Workplan for Phase II Environmental Site Assessment
Woodside Avenue Improvement Project
Woodside Avenue
Lakeside, California 92040

Prepared For:
State of California Department of Transportation

County of San Diego Department of Public Works

HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, California 91942

Prepared By:
The Bodhi Group, Inc.

May 2021
Project No. 9120005

May 24, 2021
Project No. 9120004

Ms. Beth Ehsan,
HELIX Environmental Planning, Inc.
7578 El Cajon Blvd.
La Mesa, CA 91942

Subject: Phase II Environmental Site Assessment
Woodside Avenue Improvement Project
Lakeside, San Diego County, California

Dear Ms. Ehsan,

We are pleased to submit this Work Plan for a Phase II Environmental Site Assessment (ESA) for the Woodside Avenue Improvement Project located along Woodside Avenue in the community of Lakeside in San Diego County. This Work Plan outlines proposed methods to investigate soil within the Project area for the presence of contaminants that may impact workers during Project activities.

Respectfully submitted,

THE BODHI GROUP, INC.

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1. INTRODUCTION

This Work Plan (WP) for a Phase II Environmental Site Assessment (ESA) for the Woodside Avenue Improvement Project (Project) was prepared by the Bodhi Group, Incorporated (Bodhi Group). The Project area includes the Woodside Avenue Right-of-Way (ROW) between Marilla Drive and Chestnut Street and portions of adjacent properties in the unincorporated community of Lakeside in San Diego County (Figure 1).

The Project scope proposes to improve pedestrian and bicycle facilities along portions of Woodside Avenue, to improve sidewalk infrastructure, and to increase pedestrian and bicycle safety. Project construction will include shallow excavation for the components listed below and shown on Figures 2 and 3.

- Sidewalk, curb, gutter, driveway, median, asphalt concrete (AC) pavement, and concrete ramp removal and replacement to a maximum depth of 1.5 feet below ground surface (bgs).
- Traffic conduits to a maximum depth of 2.5 feet bgs, traffic loop detector to a maximum depth of 0.5 feet bgs, and traffic signal to a maximum depth of 12 feet bgs.
- Streetlights to a maximum depth of 4.5 feet bgs.
- Stormwater drain infrastructure to a maximum depth of 6 feet bgs, stormwater dispersion areas to a maximum depth of 2 feet bgs, and stormwater biofiltration and underdrains to a maximum depth of 4 feet bgs.

An Initial Site Assessment (ISA) was prepared by the Bodhi Group in December 2020 for the Project described above (Bodhi, 2020). The ISA evaluated multiple properties identified as potentially containing hazardous materials or contamination in the Project area based on property history, review of regulatory records, and online databases. Of the multiple properties evaluated, three were recommended for evaluation of former hazardous materials releases and their impact on the proposed Project construction. The three properties are listed below and comprise the "Sites" for this Phase II ESA and are depicted on Figures 2 and 3:

- My Fuel (9774 Maine Avenue)
- Shell Service (12087 Woodside Avenue)
- Lakeside Muffler and Welding (12461 Woodside Avenue)

This WP presents the background and proposes the procedures for investigating soil at the Sites for the presence of contaminants that may impact workers during Project activities.

2. SITE BACKGROUND

As mentioned in the previous Section, an ISA was performed for the Project Area in 2020 and recommended three properties for further evaluation based on the probability of encountering residual contamination during Project construction. A brief description of each of the three properties (Sites) are described in the Sections below.

2.1. My Fuel (9774 Maine Avenue)

The address is associated with one closed unauthorized release case (H03806-001). According to the closure report available on State Water Resources Control Board-managed GeoTracker website (Geotracker), a release of gasoline and diesel was discovered during the removal of five underground storage tanks (UST)s and associated piping in 1989 impacting soil and groundwater. Records reviewed during the ISA indicated total petroleum hydrocarbon (TPH)-contaminated soil remains at the Site (Bodhi, 2020).

Project excavations for traffic conduit and loop detector, sidewalk, curb, and gutter are proposed to a maximum depth of 2.5 feet in areas where residual contaminated soil from former UST releases (northwest portion of the Site and adjacent ROW) may be present. This WP will investigate the potential to encounter residual contamination in the areas of Project excavation.

