
- Heavy Equipment Operations

2.0 ORGANIZATION, QUALIFICATIONS, AND RESPONSIBILITIES

2.1 ALL PERSONNEL

All field personnel are responsible for continuous adherence to health and safety procedures during the performance of any and all assigned work. In no case may work be performed in a manner that conflicts with the intent of this plan or the inherent health and safety cautions outlined in this HASP and other referenced documentation. **Please note that you are the person most responsible for safety in the workplace.** You are encouraged to fully accept this responsibility and to be continuously aware of the conditions and situations that may compromise safety. **No job is so urgent that it cannot be conducted safely.**

Any person who observes unsafe acts or conditions or other safety problems must immediately report observations/concerns to supervisory personnel (e.g., SHSO, DHSO, and Project Manager). If there is any dispute with regard to health and safety, the on-site HMC staff will attempt to resolve the issue and if the issue cannot be resolved, they will consult off-site technical staff and supervisors for assistance. The specific task or operation in question must be discontinued until the issue is resolved. No person may work in a manner that conflicts with the safety and environmental precautions expressed in this HASP. HMC employees are subject to progressive discipline and may be terminated for blatant or continued violations.

2.2 PROJECT MANAGER

The Project Manager is responsible for ensuring that the necessary personnel, equipment, and other applicable resources are available for this project and that the reporting, scheduling, and budgetary obligations for this project are met.

The Project Manager is ultimately responsible for ensuring that all project activities are completed in accordance with requirements set forth in this HASP and other referenced documentation. The Project Manager must perform at least one on-site safety review during the project. The Project Manager is responsible for ensuring that all incidents are reported and thoroughly investigated. The Project Manager must approve in writing any addenda or modifications to the HASP.

2.3 FIELD SUPERVISOR

The Field Supervisor is responsible for field implementation of the HASP in connection with the SHSO (there is some overlap of the health and safety responsibilities of the Field Supervisor and SHSO. In the case where these responsibilities are assigned to more than one individual is up to these individuals to coordinate their respective activities to ensure all their responsibilities are fully carried out and executed). This includes communicating site requirements to all on-site project personnel. The Field Supervisor is responsible for informing the SHSO and the Project Manager of any changes in the plan work elements, so that those changes may be properly addressed from a health and safety perspective. The Field Supervisor, as the on-site representative of HMC, is responsible for maintaining contact with the Client and/or Site Contact, and the Project Manager. Along with the SHSO the Field Supervisor is responsible for coordinating and enforcing on-site health and safety activities for all HMC team members (inclusive of contractors, subcontractors, and visitors) on site at all times. The Field Supervisor reports to the Project Manager and works directly with the Client and Site Contacts.

Other responsibilities of the Field Supervisor include:

- Conducting tailgate safety meetings and maintaining attendance logs and records.
- Enforcing the requirements of the HASP. This includes performing daily safety inspections of the work site.
- Stopping work, as required, in order to ensure personal safety and protection of property, or

where life or property-threatening noncompliance with safety requirements is found.

- Determining and posting routes to capable medical facilities, emergency telephone numbers, and arranging emergency transportation to medical facilities.
- Notifying local public emergency officers of the nature of the site operations and posting of their telephone numbers in an appropriate location.
- Observing on-site project personnel for signs of chemical or physical trauma.
- Ensuring that all HMC field personnel have been given the proper medical clearance, ensuring that all personnel have met appropriate training requirements and have the appropriate training documentation on site, and monitoring all team members to ensure compliance with the HASP.

2.4 SITE HEALTH AND SAFETY OFFICER (SHSO)

The SHSO will have the responsibility and authority to implement and enforce the approved HASP, this includes modifying/halting work, and removal of personnel from the work area if conditions change and effect on-site/off-site health and safety matters. The SHSO serves as the main contact for any on-site emergency situation. The SHSO conducts daily inspections to determine if operations are being conducted in accordance with the HASP and Cal-OSHA/OSHA regulations. The SHSO is assigned to the Project Manager for the duration of the project but reports directly to the DHSO with operational issues. An open dialogue is kept between the SHSO and supervisory personnel of the project to ensure that safety issues are quickly recognized, addressed, and corrective action taken (as required).

The SHSO has the ultimate responsibility to stop any operation that threatens the health and safety of the team, client employees and assets, the surrounding community, or that causes significant adverse impact to the environment. Other responsibilities include, but are not limited to:

- Implementing all on-site health and safety procedures and operations.
- Observing work crew members for symptoms of on-site exposure or stress.
- Upgrading or downgrading, in coordination with the DHSO and the Project Manager, the level of personal protection based upon site observations and monitoring results.
- Informing the Project Manager of significant changes in the site environment that require equipment or procedure changes.
- Arranging and ensuring the availability of first aid and on-site emergency medical care, as necessary.
- Determining evacuation routes, establishing, and posting local emergency telephone numbers, and arranging emergency transportation.
- Ensuring that all site personnel and visitors have received the proper training and medical clearance before entering the site.
- Establishing exclusion, contamination reduction, and support zones.
- Ensuring that the respiratory protection program is implemented.
- Ensuring that decontamination procedures meet established criteria.
- Ensuring that there is a qualified first-aid person on site.

2.5 DESIGNATED HEALTH AND SAFETY OFFICER (DHSO)

The DHSO is responsible for the development, implementation, and oversight of the Health and Safety Program and the HASP. The specific duties of the DHSO include:

- Providing technical input into the design and implementation of the site HASP.
- Advising on potential for worker exposure to project hazards along with appropriate methods and/or controls to eliminate site hazards.
- Working with, supporting, and providing consultation to, the Project Manager on health and safety issues to ensure a safe workplace is maintained throughout field activities and to ensure continuous compliance with the HASP and other referenced documents.

2.6 SUBCONTRACTORS, VISITORS AND OTHER ON-SITE PERSONNEL

Subcontractors are responsible for the health and safety of their employees and for complying with the standards established in this HASP and other referenced documentation. Subcontractors will report to the Field Supervisor. All subcontractors, visitors, and other on-site personnel must check in with the Field Supervisor prior to gaining access to the work areas, in order to verify that all appropriate entry requirements are met.

3.0 HAZARD ASSESSMENT

3.1 PHYSICAL HAZARD ASSESSMENT

The typical physical hazards that have been identified for the scope of work to be conducted under this HASP are listed below in Table 1.

**Table 1
Physical Hazard Assessment**

Tasks	Hazard	Tasks	Hazard	Tasks	Hazards
All	Lifting	All	Fire, explosion	All	Noise
All	Electrical	All	Vehicular operation	All	Heat exhaustion
All	Material handling	All	Uneven terrain, slips, trips, falls	All	Underground and overhead utilities
All	Hand and power tools	All	Equipment and personnel decontamination	NA	Hot work, welding, cutting
All	Heavy equipment, excavation, drilling			All	Poisonous plants and animals

NA = Not Anticipated but may occur.

3.2 CHEMICAL HAZARD ASSESSMENT

Based on discussions with site personnel chemicals of potential concern (COPC), which might be encountered during field activities include total petroleum hydrocarbons (TPH); various volatile organic compounds (VOCs, e.g., benzene, toluene, xylenes, ethylbenzene). Table 2 lists the maximum chemical concentration detected in soil samples obtained from the facility.

Table 2A
Summary of Contaminants Present In Soil

Chemical	Location	Maximum Concentration
TPH as diesel (C13-C22)	SV-03-05	130
Acetone	SV-02-10	56
Benzene	SV-16-5	1.3
1,1-Dichloroethene	SV-9A-1	1.5
Ethanol	SV-03-5	210
Tetrachloroethene (PCE)	SV-9a-1	39
Toluene	SV-16-5	1.1
Trichloroethene (TCE)	SV-9a-1	3.2

mg/kg = milligrams per kilogram; ug/kg = micrograms per kilogram

Table 2B
Summary of Contaminants Present in Soil Vapor

Chemical	Location	Maximum Concentration (** above 2019 SFRWQCB ESLs)
Tetrachloroethene	SV-9-5	45**
Trichloroethene	SV-9A-15	7.5**
1,1-Dichloroethane	SV-9A-15	0.046
1,1-Dichloroethene	SV-9A-15	19**
1,1-Difluoroethane	SV-9D-5	0.0079
1,2,4-Trimethylbenzene	SV-9A-5	0.0088
1,3,5-Trimethylbenzene	SV-9A-5	0.0025
Freon-113	SV-6-5	0.0049
2-Butanone	SV-9A-5	0.029
4-Ethyltoluene	SV-9A-5	0.0030
Acetone	SV-9C-15	0.089
Benzene	SV-9A-15	0.028**
Carbon tetrachloride	SV-9C-15	0.0071
Chloroform	SV-9A-15	0.090**
Dichlorodifluoromethane	SV-9A-5	0.004
Ethylbenzene	SV-9A-5	0.0032
Isopropanol	SV-9A-15	0.042
Methylene Chloride	SV-20-5	0.027
tert-Butyl alcohol	SV-9-5	0.038
Toluene	SV-8-5	0.076
m,p-Xylene	SV-10-5	0.038
o-Xylene	SV-9A-5	0.0048
Xylenes, Total	SV-10-5	0.038

ug/L = micrograms per liter

4.0 PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment (PPE) will be required during the fieldwork. PPE levels will be based primarily on background hazard assessment data, work task requirements, and real-time monitoring data obtained by monitoring instrumentation (discussed in Section 6.0 of this HASP). The initial levels of protection anticipated for each task, based on existing site characterization data, are presented on Table 3.

