

March 9, 2015

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By Alameda County Environmental Health 11:38 am, Mar 10, 2015

Mr. Karel Detterman, P.G.
Hazardous Materials Specialist
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
San Francisco, CA 94102

**Re: Work Plan for Additional Soil Sampling
3093 Broadway, Oakland, California
LUFT Case No. Ro0000199**

Dear Ms. Detterman,

Please find attached, for your review and comment, *Work Plan for Additional Soil Sampling*, at the Former Connell Oldsmobile site, located at 3093 Broadway in Oakland, California. The Work Plan has been prepared by Langan Treadwell Rollo.


I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

OWNER:

3093 Broadway Holdings, L.L.C.,
a Delaware limited liability company

By: 3093 Broadway Venture, L.L.C.,
a Delaware limited liability company,
Its Sole Member

By: CV 3093 Broadway, L.L.C.,
a Delaware limited liability company,
Member

By: 
Name: Stephen Siri
Title: Principal

9 March 2016

Ms. Karel Detterman, P.G.
Hazardous Materials Specialist
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

**Re: Work Plan for Additional Soil Sampling
3093 Broadway
Oakland, California
ACEH Case No.: RO0000199
Langan Project No.: 730637001**

Dear Ms. Detterman,

On behalf of 3093 Broadway Holdings, L.L.C. ("Broadway Holdings"), Langan Treadwell Rollo (Langan) has prepared this *Work Plan for Additional Soil Sampling* at the Former Connell Oldsmobile Site, located at 3093 Broadway in Oakland, California (the site; Figure 1). Soil sampling is proposed to collect additional analytical data prior to offsite disposal of soil. The sampling will be performed to evaluate soil in the western portion of the site, near Webster Street. The soil in this portion of the site was not impacted by the fuel release from the former underground storage tanks (USTs), previously located beneath the sidewalk adjacent to Hawthorne Street. The analytical data is required by potential receiving facilities as a standard review measure for soil. Background information, proposed soil sampling and analysis tasks and methods, and the schedule for implementing the sampling are described below.

BACKGROUND INFORMATION

The site is located in a mixed-use area, near commercial, medical, and residential properties. The approximately 3.4-acre site is bounded by Hawthorne Street to the north, Broadway to the east, Webster Street to the west, and a grocery store to the south. Three underground storage tanks (USTs) that previously contained gasoline, diesel, and waste oil were removed from beneath the sidewalk adjacent to Hawthorne Street, near the northwest corner of the property in December 1989.

Previous Environmental Investigations and Remediation

Site investigation in response to a fuel release from the former USTs was performed between 1990 and 2015, Subsurface impacts at the site include petroleum compounds from the former UST systems, lead impacts in shallow soil in the former service bay area, and motor oil range hydrocarbons and polyaromatic hydrocarbons (PAHs) in fill soil beneath the parking lot area. The Corrective Action Plan (CAP)¹ for the site is currently being implemented. Site grading for the

¹ Langan Treadwell Rollo. 2015. Feasibility Study and Corrective Action Plan, 3093 Broadway, Oakland, California. May 21.

development is planned to reduce existing grade by approximately 3 to 18 feet; the ground floor will be roughly level with Broadway.

Site Geology and Hydrogeology

The site elevation ranges from approximately 52 to 68 feet above mean sea level and the surface topography slopes downward to the southeast, from Webster Street to Broadway. The site is underlain by unconsolidated sediments ranging from silty clays to sandy gravels. Based on geotechnical drilling conducted by Langan at the Site, unconsolidated sediments extend to at least 50 feet bgs. The site surficial geology is mapped as the Temescal Formation, which consists of quaternary age alluvial fan deposits comprised of interbedded layers of silt, sand, clay, and gravel². Previous investigations at the site have recorded predominantly fine-grained, low permeability deposits consisting of clayey to sandy silts and silty clay, with occasional thin beds of sand and silty sand. The depth to groundwater beneath the site ranges from approximately 16 to 27 feet³. The interpreted groundwater flow direction at the site has generally ranged between southeastward and east-southeastward.

