

1:35 pm, Mar 03, 2009

Alameda County  
Environmental Health

Date: January 22, 2009  
Project No.: 267-1-2  
Prepared For: Mr. Paresh C. Khatri  
**ALAMEDA COUNTY HEALTH AGENCY**  
1131 Harbor Bay Parkway  
Alameda, California 94502  
Re: Work Plan for Crawlspace Air Quality Evaluation  
2691 Castro Valley Blvd  
Castro Valley, California

On behalf of Mr. Anthony Varni, we present this work plan for evaluation of crawl-space air quality at 2691 Castro Valley Blvd in Castro Valley, California (Site).

## PURPOSE

The purpose of this workplan is to perform additional crawls-space air sampling as described by the Alameda County Health Agency (ACHA) in their letter dated December 5, 2008 regarding case closure for the site.

Prior sampling of the crawl-space air quality was performed on October 13, 2008. Laboratory analysis of the air sample did not detect Total Petroleum Hydrocarbons in the gasoline range (TPHg) above the laboratory screening limit ( $200 \mu\text{g}/\text{m}^3$ ). The commercial Environmental Screening Level (ESL) for TPHg is  $14 \mu\text{g}/\text{m}^3$ . Benzene was detected in the crawl-space air sample at  $2.0 \mu\text{g}/\text{m}^3$ , which is above the commercial (ESL) of  $0.14 \mu\text{g}/\text{m}^3$ . Toluene, ethylbenzene, and xylene compounds were detected at levels below their Environmental Screening Levels (ESLs). However, laboratory analyses of ambient air samples collected during the same sampling event detected TPHg and benzene compounds in greater concentrations present in the crawlspace samples. Based on the results from the October 13, 2008 sampling event the ACHA stated that additional crawl-space air samples are necessary to evaluate the potential risk to the building occupants.

To evaluate the presence of volatile petroleum hydrocarbons in the air beneath the floor of the on-site building, we will collect a total of six additional air samples over two seasonal events. Two air samples from opposite locations within the building crawl space and one ambient air sample will be collected during each event. Air samples will then be sent to a state-certified laboratory for analysis.

## SCOPE OF WORK

### Crawl-Space Air Sampling

To evaluate the presence of volatile petroleum hydrocarbons in the air beneath the floor of the on-site building, we will collect a total of six air samples during two seasonal events. Two air samples from locations within the crawl space and one ambient air sample will be collected

during each event. The samples will be collected by inserting tubing through two selected exterior vents at opposite sides of the existing building (Figure 2).

Each air sample will be collected using a 6-liter SUMA canister with an 8-hour flow regulator. Sampling events will take place over 8 hour intervals during normal business hours (approximately 8AM to 4PM). The air samples will be analyzed for TPHg plus benzene, toluene, ethylbenzene, xylene (EPA Method TO-15). The laboratory will be asked to run the analyses with detection limit for TPHg at or below the commercial ESL.

### **Report and Case Closure Request**

We will prepare a report summarizing the analytical data and presenting our conclusions and recommendations. The report will include a site map showing the sample locations and copies of the analytical reports. If the analytical results are similar the October 2008 analytical results the report will request case closure from the ACHA.

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### **SCHEDULE**

We are planning to perform the crawl space air sampling during February and May, 2009. The ACHA will be notified at least three days before the planned sampling.

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### **CLOSURE**

We look forward to your approval of this work plan. If you have any questions, please do not hesitate to call me at 925-988-9500 or email me at [plangtry@cornerstoneearth.com](mailto:plangtry@cornerstoneearth.com).

