APPENDIX H – PHASE II ENVIRONMENTAL SITE ASSESSMENT

PHASE II SITE INVESTIGATION REPORT
APPROXIMATELY 19.65-ACRE SITE LOCATED NORTHWEST OF JOHN S. GIBSON BOULEVARD
SAN PEDRO, CALIFORNIA 90731
(APNS: 7440-016-001 AND PORTIONS OF 7412-024-902, -907, & -911)

Prepared for:

Howard Industrial Partners

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August 25, 2017
File No. 0121765.00, Task 3

This Phase II Site Investigation Report for an approximately 19.65-acre site comprising one complete parcel and portions of three additional parcels located on the northwestern side of John S. Gibson Boulevard in San Pedro, California, dated August 25, 2017 was prepared by Justin Rauzon and reviewed by Kevin Green:

Justin Rauzon, R.E.P.A.
Project Manager
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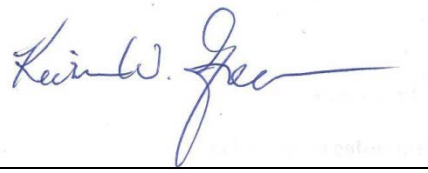

Kevin W. Green, PG
Senior Project Advisor
SCS ENGINEERS

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DISCLAIMER

This report has been prepared for Howard Industrial Partners with specific application to a Phase II soil investigation at an approximately 19.65-acre site located northwest of John S. Gibson Boulevard in San Pedro, California.

The report has been prepared in accordance with the care and skill generally exercised by reputable professionals, under similar circumstances, in this or similar localities. No other warranty, express or implied, is made as to the professional opinions presented herein. No other party, known or unknown to SCS Engineers, is intended as a beneficiary of this work product, its content or information embedded therein. Third parties use this report at their own risk.

Changes in site conditions may occur due to variation in rainfall, temperature, water usage, or other factors. Additional information that was not available to the consultant at the time of this investigation or changes that may occur on the site or in the surrounding area may result in modification to the site that would impact the summary and recommendations presented herein. This report is not a legal opinion.

1 INTRODUCTION

SCS Engineers (SCS) was retained by Howard Industrial Partners to conduct a Phase II soil investigation of an approximately 19.65-acre site comprising one complete parcel and portions of three additional parcels located on the northwestern side of John S. Gibson Boulevard in San Pedro, California (the "Property"). Investigation activities were conducted in accordance with SCS's proposal dated August 14, 2017 (Proposal No. 01217065). The Phase II proposal was based on the findings of a Phase I Environmental Site Assessment (Phase I ESA) prepared by SCS dated June 30, 2017 (SCS Project No. 01217065.00, Task 2). A Phase II site map is presented as **Figure 1**.

BACKGROUND

The Property comprises 19.65-acre site and is located on the northwestern side of the 2000 block of John S. Gibson Boulevard, immediately to the southeast of Interstate 110 (the Harbor Freeway), in San Pedro, California. The Property comprises Los Angeles County Assessor's Parcel Number (APN) 7440-016-001 and portions of APNs 7412-024-902, -907, and -911). It does not currently have a street address.

In the Phase I ESA report, SCS identified the following:

- Oil and gas pipeline infrastructure (both aboveground and underground) is located on the northern portion of the Property. Some of the pipelines are active, some are out-of-service, and some pipelines have been removed. There are four concrete culverts that pass under the adjoining freeway, through which pipelines connected the Western Fuel Oil Company (WFOC) refinery to the Port of Los Angeles, located to the east of the Property. While the Phillips 66 refinery continues to operate to the northwest of the Property, the WFOC refinery was replaced by a business center in the 1900s. Most, but not all, of the pipelines crossing easements of the Property belonged to WFOC. More than a dozen pipelines reportedly transported black oil, lite oil, slop oil, ethylene glycol, dimethyl ketone (acetone), ethylene dichloride, meth ethyl ketone, waste oil, methyl isopropyl butyl ketone, isopropyl alcohol, styrene, and water. SCS reviewed documents developed for the proposed removal of WFOC pipelines from the Los Angeles Port's Berth 120 (located to the east) and the Property. The information reviewed does not provide a full narrative of the decommissioning of the pipelines on the Property. While removed and abandoned in place, they do not provide any information about soil testing conducted along the pipeline rights-of-way on the Property. Pipelines are a common source of releases to the environment.

- A 2002 soil investigation conducted on the northern portion of the Property identified releases of total petroleum hydrocarbons (TPH) and volatile organic compounds (VOCs) at five separate areas. In general, elevated VOC concentrations coincided with elevated TPH concentration s and TPH was considered the driving constituent of concern. Based on the results of this investigation, an estimated 4,000 cubic yards of TPH-affected soil with concentrations above 1,000 milligrams per kilogram (mg/kg) are present on the Property. No information reviewed indicated that this soil has been remediated. Some of the areas of discolored and disturbed soil observed during the site inspection likely correspond with the affected areas investigated in 2002.

- Given its proximity to the Harbor Freeway, elevated lead concentrations may be present in soil at the Property as a result of aerially deposited lead (ADL) associated with the historical use of lead in gasoline. The potential for elevated lead in surface soil at the Property is not considered a REC, but may be considered a business environmental risk.

- According to a parcel profile report from the City of Los Angeles Department of City Planning (LADCP), the Property is located within the Methane Hazard Zone, possibly due to the former nearby landfills. The potential for the presence of naturally occurring methane gas or methane gas migration from the former landfill nearby Property is not considered a recognized environmental condition (REC), however, depending on future development, it may be considered as a business environmental risk.

SCS understands many of the historic pipelines have been removed or abandoned in place. The proposed development will reportedly be a truck and trailer parking, with only a small office building on the southern portion of the Property. The ADL and methane may be investigated in the future, as required as a part of the development. Based on this information, SCS recommended an investigation of the discolored and disturbed soil areas observed during the Phase I ESA site investigation to confirm contaminant levels, if any. The suspected chemicals of potential concern (COPC) in these areas include TPH and VOCs.

2 GEOLOGIC AND HYDROGEOLOGIC CONDITIONS

PHYSIOGRAPHIC SETTING

According to the U.S. Geological Survey (USGS), Torrance and San Pedro, California 7.5-minute topographic maps, the Property is located on the margins between the Palos Verdes Hills to the west and the Los Angeles Harbor to the east, at an elevation ranging from approximately 20 to 100 feet above mean sea level (amsl). Local topography varies across the Property, but generally slopes to the east and southeast, towards John S. Gibson Boulevard and the harbor.

GEOLOGY AND SOILS

The Property is located in the southwestern portion of the Western Terrace, at the margin of the Palos Verdes uplift. According to the Department of Water Resources Bulletin 104, surface sediments in the area of the Property have been mapped as Quaternary alluvium consisting of gravel, sand, silt, and clay. Underlying the Quaternary units are Miocene sedimentary units of the Monterey Formation and its equivalents to a depths of approximately 1,500 to over 2,000 feet below ground surface (bgs). The current soil investigation and the 2002 Ninyo & Moore soil investigation at the Property identified sand, silt, and clay at the Property.

GROUNDWATER

The Property is near the southern edge of the West Coast Groundwater Basin, underlying the southwestern part of the Los Angeles Coastal Plain (CDWR, 1995). It is bounded on the north by the Ballona Escarpment, on the east by the Newport-Inglewood Uplift, on the southwest by the Palos Verdes Hills, and on the south and west by the Pacific Ocean. The basin covers approximately 160 square miles and includes 20 incorporated cities. Major aquifers in the West Coast Groundwater Basin include the Gaspur, Gage, Lynwood, and Silverado. The Gaspur

Aquifer occurs only within the ancestral channel of the Los Angeles River and does not extend to the vicinity of the Property. The major aquifers are separated by aquitards in the vicinity of the Property. According to groundwater monitoring reports obtained for the former WFOC/Phillips 66 refinery facility across the Harbor Freeway to the northwest, two pairs of groundwater wells are located on (or possibly just off) the northeastern end of the Property (SCS, May 15, 2017). The wells screened in the shallow and intermediate water-bearing zones (MW-26 through MW-29) reported groundwater at an elevation of approximately 3 feet amsl, or approximately 17 feet bgs. Given the varied topography of the Property, the depth to groundwater beneath the upper and lower portions of the Property would vary, but is likely to occur at similar depths relative to mean sea level. Groundwater in the shallow and intermediate zones flows to the northeast. Groundwater in the deeper zone flows to the east.

Saltwater intrusion into the West Coast Groundwater Basin, due to an inland hydraulic gradient resulting from groundwater withdrawal, has been recognized since the 1930s (CDWR, 1957). Saltwater intrusion in the area of the Property likely occurred prior to 1955. Groundwater in the area of the Property is located seaward of the Dominguez Gap Barrier Project (DGBP) injection wells designed to mitigate saltwater intrusion. Groundwater beneath the Property is not a source of drinking water and intrinsic water quality beneath the Property is poor. Groundwater was not encountered during this Phase II investigation.

