

April 6, 2017

RECEIVED

By Alameda County Environmental Health 11:46 am, Apr 06, 2017

Mr. Mark Detterman
Alameda County Health Care Services Agency
Environmental Health Services
Local Oversight Program
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Subject: Submittal Acknowledgement regarding 811 Paramount Road, Oakland, CA.
(Alameda County Fuel Leak Case No. RO0003143 and CA Geotracker Global ID
T10000006106)

Dear Mr. Detterman:

We have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on our behalf to ACDEH's FTP server and the SWRCB's Geotracker website.

Sincerely,



Mark A. Jacobson
Property Owner-Responsible Party



Ilona Frieden
Property Owner-Responsible Party

cc: Mr. Amitai Schwartz – Property Owner-Responsible Party Counsel

April 6, 2017

Mr. Mark Detterman
Alameda County Health Care Services Agency
Environmental Health Services
Local Oversight Program
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Subject: Additional Workplan for Investigation of Soil Contamination and Potential Vapor Intrusion related to a Former Leaking Underground Heating Oil Tank located at 811 Paramount Road, Oakland, CA. (Alameda County Fuel Leak Case No. RO0003143 and CA GeoTracker Global ID T10000006106)

Dear Mr. Detterman:

INTRODUCTION AND BACKGROUND

On behalf of the property owners (Mr. Mark A. Jacobson & Ms. Ilona J. Frieden) Stellar Environmental Solutions, Inc. (Stellar Environmental) is providing this letter format Workplan as discussed in our February 2, 2017 meeting with you and Ms. Dilan Roe, the property owners and their counsel at the Alameda County Department of Environmental Health (ACDEH) office. This Workplan outlines the work tasks identified in the meeting, your letter dated February 10, 2017 requesting additional site investigation and confirmation email dated March 29, 2017.

The purpose of this additional work is to address ACDEH's concern that there remains accessible residual hydrocarbon contamination in soil related to the former underground heating oil tank that may be contributing toxic vapor intrusion into the adjacent site residence. This workplan focuses on investigating the residual soil contamination source that potentially exists immediately outside of the former UST excavation. In addition we propose to collect sub-slab soil-gas to evaluate the potential toxic vapor that may have migrated to beneath the residential basement room floor.

Sample collection methods and handling will be conducted in the same manner as in previous site investigations with the exception of the sub-slab soil-gas which is being collected for the first time at this site in the manner proposed and described below in Workplan Task No. 3.

As part of this letter workplan preparation, a detailed site plan of the crawl space (Figure 6) was prepared from the 2013 residential renovation drawings. Revised Figures 4, 5 and 6, attached to this Workplan, show the site cross-section, site plan and subgrade plan, respectively, with the locations of the Vapor Pin™ and soil borings proposed in this Workplan scope.

SCOPE OF WORK

The field tasks to be conducted, following ACHCS's approval of this workplan include:

- 1) Field investigation preparation;
- 2) Hand-auger boring and sampling;
- 3) Installation and sampling of Vapor Pin™ in the basement utility room; and
- 4) Preparation and submittal of data package followed by conference with ACDEH.

Task 1: Field Investigation Preparation

Field Investigation preparation includes contracting the hand auger boring contractor; purchasing the Vapor Pin™ probe from the manufacturer, Cox & Colvin Associated, purchasing stainless-steel sampling sleeves; arranging analytical laboratory, and renting drilling equipment to install the Vapor Pin™ in the basement utility room.

Task 2: Soil Boring and Sampling

The soil samples will be collected in the same manner as in the March 2016 investigation, utilizing a stainless steel hand auger and boring to the top of the target depth followed with collection of the soil a hand-held drive hammer sampling tool. Soil samples will be collected in a sampling sleeve inserted into the downhole end of the drive rod. The sampler will collect a relatively undisturbed 1.5-inch-diameter, 6-inch-long soil sample in a stainless-steel sleeve at the desired depth. The samples contained in the sleeves will be sealed with Teflon™ tape and non-reactive plastic caps, labeled, and placed in a chilled cooler. It is proposed to collect four (4) samples from each of three (3) bores located on the north, east and west sides adjacent to the former UST excavation, at the depths of 3-3.5, 4.5-5, 8.5-9.0 and 12.5-13 feet below ground surface as shown on Figures 5 and 6.

