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January 18, 2007

WORKPLAN
for
SOIL VAPOR SAMPLING
at
Lim Property
250 8th Street
Oakland, California

Submitted by:
AQUA SCIENCE ENGINEERS, INC.
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1.0 INTRODUCTION

This document presents Aqua Science Engineers, Inc.'s (ASEs) workplan for soil vapor sampling at the Lim Property located at 250 8th Street in Oakland, California (Figures 1 and 2). This workplan was requested by the Alameda County Health Care Services Agency (ACHCSA) in their letter dated November 20, 2006.

2.0 PROPOSED SCOPE OF WORK (SOW)

Based on the requirements of the ACHCSA, ASE's proposed SOW is as follows:

- 1) Obtain a drilling permit from the Alameda County Public Works Agency.
- 2) Push four vapor extraction points to 3-feet below ground surface (bgs) in both on and off-site locations and collect soil vapor samples.
- 3) Analyze one soil vapor sample collected from each point at a CAL-EPA certified analytical laboratory for total petroleum hydrocarbons as gasoline (TPH-G), and benzene, toluene, ethylbenzene and total xylenes (collectively known as BTEX).
- 4) Backfill each boring with neat cement.
- 5) Prepare a report presenting the results of the vapor sampling.

Details of this workplan are presented below.

TASK 1 - OBTAIN NECESSARY PERMITS

ASE will obtain a drilling permit from the Alameda County Public Works Agency (ACPWA). ASE will also notify Underground Service Alert (USA) to have underground utility lines marked in the site vicinity.

TASK 2 - PUSH FOUR VAPOR COLLECTION POINTS TO 3-FEET BGS AND COLLECT SOIL VAPOR SAMPLES

ASE will push four vapor collection points to 3-feet bgs at the locations shown on Figure 2. Vapor points will be pushed to 3-feet bgs using drilling rods driven with a Geoprobe. The bottom of the rod will contain an expendable point. Once at depth, the drive rod will be retracted separating the expendable point and the rods and creating the desired void for sample collection. A Geoprobe Point Run Tubing (PRT) system adapter and new, unused polyethylene tubing will then be advanced through the inner drive rod and secured to the expendable point holder at the base of the rods. A hydrated bentonite seal will be placed around the rods and ground surface to prevent ambient air intrusion into the borehole. The borehole will then be allowed to equilibrate



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prior to purging and sampling. The tubing will then be purged of five volumes to insure that all ambient air is removed from the tubing using the Geoprobe vacuum/volume system. The sample will be collected in a 1-liter Summa canister with a rate between 100 to 200-ml per minute. The samples will be labeled with the site location, sample designation, date and time the sample was collected, and the initials of the person collecting the sample. The samples will then be delivered under chain of custody to a CAL-EPA certified analytical laboratory. The sampling will be directed by a qualified ASE geologist.

All sampling equipment will be cleaned in buckets with brushes and an Alconox solution, then rinsed twice with tap water. All tubing will be discarded after each sampling event, and tubing will never be reused.

TASK 3 - ANALYZE ONE VAPOR SAMPLE FROM EACH LOCATION

One vapor sample from each boring will be analyzed at a CAL-EPA certified environmental laboratory for TPH-G by modified EPA Method 5030/8015, and BTEX by EPA Method 8020.

TASK 4 - BACKFILL THE BORINGS WITH NEAT CEMENT

Following the collection of the soil vapor samples, the borings will be backfilled with neat cement to the surface.

TASK 5 - PREPARE A REPORT

ASE will prepare a report presenting the methods and findings of this soil vapor assessment. This report will include a summary of the results, conclusions and recommendations. This report will be submitted under the seal of a California registered civil engineer or geologist.

SCHEDULE

The field sampling for this assessment will take place concurrently with an additional soil and groundwater assessment in February 2007. The results will be included in the soil and groundwater assessment report. The report will be issued no later than April 2007.



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Should you have any questions or comments, please call us at (925) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

A handwritten signature in dark ink, appearing to read 'Robert E. Kitay', written in a cursive style.

Robert E. Kitay, R.G., R.E.A.
Senior Geologist



cc: Alice and May Lee Lim, c/o Russell Lim, 1028 Annerly Road, Piedmont, CA 94610-1110
Mr. Jerry Wickham, Alameda County Health Care Services Agency (via upload to server)