3 SITE INVESTIGATION AND ANALYTICAL RESULTS

The objective of the Phase II investigation was to evaluate the possible presence of COPC in discolored and disturbed soil areas observed during the Phase I ESA.

SOIL SAMPLE COLLECTION

On August 7, 2017, SCS personnel collected soil samples from five boring locations (B1 through B5) using a hand-operated drilling equipment (hand auger and slide hammer sampler). A handheld Trimble GPS unit was used to collect GPS locations of the borings. The boring locations are identified on **Figures 2 through 4.** Borings were drilled to a total depth of 5 feet bgs. Soil samples were collected from each of the borings at the 0.5-, 2-, and 5-foot depths. New nitrile gloves were used and frequently replaced in the handling of all soil samples to prevent cross-contamination.

A hand auger device was used for borehole advancement to desired sample depths. A slide hammer sampler was then used to collect soil samples. Once a desired depth was reached, a 2-inch diameter pre-cleaned brass sleeve was installed in the slide hammer sampler. The hammer was then manually driven into the ground approximately 6 inches until sufficient soil sample was recovered. After retracting the sampler, the sample sleeve was removed from the sampler and the ends were covered with Teflon squares and sealed with plastic end caps. New nitrile gloves were used and frequently replaced in the handling of all soil samples to prevent cross-contamination.

A portion of each soil sample was preserved in the field using EPA Method 5035, which includes the collection of four 5-gram aliquots of soil using a plunger/sub-sampler provided by the laboratory. The four aliquots of soil were immediately placed in 40 milliliter VOA (volatile organic analysis) vials as follows – two aliquots in VOAs with a sodium bisulfate preservative,

one in a VOA with methanol preservative, and one in a blank (empty) VOA. A solvent-free label noting the date of collection, sample number, and project number was affixed to each sample sleeve. Immediately following labeling, samples were placed in a chilled cooler to be submitted to Chemtek Environmental Laboratories, Inc. (Chemtek) of Santa Fe Springs, California, a California Department of Health Services-certified laboratory.

A portion of each sample sleeve was observed for soil classification and for field indications of potential contamination, such as discoloration and odor. Field indications of contamination were noted in the 0.5- and 2-foot soil samples collected at boring B4. Boring logs recording the lithology observed are provided in **Appendix A**.

A total of 15 soil samples were collected from the soil borings described above. All of these samples (the 0.5-, 2- and 5-foot samples) were analyzed for total petroleum hydrocarbons (TPH – carbon chain analysis) using EPA Method 8015M. The 2-foot samples from each of the five borings were selectively analyzed for VOCs using EPA Method 8260B. Samples were tracked from the point of collection through the laboratory using proper chain-of-custody protocol. Samples were collected and analyzed using generally accepted regulatory procedures.

After all samples had been collected, the borings were backfilled with cuttings to match the surrounding surface. No soil cuttings requiring disposal were generated during the investigation activities.

Soil Analytical Results

The Chemtek report, including chain-of-custody forms and quality assurance/quality control (QA/QC) data, are provided in **Appendix B**.

Analytical results for TPH-cc and VOCs are summarized in **Table 1**. As shown, TPH was not detected in soil samples from boring B1. For borings B2 through B5, TPH as gasoline and light hydrocarbons (TPH-g [carbon-chain range C_4-C_{12}]) was detected in three samples at concentrations ranging from 0.39 to 213 milligrams per kilogram (mg/kg), equivalent to parts per million (ppm); TPH as diesel (TPH-d [carbon-chain range C_{13}-C_{22}]) was detected in seven soil samples at concentrations ranging from 28.0 to 83,600 mg/kg; and TPH as oil (TPH-o [carbon-chain range C_{23}-C_{36}]) was detected in 11 soil samples at concentrations ranging from 14.1 to 45,200 mg/kg.

As shown in **Table 1**, the following VOCs were detected in one or more soil samples:

- Benzene – 1.70 micrograms per kilogram (µg/kg), equivalent to parts per billion (ppb)
- Bromomethane – 2.44 µg/kg
- Ethylbenzene – 1.35 µg/kg
- Naphthalene – 62,200 µg/kg
- Toluene – 2.94 to 937 µg/kg
- Trimethylbenzene – 1,100 µg/kg
- Total xylenes – 2.10 to 2,050 µg/kg
- Methyl ethyl ketone (MEK) – 28.9 to 34.1 µg/kg
- Acetone – 202 to 212 µg/kg

4 DISCUSSION OF ANALYTICAL RESULTS AND REGULATORY LIMITS

There are no universal cleanup guidelines for TPH- and/or VOC-affected soils in California. Cleanup levels can vary based on a number of factors including the nature of the contamination, depth to groundwater, the beneficial uses of groundwater, soil type, human health risks (i.e., land use, residential vs. commercial/industrial scenarios), and regulatory oversight agency requirements. Actual cleanup goals are site-specific and based on applicable regulatory guidelines. Generally, regulatory guidelines that apply to the cleanup of specific chemical constituents in soil are related to one or more of the following issues:

- Potential impacts to groundwater
- Human health risks
- Waste disposal restrictions

Based on available information regarding the Property, the following guidelines may be applicable to the evaluation and cleanup of impacted soils.

Potential Impacts to Groundwater

The Los Angeles Regional Water Quality Control Board (LARWQCB) established cleanup guidelines, also known as soil screening levels (SSLs), for assessing soils based on the potential for groundwater contamination (LARWQCB, 1996). Where impacted soils are anticipated to be between 20 and 150 feet above groundwater (groundwater is estimated to be between 25 and 65 feet bgs at the boring locations), the SSLs for petroleum hydrocarbons are:

- TPH-g or gasoline-range hydrocarbons (C_4-C_{12}) – 500 mg/kg
- TPH-d or diesel-range hydrocarbons (C_{13}-C_{22}) – 1,000 mg/kg
- TPH-o or oil/heavy-range hydrocarbons (C_{23}-C_{40}) – 10,000 mg/kg.

Based on the analytical results shown in **Table 1**, when compared to the SSLs, the TPH-g concentrations detected were all below their respective SSL. With the exception of samples from boring B4, the TPH-d and TPH-o concentrations were also below their respective SSLs. TPH-d detected in each of the three samples and TPH-o in the 2-foot soil sample from boring B4 exceeded their respective SSLs.

The LARWQCB has also developed SSLs for selected TPH-related aromatic compounds (benzene, toluene, ethylbenzene, xylenes [BTEX], and methyl tertiary butyl ether (MTBE) in affected soils based on potential for groundwater contamination. Assuming conservatively that sandy soil is present from the depth of the impacted soil to groundwater, the SSLs for these constituents would be as follows:

- Benzene – 11 µg/kg
- Ethylbenzene – 700 µg/kg
- Toluene – 300 µg/kg
- Xylenes – 1,750 µg/kg

As shown in **Table 1**, benzene and ethylbenzene were each detected in the 2-foot soil sample from boring B5 at concentrations well below the SSLs. With the exception of the 2-foot soil sample from boring B4, toluene and xylene concentrations were also detected at concentrations well below their SSLs. Toluene was detected in the 2-foot sample at boring B4 at a concentration of 937 µg/kg, above its SSL of 300 µg/kg. Xylenes were detected in the B4 sample at a concentration of 2,050 µg/kg, above its SSL of 1,750 µg/kg.

Specific SSLs have not been developed to evaluate potential groundwater impacts from bromomethane, naphthalene, 1,2,4-trimethylbenzene, MEK, or acetone. Based on the available information, TPH and VOCs present at boring B4 may be considered a risk to groundwater, although it is apparent that the existing impacts are confined to shallow subsurface soil. Boring B4 was located within an area previously investigated by Ninyo & Moore in 2002. Ninyo & Moore estimated that the area of affected soil was approximately 1,200 square feet, with an average depth of approximately 10 feet bgs (estimated 12,000 cubic feet). Soil in the area of boring B4 should be removed during planned redevelopment activities.

Human Health Risks

The California Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) issued an updated Human Health Risk Assessment (HHRA) Note Number 3 in June 2017. In this note, DTSC recommends the methodology and use of U.S. EPA Regional Screening Levels (RSLs) for the majority of the regulated chemicals in soil at hazardous waste sites and permitted facilities. However, for certain chemicals and compounds, DTSC recommends using California EPA (CalEPA) toxicity criteria and risk assessment procedures, which typically yield more conservative screening levels. In HHRA Note No. 3, DTSC recommends the use of RSLs, California-modified RSLs, and DTSC-modified RSLs, depending on the chemical or compound being evaluated. Collectively, the screening levels defined in HHRA Note No. 3 comprise the DTSC-Recommended SLs. DTSC-Recommended SLs and RSLs have been established for residential and industrial/commercial land use scenarios.