Soil will be analyzed using the following methods:

- TPH-mo (C18-C36) and TPH-d (C10-C23) – by EPA Method 8015M.
- TPH-gasoline and volatile organic compounds (VOCs): full list including; naphthalene, benzene, toluene, ethylbenzene, and xylenes (BTEX) – by EPA Method 8260B.

- Moisture – by ASTM 2216-92, required to evaluate contaminants in soil on a dry-weight basis.

Decontamination of all down-hole sampling tools will consist of scrub brush washing with phosphate-free soap and water followed by a tap water rinse followed by a deionized/distilled water rinse (two times) between sampling locations.

Task 3: Vapor Pin Installation and Sub-Slab Gas Sampling

As requested by ACDEH, one (1) Vapor-Pin™ will be installed as recommended by the manufacturer in the proposed basement utility room floor location shown in Figures 4 and 6. A 1.5-inch diameter hole will be drilled in the concrete slab to a depth of approximately 1.75 inches using a roto-hammer drill at the proposed location. The cuttings will be removed and a stainless-steel drilling guide will be inserted into the hole. A 5/8 -inch diameter drill bit will be then inserted into the drilling guide and the drill will be advanced through the depth of the concrete slab and an additional 4 inches below the bottom of the slab into the underlying soil/baseroack. The cuttings will be removed out of the core and the brass barbed Vapor Pin™ will be prepared to be inserted into the core. A silicone sleeve will be placed over the 5/8-inch end barbed end of the pin and this end of the pin will be pounded into the 5/8 inch diameter hole. The silicone sleeve creates an air-tight seal between the pin and the concrete. The other end of the Vapor Pin™ has a 0.25-inch barb that readily adapts to fit conventional soil-gas sampling tubing. A protective silicone cap will be placed over the 0.25 barb to prevent soil gas from escaping prior to sampling. A flush-mounted stainless-steel cover designed for the Vapor Pin™ will be screwed over the Vapor Pin™ core to protect the underlying pin.

As required by ACDEH, a Shroud Apparatus will be utilized for evaluation of ambient leakage during the sub-slab soil-gas collection process to evaluate that an adequate seal is established at interface of the Vapor Pin™ with the concrete slab surface during sample collection. Helium gas will be utilized in the shroud as the leak tracer.

Sub-slab soil-gas will be collected through the Vapor Pin™ in accordance with Department of Toxic Substances Control (DTSC)/Cal EPA Soil-Gas Advisory (April 2012 and July 2015) procedures. The soil-gas will be collected about two (2) hours after installation on the Vapor Pin™.

Soil-Gas will be analyzed using the following methods:

- TPH-diesel and naphthalene - by EPA Method TO17

- TPH-gasoline, BTEX and naphthalene - by EPA Method TO15/Gas Range Organics (GRO)
- Oxygen, carbon dioxide and methane - by ASTM 1946-90
- Helium, the leak check compound - by ASTM 1946-90

Task 4: Data Package Submittal and Conference with ACDEH

As requested by ACDEH, a data package containing comprehensive data tables, sufficient figures, and bore logs will be uploaded to the State Geotracker and ACDEH fileservers for review by the ACDEH regulator, after which a telephone conference will be arranged with ACDEH and the property owners to discuss interpretation of the analytical results and any appropriate actions necessary to move the site to regulatory case closure. The data package submittal will include a cover letter with ACDEH's "Submittal Acknowledgement Statement," signed by the responsible parties.

We trust that this submittal meets your agency's needs. We declare, under penalty of perjury, that the information and/or recommendations contained in this document or report is true and correct to the best of our knowledge.

We will proceed with implementation of this workplan upon your review and concurrence. If you have any questions regarding this document or attachments, please contact us.