**Table 3
Anticipated Personal Protective Equipment Requirements**

Task	PPE	Upgrade	Special Requirements for Upgrade
Task 1 Tailgate Meeting	Level D	Level C (OV +P100)	Notify SHSO orPM
Task 2 Mark and Clear Soil Boring Locations	Level D	Level C (OV+P100)	Notify SHSO orPM
Task 3 Drill, sample, and abandon soil vapor probes, soil borings and hand auger borings	Level D	Level C (OV +P100) 1/2 mask minimum	Notify SHSO orPM
Task 4 Operate and Maintain Remediation Equipment	Level D	Level C (OV +P100) 1/2 mask minimum	Notify SHSO orPM
Task 5 Excavation Operation for Vault and Septic System	Level D	Level C (OV +P100) 1/2 mask minimum	Notify SHSO orPM

OV+P100 = Organic vapor plus P100 pre-filter respirator cartridge

Only PPE that meets the following American National Standards Institute (ANSI) standards are to be worn.

- Eye protection - ANSI Z87.1
- Head protection - ANSI Z89.1
- Foot protection - ANSI Z41

Respiratory protective equipment must be NIOSH approved for the anticipated chemicals and hazards.

Level D PPE shall consist of:

- Hardhat
- Safety glasses (with side shields optional)
- Steel-toed work boots
- Traffic safety vest if traffic is present
- Long pants and shirt
- Work or protective gloves

Modified Level D in addition to the above may include:

- Level D PPE plus
- Nitrile gloves - N-dex for sampling (or another approved equivalent)
- Nitrile or rubber gloves - for chemical activities.
- Steel-toed, rubber boots - for activities inside the exclusion/regulated and decontamination areas.

5.0 EXPOSURE MONITORING

Exposure Monitoring will be conducted to assess hazard control measures that must be implemented. Assessing control measures involves characterization of the chemical, physical, and other safety hazards at the site using a PID in the breathing space. Hazard assessment is an on-going process. This section addresses the procedures for monitoring both chemical and physical hazards specific to the work tasks to be conducted.

5.1 AIR- MONITORING AND SAMPLING PROGRAM

An air-monitoring program will be implemented for monitoring petroleum hydrocarbons and volatile organic vapors in air. Data obtained from air monitoring will be utilized to assess proper levels of PPE in accordance with the action levels presented in Table 4 thereby ensuring worker safety and preventing off- site releases of hazardous substances in concentrations that threaten human health. The action levels are for air within the breathing zone of field personnel. The minimum requirements for the air-monitoring program are summarized on Table 5.

**Table 4
Air Monitoring Action Levels and PPE Requirements**

COC	Action Levels(ppm)	PPE / Action
TPH	<50 50 to 100 >100 ppm >200 ppm	Level D Level D – Notify SHSO or PM Level C – Notify SHSO or PM Level C – Notify SHSO or PM, Stop work, Leave area
Aromatic Volatile Organic Compounds	<50 50 to 100 >100 ppm >200 ppm	Level D Level D – Notify SHSO or PM Level C – Notify SHSO or PM Level C – Notify SHSO or PM, Stop work, Leave area
Benzene	<1 0.25 to 1 >1 >10 to 50 >50	Level D Level D – Notify SHSO or PM Level C - half mask respirator Level C - Full face respirator Notify SHSO or PM, Stop work, Leave area
Halogenated Volatile Organic Compounds	<25 25 to 50 >50	Level D Level D – Notify SHSO or PM Level C – Notify SHSO or PM, Stop work, Leave area
Carbonyl Volatile Organic Compounds	<25 25 to 50 >50	Level D Level D – Notify SHSO or PM Level C – Notify SHSO or PM, Stop work, Leave area
Dust (metals)	<10 mg/m ³	Dust (metals)

**Table 5
Air Monitoring Program Minimum Requirements**

Chemical of Concern	Instrument	Frequency	Special Equipment \Method
TPH and Aromatic Hydrocarbons and Volatile Organic Compounds	PID (or other equivalent direct reading instrument [DRI])	During activities that can disturb impacted soil, groundwater and/or surface water, and FHP. 1. At the beginning of the task. 2. When the task changes. 3. Indications of chemical exposure or release. 4. Every 30 minutes unless readings are less than 10% of action level. 5. Every 60 minutes if concentrations are less than 10% of the action level 6. 1 time per shift if non-detected.	Lamp 10.2ev
Benzene	PID, or Colorimetric Detector Tube	1. Monitor contaminant concentrations in the workers breathing zone with a PID as stated above. 2. A PID reading of one (1.0) unit above background sustained for a period of one (1) minute shall be further characterized using a colorimetric detector tube sensitive to 0.5- ppm benzene. 3. A colorimetric detector tube reading of one (1.0) ppm benzene or greater will be verified by a second measurement, at the end of a ten (10) minute interval. As long as a reading of greater than one (1.0) ppm benzene is detected periodic measurements will be taken. Continuous readings using the PID will be taken during this period. Refer to Section 6.1 of the HASP for more detailed procedures.	Lamp 10.2eV Benzene colorimetric detector tube
Dust	Visual	No visual emissions permitted at boundary of worksite	

A portable photoionization detector (PID) with a 10.2 electron-volt (eV) ultra-violet radiation source will be used as the "front-line" instrument for monitoring petroleum hydrocarbons and volatile organic compounds in air (or other equivalent direct reading instrument [DRI]). The PID will be calibrated to isobutylene or hexane. In using a PID or other DRI an action level will be considered met or exceeded when the instrument reading exceeds the specific action level continuously for one (1) minute. Upon this condition, a second measurement will be taken at the end of a ten (10) minute interval.

Since benzene is considered most toxic compound and the benzene action level is the most conservative it will be used as the driver for assessing exposure and determining appropriate levels of PPE. The action level for benzene combines the occupational exposure standard for benzene listed in 29 CFR Part 1910.1028, and the ACGIH TLV-TWA. The following protocol will be used for monitoring exposure and establishing the appropriate level of protection for these exposures.

1. Monitor contaminant concentrations in the workers breathing zone with a PID (or other DRI) sensitive to aromatic compounds.
2. Level D protection is considered acceptable if instrument readings remain below one (1) unit above background.
3. An instrument reading of one (1.0) unit above background sustained for a period of one (1) minute shall be further characterized by taking a breathing zone air sample using a colorimetric detector tube. The colorimetric detector tube must be sensitive to 0.5-ppm benzene.
4. A colorimetric detector tube indication of one (1.0) ppm benzene or greater shall be verified by a second measurement, using a colorimetric detector tube, at the end of a ten (10) minute interval. As long as a reading of greater than one (1.0) ppm benzene is detected periodic measurements should be taken with the colorimetric detector tube. Continuous readings using the PID will be taken during this period.
5. Level C protection is required as long as colorimetric detector tube readings indicate benzene equal to or greater than one (1) ppm in the workers breathing zone. Alternatively, the work area may be evacuated until readings drop back to acceptable levels for a period of no less than 10 continuous minutes and/or engineering controls are instituted to ensure worker safety.
6. Level C protection with a half face respirator is considered acceptable if the colorimetric detector tube indicates greater than one (1.0) but less than ten (10) ppm benzene.
7. Level C protection with a full-face respirator is considered acceptable if the colorimetric detector tube indicates greater than ten (10) but less fifty (50) ppm benzene.
8. If levels of greater than 50 units above background with the PID or 50 ppm benzene using a colorimetric detector tube are detected work will stop and the work area evacuated. Periodic measurements will be taken and/or engineering controls instituted to ensure worker safety and prevent off-site releases of hazardous substances in concentrations that threaten human health. Work may resume when PID reading and colorimetric tubes indicated that benzene measurements have been reduced below 50 units/ppm.

5.2 EXPLOSION HAZARDS

Explosion hazards exist from the presence of volatile and potentially explosive hydrocarbon vapors in saturated soils and groundwater. Explosion hazards will not be monitored during work activities.

5.3 NOISE

Action levels for noise exposure are provided on Table 6.

Table 6
Noise Monitoring Action Levels

Intensity (dBA)	Action
<85	Work may continue without change.
>85	Hearing protection required.

5.4 HEAT STRESS MONITORING

The stress of working in a hot environment can cause a variety of illnesses including heat exhaustion or heat stroke. Heat stroke can be fatal. Personal protective equipment can significantly increase heat stress. To reduce or prevent heat stress, frequent rest periods and controlled beverage consumption to replace body fluids and electrolytes may be required.

Additionally, quantitative physiological monitoring for heat stress may be conducted. Physiological monitoring for heat stress includes heart rate as a primary indicator. The frequency of monitoring depends on the ambient temperature, the level of protection used on-site, and the type of work being performed. To determine the initial monitoring frequency, after a work period of moderate exertion, use the information provided on Table 7.

**Table 7
Heat Stress Monitoring Frequency**

Adjusted Temperature*	Level D	Level C
90 °F or above	after 45 minutes	after 15 minutes
87.5 to 90 °F	after 60 minutes	after 30 minutes
82.5 to 87.5 °F	after 90 minutes	after 60 minutes
77.5 to 82.5 °F	after 120 minutes	after 90 minutes
72.5 to 77.5 °F	after 150 minutes	after 120 minutes

°F = temperature in degree Fahrenheit.

* Adjusted air temperature equals the observed temp + (13 x % sunshine); air temp measured with bulb shielded from radiant heat, percent sunshine is the time sun is not covered by clouds thick enough to produce a shadow (100% = no cloud cover and a sharp, distinct shadow; 0% = no shadows)

Physiological monitoring of heat stress will be conducted by counting the radial pulse during a 30 second period as early as possible in the rest cycle. If the heart rate exceeds 110 beats per minute, shorten the next work cycle by one third while keeping the rest cycle the same. At the next rest cycle, count the radial pulse during a 30 second period as early as possible in the rest cycle. If the heart rate again exceeds 110 beats per minute, shorten the next work cycle by one third while keeping the rest period the same. In addition, take the oral temperature of the worker.