Human health risks associated with contact of contaminated soil (dermal, ingestion, etc.) in California can be assessed by comparing concentrations detected to the DTSC-Recommended SLs. DTSC-Recommended SLs have been established for the VOCs, but are not defined for TPH. The VOC results for soil samples from this investigation are compared to the DTSC-Recommended SLs on **Table 1**.

As shown in **Table 1**, with the exception of naphthalene in the 2-foot sample from boring B4, all VOC concentrations were below their DTSC-Recommended SLs for commercial/industrial land use. Naphthalene was detected at B4 at a concentration of 62,200 µg/kg, above its DTSC-Recommended SL of 17,000 µg/kg. Based on the available information, soil in the area of boring B4 may pose a risk to human health and should be removed during planned redevelopment activities.

Waste Disposal Restrictions

There are a number of state and federal regulations that relate to the disposal of contaminated soils. For the purposes of disposal, waste streams can be:

- Defined as hazardous in the regulations (e.g., soils containing spent solvents above specified limits for hazardous chemicals).

- Classified as hazardous on the basis of testing results for physical or chemical characteristics (i.e., toxic, reactive, ignitable, and/or corrosive).

In general soil containing TPH and/or VOCs are not defined as "hazardous" under state and federal regulations. They may, however, exhibit "hazardous characteristics," and should therefore be tested and characterized for disposal at an appropriate facility when excavated and removed. Under California regulations (Title 14 CCR, Division 7, Chapter 3, Article 5.6), contaminated soil that is excavated, and then either removed from or placed back on the Property, may be subject to the requirements of the LARWQCB or a Local Enforcement Agency (such as the Los Angeles County Fire Department, Site Mitigation Unit). Based on the analytical results, TPH- and VOC-affected soil with concentrations exceeding regulatory screening levels is present on the Property. Regulatory requirements in the handling of future excavated soils should be considered.

5 CONCLUSIONS AND RECOMMENDATIONS

On August 7, 2017, SCS conducted a soil investigation at an area of undeveloped land located on the northwestern side of John S. Gibson Boulevard in San Pedro, California. Based on the results of this investigation, SCS presents the following conclusions:

- TPH and VOC concentrations detected (if any) at borings B1, B2, B3, and B5 were low and do not represent a risk to groundwater and/or human health.

- TPH and VOCs were detected in soil samples from boring B4 that may represent a risk to groundwater and/or human health. This boring was located within an area characterized by Ninyo & Moore during a 2002 soil investigation.

- Given SCS' review of the Ninyo & Moore investigation report and the results of this investigation, it appears that soil remediation activities were not conducted following the 2002 site characterization work that estimated approximately 4,000 cubic yards of soil with TPH present at concentrations above 1,000 mg/kg.

In summary, based on the results of this investigation, SCS recommends that a soil management plan (SMP) be developed and implemented during planned excavation, grading, and redevelopment activities. The SMP should also consider potential impacts from ADL along the freeway. Depending on development plans and building department requirements, additional investigation of potential methane migration beneath the Property may be warranted.

6 REFERENCES

California Department of Toxic Substances Control (DTSC), Office of Human and Ecological Risk (HERO), June 2017. *Human Health Risk Assessment (HHRA) Note Number 3*.

California Environmental Protection Agency, January 2005. *Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties*.

California State Water Resources Control Board, September 2006. *UST Closure Criteria (Draft).*

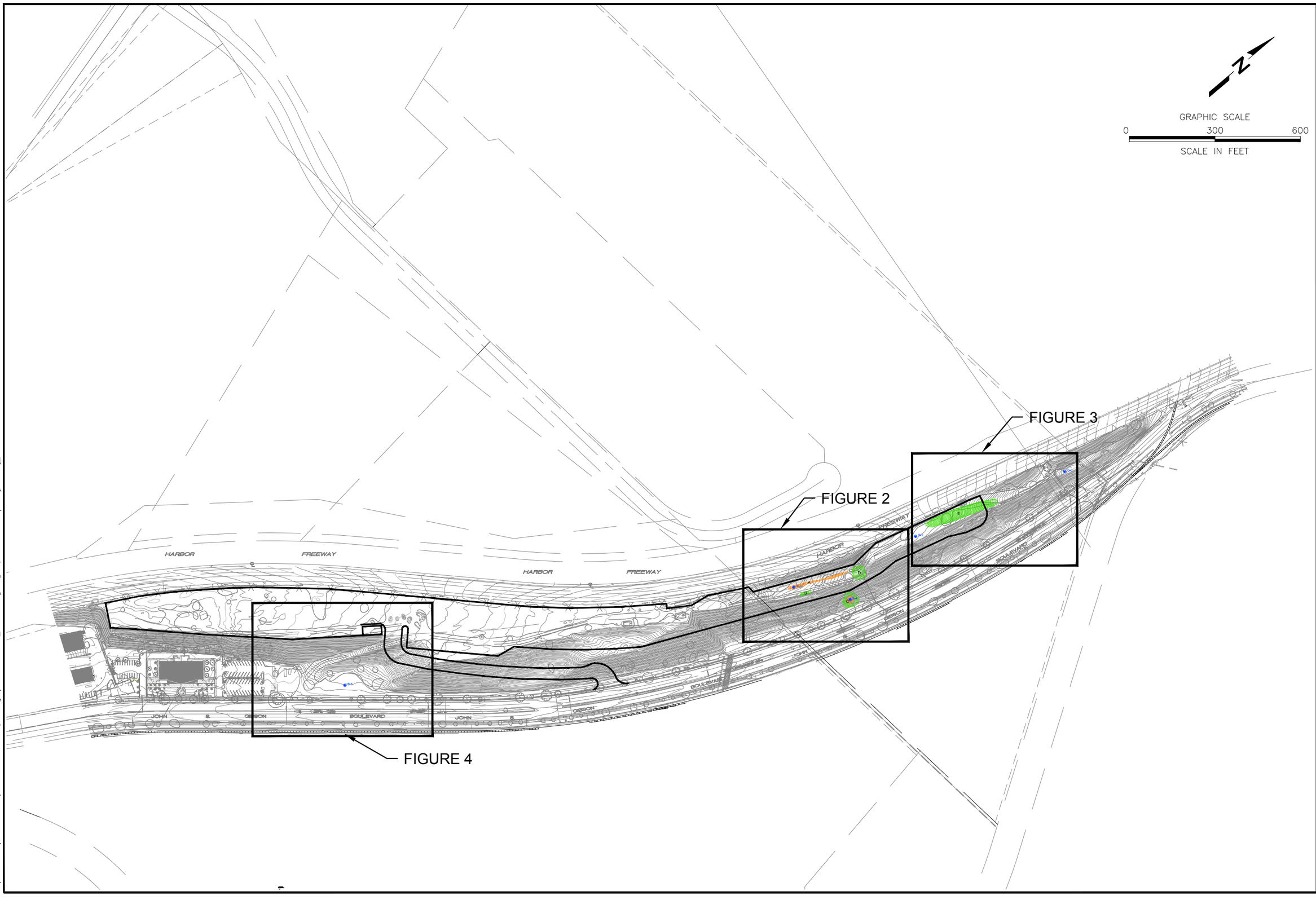
California Environmental Protection Agency, State Water Resources Control Board. GeoTracker website; http://geotracker.waterboards.ca.gov/

Los Angeles Regional Water Quality Control Board (LARWQCB). *Interim Site Assessment and Cleanup Guidebook*. May 1996.

Ninyo & Moore Geotechnical and Environmental Sciences Consultants (Ninyo & Moore), February 18, 2002. *Soil Investigation: Slope between Harbor Freeway and John S. Gibson Boulevard, Los Angeles, California – Project Directive No. 16*. Project No 202246014.