Sincerely,



Mark A. Jacobson
Property Owner-Responsible Party



Ilona Frieden
Property Owner-Responsible Party

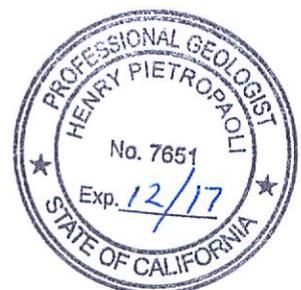


Henry Pietropaoli, P.G.
Principal Geologist and Project Manager

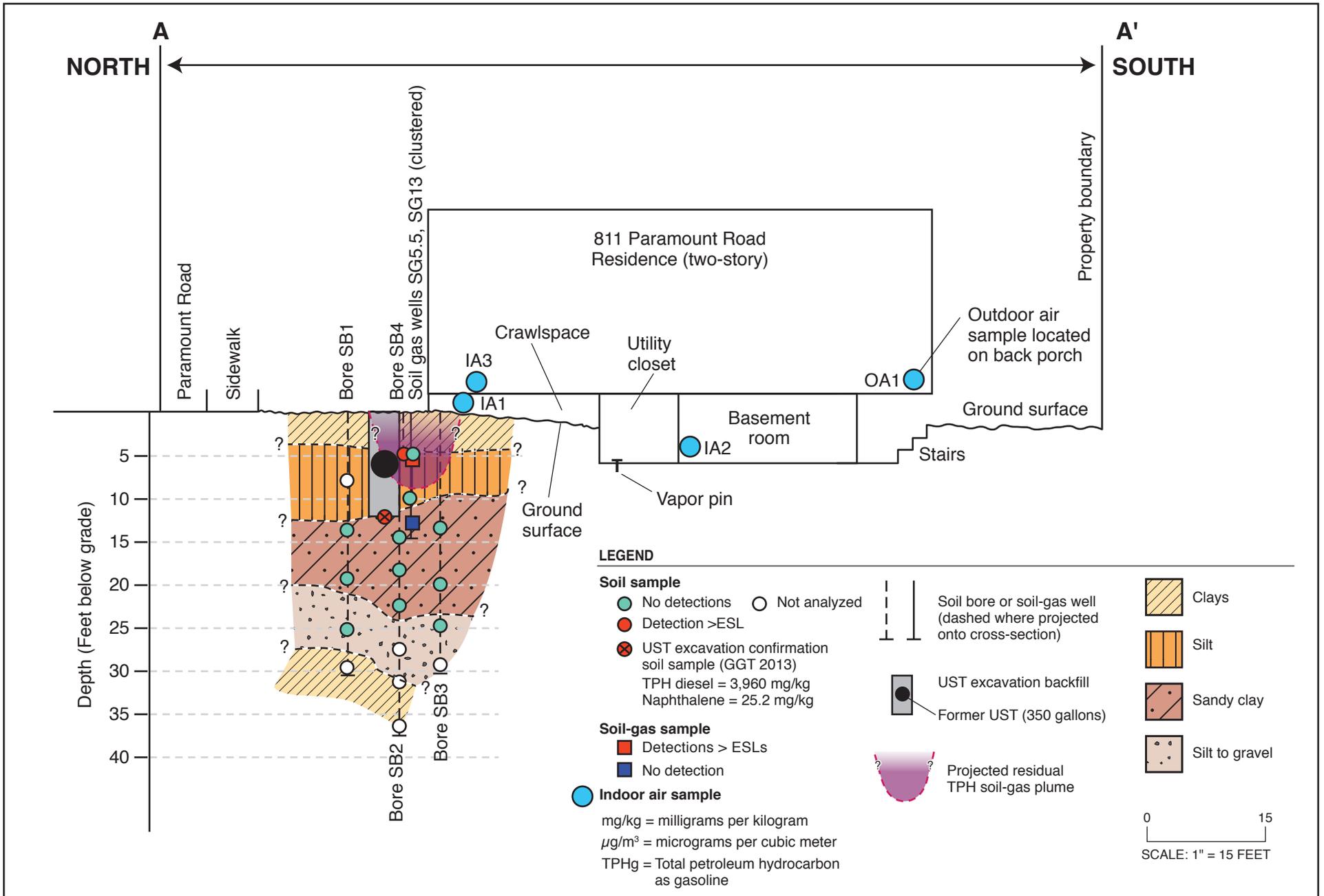


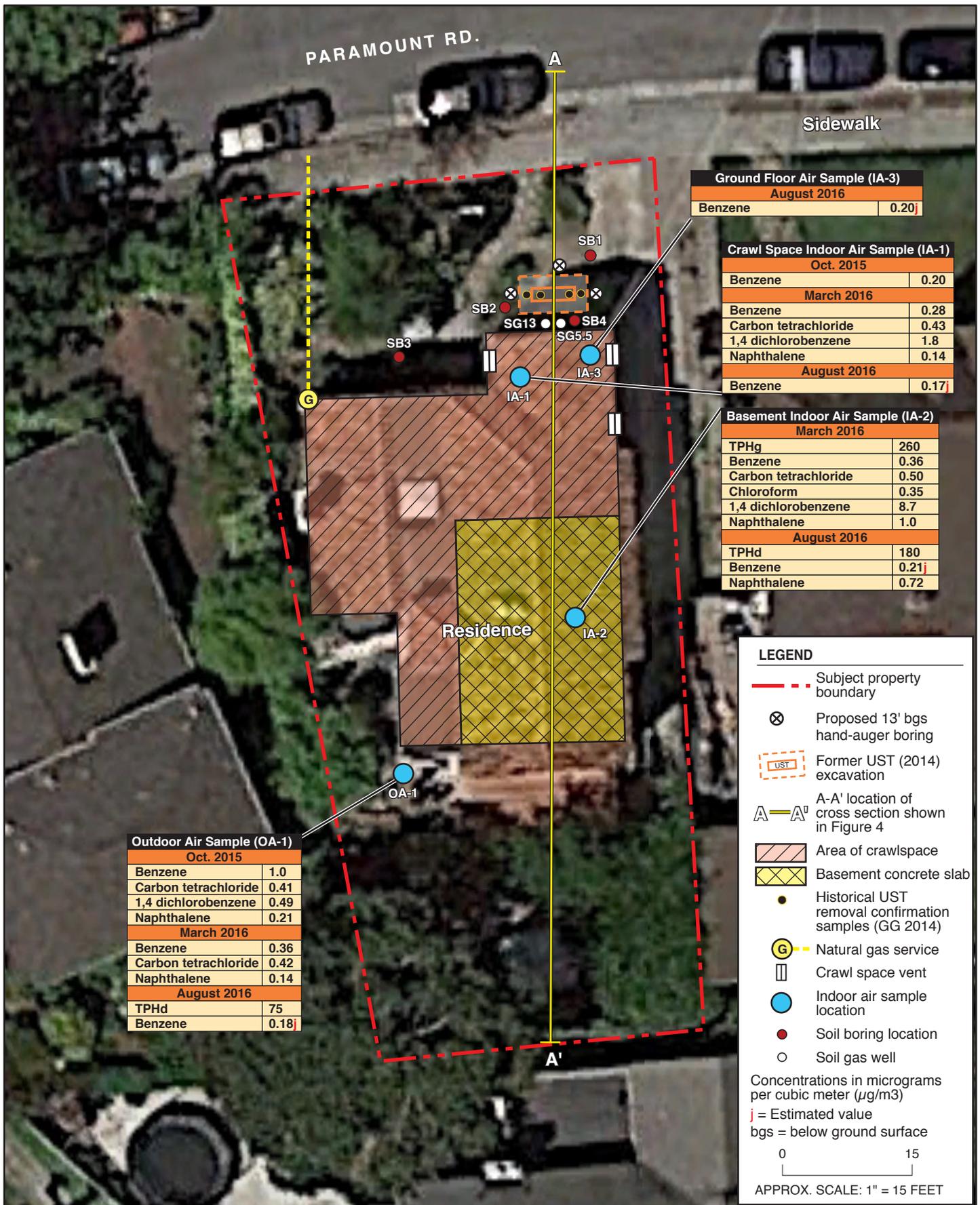
Richard S. Makdisi, P.G.
Principal Geochemist and President