ADDITIONAL SOIL SAMPLING AND ANALYSIS

Four soil samples will be collected and analyzed as described below.

Permits and Coordination

A permit to drill exploratory borings will be obtained from the Alameda County Public Works Agency, Water Resources Department. Underground Service Alert will be contacted to locate and mark subsurface utilities in the vicinity. A professional utility locator will also be contracted to clear sampling locations for utilities. A site-specific Health and Safety Plan will be prepared for the soil sampling effort and this document will be adhered to by personnel performing sampling work at the site.

Drilling and Sample Collection

Four soil borings will be advanced to 8 feet below ground surface (bgs) by Cascade Drilling, a California state-licensed drilling contractor (Figure 2). Borings will be advanced using a hand auger to 5 feet bgs and then using dual-tube direct push sampling technology from 5 to 8 feet bgs. Soil cores will be visually inspected and continuously logged in general accordance with the United Soil Classification System (USCS). Soil cores and drill cuttings will be screened for organic vapors using a calibrated Photoionization Detector (PID). Soil coring and sample collection will be performed under the supervision of a California Professional Geologist or Engineer. Down-hole drilling equipment will be decontaminated between each sample location.

² Radbrush, Dorothy. 1957, Areal and Engineering Geology of the Oakland West Quadrangle, California.

³ Langan Treadwell Rollo. 2014. Conceptual Site Model, ACEH Case # RO0000199, 3093 Broadway, Oakland. October 24.

One soil sample will be collected from each boring from 7.5 to 8.0 feet bgs. The samples will be collected in new acetate liners or stainless steel sample rings. Sample ends will be covered with Teflon, sealed with plastic end caps, labeled, and stored on ice pending submittal to a State of California-certified laboratory for analysis. Soil samples will be transported under chain-of-custody protocol.

The borings will be backfilled with neat cement grout, as required by the ACPWA permit. The drilling locations will be surveyed by a licensed professional surveyor. Drill cuttings will be stockpiled on site, pending offsite disposal. Stockpiles will be placed on and covered with plastic sheeting, according to the procedures described in the 29 October 2015 Construction Soil and Groundwater Management Plan for the site.

Laboratory Analysis

As requested by the excavation contractor, a soil sample collected from 7.5 feet bgs from each boring will be analyzed for:

- Total petroleum hydrocarbons (TPH) as diesel (TPHd) and motor oil (TPHmo) using modified U.S. Environmental Protection Agency (EPA) Method 8015B;
- TPH as gasoline (TPHg) using U.S. EPA Method 8015B; and
- California Assessment Manual (CAM) 17 metals using U.S. EPA Method 6010B.

If a detected metal concentration in any of the samples exceeds the Total Threshold Limit Concentration (TTL), or if a total metal concentration exceeds 10 times the Soluble Threshold Limit Concentration (STLC), the respective sample will be further analyzed using the California Waste Extraction Test (WET) method, to evaluate if the excavated soil may need to be disposed as a State of California Hazardous Waste. If a soluble metal result exceeds the STLC, the sample will be analyzed using the Toxicity Characteristic Leaching Procedure (TCLP), to evaluate if excavated soil will be a Resource Conservation and Recovery Act (RCRA) hazardous waste (Federal hazardous waste).

Data Evaluation and Reporting

A letter-report describing the sampling activities, and presenting tabulated analytical results, a scaled figure showing sampling locations, and a copy of the analytical laboratory report will be submitted to the ACEH and uploaded to the State's online database (Geotracker).

SCHEDULE

Sampling is scheduled for 18 March 2016, and the technical memorandum will be submitted to the ACEH within two weeks of completion of the field work.

CLOSING

This report was prepared by Langan under the supervision of the Professional Geologist or Engineer whose seal and signature appear hereon. The findings, recommendations, specifications, or professional opinions are presented within the limits described by the client, after being prepared in accordance with generally accepted professional engineering practice. No warranty is expressed or implied. If you have any questions, please do not hesitate to call us at 415-955-5200.