SCS Engineers, June 30, 2017. *Phase I Environmental Site Assessment, Approximately 19.65-Acre Site, John S. Gibson Boulevard, San Pedro, California 90018 (Assessor's Parcel Number: 5072-030-006).*

FIGURES 1 THROUGH 4



NO.	REVISION	DATE
		-

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PROJECT TITLE: SAN PEDRO DISTRIBUTION CENTER
JOHN GIBSON BLVD. SAN PEDRO, CA

CLIENT: HOWARD INDUSTRIAL PARTNERS
155 NORTH RIVERVIEW DRIVE
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PROJ. NO.	DSN. BY:	JACKFILE:
01217065.00 T3	J. HAN	N/PROJECTS
DSN. BY: K. GREEN	CHK. BY: K. GREEN	APP. BY: K. GREEN

DATE: AUGUST 2017

SCALE: 1" = 300'

FIGURE 1

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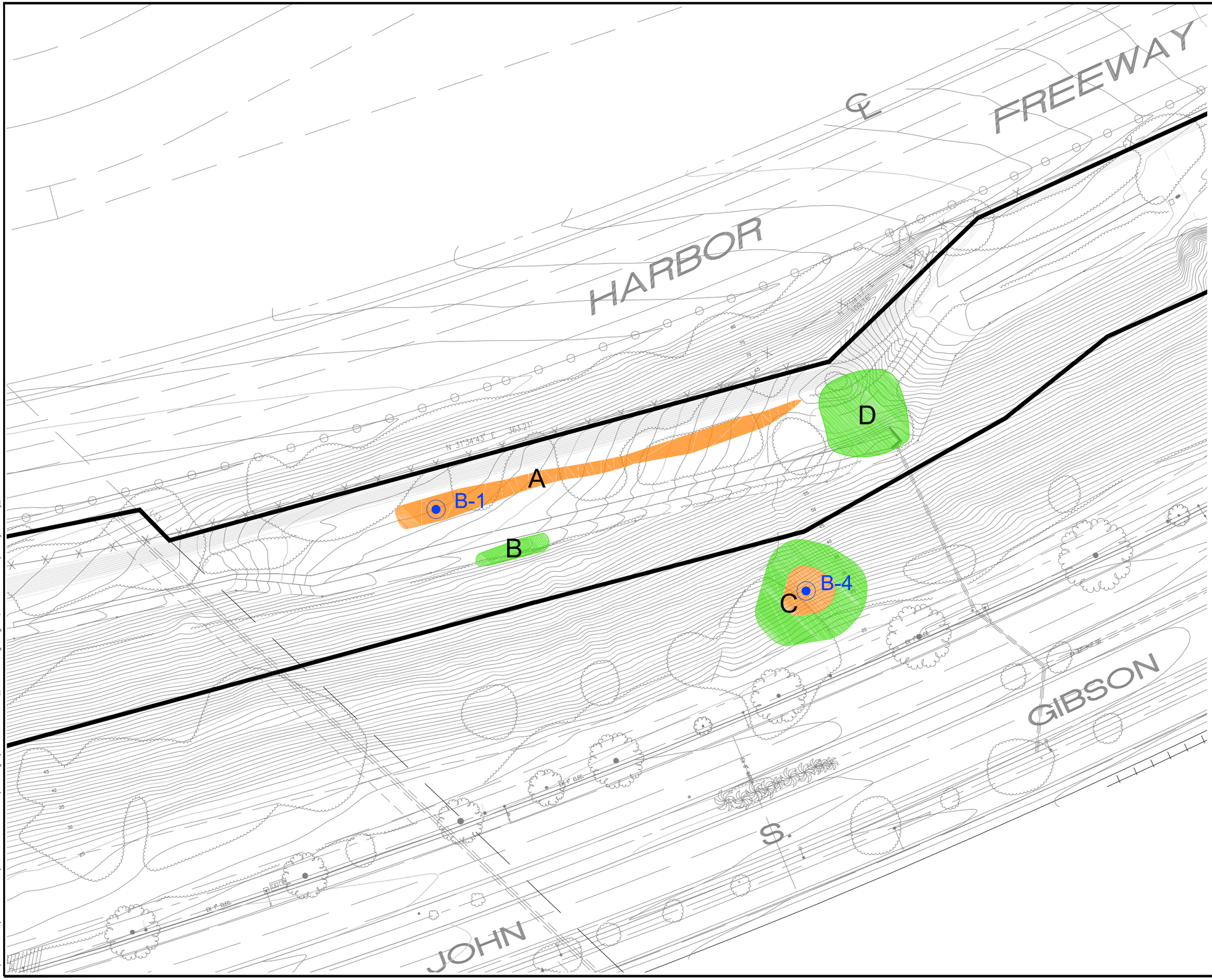

NO.	REVISION	DATE
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SHEET TITLE: SAMPLE LOCATION 1

PROJECT TITLE: SAN PEDRO DISTRIBUTION CENTER
JOHN GIBSON BLVD. SAN PEDRO, CA

CLIENT: HOWARD INDUSTRIAL PARTNERS
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01217065.00 T3	J. HAN	N/PROJECTS
CSN. BY:	CHK. BY:	APP. BY:
K. GREEN	K. GREEN	K. GREEN

DATE: AUGUST 2017

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FIGURE 2

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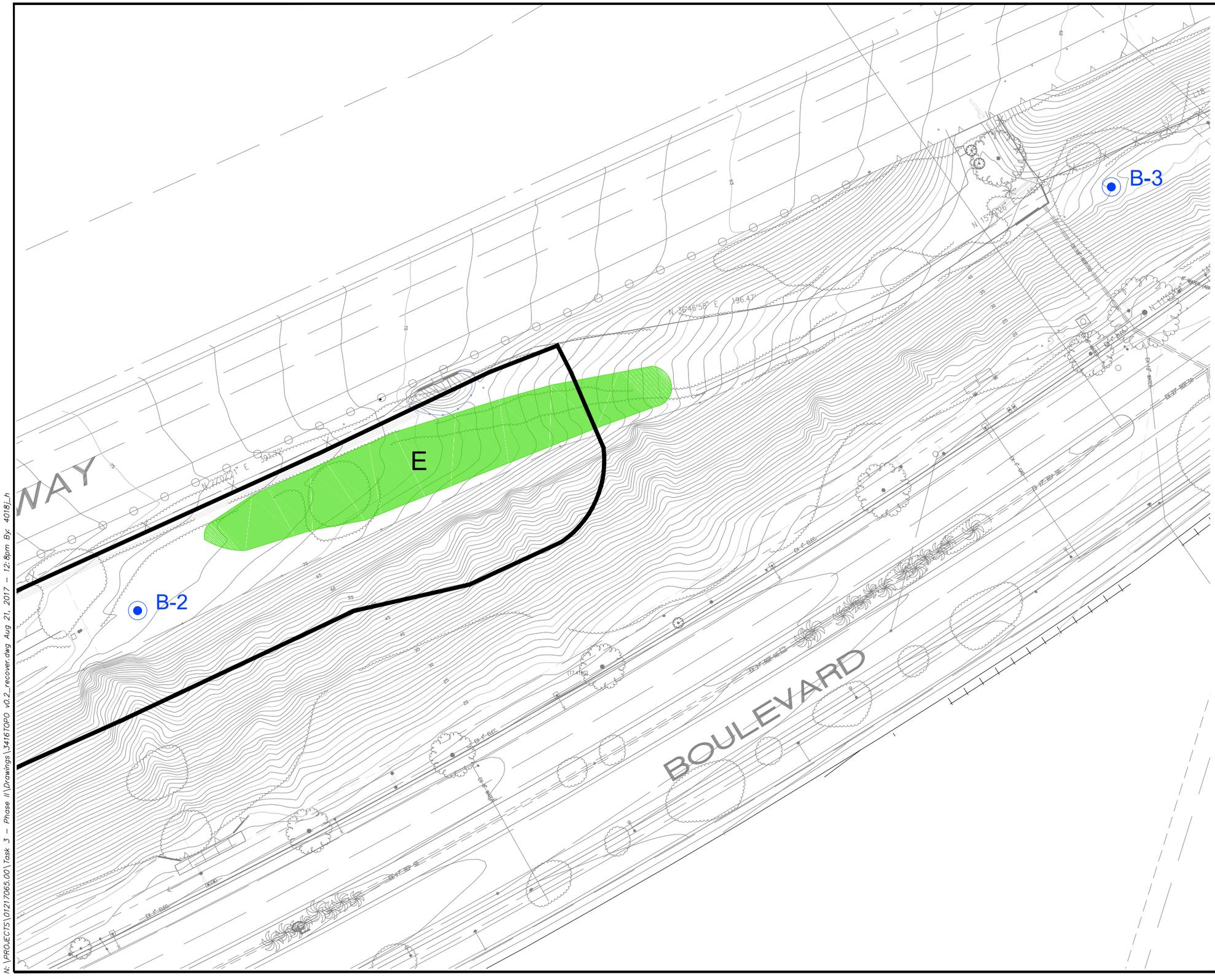

NO.	REVISION	DATE
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JOHN GIBSON BLVD. SAN PEDRO, CA

CLIENT: HOWARD INDUSTRIAL PARTNERS
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PROJ. NO:	01217065.00 T3
DSN. BY:	K. GREEN
DWN. BY:	J. HAN
CHK. BY:	K. GREEN
LOAD FILE:	N/PROJECTS
APP. BY:	K. LISTER

DATE: AUGUST 2017

SCALE: 1" = 200'