2.2. Shell Service (12087 Woodside Avenue)

Records reviewed during the ISA indicated that volatile organic compounds (VOC) and TPH were detected in soil after five USTs were removed from the Site in 2006. Approximately 168 cubic yards of soil was reportedly excavated from the former UST area; however, confirmation sampling indicated residual concentrations of TPH and VOCs remained after excavation (Bodhi, 2020).

Project construction for sidewalk, curb and gutter, and street light footings is proposed in the adjacent ROW along the northern and eastern Site boundaries to a maximum depth of 4.5 feet and traffic signal footings are proposed in the northeast corner of the Site to a maximum depth of 12 feet bgs. This WP will investigate the potential to encounter contaminated soil in the areas of Project excavation.

2.3. Lakeside Muffler and Welding (12461 Woodside Avenue)

Records reviewed during the ISA indicated that one soil boring was installed in the northeast portion of the Site to investigate potential contaminants in soil from a transformer release and from a nearby off-Site property. TPH was detected in samples collected from the surface to approximately 6.5 feet bgs, and VOCs were detected in samples collected from 3 to 4.5 feet bgs. Stained and odorous soil was observed in the boring at a depth of 3 to 4.5 feet bgs. The contaminated soil was reportedly left in place (Bodhi, 2020).

Project work consisting of driveway, sidewalk, and curb and gutter investigation is proposed in the north portion of the Site to a maximum depth of 1.5 feet bgs. This WP will investigate the potential for contaminated soil to be encountered in the areas of Project excavation.

3. ENVIRONMENTAL SETTING

This Section includes a description of topography, hydrology, geology, hydrogeology, and land use at the Site and surrounding areas.

3.1. Topography

The elevation at the Sites ranges from approximately 395 feet North American Vertical Datum of 1988 in feet (NAVD 88) at 12087 Woodside Avenue to approximately 415 feet NAVD 88 at 9774 Maine Avenue.

3.2. Hydrology

There is no surface water present at the Site. Surface runoff is transported by sheet flow over the paved area to storm drains.

3.3. Geology

Based on a review of the Preliminary Geologic Map of the El Cajon 30' x 60' Quadrangle, the Site is underlain by Young alluvium and Granitoid rocks. Young alluvium is described as sand, silt, and gravel in modern streambeds and washes. Granitoid rocks are described as undivided tonalite and granodiorite (Todd, 2004).

3.4. Hydrogeology

The Site addressed 12087 Woodside Avenue is located within the Santee Hydrologic Subarea (HSA) and The Sites addressed 9774 Maine Avenue and 12461 Woodside Avenue are located in the Coches HSA. Both HSAs are within the Lower San Diego Hydrologic Area, of the San Diego Hydrologic Unit. The beneficial uses of groundwater in the Santee and Coches HSAs include municipal, industrial, agricultural, and processing supply (Coches HSA has potential beneficial use for processing supply; RWQCB, 1994).

The depth to groundwater data published in Geotracker, was measured between 28 and 30 feet bgs at a property located approximately 120 feet northeast of 12087 Woodside Avenue (reported in 2019) and between 24.5 and 25.5 feet bgs at a property located approximately 70 feet north of 9774 Maine Avenue and 12461 Woodside Avenue (reported in 2011).

The maximum depth of proposed Project excavation is 12 feet bgs, thus groundwater is not anticipated to be encountered during Project work and an investigation into groundwater is not warranted as part of this Phase II ESA.

4. SITE INVESTIGATION

4.1. Locations of Sample Collection

The locations and rationale of soil samples for each Site were described in Section 2. Boring locations and the soil sampling intervals are depicted in Figures 2 and 3 and discussed below. The depths of soil borings and soil samples at a given location correspond to the depths of the proposed Project excavation at that location.

4.1.1. My Fuel (9774 Maine Avenue)

As discussed in Section 2.1, project excavations for traffic conduit and loop detector, sidewalk, curb, and gutter may encounter residual contamination from former UST releases. Accordingly, soil samples will be collected from borings 12-1 and 12-2 at depths of 1.5 feet bgs and from boring 12-3 from a depth of 2.5 feet bgs (Figure 3).

4.1.2. Shell Service (12087 Woodside Avenue)

As discussed in Section 2.2, residual soil contamination remains at the Site from former UST releases and may be encountered during construction. Accordingly, soil samples will be collected at a depth of 4.5 feet bgs from borings 14-1, 14-2, 14-4, and 14-5. A soil sample will be collected from boring 14-3 at a depth of 12 feet bgs corresponding to the proposed traffic signal.