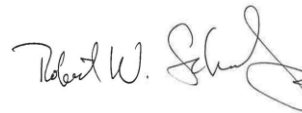
Sincerely yours,

Langan Treadwell Rollo

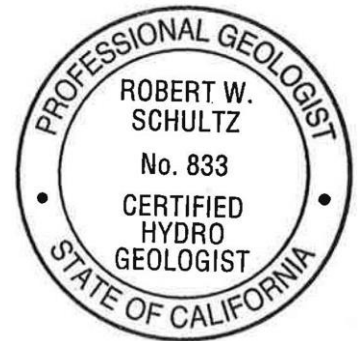


Nancy Tu
Staff Engineer

cc: Mr. Stephen Siri
3093 Broadway Holdings, L.L.C.
44 Montgomery Street, Suite 4050
San Francisco, CA 94104



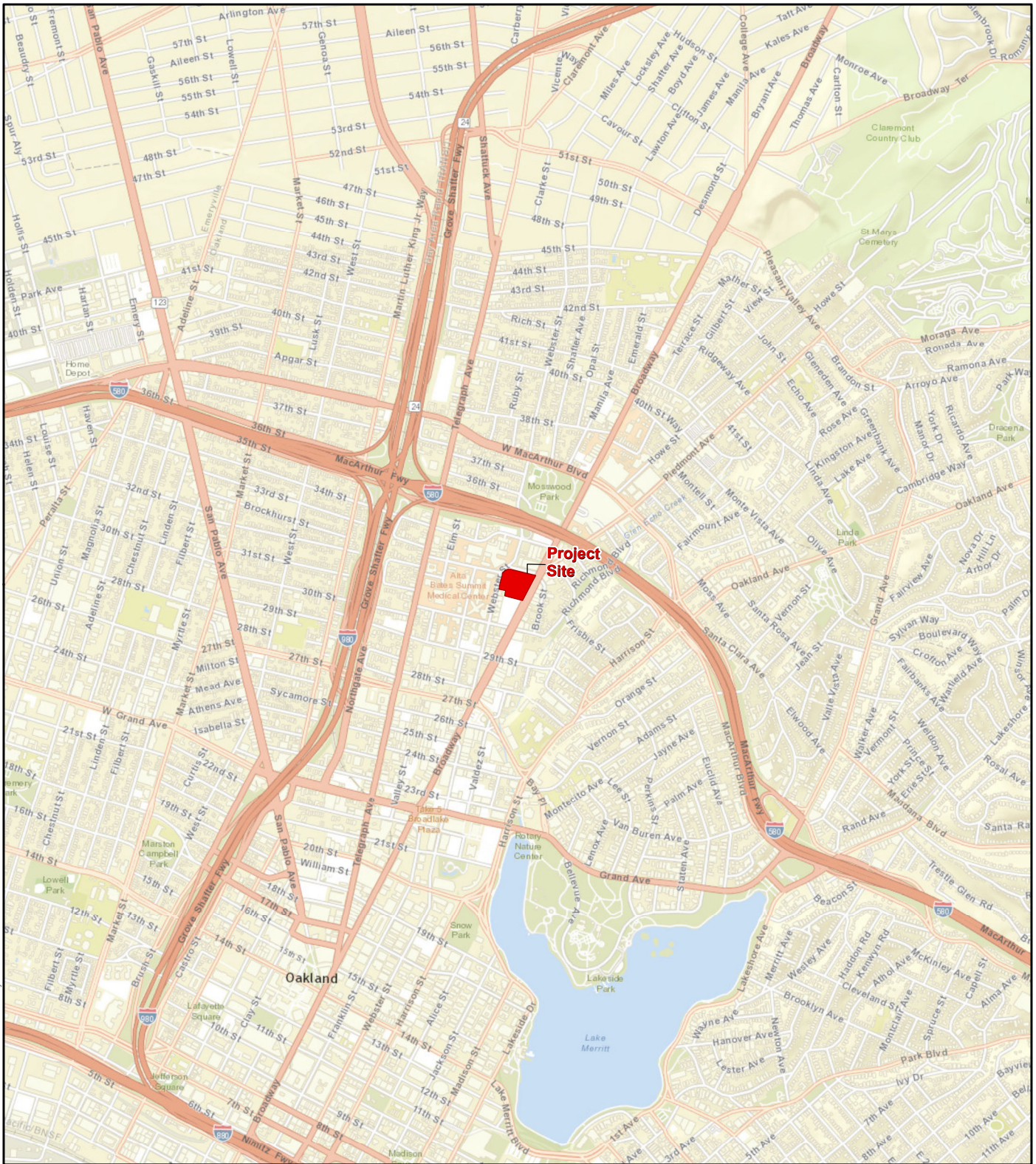
Robert W. Schultz, CHG
Senior Project Manager