FIGURE 3

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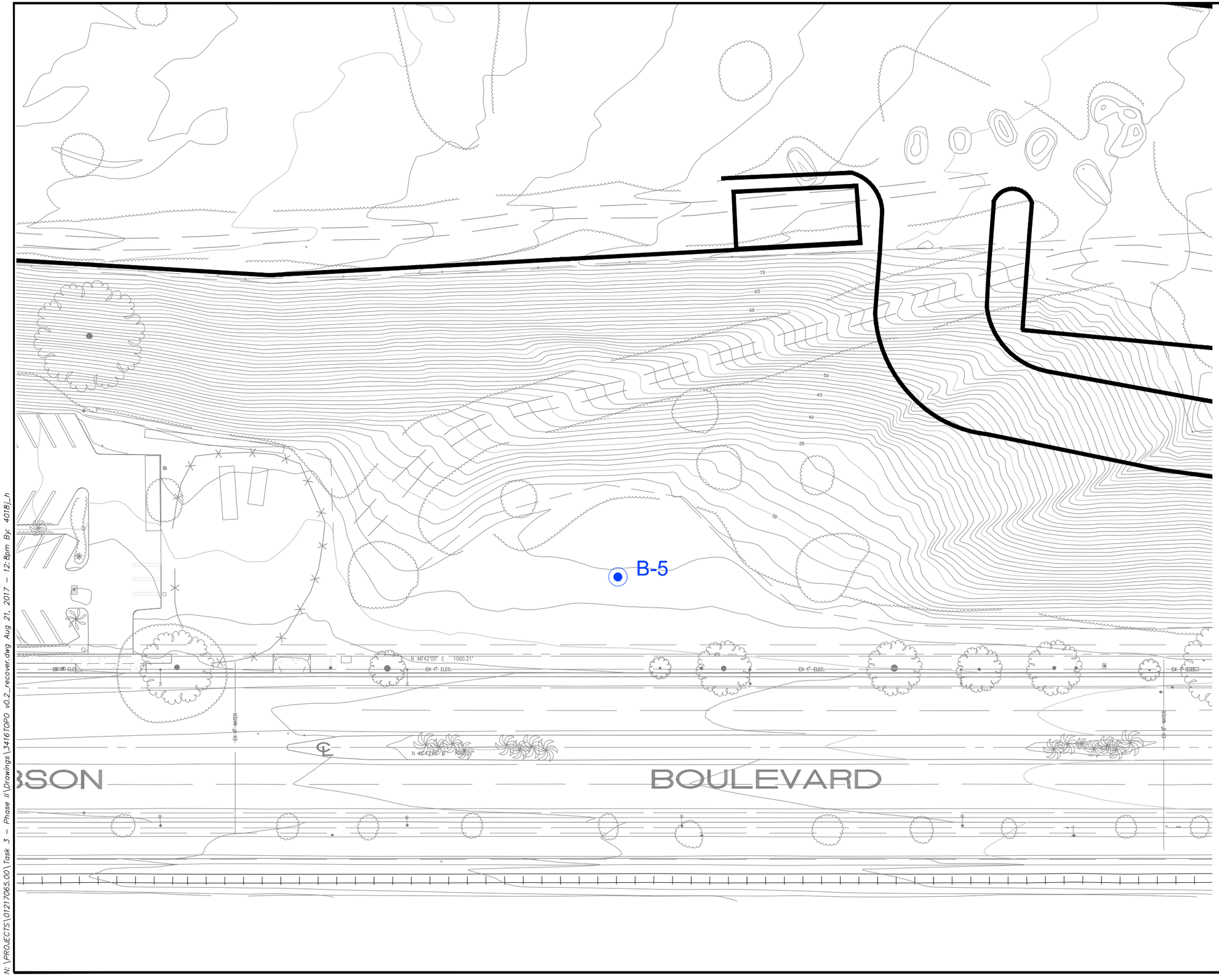

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GRAPHIC SCALE

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SCALE IN FEET

SYMBOL LEGEND

B-1 ◉ SOIL SAMPLE LOCATION

NO.	REVISION	DATE
		-

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PROJECT TITLE: SAN PEDRO DISTRIBUTION CENTER
JOHN GIBSON BLVD. SAN PEDRO, CA

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PROJ. NO	DWN. BY	CAD FILE
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CHK. BY: K. GREEN	CHK. BY: K. GREEN	APP. BY: K. LISTER

DATE: AUGUST 2017

SCALE: 1" = 200'

FIGURE 4

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TABLE 1

TABLE 1
SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES - TPH & VOCS
JOHN S. GIBSON BOULEVARD PARCELS, SAN PEDRO, CALIFORNIA

Sample Location	Sample Depth (feet bgs)	Date of Collection	TPH (EPA Method 8015M)			Volatile Organic Compounds (EPA Method 8260B)								
			TPH as Gasoline-range Hydrocarbons (C4 - C12)	TPH as Diesel-range Hydrocarbons (C13 - C22)	TPH as Motor Oil-range Hydrocarbons (C23 - C36)	Benzene	Bromomethane	Ethylbenzene	Naphthalene	Toluene	1,2,4-Trimethylbenzene	Total Xylenes	Methyl ethyl ketone (MEK)	Acetone
			milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)			micrograms per kilogram (µg/kg), equivalent to parts per billion (ppb)								
B1	0.5	August 7, 2017	<0.20	<5.0	<10.0	Not Analyzed								
	2		<0.20	<5.0	<10.0	<1.2	<1.2	<1.2	<1.2	**3.11**	<1.2	**2.25**	**34.1**	**212**
	5		<0.20	<5.0	<10.0	Not Analyzed								
B2	0.5		**0.39**	**133**	**203**	Not Analyzed								
	2		<0.20	**184**	**284**	<0.92	**2.44**	<1.2	<1.2	**3.49**	<1.2	**2.10**	**28.9**	**202**
	5		<0.20	**47.5**	**68.5**	Not Analyzed								
B3	0.5		<0.20	<5.0	**36.1**	Not Analyzed								
	2		<0.20	<5.0	**48.2**	<1.2	<1.2	<1.2	<1.2	**2.94**	<1.2	**2.31**	<12	<120
	5		<0.20	<5.0	**34.7**	Not Analyzed								
B4	0.5		<0.20	**8,480**	**8,800**	Not Analyzed								
	2		**213**	**83,600**	**45,200**	<600	<600	<600	**62,200**	**937**	**1,100**	**2,050**	<6,000	<60,000
	5		**1.23**	**4,000**	**3,140**	Not Analyzed								
B5	0.5		<0.20	<5.0	**14.1**	Not Analyzed								
	2		<0.20	**28.0**	**50.2**	**1.70**	<1.1	**1.35**	<1.1	**7.52**	<1.1	**5.02**	<1.1	<110
	5		<0.20	<5.0	<10.0	Not Analyzed								
LARWQCB SSLs			500	1,000	10,000	11	--	700	--	300	--	1,750	--	--
DTSC-Recommended SL (Commercial/Industrial)			--	--	--	1,400	30,000	25,000	17,000	47,000,000	1,800,000	2,500,000	190,000,000	670,000,000

Notes:

VOCs = Volatile organic compounds

bgs = Below ground surface

LARWQCB SSLs = Los Angeles Regional Water Quality Control Board Soil Screening Levels in sandy soils approximately 20-150 feet above groundwater (Interim Site Assessment and Cleanup Guidebook. May 1996).

DTSC-Recommended SL = Screening Level as recommended in California Department of Toxic Substances Control (DTSC), Office of Human and Ecological Risk (HERO), Human Health Risk Assessment (HHRA) Note No. 3 - Industrial/commercial land use scenarios (June 2017), Referencing U.S. Environmental Protection Agency Regional Screening Level Summary Table - June 2017.

APPENDIX A

BORING LOGS

SCS ENGINEERS

BORING LOG

3900 Kilroy Airport Way, Suite 100
Long Beach, California 90806-6816

BORING NUMBER: B1

Project Name: Phase II: Howard Industrial Partners
Location: Proposed San Pedro Distribution Center
City, State San Pedro, CA

JOB NUMBER: Job Number 01217065.00

REMARKS:

Depth (meters)	Depth (feet)	Sample Location	Sample Number	Blow Counts	OVM (ppm)	USCS Soil Class.	Graphic Log	Description
0	0	X	B1-0.5			ML		Dark brown, SILT, Dry 100% silt.
	1							
	2	X	B1-2			SP		Brown, SAND, slightly moist, 100% sand, VF-F, well-sorted, subangular to rounded; trace gravel, F.
1	3							
	4							
	5	X	B1-5			SP		Tan, SAND, Dry 100% sand, VF-M, well-sorted, trace shell fragments.
2	6							
	7							
	8							
3	9							
	10							

Completion Detail: 0 — 5

Drilling Company: SCS Engineers
Drilling Method: Hand Auger
Logged By: CP
Sampling Method: Slide Hammer & Method 5035

Date Started: 8/17/17
Date Ended: 8/17/17
Boring Diameter: 2"
Well Diameter: NA

Time Started: 00:00
Time Ended: 00:00
Depth to Water: ~~ft~~ NA
Total Depth: ~~10.0 ft~~ 5 ft

STANDARD_LOG 10FTBLNK.GPJ STD_LOG.GDT 2/24/10

SCS ENGINEERS — BORING LOG

3900 Kilroy Airport Way, Suite 100
Long Beach, California 90806-6816

BORING NUMBER: B4 — Page 1 of 1

Project Name: Phase II: Howard Industrial Partners
Location: Proposed San Pedro Distribution Center
City, State San Pedro, CA