On-site personnel shall be trained to recognize the symptoms of heat stress and the appropriate action to take upon recognition. Even though physiological monitoring is not always necessary, it is essential that personnel understand the significance of heat stress and its recognition. It is also important that personnel understand the difference between heat exhaustion and heat stroke. Some of the symptoms for heat exhaustion and heat stroke are provided in Table 8.

**Table 8
Heat Exhaustion versus Heat Stroke Symptoms**

Heat Exhaustion	Heat Stroke
Clammy skin Weakness Fatigue Light headiness Fainting Rapid pulse Nausea (vomiting)	Staggering gait Mental confusion Hot skin Temperature rise (yet may feel chilled) Convulsions Unconsciousness Incoherent, delirious

If a worker exhibits the symptoms of heat exhaustion conduct the following:

- Remove the victim to a cool and uncontaminated area. Elevate the victim's feet and allow him/herto rest.
- Remove protective clothing. Loosen tight or constrictive clothing.
- Cool the victim with cold cloths and give "sips" of cool water. Cool the temperature controlareas of the body, forehead, back of neck and wrists

If a worker exhibits the symptoms of heat stroke immediately perform the following steps:

- Remove victim to a cool, uncontaminated area.
- Cool the victims' whole body with water compresses and/or rapid fanning.
- Give water to drink if conscious.
- Transport the victim to a medical facility for further cooling and monitoring of body functions.

HEAT STROKE IS A LIFE-THREATENING MEDICAL EMERGENCY!

6.0 MEDICAL MONITORING, SANITATION AND HYGIENE PRACTICES

6.1 MEDICAL SURVEILLANCE PROGRAM

Based on current data characterizing the site contamination and potential hazards to personnel involved in project activities, a project specific medical surveillance program is not required beyond that which is required under Title 8 CCR 5194 HAZWOPER. Employee exposure to airborne contaminants is not expected to approach the applicable Cal-OSHA action levels or permissible exposure levels under foreseeable work conditions.

Medical evaluations for the wearing of respiratory protection will be given to each worker required to wear a respirator in accordance with Title 8 CCR Section 5144. A certification by a licensed physician of fitness to wear respiratory protection is required for each worker entering the regulated area/exclusion zone if they are required to wear respiratory protection.

6.2 SANITATION AND PERSONAL HYGIENE

Sanitation and personal hygiene facilities are available at the site. Workers are expected and encouraged to wash their face and hands before leaving the site and before smoking, eating, or taking breaks.

6.3 DRINKING WATER

Drinking water will not be provided and is unavailable at the site. Each employee shall bring their own drinking water to the site and keep it inside their vehicle. The water will be kept cool to encourage personnel to drink. If temperatures exceed 75 °F, break periods will be provided to encourage people to drink water and metabolite supplements such as Gatorade.

7.0 TRAINING

All site workers have received the following information:

The SHSO shall ensure that each site worker has a working knowledge of the HASP and other referenced documentation and is responsible for conducting regular Tailgate Safety Meeting(s) (at the beginning of each shift, whenever new personnel arrive at the site, and as site conditions change, as tasks are added, revised, and/or changed, and as addendum to this HASP require). The typical Tailgate Safety Meeting will be brief and address only the most critical safety issues, such as the types of accidents most likely to occur, and areas where improvements need to be made with respect to health and safety. A more in-depth tailgate session will be held at the beginning of each week, whenever new personnel arrive at the site, and when new types of activities are undertaken. The physical hazards of concern will be identified at each meeting.

Potential topics of discussion at these meetings include the following:

- Protective Clothing/Equipment (Task Specific).
- Chemical Hazards (Task Specific).
- Physical Hazards (Task Specific).
- Emergency Procedures.
- Hospital/Ambulance Route.
- Standard Operating Procedures.
- Other safety topics which are relevant to the site

8.0 CONTINGENCY PLAN AND EMERGENCY EVACUATION PLAN

At least one person trained in first aid and CPR will be present on site at all times work is being conducted. First aid and blood borne pathogen supplies shall be available at the site at all times. Personnel shall be informed of the location of such supplies during the tailgate safety meeting. In the event of an emergency, personnel will immediately leave the work area and assemble at a prearranged area.

If a fire occurs, personnel shall assess the size and nature of the fire. If it is safe to do so, it shall be extinguished with a fire extinguisher. If it is not safe to extinguish with a fire extinguisher, the County Fire Authority will be contacted at 911.

In the event of a first aid emergency, if the injured person can self-administer first aid they should be encouraged to do so. If the person cannot self-administer first aid, the on-site qualified first aid person shall administer first aid if it is safe to do so. Personnel shall not endanger themselves to render aid to another person.

A cell phone will be easily accessible at the work areas for emergency notifications.

9.0 DECONTAMINATION PROCEDURES

Establishment of decontamination procedures for personnel and equipment is necessary to control contamination and to protect field personnel.

9.1 EQUIPMENT DECONTAMINATION AND DISPOSAL OF CONTAMINATED MATERIALS

Equipment requiring decontamination may include excavation equipment, hand tools, soil and water sampling devices, and certain protective equipment. Tools and protective equipment shall be decontaminated using a soft bristle brush and a detergent (Alconox or TSP mixed in water) followed by two water rinses.

All materials and equipment used for decontamination must be disposed of properly in onsite 200-gallon totes located behind the former Building 41A location. Disposable clothing, tools, buckets, brushes, and all other equipment that is contaminated will be secured in appropriately Department of Transportation (DOT) specification 55-gallon drums or other containers. Clothing that will be reused, but which is not completely decontaminated on the site, will be secured in plastic bags before being removed from the site.

Contaminated wash water solutions shall be transferred into portable storage tanks, pending disposal. All soil cuttings produced during soil sampling will be centrally located for subsequent characterization and disposal.

Exposure to chemicals can be divided into two categories:

- Injuries from direct contact, such as acid burns or inhalation of toxic chemicals.
- Potential injury due to gross contamination on clothing or equipment.

For inhalation exposure cases, a qualified physician can only perform treatment. If the contaminant is on the skin or the eyes, immediate measures can be taken on-site to counteract the substance's effect. First aid treatment consists of flooding the affected area with copious amounts of water. The SHSO must assure that an adequate supply of running water or a portable emergency eyewash is available on-site.

When protective clothing is grossly contaminated, contaminants can possibly be transferred to treatment personnel and cause an exposure. Unless severe medical problems have occurred simultaneously with personnel contamination, the protective clothing should be carefully removed.

10.0 SITE AND TRAFFIC CONTROL PLAN

10.1 TRAFFIC CONTROL

Vehicular traffic is limited to onsite personnel and authorized contractors working onsite. Traffic control at the site is controlled through locked gates at the entrance/exit. All contractor personnel entering the site are required to have entry permissions.

APPENDIX A
CODE OF SAFE PRACTICES
General Construction Services Code of Safe Practices

1. All persons shall follow these safe practices rules, render every possible aid to safe operations, and report all unsafe conditions or practices to the foreman or superintendent.
2. Foremen shall insist on employees observing and obeying every rule, regulation, and order as is necessary to the safe conduct of the work and shall take such action as is necessary to obtain observance.
3. All employees shall be given frequent accident prevention instructions. Instructions shall be given at least every 10 working days.
4. Anyone known to be under the influence of drugs or intoxication substances which impair the employee's ability to safely perform the assigned duties shall not be allowed on the job while in that condition.
5. Horseplay, scuffling, and other activities which tend to have an adverse influence on the safety or well-being of the employees shall be prohibited.
6. Work shall be well planned and supervised to prevent injuries in the handling of materials and in working together with equipment.
7. No one shall knowingly be permitted or required to work while the employee's ability or alertness is so impaired by fatigue, illness, or other causes that it might unnecessarily expose the employee or others to injury.
8. Employees shall not enter manholes, underground vaults, chambers, tanks, silos, or other similar places that receive little ventilation, unless it has been determined that it is safe to enter.
9. Employees shall be instructed to ensure that all guards and other protective devices are in proper places and adjusted and shall report deficiencies promptly to the foreman or superintendent.
10. Crowding or pushing when boarding or leaving any vehicle or other conveyance shall be prohibited.
11. Workers shall not handle or tamper with any electrical equipment, machinery, or air or water lines in a manner not within the scope of their duties, unless they have received instructions from their foreman.
12. All injuries shall be reported promptly to the foreman or superintendent so that arrangements can be made for medical or first aid treatment.
13. When lifting heavy objects, the large muscles of the leg instead of the smaller muscles of the back shall be used.
14. Inappropriate footwear or shoes with thin or badly worn soles shall not be worn.
15. Materials, tools, or other objects shall not be thrown from buildings or structures until proper precautions are taken to protect others from the falling objects.
16. Employees shall cleanse thoroughly after handling hazardous substances and follow special instructions from authorized sources.
17. Work shall be so arranged that employees are able to face each ladder and use both hands while climbing.
18. Gasoline shall not be used for cleaning purposes.
19. No burning, welding, or other source of ignition shall be applied to any enclosed tank or vessel, even if there are some openings, until it has first been determined that no possibility of explosion exists, and authority for the work is obtained from the foreman or superintendent.
20. Any damage to scaffolds, falsework, or other supporting structures shall be immediately reported to the foreman and repaired before use.
21. All tools and equipment shall be maintained in good condition.