Enclosures: Figure 1 – Site Location Map
Figure 2 – Site Plan and Proposed Additional Soil Sampling Locations

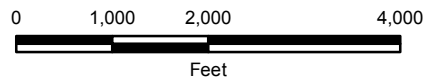
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FIGURES



Notes:

1. World street basemap is provided through Langan's Esri ArcGIS software licensing and ArcGIS online. Credits: Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN.
2. Map displayed in California State Plane Coordinate System, Zone III, North American Datum of 1983 (NAD83), US Survey Feet.



3093 BROADWAY
Oakland, California

SITE LOCATION MAP

LANGAN TREADWELL ROLLO

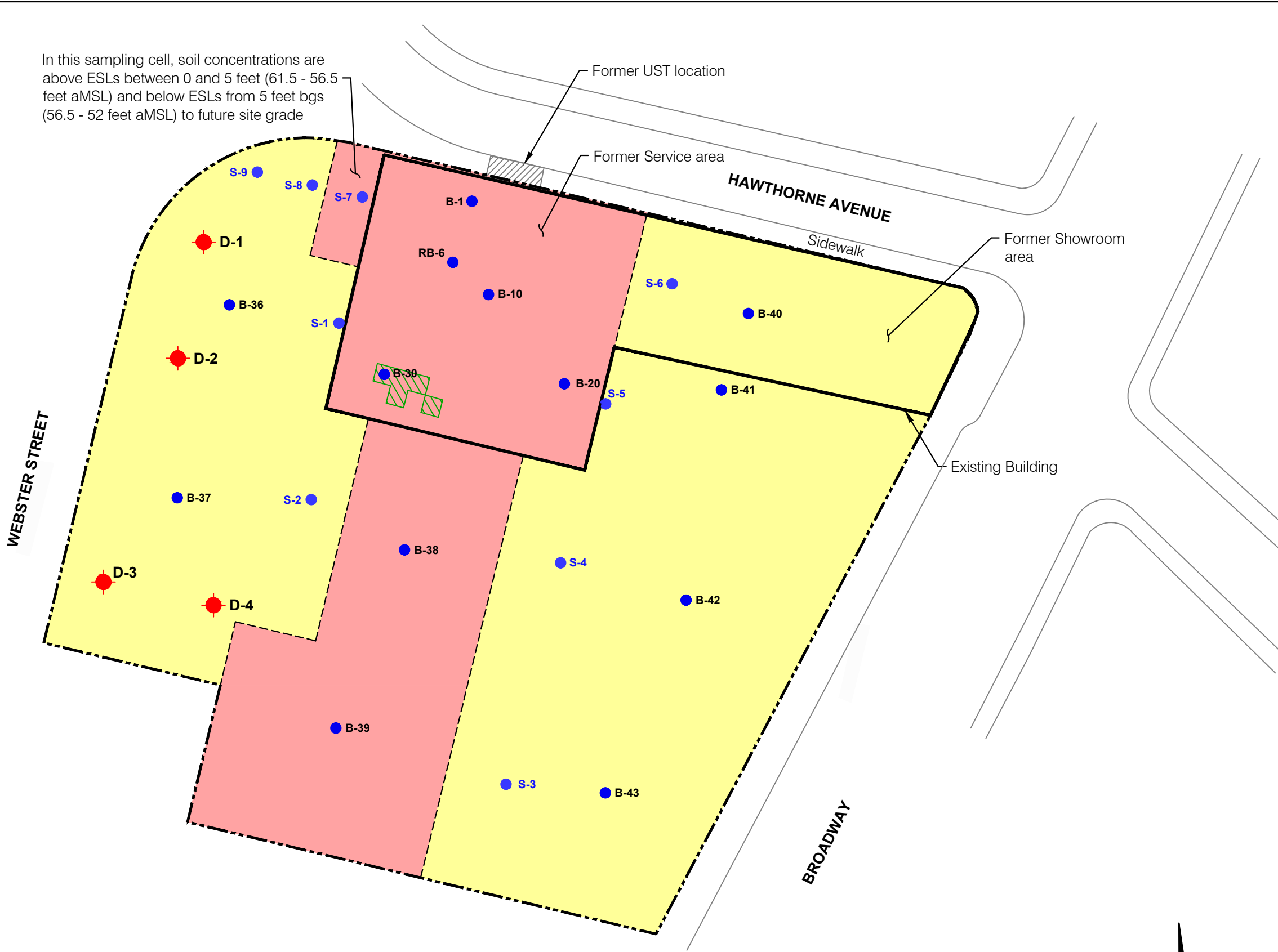
Date 3/9/2016

Project 7316317001

Figure 1

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In this sampling cell, soil concentrations are above ESLs between 0 and 5 feet (61.5 - 56.5 feet aMSL) and below ESLs from 5 feet bgs (56.5 - 52 feet aMSL) to future site grade



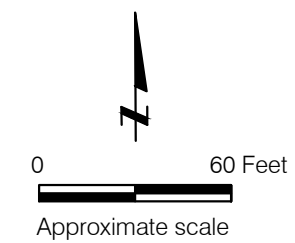
EXPLANATION

- D-1** Proposed additional soil sampling location
- B-36** Pre-excavation soil sampling location by Langan Treadwell Rollo, May 2015 - September 2015
- Site boundary
- One or more detected concentrations exceed the Residential Environmental Screening Levels (ESL)
- Detected concentrations are less than the Residential ESLs
- Outline of Lead-Impacted area

Notes:

1. Soil samples from B-1, 10, 20, 30, 36-43 were analyzed for Total petroleum hydrocarbons (TPH) as gasoline, TPH as diesel, TPH as motor oil, polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), PCBs, pesticides, and CAM-17 Metals.
2. Soil samples from RB-6 were analyzed for TPH as gasoline, TPH as diesel, benzene, ethylbenzene, toluene, xylenes, MTBE, and naphthalene only.
3. Soil samples from S-1 to S-9 were analyzed for TPH as gasoline, TPH as diesel, TPH as motor oil, BTEX, MTBE, and benzo(a)pyrene.
4. Residential ESLs for soil are from Table A-1 - Environmental Screening Levels for Shallow Soil (<3 meters), Residential Land Use, where groundwater is a current or potential drinking water resource, San Francisco Regional Water Quality Control Board, December 2013.
5. Future site grade is planned to be 52 feet above Mean Sea Level (MSL), so soil samples collected at elevations greater than 52 feet above MSL are projected to be removed.
6. Arsenic is not included in the screening shown on this figure because naturally occurring arsenic exceeds the Residential ESL. Arsenic concentrations detected in site soil were within the range of anticipated naturally occurring arsenic concentrations.

aMSL = above Mean Sea Level



3093 BROADWAY Oakland, California		
ADDITIONAL SOIL SAMPLING LOCATIONS		
Date 03/09/16	Project No. 731637001	Figure 2
LANGAN TREADWELL ROLLO		

Reference: Base map from a drawing titled "C2.0 Conceptual Grading Plan," by BKF, dated 08/19/14 and "First Floor Plan," by Van Tilburg, Babvard & Soderbergh, AIA, dated 10/03/14.