Sincerely,

**Cornerstone Earth Group, Inc.**

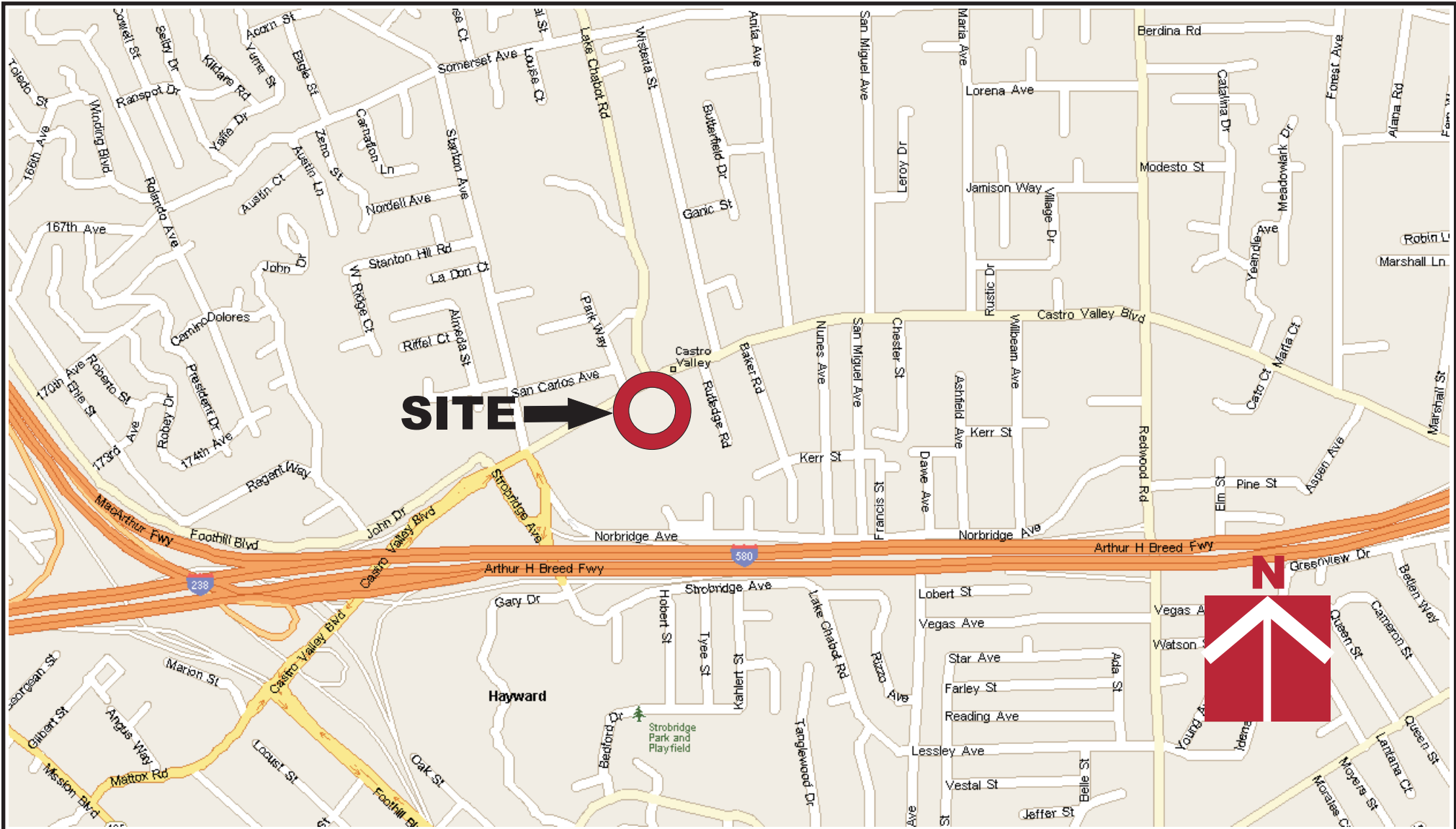


Peter M. Langtry, C.HG., C.E.G.  
Principal Geologist



Copies: Addressee (1)  
Mr. Anthony Varni (1)