4.1.3. Lakeside Muffler and Welding (12461 Woodside Avenue)

As discussed in Section 2.3, proposed Project work consisting of driveway, sidewalk, and curb and gutter excavation at the Site may encounter residual contaminated soil. Accordingly, soil samples will be collected from 1.5 feet bgs from soil borings 21-1 and 21-2 (Figure 3).

4.2. Pre-Field Activities

The following Sections describe the activities that will be completed prior to drilling.

4.2.1. Notification and Permitting Activities

An Excavation Permit and a Traffic Control Permit application will be submitted to the County of San Diego Planning and Development Services Department (County PDS). Additionally, an Encroachment Permits is required by the State of California Department of Transportation (Caltrans) for traffic control signage placement along Caltrans right-of-way ROW (the Highway 67 off-ramp). Fieldwork will commence after approval of this WP along with approval of the required County PDS and Caltrans permits. No other permits are needed for the fieldwork.

4.2.2. Health and Safety

Prior to fieldwork, a health and safety plan (HSP) will be prepared to address hazards that may be encountered during fieldwork. The HSP will present procedures that are protective of worker and public health and safety in accordance with Title 29 of the Code of Federal Regulations Part 1910.120. The HSP will be kept on-Site and will be readily available to all field personnel during fieldwork.

4.2.3. Utility Locating

Prior to drilling, each boring location will be cleared of potential conflict with underground utilities by notifying Dig Alert a minimum of 48 hours prior to fieldwork. In addition to notifying Dig Alert, a private geophysical utility clearance will be conducted to clear proposed sampling locations of

underground utility conflicts. At boring locations with potential for underground utility conflict, the boring locations will be moved to avoid the conflict.

4.3. Fieldwork

The following Sections describe the investigation procedures for the proposed soil sample collection.

4.3.1. Boring Advancement and Soil Sample Collection

Shallow soil borings (maximum depth 4.5 feet bgs) will be advanced using either hand tools or by the direct push drilling method by a bonded, C-57-licensed drilling contractor. The 12-foot soil boring (SB14-3, Figure 2) will be advanced by the direct push drilling method. The direct push method of drilling drives a 2.25-inch diameter macro core lined with an acetate sleeve to the specified boring depth. Where the proposed borings are located in areas paved with concrete, a concrete core will be cut using a circular saw blade prior to boring advancement. Boring lithology will be recorded by a Geologist in accordance with the United Soil Classification System visual-manual method and soil will be screened with a photoionization detector (PID) for evidence of VOCs.

In addition to collecting samples as described in Section 4.1, soil samples will be collected where there is obvious evidence of contamination, such as visual staining or odors and/or elevated PID readings. The soil samples will be collected directly from the hand tool or acetate sleeves (depending on drilling method) and placed in laboratory-supplied glass jars. In addition to the glass jars, soil samples will be collected in TerraCore™ kits by United States Environmental Protection Agency (EPA) Method 5035 and preserved for VOC and TPH in the gasoline range (TPH-G) analysis. The boring locations and sampling intervals are depicted on Figures 2 and 3.

The sample ID, date, and time of collection will be recorded on the chain-of-custody and the sample labels and the labels will be affixed to the soil sample containers. The samples will be placed in a cooler with ice and transported to a state-certified laboratory.

Soil samples will be analyzed by a laboratory certified by the California Environmental Laboratory Accreditation Program for TPH-G, TPH in the diesel range (TPH-D) and TPH in the motor oil range (TPH-MO) by EPA method 8015B, VOCs by EPA method 8260B, and total lead by EPA method 6010B. Those samples where the total lead concentration indicates the theoretical potential of soluble lead exceeding the soluble threshold limit concentration per 22 CCR 66261 or the toxicity characteristic leaching procedure (TCLP) limit per 40 CFR 261 will be additionally analyzed by the Waste Extraction Test and TCLP, respectively.

After soil sample collection, the borings will be backfilled with soil previously excavated and hydrated bentonite chips (the decontamination water will be used for hydrating the chips). The surface will be patched with concrete or asphalt to match the existing grade.

4.3.2. Decontamination

Drilling and sampling equipment that directly contacts the soil will be decontaminated between soil borings and sample collection to minimize the possibility of cross-contamination. Sampling equipment will be decontaminated prior to, and between, each use. Sampling equipment will be decontaminated with a 3-step process of washing with Liquinox™ detergent solution in tap water, rinsing with potable water, followed by final rinsing with deionized water.

