



Phase II Environmental Site Assessment

5401-5425 Wilshire Boulevard
Los Angeles, California

prepared for
Walter N. Marks, Inc.

prepared by
Rincon Consultants, Inc.

May 29, 2020

rincon

RINCON CONSULTANTS, INC.

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May 29, 2020
Project 18-06852

Wally Marks
Walter N. Marks, Inc.
Helms Hall of Fame
8758 Venice Boulevard, Suite 100
Los Angeles, CA 90034

**Subject: Phase II Environmental Site Assessment
5401-5425 Wilshire Boulevard
Los Angeles, California**

Dear Mr. Marks:

This report presents the findings of a Phase II Environmental Site Assessment (ESA) completed by Rincon Consultants, Inc. for 5401-5425 Wilshire Boulevard in Los Angeles, California (subject property). The Phase II ESA was performed for Walter N. Marks, Inc. by Rincon Consultants, Inc. The work was conducted based on the findings of our Phase I ESA dated January 17, 2019 which identified potential recognized environmental condition (RECs) in connection with the subject property. This Phase II ESA includes the results of soil vapor sampling at the subject property.

Thank you for selecting Rincon for this project. If you have any questions, or if we can be of any future assistance, please contact us.

Sincerely,
Rincon Consultants, Inc.

Lauren Kodama Roenicke
Project Manager

Walt Hamann, PG, CEG, CHG
Principal

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Executive Summary

This report presents the findings of a Phase II Environmental Site Assessment (ESA) for 5401-5425 Wilshire Boulevard in Los Angeles, California (subject property). The Phase II ESA was performed for Walter N. Marks, Inc.

Rincon completed a Phase I ESA for the subject property on January 17, 2019. Based on the results of the Phase I ESA, five Potential Recognized Environmental Condition (RECs) were identified in connection with the subject property as follows:

Potential RECs

- Current eastern adjacent dry cleaner (682 South Cloverdale Avenue)
- Former eastern adjacent dry cleaner (676 Cloverdale Court/Avenue) and former garage with gas and oil services from at least 1950 to 1969 (674 South Cloverdale Avenue)
- Former western adjacent dry cleaner (5455 Wilshire Boulevard)
- Former western adjacent gasoline service station (5453 Wilshire Boulevard)
- The location of the subject property within a methane zone

Rincon recommended conducting a methane survey in accordance with Los Angeles Department of Building and Safety (LADBS) protocols.

Rincon also recommended a soil vapor assessment to determine if the subject property has been adversely impacted by the adjacent land uses.

On May 8, 2020, under the direct supervision of Rincon, Optimal Technology mobilized to the subject property and hydraulically advanced a total of 12 shallow borings (SV-1 through SV-12) to a depth of 5 feet below ground surface (bgs). Soil vapor samples were collected from 5 feet bgs in each of the borings. The soil vapor samples were analyzed onsite via a mobile laboratory. Six of the 12 soil vapor samples were analyzed for methane by United States Environmental Protection Agency (EPA) Method 8015 and were sampled and analyzed in accordance with the LADBS Site Testing Standards for Methane, and the remaining six soil vapor samples were analyzed for volatile organic compounds (VOCs) and total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8260B, modified for soil vapor.

VOCs and TPHg were not detected above the laboratory reporting limits in the soil vapor samples analyzed for those constituents (SV-1 through SV-6).

Methane was not detected above the laboratory reporting limits in the soil vapor samples analyzed for methane at a depth of 5 feet bgs (SV-7 through SV-8).

On May 19, 2020, under the direct supervision of Rincon, Choice Drilling mobilized to the subject property and advanced a total of three deep borings using a hollow stem auger. Based on the proposed development plans for the subject property, Choice Drilling attempted to advance the borings to a total depth of 81 feet below ground surface (bgs), and install soil vapor points at 66 feet bgs, 71 feet, and 81 feet bgs, per LADBS guidelines. However, during drilling activities, groundwater was encountered between 25 and 30 feet bgs; therefore, soil vapor points were installed at a depth of 23 feet bgs in each of the borings. Per LADBS methane sampling guidelines, soil vapor sampling is not required in the saturated zone and should be conducted at least 12 inches above groundwater.