cc: Mr. Amitai Schwartz – property owner counsel
Attachments: Figures 4, 5 and 6



REVISED WORKPLAN FIGURES 4, 5, and 6





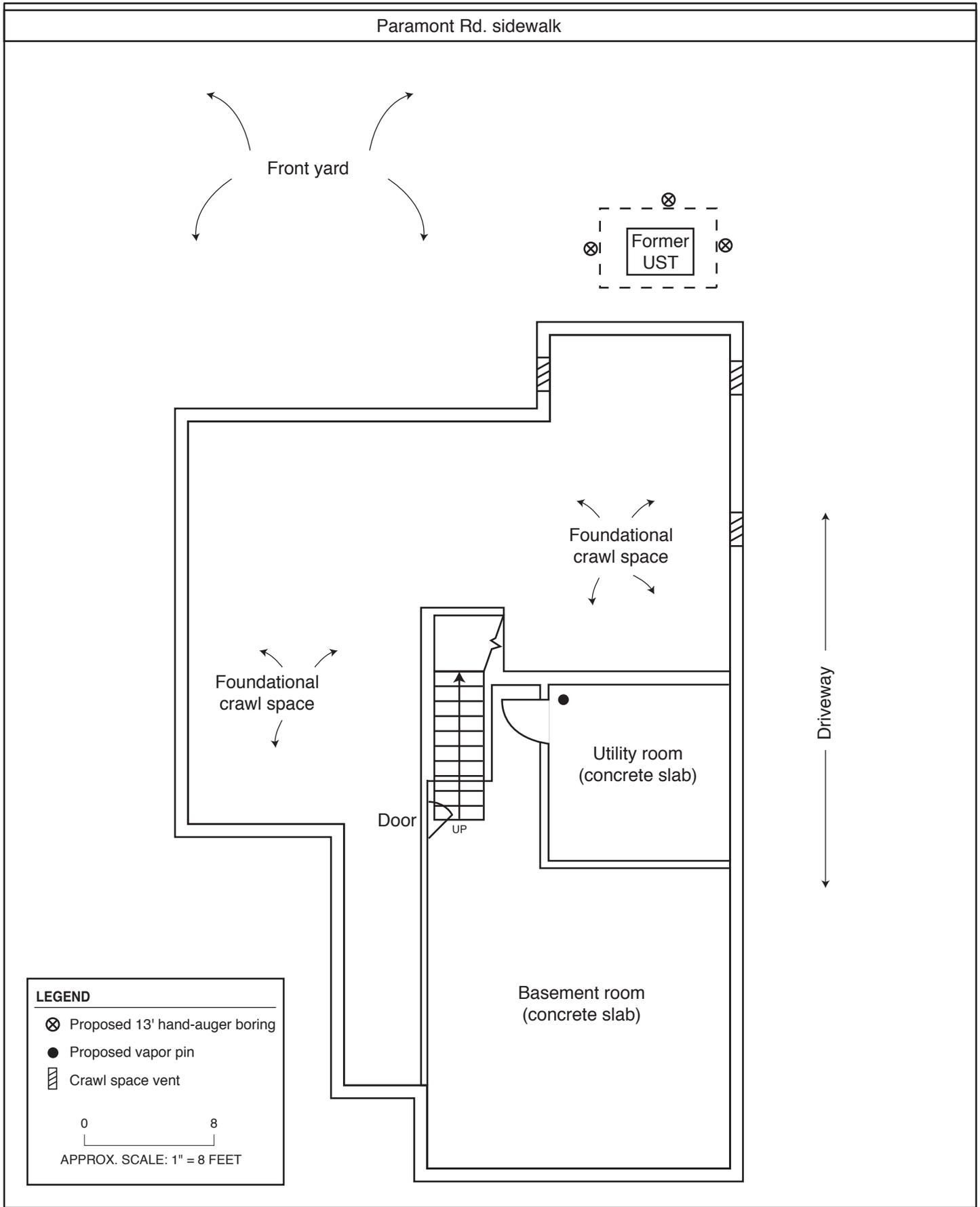
SITE PLAN SHOWING PROPOSED BORINGS AND ANALYTICAL RESULTS IN INDOOR AND OUTDOOR AIR

811 Paramount Road
Oakland, CA

By: MJC

MARCH 2017

Figure 5



LEGEND

- ⊗ Proposed 13' hand-auger boring
- Proposed vapor pin
- ▨ Crawl space vent

0 8

APPROX. SCALE: 1" = 8 FEET



PLAN VIEW OF SUBGRADE CRAWL SPACE AND BASEMENT RELATIVE TO FORMER UST

**811 Paramount Road
Oakland, CA**

By: MJC

MARCH 2017

Figure 6



2015-16-20