22. Damaged tools or equipment shall be removed from service and tagged **“DEFECTIVE.”**
23. Pipe or Stillson wrenches shall not be used as a substitute for other wrenches.
24. Only appropriate tools shall be used for the job.
25. Wrenches shall not be altered by the addition of handle extensions or “cheaters.”
26. Files shall be equipped with handles and not used to punch or pry.
27. A screwdriver shall not be used as a chisel.
28. Wheelbarrows shall not be pushed with handles in an upright position.
29. Portable electric tools shall not be lifted or lowered by means of the power cord. Ropes shall be used.
30. Electric cords shall not be exposed to damage from vehicles.
31. In locations where the use of a portable power tool is difficult, the tool shall be supported by means of a rope or similar support of adequate strength.
32. Only authorized persons shall operate machinery or equipment.
33. Loose or frayed clothing, or long hair, dangling ties, finger rings, etc. shall not be worn around moving machinery or other sources of entanglement.
34. Machinery shall not be serviced, repaired, or adjusted while in operation, nor shall oiling of moving parts be attempted, except on equipment that is designed or fitted with safeguards to protect the person performing the work.
35. Where appropriate, lock-out procedures shall be used. Refer to HSPP Section 6.7 (Equipment Lockout and Tagout Procedures).
36. Employees shall not work under vehicles supported by jacks or chain hoists, without protective blocking that will prevent injury if jacks or hoists should fail.
37. Air hoses shall not be disconnected at compressors until hose line has been bled.
38. All excavations shall be visually inspected before backfilling, to ensure that it is safe to backfill.
39. Excavating equipment shall not be operated near tops of cuts, banks, and cliffs if employees are working below.
40. Tractors, bulldozers, scrapers, and carryalls shall not be operated where there is possibility of overturning in dangerous areas like edges of deep fills, cut banks, and steep slopes.
41. When loading where there is a probability of dangerous slides or movement of material, the wheels, or treads of loading equipment, other than that riding on rails, should be turned in the direction which will facilitate escape in case of danger, except in a situation where this position of the wheels or treads would cause a greater operational hazard.

APPENDIX B

Project Directory

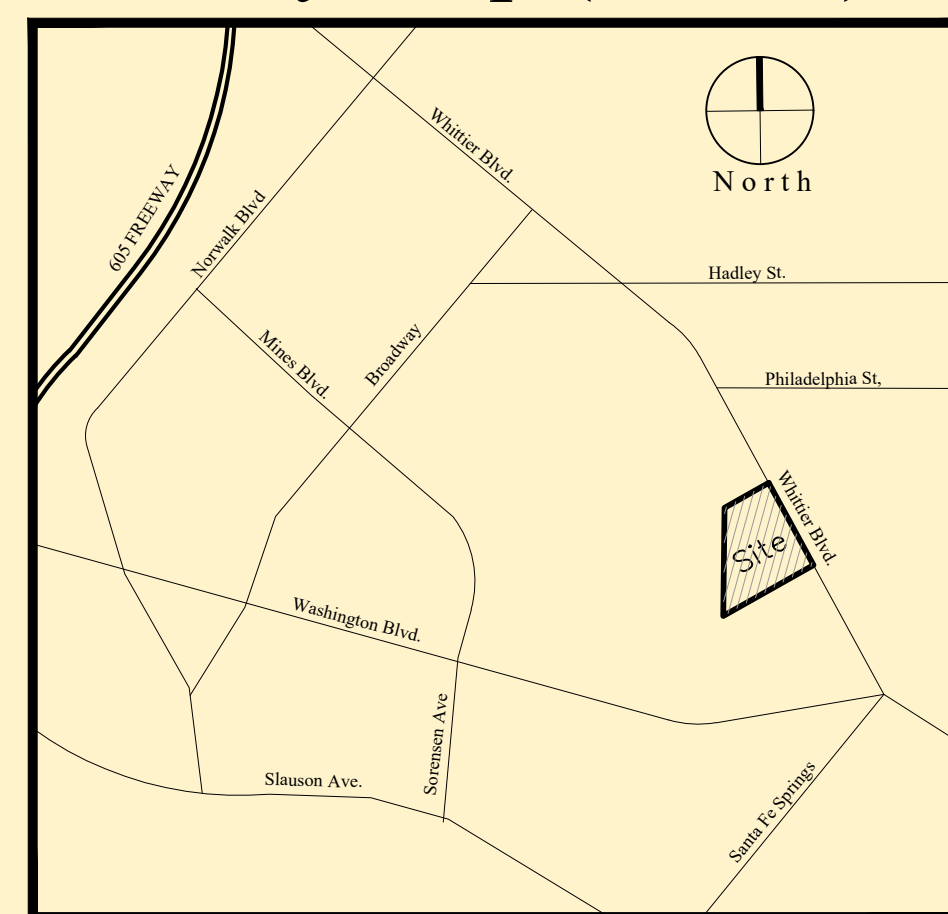
DEVELOPER / APPLICANT:
 WESTERN REALCO, LLC
 500 Newport Center Drive, Suite 630
 Newport Beach, California 92660
 Telephone: 949 720 3788
 Contact: Gary Edwards
 gedwards@westernrealco.com

ARCHITECT:
 BASTIEN AND ASSOCIATES, INC.
 15661 Red Hill Avenue, Suite 150
 Tustin, California 92780
 Telephone: 714 617 8600
 Contact: Mike McAndrew
 mmcandrew@bastienarchitects.com

CIVIL:
 THIENES ENGINEERING
 14349 Firestone Blvd.
 La Mirada, CA 90638
 Telephone: 714 521 4811
 Contact: Brian Thienes
 brian@thieneseng.com

LANDSCAPE:
 EMERALD DESIGN
 305 N. Harbor Blvd., Suite 222
 Fullerton, CA 92832
 Telephone: 714 680 0417
 Contact: Charles Lamb
 charles@emeraldldesign.com

Vicinity Map (N.T.S.)



Legend

- Existing Property Line
- Setback Line
- - - Potential Interior Wall Location
- Fencing
- E.V. Electric Vehicle Charging Station Stall
- █ Solid Dark Hatch Represents Landscaping Area
- █ Diagonal Hatch Represents Painted Striping
- █ Solid Light Hatch Represents On-Site Hardscape
- █ Dark Hatch Represents Enhanced Hardscape
- ⑩ Parking Stall Count Reference

Scope of Work

- Single New Concrete Tilt Industrial Building
- All new Drives shall be Asphalt or Concrete Paving.
- All new Walks shall be concrete with medium Broom Finish
- Public Improvements as directed by City Staff.
- All new Landscaping Per City Requirements

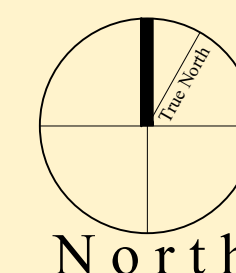
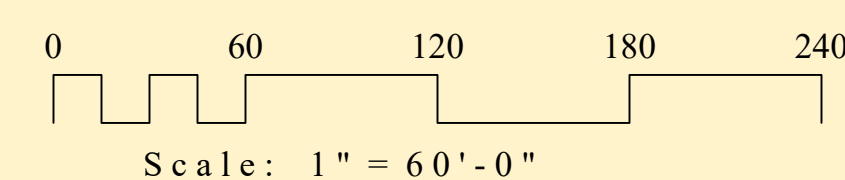
Legal Description

Parcel 2 of Parcel Map no. 60391, in the city of Whittier, county of Los Angeles, state of California, as per map filed in book 326, page 39-43 of parcel maps, in the office of the county recorder of said county.