On May 20, 2020, Optimal Technology mobilized to the subject property, collected one soil vapor sample from each of the deep borings, and analyzed the soil vapor samples for methane and pressure by EPA Method 8015. Per LADBS methane guidelines, a second round of analysis was conducted on May 21, 2020, at least 24 hours after the initial round of analysis on May 20, 2020.

Methane was not detected above the laboratory reporting limits in the soil vapor samples collected from a depth of 23 feet bgs (SV-13 through SV-15) during either sampling event.

In addition, pressure was not detected in any of the borings sampled for methane.

Because VOCs and TPHg were not detected above their respective laboratory reporting limits, the soil vapor at the subject property does not appear to be impacted by the former adjacent and nearby laundromats/cleaners and gasoline stations/automotive repair facilities. Therefore, no additional assessment pertaining to these issues is recommended.

Methane was not detected in any of the samples analyzed. In addition, no pressure was detected in any of the borings. Based on these results, the subject property does not appear to be impacted by the location of the subject property within a methane zone. Therefore, no additional assessment pertaining to methane is recommended. However, Client should follow the LADBS methane ordinance during design and construction of the proposed redevelopment.



Introduction & Project History

Rincon Consultants, Inc. (Rincon) conducted a Phase II Environmental Site Assessment (ESA) at 5401-5425 Wilshire Boulevard in Los Angeles, California (subject property). The subject property is located north of Wilshire Boulevard, between S Cochran Avenue and S Cloverdale Avenue (Figure 1, Vicinity Map).

Phase I Environmental Site Assessment

Rincon completed a Phase I ESA for the subject property on January 17, 2019. Based on the results of the Phase I ESA, five Potential Recognized Environmental Condition (RECs) were identified in connection with the subject property as follows:

Potential RECs

- Current eastern adjacent dry cleaner (682 South Cloverdale Avenue)
- Former eastern adjacent dry cleaner (676 Cloverdale Court/Avenue) and former garage with gas and oil services from at least 1950 to 1969 (674 South Cloverdale Avenue)
- Former western adjacent dry cleaner (5455 Wilshire Boulevard)
- Former western adjacent gasoline service station (5453 Wilshire Boulevard)
- The location of the subject property within a methane zone

Rincon recommended conducting a methane survey in accordance with Los Angeles Department of Building and Safety (LADBS) protocols.

Rincon also recommended a soil vapor assessment to determine if the subject property has been adversely impacted by the adjacent land uses.



Site Assessment

Purpose and Scope

The purpose of this Phase II ESA was to evaluate whether the soil vapor at the subject property has been impacted by the current and former adjacent land uses, or by the location of the subject property within a methane zone.

Our Phase II ESA scope of work included the following:

- **Health and Safety Plan.** A Health and Safety Plan was developed for the Phase II ESA sampling personnel.
- **Utility Notification.** The subject property was pre-marked and Underground Services Alert (USA) was contacted to mark areas where underground public utilities are located in the sampling area.
- **Soil Vapor Sampling and Analysis.** On May 8, 2020, under the direct supervision of Rincon, Optimal Technology advanced a total of six shallow borings at the subject property to a depth of 5 feet below ground surface (bgs) using a limited access hydraulic hand drill (Figure 2). Soil vapor samples were collected at 5 feet bgs in each of the six boring locations and analyzed for volatile organic compounds (VOCs) and total petroleum hydrocarbons in the gasoline range (TPHg) by United States Environmental Protection Agency (EPA) Method 8260B modified for soil vapor by an onsite mobile laboratory.
- **LADBS Site Testing for Methane.** On May 8, 2020, under the direct supervision of Rincon, Optimal Technology conducted an LADBS Shallow Soil Gas Test, and advanced a total of six shallow borings at the subject property using a limited access hydraulic hand drill (Figure 2). The borings were advanced to a total depth of 5 feet bgs. Soil vapor samples were collected at 5 feet bgs in each of the six boring locations, and analyzed for methane by EPA Method 8015 and pressure via an onsite mobile laboratory.