4.3.3. Waste Disposal

Soil and water waste will not be produced during drilling and sample collection as the drill cuttings and the water used for decontamination will be used in backfilling the borings.

5. REPORTING

A Phase II ESA Report (Report) will be prepared providing a detailed discussion of the investigation and sampling activities and any deviations from the approved WP. The Report will include tabulated data of Site COC analytical results, laboratory reports, and Chain-of-Custody forms. If COCs are detected at any of the Sites, the concentrations will be compared to the January 2019 San Francisco Bay Regional Water Quality Control Board environmental screening levels ESLs protective of construction workers.

The Report will provide conclusions and recommendations and will be prepared under the direction of a California-Registered Civil Engineer or Professional Geologist with the appropriate experience and training. The Registered Professional will sign, stamp, and date the report.

6. SELECT REFERENCES

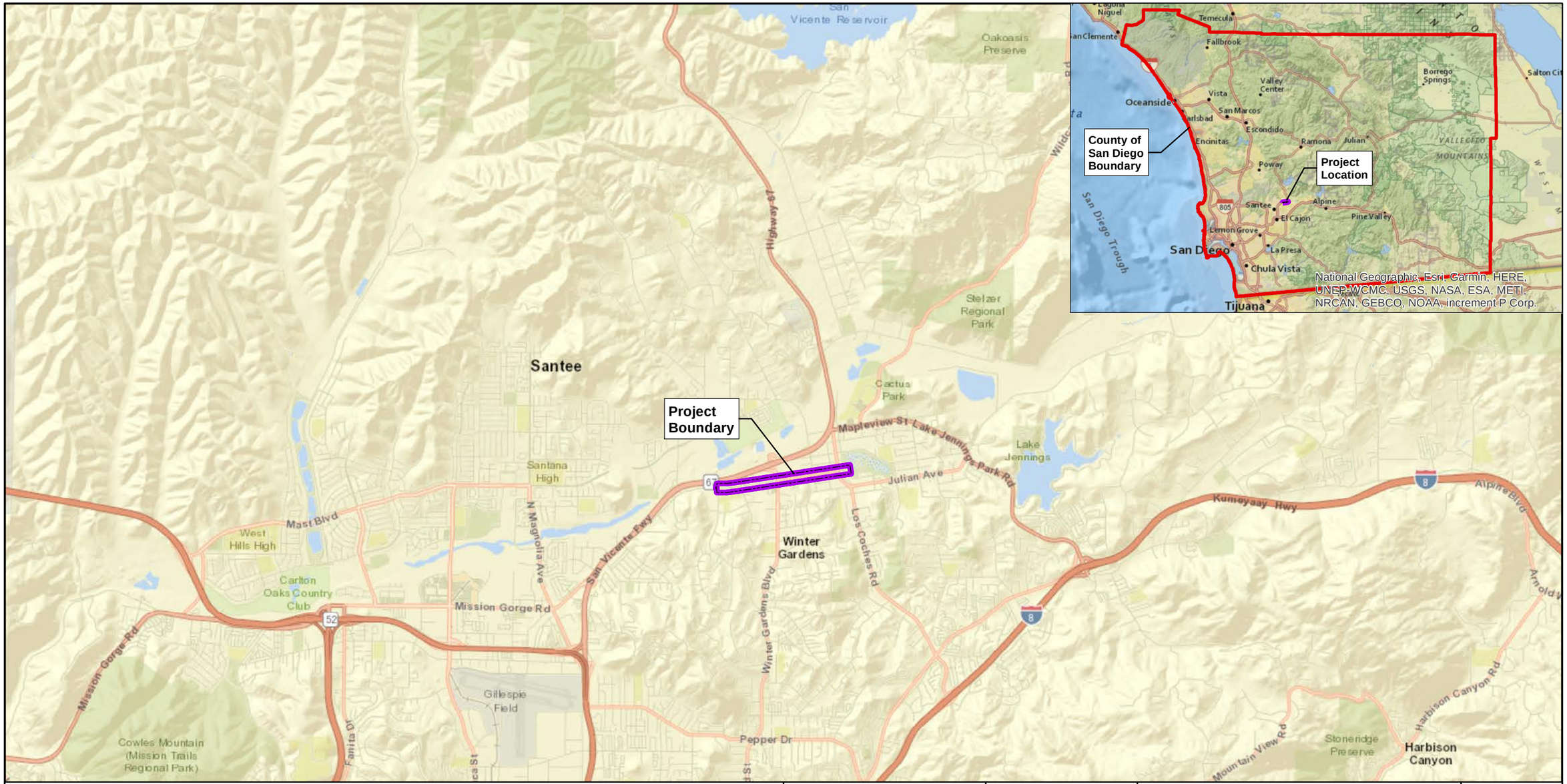
San Diego Regional Water Quality Control Board (RWQCB), 1994, Water Quality Control Plan for the San Diego Basin (9), with amendments effective on or before May 17, 2016: dated September. https://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/.