Parcel Numbers

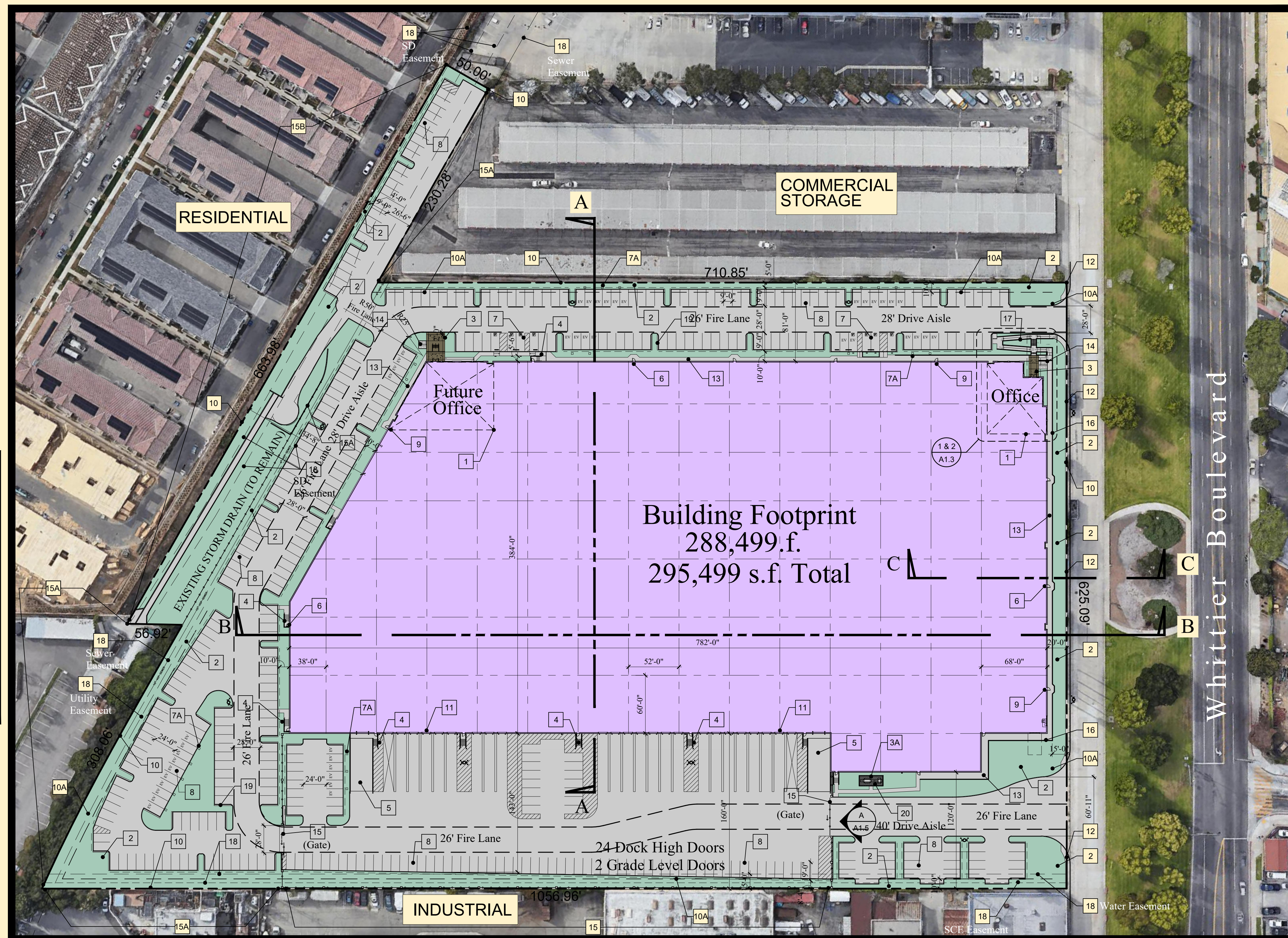
8170-026-011 8170-026-015

CONCEPTUAL SITE PLAN



Planning Information

General Plan Zone: General Plan (GP) - Specific Plan
 Specific Plan: Whittier Blvd. Specific Plan (Workplace District)
 Bldg. Setbacks: 15' On Whittier Blvd. 'East'
 10' On the South property line
 10' On the West property line
 10' On the North property line



Site Plan Summary

Gross Site Area	13.49 Acres	587,672 s.f.
Total Building Footprint		288,499 s.f.
Total Building Area (Including 7,000 s.f. Mezz)		295,499 s.f.
Gross Site Coverage		49.09%
Gross Floor Area Ratio (Including Mezz)		50.28%
Parking Required		417 Stalls
Office	14,000 s.f. / 300	47 Stalls
Manufacturing	136,705 s.f. / 1,500	273 Stalls
Distribution	144,794 s.f. / 1,500	97 Stalls
Parking Provided (1.41 Stalls per 1,000 s.f.)		417 Stalls
Electric Vehicle Charging Station Required (10% of Total Actual Stalls for Project w/201 Stalls or more)		42
Electric Vehicle Charging Station Provided		42
Bike Parking (4 Bikes for first 50,000 sf / 1 Bike for each additional 50,000 sf)		9 Bikes
Landscape Required (10% Min.)		58,767 sf.
Landscape Provided		78,889 sf.

Sheet Index

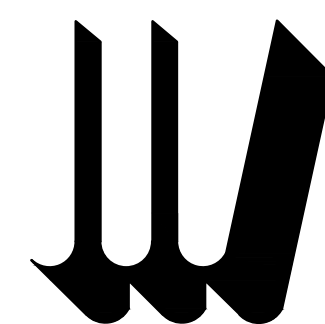
- ARCHITECTURAL**
- A 0.1 SITE PHOTOGRAPHIC SURVEY
 - A 1.0 CONCEPTUAL SITE PLAN A 1.0.1 SITE DETAILS
 - A 1.1 OVERALL FLOOR PLAN
 - A 1.2 OVERALL ROOF PLAN
 - A 1.3 ENLARGED TENANT IMPROVEMENT FLOOR PLAN
 - A 1.4 NORTH and EAST CONCEPTUAL ELEVATIONS
 - A 1.5 SOUTH and WEST CONCEPTUAL ELEVATIONS
 - A 1.6 LIGHTING CUT SHEET & CANOPY SECTION
 - A 1.7 MATERIAL and PAINT COLOR BOARD
 - A 1.8 FIRE PLAN A 1.8.1 OVERALL FIRE PLAN
 - A 1.9 BUILDING SECTIONS
- LANDSCAPE**
- L1 TITLE SHEET AND GENERAL NOTES
 - L2 LANDSCAPE PLAN - AREA 1A
 - L3 LANDSCAPE PLAN - AREA 1B
 - L4 LANDSCAPE PLAN - AREA 2
 - L5 LANDSCAPE PLAN - AREA 3
 - L6 LANDSCAPE IMAGE BOARD
- CIVIL**
- C1 CONCEPTUAL GRADING PLAN
 - C2 CONCEPTUAL GRADING PLAN
 - C3 CONCEPTUAL GRADING PLAN
 - C4 CONCEPTUAL UTILITY PLAN
 - C5 CONCEPTUAL UTILITY PLAN
 - C6 CONCEPTUAL WALL PROFILES

General Notes

1. Site Plan Shall Meet All Engineering and NPDES Requirements.
2. All Lighting Shall Conform with the Municipal Standards
3. All Signage Shall Conform with the Municipal Standards
4. All Hardscape Shown on Plan will be Installed as either Concrete or Asphalt Paving
5. All Parking Spaces are shown as Standard Size Stalls
6. All Mechanical Equipment and Screening Shall Conform with the Municipal Standards
7. All Public Improvements Shall Conform with the Municipal Standards
8. Roof will be able to accommodate the installation of the appropriate number of solar panels.

Key Notes

- 1 Approximate Extent of Office Area - Typ. (Anticipated to be Built with Shell Construction)
- 2 Green Shaded Area Represents Landscaping - Typ. (See Legend)
- 3 Decorative Colored Concrete with Exposed Aggregate at Main Building Entrance. Decorative Concrete Pavers Employee Lunch Area at "3A". See Landscape drawings.
- 4 Concrete Stairs and Painted Metal Railings - Typ
- 5 Ramp Up to Ground Level Service Door - Typ.
- 6 Fire Dept. Access Door at 125'-0" max
- 7 Accessible Parking with Accessible Path to Entry - Typ. Provide Conduit And J-Box For Future Electric Vehicle (EV) Dual Charging Station at "7A"
- 8 Standard Parking Space: 9'-0" x 19'-0" (17'-0" w/ 2' Overhang, where occurs)
- 9 Grade Level Exit Door Connected to Path of Travel
- 10 Property Line - Refer to Civil. Building Setback Line at "10A"
- 11 Vertical Lift, Sectional Door - Painted to Match adjacent Wall - Typ.
- 12 Existing Public Sidewalk - Refer to Civil
- 13 On-Site, Concrete Sidewalk (48" Wide Minimum) Natural Color with Medium Broom Finish - Refer to Civil
- 14 Bike Rack (5 Bikes) by Dero Rack (Hitch style) Color: Green. See A1.0.1 for Details
- 15 8'-0" high Steel Tube Fence w/ 2'-0"x2'-0" Concrete Pilasters at ±40'-0" on center. Existing 6'-0" High Chain link Fence to remain at "15A". Existing CMU wall at "15B". Provide Fire Department Approved Knox Box or Equal at all Gates within Fire Lane.
- 16 Natural Concrete Retaining Wall (Not in Public View) - Refer to Civil
- 17 ADA Compliant Concrete Ramp and Integrated Stair with Painted Metal Handrails for Accessible Path of Travel to Public Way.
- 18 Easement - Refer to Civil
- 19 12" wide concrete "Step-out" - Typ. See sheet A1.3 for typical detail.
- 20 ADA Accessible Table & Seating for Employee Lunch Area, See Detail and Cut Sheet on A1.0.1



WESTERN REALCO

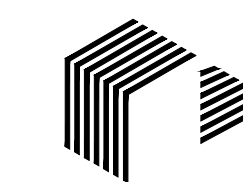
Drawings, specifications and other documents, including those in electronic form, prepared by the Architect and the Architect's consultants are Instruments of Service for use solely with respect to this Project. The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service and shall retain all common law, statutory and other reserved rights, including copyrights.