On May 19, 2020, under the direct supervision of Rincon, Choice Drilling mobilized to the subject property and advanced a total of three deep borings using a hollow stem auger drill rig (SV-13, SV-14 and SV-15) to a depth of 30 feet bgs. Groundwater was encountered between 25 and 30 feet bgs; therefore, soil vapor points were installed at a depth of 23 feet bgs in each of the boring locations. Per LADBS methane sampling guidelines, soil vapor sampling is not required in the saturated zone and should be conducted at least 12 inches above groundwater.

On May 20 and 21, 2020, Optimal Technology mobilized to the subject property, collected one soil vapor sample from each of the deep borings, and analyzed the soil vapor samples for methane and pressure by EPA Method 8015.

- **Reporting.** Preparation of this report documenting our findings.



Geologic and Hydrologic Setting

Site Geology

The Los Angeles area is within the Peninsular Ranges Geologic Province of California (California Geologic Survey [CGS], 2002). This province is characterized by northwest-trending mountains and faults. Rocks within the Peninsular Range Province were emplaced during Cretaceous orogenic events and uplifted into the present mountain ranges during the late Tertiary and Quaternary periods. Igneous, volcanic, metamorphic, and sedimentary rocks are all found within the Peninsular Ranges. The area is seismically active, with several known active faults crossing the Province (CGS, 2002).

According to the 2004 *Site Assessment: Staples Store* report, the subject property is located on a gently-sloping marine terrace, underlain by Quaternary-aged unconsolidated alluvium, and soil borings advanced at the subject property indicate that soil at the subject property consists of sandy clay and clayey sand from ground surface to 32 feet bgs.

According to the current USGS Geologic Map (Hollywood and Burbank [South ½] Quadrangles, 1991), the subject property is underlain by older surficial sediments, which are described as alluvium of clay, sand, and gravel and includes alluvial fan sediments from the late Pleistocene age.

During the Phase II ESA, the soil was observed to be brown sandy silt.

Site Hydrogeology

The subject property is located within the Central Subbasin of the Coastal Plain of Los Angeles groundwater basin.

During the preparation of the 2019 Phase I ESA, we reviewed the California State Water Resources Control Board's (SWRCB's) online GeoTracker database to determine groundwater flow direction in the vicinity of the subject property. According to the *Fourth Quarter 2012 Off-Site Groundwater Monitoring Report, BRE Wilshire Property, 5220 Wilshire Boulevard and 714-780 South La Brea Avenue, Los Angeles, California* prepared by ARCADIS U.S., Inc. and dated January 15, 2012, groundwater is reported to be between 13.92 and 18.22 feet bgs and flow toward the southwest. This property is located approximately 800 feet to the east of the subject property.

During this Phase II ESA, groundwater was encountered between 25 and 30 feet bgs.



Methodology

Shallow Soil Vapor Sampling & Analysis

On May 8, 2020, under the direct supervision of Rincon, Optimal Technology advanced a total of 12 borings (SV-1 through SV-12) to a depth of 5 feet bgs at the subject property (shallow borings). The probes were hydraulically advanced using a limited access hand drill equipped with a 0.5-inch diameter probe.

Prior to purging or sampling, a shut-in test was conducted to check for leaks in the above-ground sampling system. The system was evaluated to a minimum measured vacuum of approximately 100 inches of water using a purge pump. If there was any observable loss of vacuum, the fittings were adjusted until the vacuum in the sample train did not noticeably dissipate. After the shut-in test was validated, the sampling train was not altered.

A leak test was conducted by applying a tracer gas to the probes at each point of connection where ambient air could enter the sampling system. These points included the top of the sampling probe where the tubing meets the probe connection and the surface bentonite seals.