The Bodhi Group, Inc. (Bodhi Group), 2020, Updated Initial Site Assessment, Woodside Avenue Improvement Project, dated: December.

Todd, V.R., 2004, California Geological Survey Preliminary Geologic Map of the El Cajon 30' X 60 Quadrangle, Southern California.

United States Geological Survey, 2018, El Cajon, California, 7.5 Minute Series (Topographic): Scale 1:24,000.

FIGURES



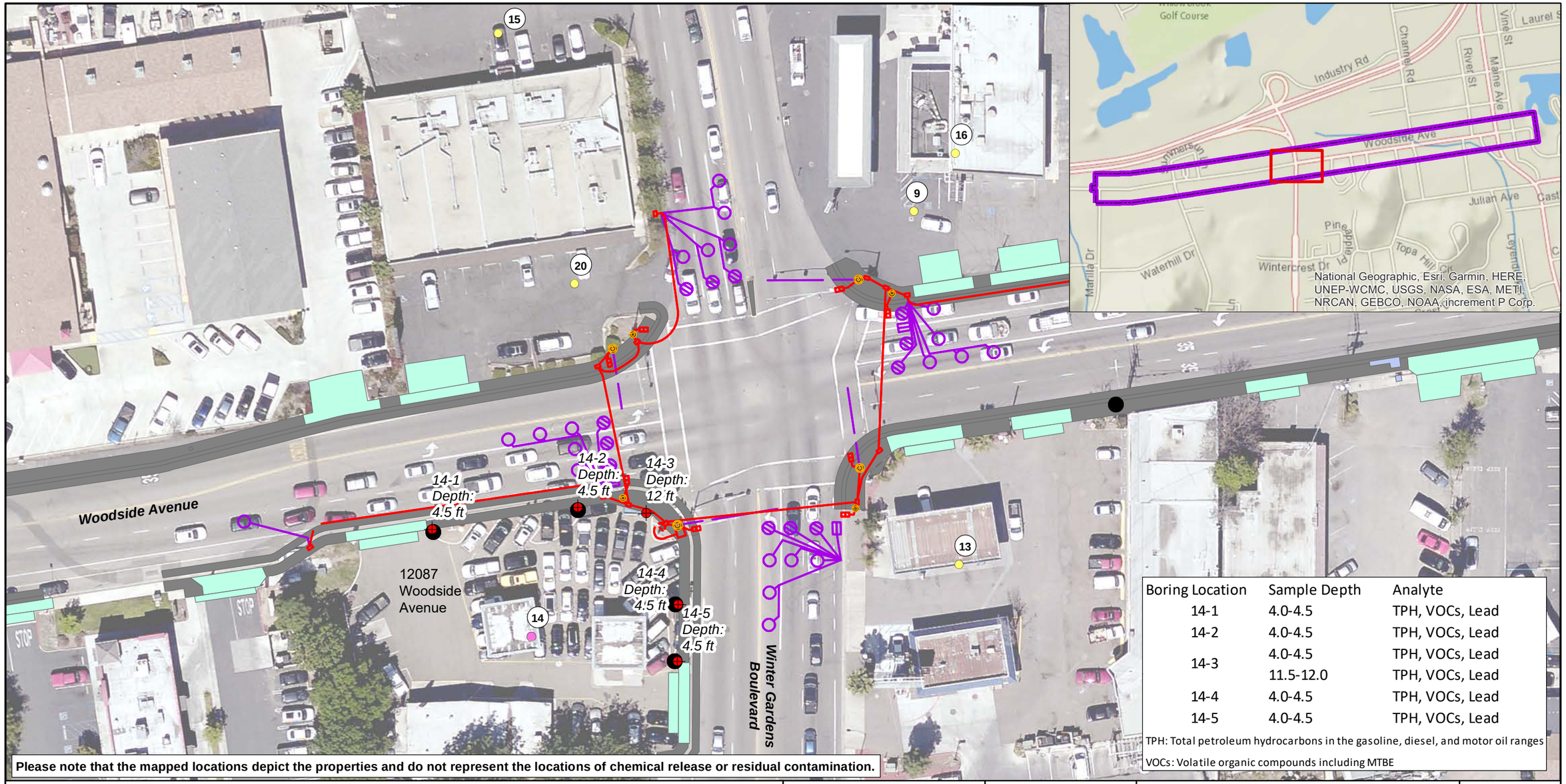
Legend

Project Boundary

N W E S

0 2,500 5,000 Feet

Project No. 9120005	**Project Location Map Woodside Avenue Improvements Project**	THE BODHI GROUP INNOVATING | SUSTAINING | SOLVING
Date: 06/2020		
Drawn By: SG	**Woodside Avenue Marilla Drive to Chestnut Street Lakeside, California**	Figure 1



Boring Location	Sample Depth	Analyte
14-1	4.0-4.5	TPH, VOCs, Lead
14-2	4.0-4.5	TPH, VOCs, Lead
14-3	4.0-4.5	TPH, VOCs, Lead
	11.5-12.0	TPH, VOCs, Lead
14-4	4.0-4.5	TPH, VOCs, Lead
14-5	4.0-4.5	TPH, VOCs, Lead

TPH: Total petroleum hydrocarbons in the gasoline, diesel, and motor oil ranges

VOCs: Volatile organic compounds including MTBE

Please note that the mapped locations depict the properties and do not represent the locations of chemical release or residual contamination.

Proposed Soil Boring (advance in ROW only)

Properties and Hazard Ranking

- Rank 4 (Total 2)
- Rank 3 (Total 1)
- Rank 2 (Total 14)
- Rank 1 (Total 6)
- No Rank Assigned (Total 1)

Excavation for Improvements (feet)

- Sidewalk, Curb & Gutter, Medians, AC removal, Ramps (1.5')
- Driveway (1.5')
- Storm Drain Infrastructure (6')
- Stormwater Dispersion Areas (2')
- Stormwater Biofiltration and Underdrains (4')