JOB NUMBER: Job Number 01217065.00

REMARKS:

Depth (meters)	Depth (feet)	Sample Location	Sample Number	Blow Counts	OVM (ppm)	USCS Soil Class.	Graphic Log	Description
0	0	X	B4-0.5			SP		1249 Brownish BLACK, SAND, DRY 100% sand, VF-F, well sorted, subangular to rounded; trace gravel (VF-F), contains small root fragments & has a light HC scent. HC scent becomes more noticeable @ approx 1 ft bgs
	1							
	2	X	B4-2			ML		1259 D.Brown & BLACK, SILT, MOIST 100% silt, Trace sand, Contains HC (BLACK). & HC odor is strong.
1	3							
	4							
	5	X	B4-5			SP		1320 Dark brown, SAND, DRY, 100% sand, VF-F, well sorted, subangular to rounded; trace medium to coarse sand; HC odor is detectible
2	6							
	7							
	8							
	9							
3	10							

Completion Detail: 0 — 5

Drilling Company: SCS
Drilling Method: Hand auger
Logged By: CP
Sampling Method: Slide Hammer & Meth 5035

Date Started: 8/7/17
Date Ended: 8/7/17
Boring Diameter: 2"
Well Diameter: NA

Time Started: 00:00
Time Ended: 00:00
Depth to Water: ~~ft~~ NA
Total Depth: ~~10.0 ft~~ 5

STANDARD_LOG 10FTBLNK.GPJ STD_LOG.GDT 2/24/10

SCS ENGINEERS

BORING LOG

3900 Kilroy Airport Way, Suite 100
Long Beach, California 90806-6816

BORING NUMBER: B-3

Page 1 of 1

Project Name: Phase II: Howard Industrial Partners
Location: Proposed San Pedro Distribution Center
City, State San Pedro, CA

JOB NUMBER: Job Number 01217065.00

REMARKS:

Depth (meters)	Depth (feet)	Sample Location	Sample Number	Blow Counts	OVM (ppm)	USCS Soil Class.	Graphic Log	Description
0	0	X	B3-05			SP		Brownish-gray, SAND, dry 100% sand, VF-F, well-sorted, sub-angular – rounded; trace silt & small root fragments
	1							
	2	X	B3-2			SP		Brown, SAND, moist, 100% sand, VF-F, well-sorted subangular - rounded; trace silt & trace gravel, F.
1	3							
	4							
	5	X	B3-5			SP		Yellowish-Brown, SAND, moist 95% Sand, F, well sorted, rounded; 5% gravel (up to 25mm) subangular to rounded.
	6							
2	7							
	8							
	9							
3	10							

Completion Detail: 0 – 5

Drilling Company: SCS
Drilling Method: Hand Auger
Logged By: CP
Sampling Method: Slide Hammer & Meth 5035

Date Started: 8/7/17
Date Ended: 8/17/17
Boring Diameter: 2"
Well Diameter: NA

Time Started: 00:00
Time Ended: 00:00
Depth to Water: ~~ft~~ NA
Total Depth: ~~10.0 ft~~ 5 ft

STANDARD_LOG 10FTBLNK.GPJ STD_LOG.GDT 2/24/10

SCS ENGINEERS

BORING LOG

3900 Kilroy Airport Way, Suite 100
Long Beach, California 90806-6816

BORING NUMBER: B2

Project Name: Phase II: Howard Industrial Partners
Location: Proposed San Pedro Distribution Center
City, State San Pedro, CA

JOB NUMBER: Job Number 01217065.00

REMARKS:

Depth (meters)	Depth (feet)	Sample Location	Sample Number	Blow Counts	OVM (ppm)	USCS Soil Class.	Graphic Log	Description
0	0	X	B2-0.5			SM		Dark brown, silty sand, dry, 85% sand, VF-F, well sorted, sub rounded to rounded; 15% silt; contains twigs + roots
	1							
	2	X	B2-2			ML		Reddish-brown, silt, moist, 100% silt; trace sand, VF.
1	3							
	4							
	5	X	B2-5			SP		Reddish-brown, SAND, moist 100% sand, VF-F, well-sorted, sub angular - rounded.
	6							
2	7							
	8							
	9							
3	10							

Completion Detail: 0 — 5

Drilling Company: SCS
Drilling Method: Hand Auger
Logged By: CP
Sampling Method: Slide Hammer & Meth. 5035

Date Started: 8/7/17
Date Ended: 8/7/17
Boring Diameter: 2"
Well Diameter: NA

Time Started: 00:00
Time Ended: 00:00
Depth to Water: ~~ft~~ NA
Total Depth: ~~10.0 ft~~ 5'

STANDARD_LOG 10FTBLNK.GPJ STD_LOG.GDT 2/24/10

SCS ENGINEERS

BORING LOG

3900 Kilroy Airport Way, Suite 100
Long Beach, California 90806-6816

BORING NUMBER: B5

Page 1 of 1

Project Name: Phase II- Howard Industrial Partners
Location: Proposed San Pedro Distribution Center
City, State San Pedro, CA

JOB NUMBER: Job Number 01217065.00

REMARKS:

Depth (meters)	Depth (feet)	Sample Location	Sample Number	Blow Counts	OVM (ppm)	USCS Soil Class.	Graphic Log	Description
0	0	X	B5-0.5			SP		1210 Light Brown, SAND, Dry, 100% sand, VF-F, med-well sorted, subangular to rounded; trace gravel, Fine; contain wood chips & plant fragments
	1							
	2	X	B5-2			SP		1218 Light Brown, SAND, moist, 100% sand, VF-F, well-sorted subangular to rounded, trace wood fragments.
1	3							
	4							
	5	X	B5-5			SP		1221 Light Brown, SAND, moist 100% sand, VF-F, well-sorted, subangular to rounded
2	6							
	7							
	8							
3	9							
	10							

Completion Detail

0
5

Drilling Company: SCS
Drilling Method: Hand Auger
Logged By: CP
Sampling Method: Slide Hammer & Meth. 5035

Date Started: 8/7/17
Date Ended: 8/7/17
Boring Diameter: 2"
Well Diameter: NA

Time Started: 00:00
Time Ended: 00:00
Depth to Water: ~~ft~~ NA
Total Depth: ~~10.0 ft~~ 5

STANDARD_LOG 10FTBLNK.GPJ STD_LOG.GDT 2/24/10

APPENDIX B

CHEMTEK LABORATORY REPORT

CHEMTEK
environmental laboratories

ELAP: 1435
LACSD: 10167

13554 Larwin Cir., Santa Fe Springs, CA 90670
T 562.926.9848
F 562.926.8324

Certificate of Analysis

Client: SCS Engineers
3900 Kilroy Airport Way
Long Beach, CA

Attention: Justin Rauzon

Project No. 01217065
Project Site: John S. Gibson
San Pedro

Job No: 708046
Report Date: 08/15/17
Date Received: 08/08/17
Number of Samples: 15
Sample Matrix: Soil

This is the Certificate of Analysis for the following samples:

SAMPLE IDENTIFICATION	DATE OF SAMPLE	LABORATORY IDENTIFICATION
B1-0.5	08/07/17	708046-01A
B1-2	08/07/17	708046-02A
B1-5	08/07/17	708046-03A
B2-0.5	08/07/17	708046-04A
B2-2	08/07/17	708046-05A
B2-5	08/07/17	708046-06A
B3-0.5	08/07/17	708046-07A
B3-2	08/07/17	708046-08A
B3-5	08/07/17	708046-09A
B4-0.5	08/07/17	708046-10A
B4-2	08/07/17	708046-11A
B4-5	08/07/17	708046-12A
B5-0.5	08/07/17	708046-13A
B5-2	08/07/17	708046-14A
B5-5	08/07/17	708046-15A

Reviewed and Approved:

For

Michael C.C. Lu
Laboratory Director

CHEMTEK
environmental laboratories
13554 Larwin Cir., Santa Fe Springs, CA 90670
T 562.926.9848
F 562.926.8324

Certificate of Analysis

Client: SCS Engineers **EPA Method:** 8260B **Units:** µg/kg or ppb **Job No:** 708046
Project Site: John S. Gibson **Matrix:** Soil
Project No. 01217065