Soil vapor samples were collected using a vacuum pump set to draw 0.2 liters/minute of soil vapor at a maximum vacuum of 100 inches of water. The pump was attached to the probe and purged prior to sample collection. Vapor samples were obtained by drawing the sample through a luer-lock connection between the sampling probe and the vacuum pump or by puncturing tubing connecting the sampling probe and the vacuum pump. New tubing was used at each sampling point to prevent cross contamination.

The soil vapor samples were collected in syringes and analyzed onsite using a mobile lab. Six soil vapor samples were analyzed for VOCs and TPHg by EPA Method 8260B modified for soil vapor (SV-1 through SV-6), and six soil vapor samples were analyzed for methane by EPA Method 8015 (SV-7 through SV-12). Pressure in the probes was also measured in SV-7 through SV-12.

Methane Soil Vapor Probe Advancement & Analysis

On May 19, 2020, under the direction supervision of Rincon, Choice Drilling advanced a total of three deep borings (SV-13 through SV-15) using a hollow stem auger drill rig. Based on the proposed development plans for the subject property, Choice Drilling attempted to advance the borings to a total depth of 81 feet bgs, and install soil vapor points at 66 feet bgs, 71 feet bgs, and 81 feet bgs, per LADBS guidelines. However, groundwater was encountered between 25 and 30 feet. Therefore, the soil vapor probes were set at 23 feet bgs. Per LADBS guidelines, the soil vapor samples must be collected at least 12 inches above groundwater.

Once the soil boring was drilled to depth, the measured lengths of quarter inch diameter Nylaflow tubing were attached to a support rod and inserted into the open borehole. A one foot thick layer of Monterey #3 sand was used as a filter pack, and was placed six inches above and six inches below the soil vapor probe sampling point. Grout was then placed above the probe to the surface. Each probe was capped and labeled for later sampling. A well box was installed in order to protect the soil vapor probes.



On May 20, 2020, Optimal Technology mobilized to the subject property, collected one soil vapor sample from each of the deep borings, and analyzed the soil vapor samples for methane and pressure by EPA Method 8015. Per LADBS methane guidelines, a second round of analysis was conducted on May 21, 2020, at least 24 hours after the initial round of analysis on May 20, 2020.

To collect the methane samples, the tubing exiting the surface of the ground was connected to a vacuum gauge, plastic syringe or pump for purging, and glass sampling syringe. Sampling was conducted after three purge volumes are purged from the soil vapor probes. Once each soil vapor probe was purged, the glass syringe was filled and analyzed on site using a mobile laboratory for methane by EPA Method 8015. In addition, the pressure in probes SV-7 through SV-15 was also measured. The pressure in probes SV-7 through SV-12 was measured once, and the pressure in probes SV-13 through SV-15 was measured twice.



Soil Vapor Results

VOCs and TPHg were not detected above the laboratory reporting limits in the soil vapor samples analyzed for those constituents (SV-1 through SV-6).

Methane was not detected above the laboratory reporting limits in the soil vapor samples analyzed for methane at a depth of 5 feet bgs (SV-7 through SV-12).

Methane was not detected above the laboratory reporting limits in the soil vapor samples collected from a depth of 23 feet bgs (SV-13 through SV-15).

In addition, pressure in the probes was not detected in any of the borings sampled for methane.

The results of the soil vapor analysis is shown in Tables 1 and 2. A copy of the laboratory analytical report is provided in Appendix A.



Conclusions & Recommendations

Because VOCs and TPHg were not detected above their respective laboratory reporting limits, the soil vapor at the subject property does not appear to be impacted by the former adjacent and nearby laundromats/cleaners and gasoline stations/automotive repair facilities. Therefore, no additional assessment pertaining to these issues is recommended.

Methane was not detected in any of the samples analyzed. In addition, no pressure was detected in any of the vapor probes. Based on these results, the subject property does not appear to be impacted by the location of the subject property within a methane zone. Therefore, no additional assessment pertaining to methane is recommended. However, Client should follow the LADBS methane ordinance during design and construction of the proposed redevelopment.