WHITTIER BOULEVARD BUSINESS CENTER

Whittier, California

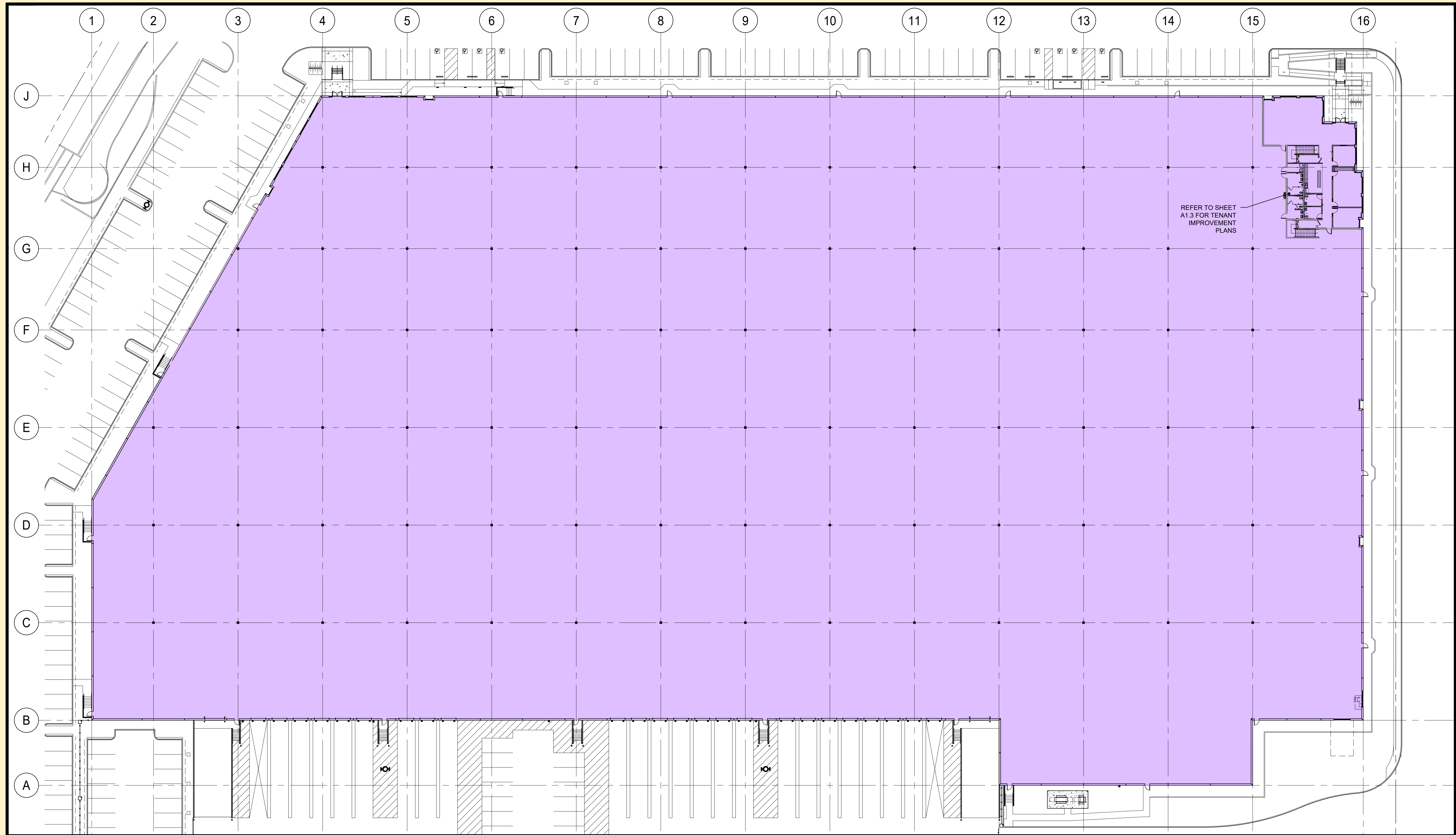
A1.0

October 06, 2022
 19006



BASTIEN AND ASSOCIATES, INC.
 ARCHITECTURE AND PLANNING

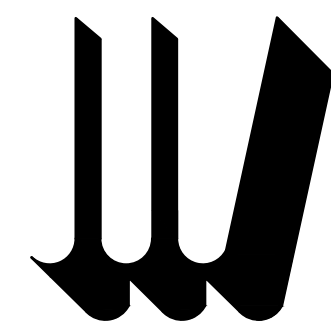
15661 RED HILL AVENUE, SUITE 150
 TUSTIN, CALIFORNIA 92780-7324
 Phone: (714) 617-8600 Fax: (714) 617-8671
 www.BastienArchitects.com



OVERALL GROUND FLOOR PLAN

WHITTIER BOULEVARD BUSINESS CENTER

Whittier, California

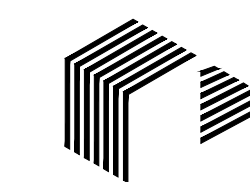


WESTERN REALCO

Drawings, specifications and other documents, including those in electronic form, prepared by the Architect and the Architect's consultants are Instruments of Service for use solely with respect to this Project. The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service and shall retain all common law, statutory and other reserved rights, including copyrights.

A1.1

September 07, 2022
19006



BASTIEN AND ASSOCIATES, INC.
ARCHITECTURE AND PLANNING

15661 RED HILL AVENUE, SUITE 150
TUSTIN, CALIFORNIA 92780-7324
Phone: (714) 617-8600 Fax: (714) 617-8671
www.BastienArchitects.com

SEE SHEET 2

EARTHWORK BALANCE CALCULATIONS			10/21/2021
PROJECT:	WHITTIER BLVD BUSINESS CENTER		
JOB#:	3868		
		QUANTITY	UNITS
K.	SITE AREA:	580,070	SF
L.	SUBSIDENCE FACTOR:	0.120	
M.	SHRINKAGE FACTOR:	12	%
N.	SITE STRIPPING FACTOR:	0.1	
O.	OVEREXCAVATION:	21,407	CY
<hr/>			
A.	CALCULATED CUT:	18,135	CY
	ADDITION SLAB CUT:	892	CY
	FOOTING AND UTILITY SPOILS	1,645	CY
	RECYCLE MATERIAL	1,600	CY
	UGS-WQMP	4,489	CY
	TOTAL CUT: (A+B)	26,761	CY
<hr/>			
D.	CALCULATED FILL:	16,265	CY
E.	LIGHT PAVING FILL:		CY
F.	SUBSIDENCE: (LxK)/27=	2,578	CY
G.	SHRINKAGE: (M/100)C=	3,211	CY
H.	SITE STRIPPING	2,138	CY
I.	OVEREXCAVATION SHRINKAGE	2,569	CY
J.	TOTAL FILL: (D+E+F+G+H)=	26,761	CY
<hr/>			
K.	TOTAL (IMPORT) OR EXPORT:	0	CY
<hr/>			
NOTE: EARTHWORK FIGURES SHOWN ARE APPROXIMATE FIGURES & ARE TO BE USED BY BLDG DEPT ONLY. CONTRACTOR SHALL CALCULATE THEIR OWN EARTHWORK QUANTITIES AND BID A COMPLETE JOB.			
	SITE ADJUSTMENT	0.00	

Building Footprint
288,499 s.f.

SLOPE FLOOR

S=0.005

RETAINING WALL "A"

WHITTIER BLVD.

SEE SHEET 3

Last Update: 10/27/22
D:\3800-3899\3868\3868COP01-COP.dwg

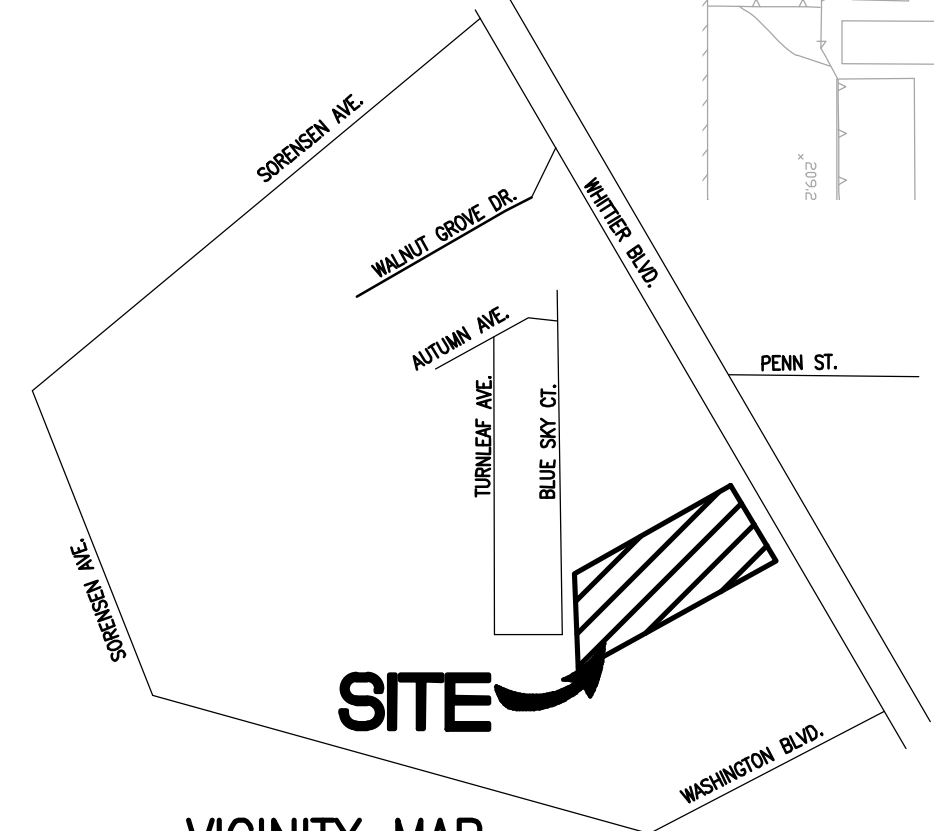
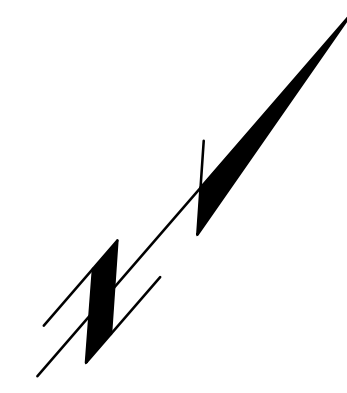
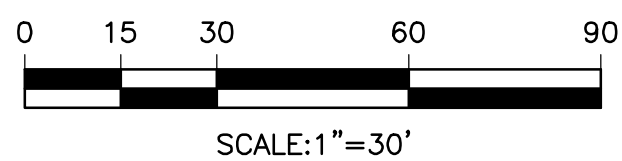
CITY OF WHITTIER
PUBLIC WORKS DEPARTMENT
CONCEPTUAL GRADING PLAN
WHITTIER BOULEVARD
BUSINESS PARK
12352 WHITTIER BLVD.