	Sample ID	Sample Date	Sample ID	Sample Date
	B1-2	8/7/2017	B2-2	8/7/2017

Analyte	Results	Units	DF	DLR	Results	Units	DF	DLR
Benzene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Bromobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Bromochloromethane	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Bromoform	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Bromomethane	ND	µg/kg	1.2	1.2	2.44	µg/kg	0.92	0.92
n-Butylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
sec-Butylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
tert-Butylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Carbon Tetrachloride	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Chlorobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Chloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Chloroform	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Chloromethane	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
2-Chlorotoluene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
4-Chlorotoluene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
2-Chloroethyl vinyl ether	ND	µg/kg	1.2	2.4	ND	µg/kg	0.92	1.84
Dibromochloromethane	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,2-Dibromo-3-chloropropane	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,2-Dibromoethane (EDB)	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Dibromomethane	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,2-Dichlorobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,3-Dichlorobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,4-Dichlorobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Dichlorodifluoromethane	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,1-Dichloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,2-Dichloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,1-Dichloroethene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
cis-1,2 Dichloroethene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Trans-1,2-Dichloroethene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,2-Dichloropropane	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,3-Dichloropropane	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
2,2-Dichloropropane	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,1-Dichloropropene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Cis-1,3-Dichloropropene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
trans-1,3-Dichloroproene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Ethylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Hexachlorobutadiene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Isopropylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
4-Isopropyltoluene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Methylene Chloride	ND	µg/kg	1.2	6.0	ND	µg/kg	0.92	4.60
Naphthalene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
n-propylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Styrene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,1,1,2-Tetrachloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,1,2,2-Tetrachloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Tetrachloroethene(PCE)	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Toluene	3.11	µg/kg	1.2	1.2	3.49	µg/kg	0.92	0.92
1,2,3-Trichlorobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,2,4-Trichlorobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,1,1-Trichloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,1,2-Trichloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Trichloroethene(TCE)	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Trichlorofluoromethane	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,2,3-Trichloropropane	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,2,4-Trimethylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
1,3,5-Trimethylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Vinyl Chloride	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
Total Xylenes	2.25	µg/kg	1.2	2.4	2.10	µg/kg	0.92	1.84
Ethanol	ND	µg/kg	1.2	300	ND	µg/kg	0.92	230
MTBE	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
ETBE	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
DIPE	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
TAME	ND	µg/kg	1.2	1.2	ND	µg/kg	0.92	0.92
TBA	ND	µg/kg	1.2	60	ND	µg/kg	0.92	46
MEK	34.1	µg/kg	1.2	12	28.9	µg/kg	0.92	9.2
MIBK	ND	µg/kg	1.2	12	ND	µg/kg	0.92	9.2
2-Hexanone	ND	µg/kg	1.2	12	ND	µg/kg	0.92	9.2
Acetone	212	µg/kg	1.2	120	202	µg/kg	0.92	92
Analysis Date:	08/14/17				08/14/17			

ND : Not detected at or above DLR
DLR: Detection Limit for Reporting Purposes

CHEMTEK
environmental laboratories
13554 Larwin Cir., Santa Fe Springs, CA 90670
T 562.926.9848
F 562.926.8324

Certificate of Analysis

Client: SCS Engineers **EPA Method:** 8260B **Units:** µg/kg or ppb **Job No:** 708046
Project Site: John S. Gibson **Matrix:** Soil
Project No. 01217065

	Sample ID	Sample Date	Sample ID	Sample Date
	B3-2	8/7/2017	B4-2	8/7/2017

Analyte	Results	Units	DF	DLR	Results	Units	DF	DLR
Benzene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Bromobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Bromochloromethane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Bromoform	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Bromomethane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
n-Butylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
sec-Butylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
tert-Butylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Carbon Tetrachloride	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Chlorobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Chloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Chloroform	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Chloromethane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
2-Chlorotoluene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
4-Chlorotoluene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
2-Chloroethyl vinyl ether	ND	µg/kg	1.2	2.4	ND	µg/kg	600	1200
Dibromochloromethane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
1,2-Dibromo-3-chloropropane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
1,2-Dibromoethane (EDB)	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Dibromomethane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
1,2-Dichlorobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
1,3-Dichlorobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
1,4-Dichlorobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Dichlorodifluoromethane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
1,1-Dichloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
1,2-Dichloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
1,1-Dichloroethene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
cis-1,2 Dichloroethene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Trans-1,2-Dichloroethene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
1,2-Dichloropropane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
1,3-Dichloropropane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
2,2-Dichloropropane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
1,1-Dichloropropene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Cis-1,3-Dichloropropene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
trans-1,3-Dichloroproene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Ethylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Hexachlorobutadiene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Isopropylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
4-Isopropyltoluene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Methylene Chloride	ND	µg/kg	1.2	6.0	ND	µg/kg	600	3000
Naphthalene	ND	µg/kg	1.2	1.2	62200	µg/kg	600	600
n-propylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Styrene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
1,1,1,2-Tetrachloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
1,1,2,2-Tetrachloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Tetrachloroethene(PCE)	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Toluene	2.94	µg/kg	1.2	1.2	937	µg/kg	600	600
1,2,3-Trichlorobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
1,2,4-Trichlorobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
1,1,1-Trichloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
1,1,2-Trichloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Trichloroethene(TCE)	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Trichlorofluoromethane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
1,2,3-Trichloropropane	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
1,2,4-Trimethylbenzene	ND	µg/kg	1.2	1.2	1100	µg/kg	600	600
1,3,5-Trimethylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Vinyl Chloride	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
Total Xylenes	2.31	µg/kg	1.2	2.4	2050	µg/kg	600	1200
Ethanol	ND	µg/kg	1.2	300	ND	µg/kg	600	150000
MTBE	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
ETBE	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
DIPE	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
TAME	ND	µg/kg	1.2	1.2	ND	µg/kg	600	600
TBA	ND	µg/kg	1.2	60	ND	µg/kg	600	30000
MEK	ND	µg/kg	1.2	12	ND	µg/kg	600	6000
MIBK	ND	µg/kg	1.2	12	ND	µg/kg	600	6000
2-Hexanone	ND	µg/kg	1.2	12	ND	µg/kg	600	6000
Acetone	ND	µg/kg	1.2	120	ND	µg/kg	600	60000
Analysis Date:	08/14/17				08/15/17			

ND : Not detected at or above DLR
DLR: Detection Limit for Reporting Purposes

CHEMTEK
environmental laboratories
13554 Larwin Cir., Santa Fe Springs, CA 90670
T 562.926.9848
F 562.926.8324

Certificate of Analysis

Client: SCS Engineers **EPA Method:** 8260B **Units:** µg/kg or ppb **Job No:** 708046
Project Site: John S. Gibson **Matrix:** Soil

Project No. 01217065	Sample ID: B5-2	Sample Date: 8/7/2017

Analyte	Results	Units	DF	DLR
Benzene	1.70	µg/kg	1.1	1.1
Bromobenzene	ND	µg/kg	1.1	1.1
Bromochloromethane	ND	µg/kg	1.1	1.1
Bromoform	ND	µg/kg	1.1	1.1
Bromomethane	ND	µg/kg	1.1	1.1
n-Butylbenzene	ND	µg/kg	1.1	1.1
sec-Butylbenzene	ND	µg/kg	1.1	1.1
tert-Butylbenzene	ND	µg/kg	1.1	1.1
Carbon Tetrachloride	ND	µg/kg	1.1	1.1
Chlorobenzene	ND	µg/kg	1.1	1.1
Chloroethane	ND	µg/kg	1.1	1.1
Chloroform	ND	µg/kg	1.1	1.1
Chloromethane	ND	µg/kg	1.1	1.1
2-Chlorotoluene	ND	µg/kg	1.1	1.1
4-Chlorotoluene	ND	µg/kg	1.1	1.1
2-Chloroethyl vinyl ether	ND	µg/kg	1.1	2.2
Dibromochloromethane	ND	µg/kg	1.1	1.1
1,2-Dibromo-3-chloropropane	ND	µg/kg	1.1	1.1
1,2-Dibromoethane (EDB)	ND	µg/kg	1.1	1.1
Dibromomethane	ND	µg/kg	1.1	1.1
1,2-Dichlorobenzene	ND	µg/kg	1.1	1.1
1,3-Dichlorobenzene	ND	µg/kg	1.1	1.1
1,4-Dichlorobenzene	ND	µg/kg	1.1	1.1
Dichlorodifluoromethane	ND	µg/kg	1.1	1.1
1,1-Dichloroethane	ND	µg/kg	1.1	1.1
1,2-Dichloroethane	ND	µg/kg	1.1	1.1
1,1-Dichloroethene	ND	µg/kg	1.1	1.1
cis-1,2 Dichloroethene	ND	µg/kg	1.1	1.1
Trans-1,2-Dichloroethene	ND	µg/kg	1.1	1.1
1,2-Dichloropropane	ND	µg/kg	1.1	1.1
1,3-Dichloropropane	ND	µg/kg	1.1	1.1
2,2-Dichloropropane	ND	µg/kg	1.1	1.1
1,1-Dichloropropene	ND	µg/kg	1.1	1.1
Cis-1,3-Dichloropropene	ND	µg/kg	1.1	1.1
trans-1,3-Dichloproene	ND	µg/kg	1.1	1.1
Ethylbenzene	1.35	µg/kg	1.1	1.1
Hexachlorobutadiene	ND	µg/kg	1.1	1.1
Isopropylbenzene	ND	µg/kg	1.1	1.1
4-Isopropyltoluene	ND	µg/kg	1.1	1.1
Methylene Chloride	ND	µg/kg	1.1	5.5
Naphthalene	ND	µg/kg	1.1	1.1
n-propylbenzene	ND	µg/kg	1.1	1.1
Styrene	ND	µg/kg	1.1	1.1
1,1,1,2-Tetrachloroethane	ND	µg/kg	1.1	1.1
1,1,2,2-Tetrachloroethane	ND	µg/kg	1.1	1.1
Tetrachloroethene(PCE)	ND	µg/kg	1.1	1.1
Toluene	7.52	µg/kg	1.1	1.1
1,2,3-Trichlorobenzene	ND	µg/kg	1.1	1.1
1,2,4-Trichlorobenzene	ND	µg/kg	1.1	1.1
1,1,1-Trichloroethane	ND	µg/kg	1.1	1.1
1,1,2-Trichloroethane	ND	µg/kg	1.1	1.1
Trichloroethene(TCE)	ND	µg/kg	1.1	1.1
Trichlorofluoromethane	ND	µg/kg	1.1	1.1
1,2,3-Trichloropropane	ND	µg/kg	1.1	1.1
1,2,4-Trimethylbenzene	ND	µg/kg	1.1	1.1
1,3,5-Trimethylbenzene	ND	µg/kg	1.1	1.1
Vinyl Chloride	ND	µg/kg	1.1	1.1
Total Xylenes	5.02	µg/kg	1.1	2.2
Ethanol	ND	µg/kg	1.1	275
MTBE	ND	µg/kg	1.1	1.1
ETBE	ND	µg/kg	1.1	1.1
DIPE	ND	µg/kg	1.1	1.1
TAME	ND	µg/kg	1.1	1.1
TBA	ND	µg/kg	1.1	55
MEK	ND	µg/kg	1.1	11
MIBK	ND	µg/kg	1.1	11
2-Hexanone	ND	µg/kg	1.1	11
Acetone	ND	µg/kg	1.1	110