Limitations

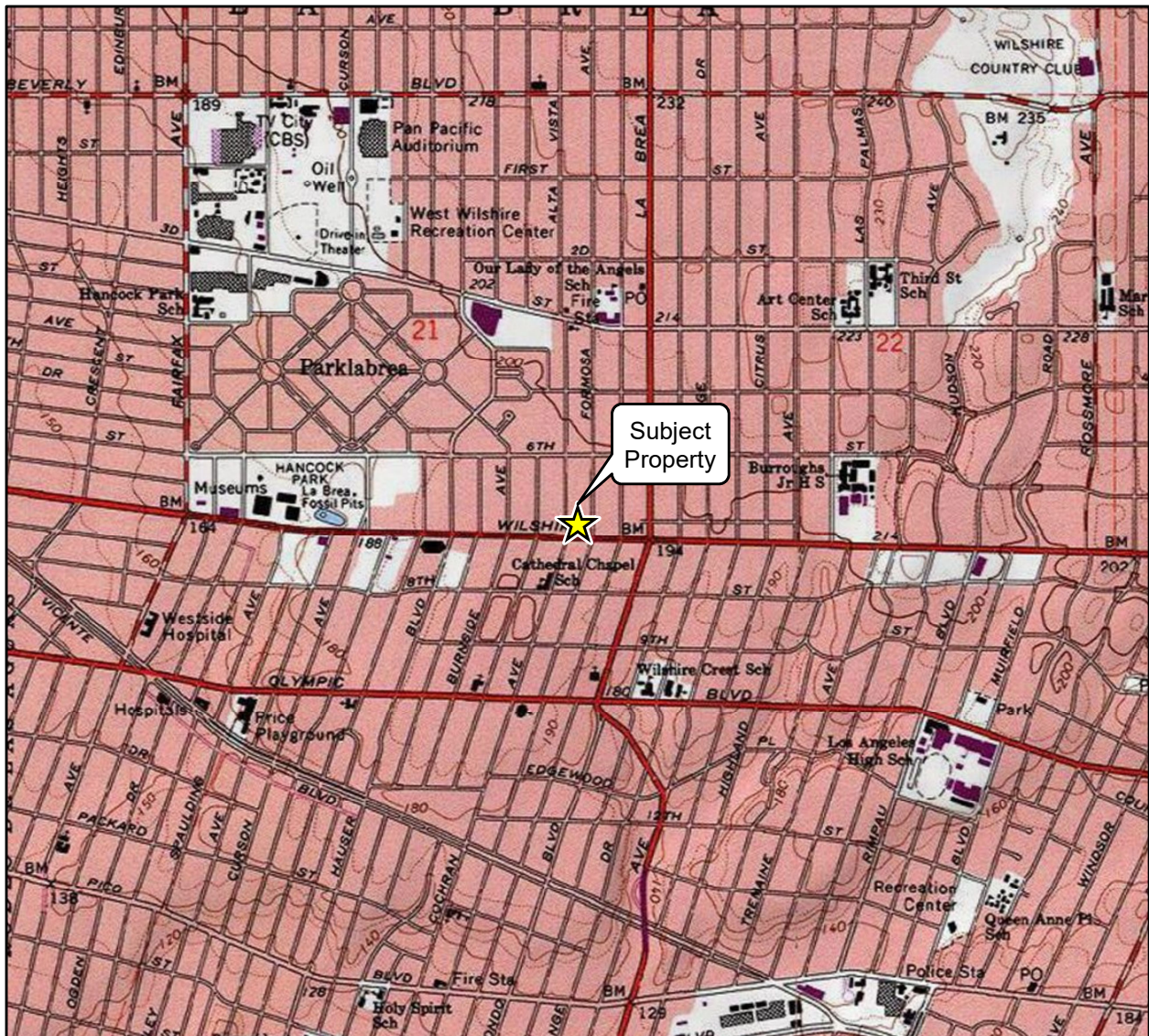
This report has been prepared for and is intended for the exclusive use of Walter N. Marks, Inc. The contents of this report should not be relied upon by any other party without the written consent of Rincon Consultants, Inc.