Designed by	Approved by	Date
Checked by		
Public Works Director	R.C.E.	XXXXXX
Sheet	1	of 3

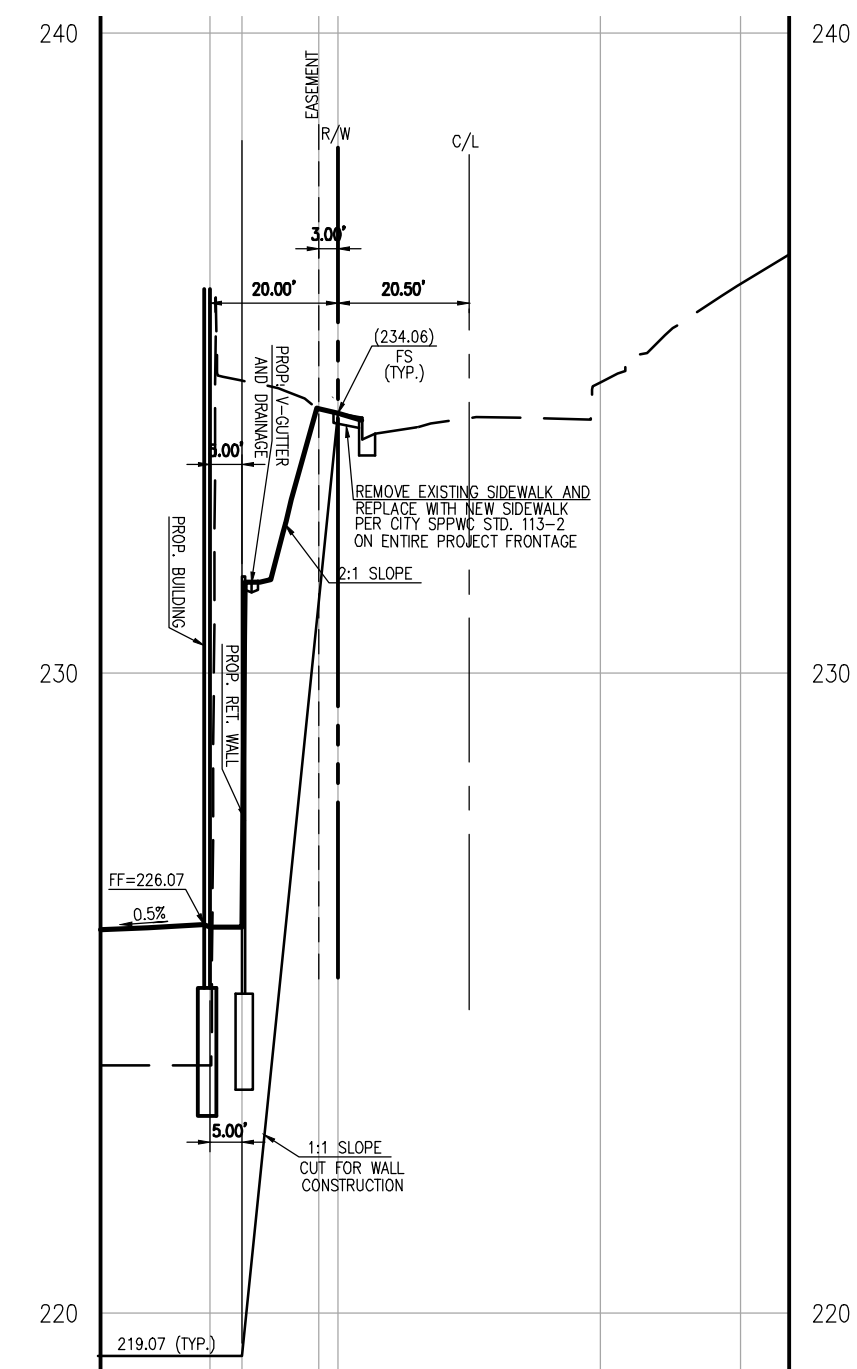
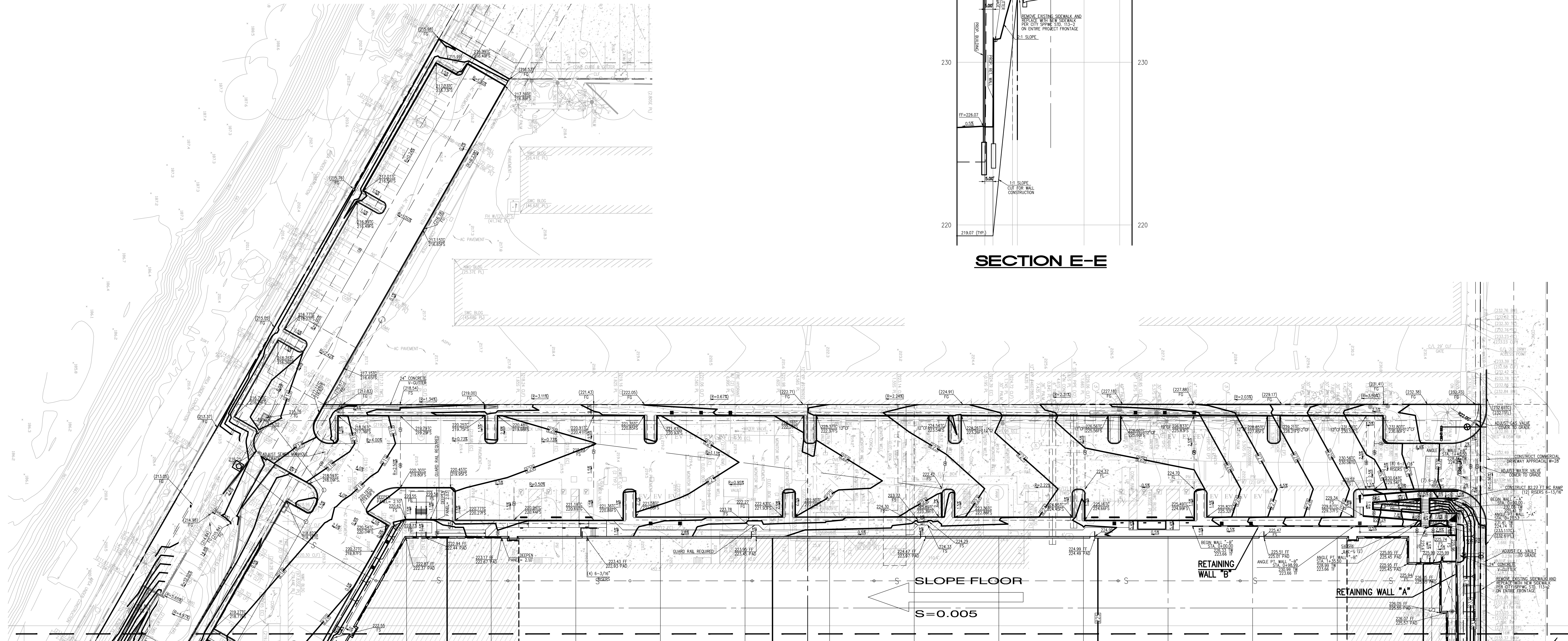
3868/1 OF 6 SHEET

PREPARED FOR:
WESTERN REALCO, LLC.
500 NEWPORT CENTER DRIVE, SUITE 630
NEWPORT BEACH, CA 92660
PHONE: (949) 720-3788

TEI Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)921-4811 FAX(714)921-4173



VICINITY MAP
N.T.S.



SECTION E-E

SEE SHEET 1

WHITTIER BLVD.

Last Update: 10/27/22
0:\3800-3899\3868\3868COP02-COP.dwg

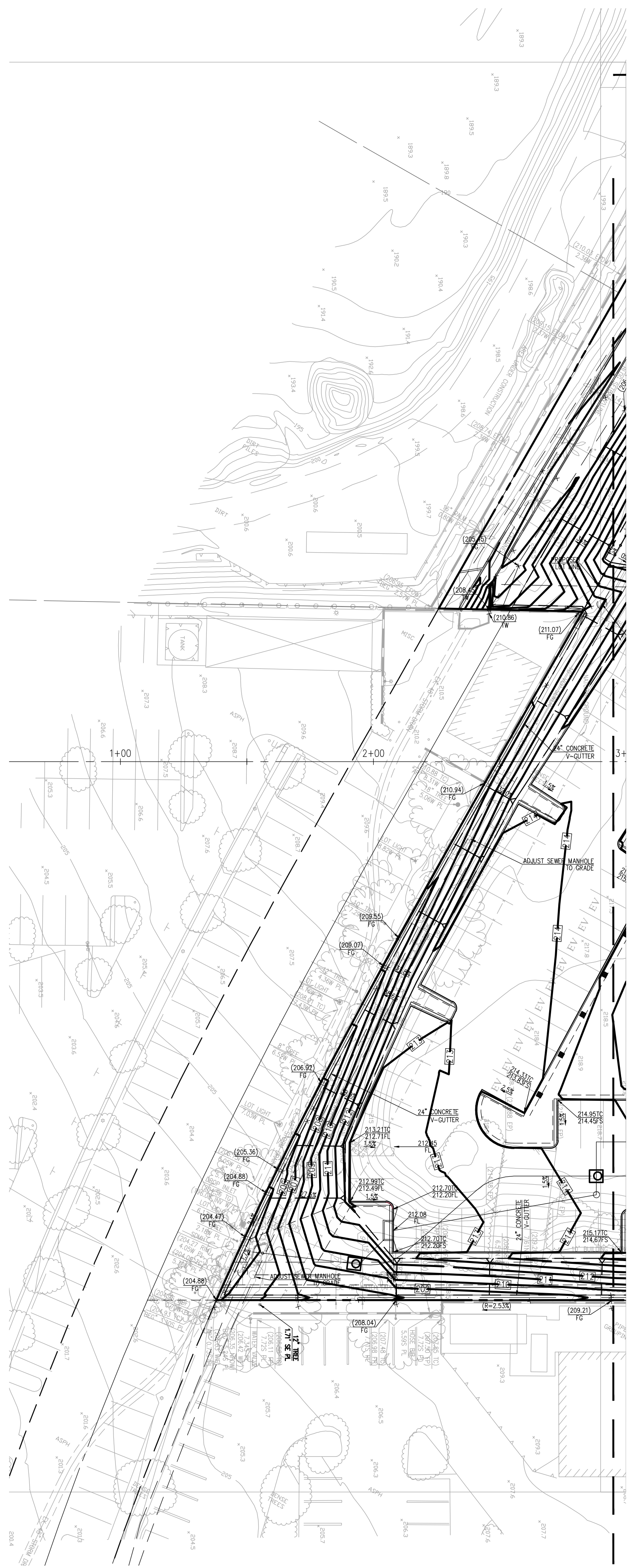
CITY OF WHITTIER
PUBLIC WORKS DEPARTMENT
CONCEPTUAL GRADING PLAN
WHITTIER BOULEVARD
BUSINESS PARK
12352 WHITTIER BLVD.