Analysis Date: 08/14/17

ND : Not detected at or above DLR
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CHEMTEK
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13554 Larwin Cir., Santa Fe Springs, CA 90670
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Certificate of Analysis

Client: SCS Engineers
Project Site: John S. Gibson
San Pedro
Project No: 01217065

EPA Method: 8015M
units: mg/kg or ppm

Job No: 708046
Report Date: 08/15/17
Date of Sample: 08/07/17
Date Received: 08/08/17
Sample Matrix: Soil

Sample ID	UNITS	Gas Range (C4-C12)	DF	DLR	Diesel Range (C13-C22)	DF	DLR	Oil Range (C23-36)	DF	DLR
B1-0.5	mg/kg	ND	1	0.20	ND	1	5.0	ND	1	10
B1-2	mg/kg	ND	1	0.20	ND	1	5.0	ND	1	10
B1-5	mg/kg	ND	1	0.20	ND	1	5.0	ND	1	10
B2-0.5	mg/kg	0.39	1	0.20	133	1	5.0	203	1	10
B2-2	mg/kg	ND	1	0.20	184	1	5.0	284	1	10
B2-5	mg/kg	ND	1	0.20	47.5	1	5.0	68.5	1	10
B3-0.5	mg/kg	ND	1	0.20	ND	1	5.0	36.1	1	10
B3-2	mg/kg	ND	1	0.20	ND	1	5.0	48.2	1	10
B3-5	mg/kg	ND	1	0.20	ND	1	5.0	34.7	1	10
B4-0.5	mg/kg	ND	1	0.20	8,480	20	100	8,800	20	200
B4-2	mg/kg	213	600	120.00	83,600	40	200	45,200	40	400
B4-5	mg/kg	1.23	2.5	0.50	4,000	20	100	3,140	20	200
B5-0.5	mg/kg	ND	1	0.20	ND	1	5.0	14.1	1	10
B5-2	mg/kg	ND	1	0.20	28.0	1	5.0	50.2	1	10
B5-5	mg/kg	ND	1	0.20	ND	1	5.0	ND	1	10
Sample Date:		08/07/17			08/07/17			08/07/17		
Analysis Date:		8/14/17, 08/15/17			08/08/17			08/08/17		

ND : Not detected at or above DLR

DLR: Detection Limit for Reporting Purposes

CHEMTEK
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QC Analysis Date: 08/14/17
QC Lab ID: 708046-08
Units: ppb
Job No: 708046

QUALITY CONTROL DATA

EPA METHOD: 8260B(VOC's)

ANALYTE	BLANK RESULT	SPIKE CONC.	MS % REC	MSD % REC	% RPD	% RPD ACCEPT LIMITS	% REC ACCEPT LIMITS
1,1-Dichloroethene	ND	25	92.2	93.7	1.6%	30	70-130
Benzene	ND	25	101.9	99.3	2.6%	30	70-130
Trichloroethylene	ND	25	98.9	94.2	4.9%	30	70-130
Toluene	ND	25	129.1	128.4	0.5%	30	70-130
Chlorobenzene	ND	25	118.2	115.8	2.1%	30	70-130

QC Analysis Date: 08/14/17
QC Lab ID: 708046-08
Units: ppm

QUALITY CONTROL DATA

EPA METHOD: 8015B(TPH Gas Range Organics)

ANALYTE	BLANK RESULT	SPIKE CONC.	MS % REC	MSD % REC	% RPD	% RPD ACCEPT LIMITS	% REC ACCEPT LIMITS
GRO (TPH)	ND	0.5	120.6	116.0	3.9%	30	70-130

QC Analysis Date: 08/08/17
QC Lab ID: 708046-1A
Units: ppm

QUALITY CONTROL DATA

EPA METHOD: 8015m(TPH Diesel Range Organics)

ANALYTE	BLANK RESULT	SPIKE CONC.	MS % REC	MSD % REC	% RPD	% RPD ACCEPT LIMITS	% REC ACCEPT LIMITS
DRO (TPH)	ND	100	108.5	121.4	11.2%	30	70-130

CHEMTEK Environmer .aboratories Inc.

13554 Larwin Circle, Santa Fe Springs, CA 90670

Tel. (562) 926-9848 FAX (562) 926-8324 Email: ChemtekLabs@hotmail.com

CA Dept of Health Accredited. (ELAP No. 1435) & Mobile Lab (ELAP No. 2629)

CHAIN OF CUSTODY RECORD

708046

Job No.: 01217065

Page: 1 of 1

CUSTOMER INFORMATION

COMPANY NAME: SCS Engineers

PROJECT CONTACT: Justin Rauzon Email: JRauzon@scsengineers.com

ADDRESS: 3900 Kilroy Airport Way Ste. 100 Long Beach, CA 90806

PHONE (562) 637-4530 FAX:

PROJECT INFORMATION

PROJECT NAME John S. Gibson Phase II P.O. No.

SITE ADDRESS: San Pedro, CA

SAMPLED BY: CP & CR EDF

Turn Around Time NORM X 24 hr 48 hr Other

ANALYSIS REQUIRED

	SAMPLE ID	DATE SAMPLED	TIME SAMPLED	TYPE *	pH/Time	REMARKS	Preserved	NO. OF CONT	8015M TPH G or GRO	8015M TPH D or DRO	TPH-CARBON CHAIN (8015M)	VOCs (8260 B) FULL + fuel oxygenates	OXYGENATES (8260 B) SHORT	COD / TSS / BOD / TDS	pH, Conductivity, Turbidity	Sulfide, Cyanide, O&G	CAM 17 Metals					
1	B1-0.5	8/7/17	830	SO				4			X											
2	B1-2		955								X	X										
3	B1-5		910								X											
4	B2-0.5		950								X											
5	B2-2		1003								X	X										
6	B2-5		1020								X											
7	B3-0.5		1047								X											
8	B3-2		1100								X	X										
9	B3-5		1108								X											
10	B4-0.5		1249								X											
11	B4-2		1259								X	X										
12	B4-5		1320								X											
13	B5-0.5		1210								X											
14	B5-2		1218								X	X										
15	B5-5		1227								X											
16																						

SIGNATURE	PRINT NAME	COMPANY NAME	DATE	TIME
RELINQUISHED BY:	Chindamony Pak	SCS Engineers	8/8/17	1227
RECEIVED BY:				
RELINQUISHED BY:				
RECEIVED FOR LABORATORY BY:	Martin	Chemtek	8/8/17	12pm

NOTE: Samples are discarded 30 days after results are reported unless other arrangements are made.

Distribution : WHITE with report / YELLOW to CHEMTEK / PINK to courier

*Type: SO-Soil GW-Ground Water WW-Waste Water AQ-Aqueous A-Air OT-Other