Our conclusions regarding the subject property are based on observations of existing site conditions and the results of a limited subsurface sampling program. The results of this evaluation are qualified by the fact that only limited sampling and analytical testing was conducted during this assessment.

This scope was not intended to completely establish the quantities and distribution of contaminants present at the subject property. The concentrations of contaminants measured at any given location may not be representative of conditions at other locations. Furthermore, conditions may change at any particular location as a function of time in response to natural conditions, chemical reactions, and other events. Conclusions regarding the condition of the subject property do not represent a warranty that all areas within the subject property are similar to those sampled.

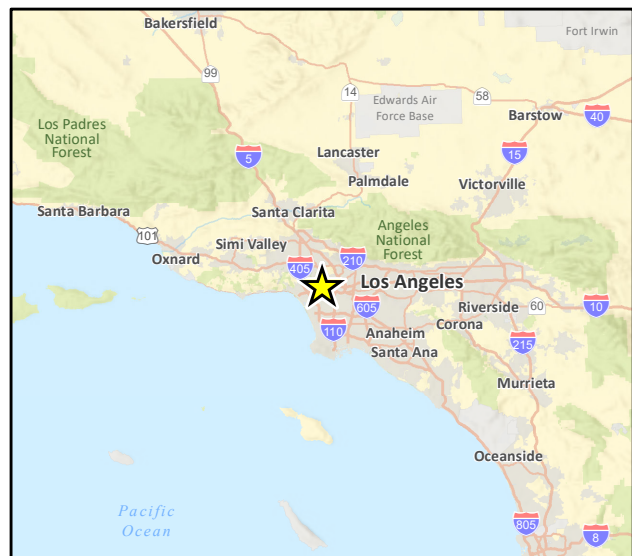


Figures



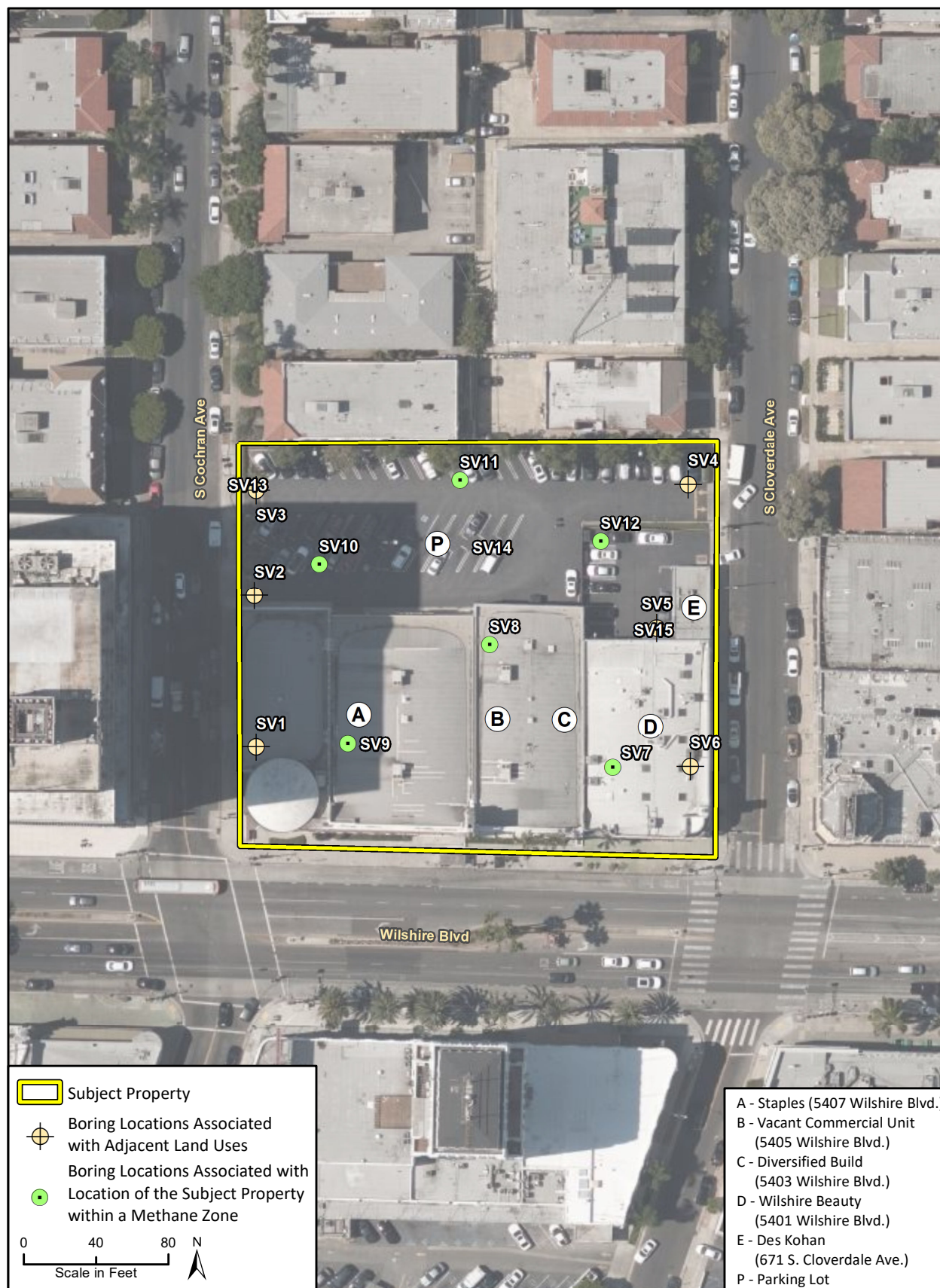
Imagery provided by National Geographic Society, Esri and its licensors © 2018. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