PREPARED FOR:
WESTERN REALCO, LLC.
500 NEWPORT CENTER DRIVE, SUITE 630
NEWPORT BEACH, CA 92660
PHONE: (949) 720-3788

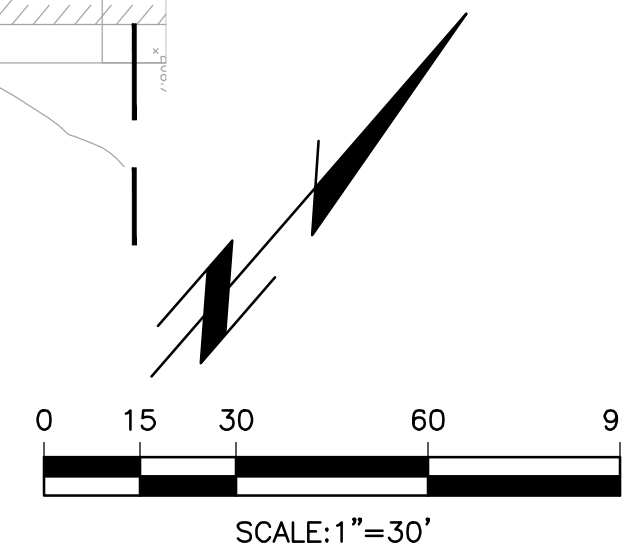


Designed by _____	Approved by _____	Date _____
Checked by _____	Public Works Director _____	R.C.E. XXXXX
Designed by _____		
Checked by _____		
Date _____	Sheet 2 of 3 Sheets	

3868/2 OF 6 SHEET



SEE SHEET 1



Last Update: 10/27/22
 0:\3800-3899\3868\3868COP03-COP.dwg

CITY OF WHITTIER PUBLIC WORKS DEPARTMENT	
CONCEPTUAL GRADING PLAN WHITTIER BOULEVARD BUSINESS PARK 12352 WHITTIER BLVD.	
Designed by _____ Date _____ Checked by _____ Date _____	Approved by _____ Date _____ Public Works Director R.C.E. XXXXX
Designed by _____ Date _____ Checked by _____ Date _____	Sheet 3 of 3 Sheets

PREPARED FOR:
 WESTERN REALCO, LLC.
 500 NEWPORT CENTER DRIVE, SUITE 630
 NEWPORT BEACH, CA 92660
 PHONE: (949) 720-3788



3868/3 OF 6 SHEET

APPENDIX C

APPENDIX C

SOIL SAMPLING PROCEDURES

This appendix summarizes soil sampling procedures that may be used at the Site. The specific sampling procedure selected generally depends on the purpose of the sample. Soil samples will typically be collected with a trowel or hand auger as described in Section C.4. If unanticipated soil impacts are encountered and additional delineation is required, drilling methods will be considered as described in Sections B.2 and B.3.

C.1 SOIL SAMPLING FROM EXCAVATIONS, FILLS OR STOCKPILES

1. Soil samples collected from excavations, fills, or stockpiles for chemical analyses will be collected in laboratory-supplied glass containers or by using a slide-hammer-style sampler with 4-inch-long brass or stainless-steel tubes.
2. If a slide-hammer-style sampler is used the sampler will be washed between samples using an inorganic detergent followed by two tap water rinses and a deionized water rinse. Following retrieval of the sample, the sample tube will be removed from the sampler and the ends will be fitted with PVC end caps.
3. Each sample jar or tube will be labeled with the sample number and date.
4. Samples will be transferred to the analytical laboratory using standard chain-of-custody protocols. At least one chain-of-custody form will be used for each delivery group. The following information will be clearly written on each chain of custody form:
 - HMC project number;
 - Laboratory name, address, and phone number;
 - Date;
 - Project manager and phone number;
 - Sample identification;
 - Sample date and time;
 - Analysis requested, including U.S. EPA method number;
 - Preservation;
 - Sampler name and signature;
 - Special instructions;
 - Date results requested;
 - Date delivered to laboratory; and
 - Signature, date, and time for all subsequent changes in sample control.

A copy of the completed chain of custody form for each cooler will be sealed in a plastic bag and placed in the cooler. A copy will be retained by field personnel to be placed in the project file. The cooler lid will then be secured with a numbered custody seal. The laboratory performing the analysis will be instructed to return a completed copy of the chain of custody with the analytical results.

C.2 DRILLING AND SOIL SAMPLING PROCEDURES

1. Borings will be drilled by a State-licensed drilling contractor with a truck-mounted drill rig equipped with hollow-stem augers.
2. The augers will be pressure washed or steam cleaned prior to drilling.
3. Soil descriptions, in general accordance with the Unified Soil Classification System, sample type and depth, and related drilling information, will be recorded on a boring log under the supervision of a registered geologist.
4. Soil samples will be collected using a split-barrel modified California sampler at intervals to be determined by the specific conditions being assessed.
5. The sampler will be washed between sampling intervals with an inorganic detergent; followed by two tap water rinses and a deionized-water rinse.
6. Soil samples will be collected in stainless steel or brass sampling tubes inside the sampler.
7. Following retrieval of the sampler, the second tube from the shoe of the sampler will be removed

from the sampler and the ends will be fitted with PVC end caps. The sample will be labeled retained for potential laboratory analysis.

8. The soil in the first sample tube from the shoe of the sampler will be used to describe the soil.

C.3 GEOPROBE PROCEDURES

1. Points will be advanced to the specific intervals below ground surface to be determined by the specific conditions being assessed, using a Geoprobe sampling rig.
 2. The Geoprobe points will be cleaned prior to sampling.
 3. The plastic sample liner containing soil from the collected sample depth will be removed from the sampler and a six-inch portion of the plastic sampler containing the 2-to-3-foot sample will be cut, capped, and retained in an ice chest for chemical analyses.
5. The Geoprobe points will be washed prior to the start of work and between sampling intervals.

C.4 HAND-AUGERING PROCEDURES

1. Hand augered samples will be collected using a slide hammer hand sampler with 4- inch-long brass or stainless-steel sample tubes.
2. Hand-augering equipment will be washed between borings with an inorganic detergent, followed by two tap water rinses and a final deionized-water rinse.
3. Immediately after sample collection, the ends of sample tubes will be fitted with PVC end caps.

C.5 SAMPLE HANDLING

1. The samples retained for chemical analyses will be placed in Ziploc bags and stored in an ice chest cooled using water ice or "blue" ice. Samples may be transferred to and stored in a refrigerator prior to delivery to the laboratory.
2. The samples will be delivered to a State-certified laboratory within one working day of collection, or a State-certified mobile laboratory will analyze the samples on-Site. Sample handling, transport, and delivery to the laboratory will be documented using chain-of-custody procedures, including the use of chain-of-custody forms.

C.6 SAMPLE LOCATION

1. All sample locations will be documented using to accuracy sufficient to meet the requirements of the specific Site conditions being assessed.
2. Sample locations and sample depths will be made by HMC or other designated field participants.

C.7 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

1. Trip Blanks: These samples are used to demonstrate that the samples have not been contaminated during transportation or at the laboratory. If VOC analyses are being conducted, two trip blanks (VOC vials containing high-performance liquid chromatography-grade water) will be present in each cooler received from the laboratory. These will be uniquely labeled in the field, recorded on the chain of custody for the cooler in which they are present, and returned to the laboratory for VOC analysis, as necessary.
2. Equipment Blanks: If non-dedicated sampling equipment is being use (e.g., hand auger, trowel) on equipment blank will be collected per day of sampling by pouring laboratory-prepared deionized water over the equipment and collecting a sample of the rinsate.
3. Temperature Blank: A temperature blank will be present in each cooler received from the laboratory; it will be used to record the temperature inside the cooler upon receipt by the laboratory.
4. A matrix spike/matrix spike duplicate (MS/MSD) sample pair will be collected at a rate of one per 20 samples. These samples will be designated on the chain-of-custody.
5. The laboratory will perform analysis on laboratory control spike samples in accordance with their internal Quality Assurance Plan.
6. Data provided by the laboratory will be reviewed for data representativeness, reproducibility, completeness, erroneous data, and discrepancies to evaluate the data usability. Data will be assessed in accordance with guidance from the EPA Contract Laboratory Program National Functional Guidelines.