- Traffic Signal (12')
- Traffic Conduit (2.5')
- Traffic Loop Detector (0.5')
- Street Light (4.5')

N W E S

0 25 50 Feet

Project No. 9120005

Date: 03/2021

Drawn By: SG

Proposed Soil Sample Locations
Woodside Avenue and
Winter Gardens Boulevard

Woodside Avenue
Marilla Drive to Chestnut Street
Lakeside, California

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Figure 2

Boring Location	Sample Depth	Analyte
21-1	1.0-1.5	TPH, VOCs, Lead
21-2	1.0-1.5	TPH, VOCs, Lead
12-1	1.0-1.5	TPH, VOCs, Lead
12-2	1.0-1.5	TPH, VOCs, Lead
12-3	2.0-2.5	TPH, VOCs, Lead

TPH: Total petroleum hydrocarbons in the gasoline, diesel, and motor oil ranges

VOCs: Volatile organic compounds including MTBE

Please note that the mapped locations depict the properties and do not represent the locations of chemical release or residual contamination.

Proposed Soil Boring (advance in ROW only)

Properties and Hazard Ranking

- Rank 4 (Total 2)
- Rank 3 (Total 1)
- Rank 2 (Total 6)
- Rank 1 (Total 14)
- No Rank Assigned (Total 1)

Excavation for Improvements (feet)

- Sidewalk, Curb & Gutter, Medians, AC removal, Ramps (1.5')
- Driveway (1.5')
- Storm Drain Infrastructure (6')
- Stormwater Dispersion Areas (2')
- Stormwater Biofiltration and Underdrains (4')
- Traffic Signal (12')
- Traffic Conduit (2.5')
- Traffic Loop Detector (0.5')
- Street Light (4.5')

N W E S

0 25 50 Feet

Project No. 9120005

Date: 03/2021

Drawn By: SG

Proposed Soil Sample Locations Woodside Avenue and Maine Avenue

Woodside Avenue Marilla Drive to Chestnut Street Lakeside, California

Figure 3

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