0 1,000 2,000
 Scale in Feet



Vicinity Map

Figure 1



Imagery provided by Microsoft Bing and its licensors © 2020.

Boring Location Map - Shallow Borings

Figure 2



Boring Location Map - Gas Probe Sets

Figure 3

Tables

Table 1 - Soil Vapor Analytical Summary - VOCs & TPHg

Boring ID	Sample Date	Depth (feet bgs)	VOCs (µg/L)	TPHg (µg/L)
SV-1	5/8/2020	5	ND	ND
SV-2	5/8/2020	5	ND	ND
SV-3	5/8/2020	5	ND	ND
SV-4	5/8/2020	5	ND	ND
SV-5	5/8/2020	5	ND	ND
SV-6	5/8/2020	5	ND	ND
Reporting Limit			<i>Varies</i>	<i>5.00</i>
ESL (Residential)			<i>Varies</i>	<i>Varies</i>

µg/L = micrograms per liter

bgs = below ground surface

ESL = San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (revised July 2019); Summary of Vapor ESLs table for human health risk levels

ND = Not detected at or above laboratory reporting limits

VOCs = Volatile Organic Compounds

TPHg = Total Petroleum Hydrocarbons as gasoline

Samples analyzed via a mobile laboratory by Optimal Technology.



Table 2 - Soil Vapor Analytical Summary - Methane

Boring ID	Sample Date	Depth (feet bgs)	Methane (ppmv)	Pressure (inches water column)
SV-7	5/8/2020	5	ND	0
SV-8	5/8/2020	5	ND	0
SV-9	5/8/2020	5	ND	0
SV-10	5/8/2020	5	ND	0
SV-11	5/8/2020	5	ND	0
SV-12	5/8/2020	5	ND	0
SV-13	5/20/2020	23	ND	0
	5/21/2020	23	ND	0
SV-14	5/20/2020	23	ND	0
	5/21/2020	23	ND	0
SV-15	5/20/2020	23	ND	0
	5/21/2020	23	ND	0
Reporting Limit			5.0	--

ppmv = parts per million by volume

bgs = below ground surface

ND = Not detected at or above laboratory reporting limits

Samples analyzed via a mobile laboratory by Optimal Technology.