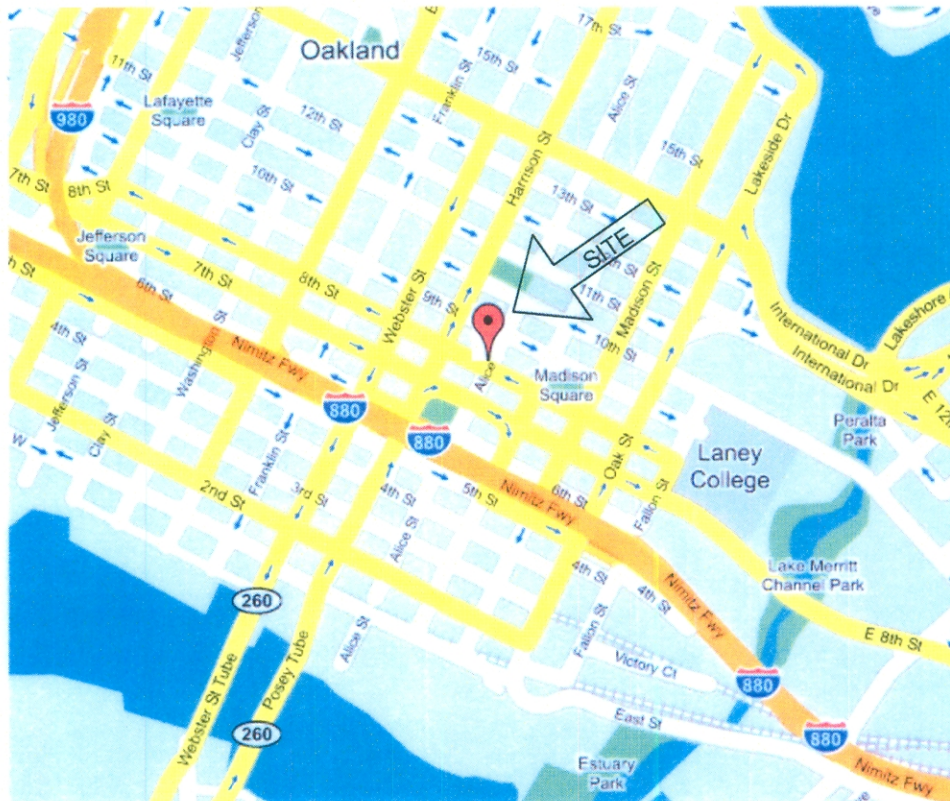


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FIGURES



NORTH

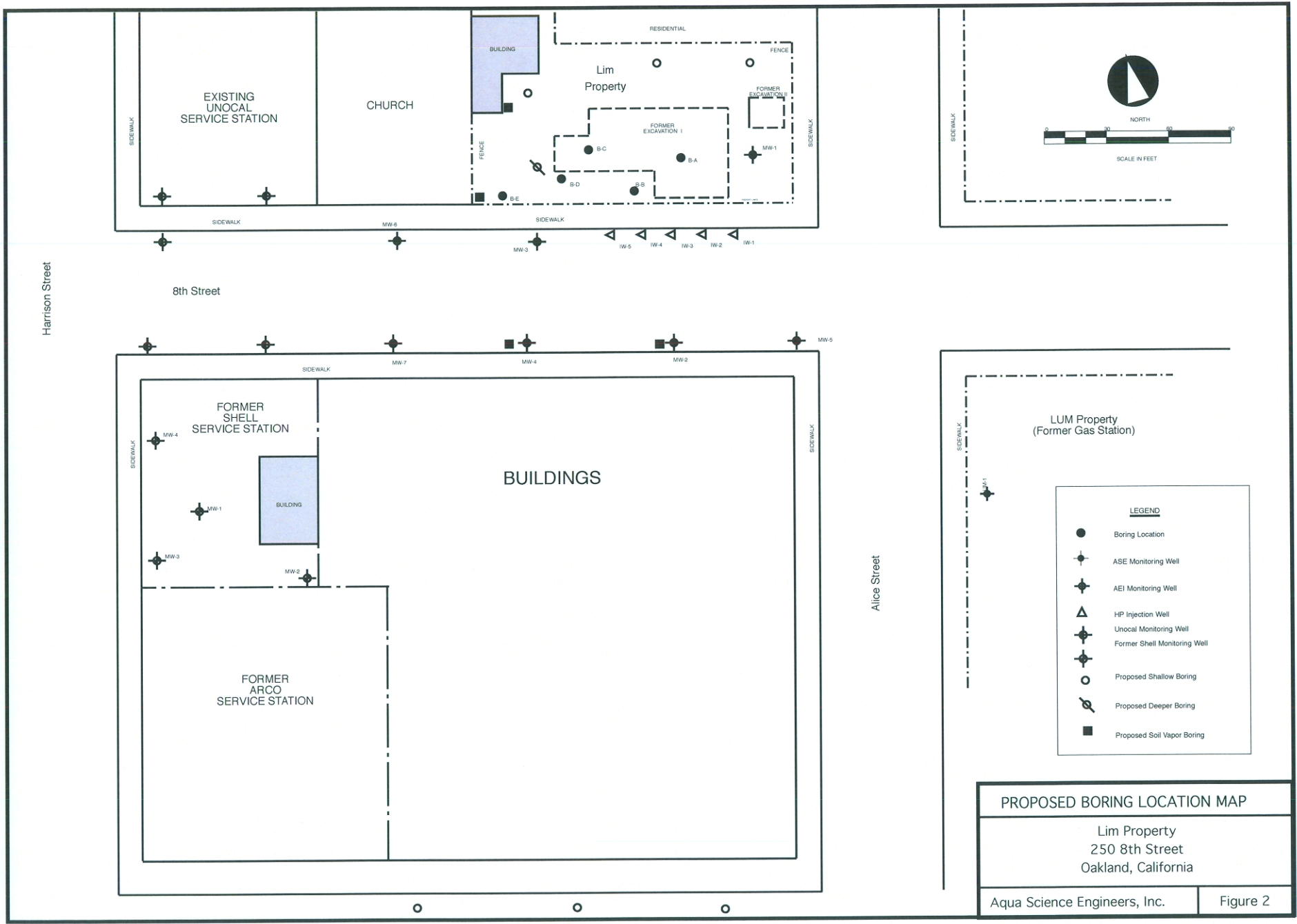


LOCATION MAP

LIM PROPERTY
250 8TH STREET
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS

FIGURE 1



PROPOSED BORING LOCATION MAP

Lim Property
 250 8th Street
 Oakland, California

Aqua Science Engineers, Inc.

Figure 2