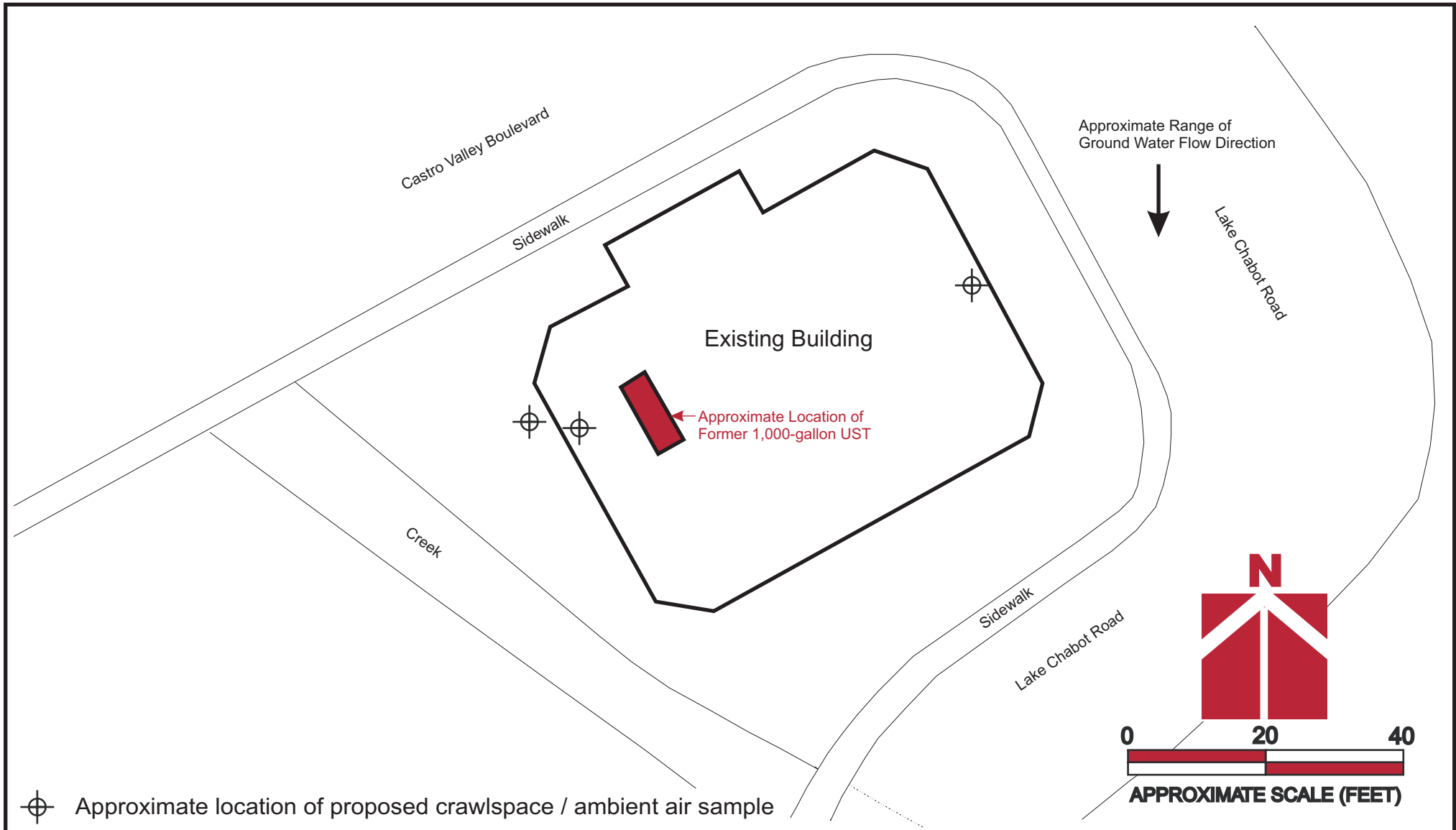
Attachments: Figure 1 – Vicinity Map  
Figure 2 – Site Map



**Vicinity Map**

**2691 Castro Valley Boulevard  
Castro Valley, CA**

Project Number	267-1-2
Figure Number	Figure 1
Date	January 2009
Drawn By	FLL



**Site Plan**

**2691 Castro Valley Boulevard  
Castro Valley, CA**

Project Number  
267-1-2

Figure Number  
Figure 2

Date  
January 2009

Drawn By  
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