

# ALL ENVIRONMENTAL, INC.

Environmental Engineering & Construction

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March 12, 1996

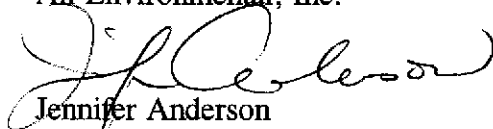
Ms. Jennifer Eberle  
Alameda County Health Services Agency  
Department of Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

Re: 245 8th Street, Oakland, California

Dear Jennifer:

Enclosed is the requested Phase II Groundwater Investigation Work Plan. Please review and if you have any questions or comments don't hesitate to contact me at (510) 820-3224.

Thank you,  
All Environmental, Inc.

  
Jennifer Anderson  
Project Manager

ENVIRONMENTAL  
PROTECTION  
96 MAR 14 PM 2:15

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Corporate Headquarters:

2641 Crow Canyon Rd., #5  
San Ramon, CA 94583  
(510) 820-3224

Los Angeles Office:

5031 Pacific Coast Hwy., #178  
Torrance, CA 90505  
(310) 328-8878

**PHASE II GROUNDWATER  
INVESTIGATION WORK PLAN**

**245 8th Street  
Oakland, CA 94607**

3-12-96

**Prepared For:**

**Mr. Victor Lum  
Vic's Automotive  
245 8th Street  
Oakland, CA 94607**

**Prepared By**

**All Environmental, Inc.  
2641 Crow Canyon Road, Suite 5  
San Ramon, CA 94583**

**March 12, 1996**

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- FIGURE 2:           SOIL BORING LOCATION MAP

## **1.0 INTRODUCTION**

All Environmental, Inc. (AEI) has prepared this workplan on behalf of Mr. Victor Lum, in response to his request for a soil and groundwater investigation at 245 8th Street in Berkeley, California. The proposed site assessment activities have been initiated by the property owner in accordance with the Alameda County Health Care Services Agency (ACHCSA) requirements. AEI proposes to advance four soil borings to qualitatively and quantitatively assess impacts and define the extent of the free product plume.

This subsurface investigation includes the advancement of each borehole, soil and groundwater screening and sampling, sample analysis and determination of the free product plume extent. Prior to the commencement of field activities, this work plan will be approved by the ACHCSA. Appropriate permits will be obtained ACHCSA and the property owners will be notified verbally.

## **2.0 SITE DESCRIPTION AND BACKGROUND**

The site is located in a commercial zone at the corner of 8th Street and Alice Street in Oakland (Figure 1: Site Location Map). The topography of the site is relatively flat, with an elevation of approximately 32 feet above mean sea level. The nearest significant surface water is Lake Merritt, located approximately 2200 feet to the northeast, and the Alameda Inner Harbor located about 2400 feet to the south southwest. The narrow waterway connecting Lake Merritt with the Inner Harbor lies approximately 2200 feet to the southeast.

One building is located on the property, which contains both an auto repair shop and office for Vic's Automotive. The building is surrounded by an asphalt paved parking lot.

Five underground storage tanks were removed from the site in June, 1993 by AEI. The tanks consisted of four 1,000 gallon gasoline tanks, and one 250 gallon waste oil tank. Prior to removal, approximately 425 gallons of waste product were pumped from the tanks. Two additional 6,000 gallon gasoline tanks were removed by AEI in August of 1994.

Soils taken from the excavations were found to be contaminated, with as much as 3700 ppm Total Petroleum Hydrocarbons (TPH) as gasoline in stockpiled soil, and 160 ppm TPH gasoline in soils taken from the bottom of one of the excavations. There is an additional known source of hydrocarbon contamination of groundwater across the intersection from the site, in an upgradient direction. The excavations were backfilled with clean import material.

AEI drilled two soil borings and converted each boring into a groundwater monitoring well on July 14, 1995. This subsurface investigation included logging boreholes under the supervision of a Registered Professional Engineer, soil sampling and analyses, well development, and groundwater sampling and analyses. Prior to drilling, a work plan compiled by AEI was approved by Jennifer Eberle, Hazardous Materials Specialist for ACHCSA. A Drilling Permit was obtained from Zone 7 Water Agency, and the property owners were notified verbally.

AEI performed the first and second quarterly groundwater monitoring and sampling on July, 1995 and October, 1995, respectively. Free floating product was discovered in MW-1 during both sampling episodes. No free floating product was observed in MW-2. Subsequent monitoring of the wells indicated up to 3.9 feet of free floating product in MW-1 and up to 0.12 feet of product in MW-2.

### **3.0 GEOLOGY AND HYDROGEOLOGY**

The site is located in the alluvial basin that surrounds the San Francisco Bay, approximately 70 feet above mean sea level (USGS, Oakland West Quadrangle, 7.5' Topographical Map). The late Pleistocene alluvium generally consists of irregularly interbedded, poorly to moderately consolidated, clays, silts and gravels.

Soils in the vicinity of the site are generally comprised of brown gravelly sand, brown clayey sand and light brown and red brown clayey sand. According to previous groundwater sampling data, groundwater is expected between 15 and 20 feet below ground surface.

### **4.0 SOIL BORING INVESTIGATION**

The focus of this investigation is to determine the extent of free floating product in the vicinity of MW-1. The eastern extent of the plume has been determined with the placement of MW-2. The scope of this investigation includes the advancement of **four soil borings** to first groundwater north, south and west of MW-1, in the locations shown in Figure 2. The borings will be advanced using a Geoprobe and grab groundwater samples will be collected using a hydropunch. The extent of free floating product will be assessed qualitatively from the collected groundwater samples. All samples will be checked for floating product and sheen. If free product is encountered during the drilling of any of the borings an additional boring will be advanced 10 additional feet away from MW-1, thus defining the extent of the free product plume. If free product is absent, the groundwater samples will be analyzed.

Groundwater samples will be submitted for chemical analyses of total petroleum hydrocarbons

(TPH) as gasoline (EPA method 5030/8015), and benzene, toluene, ethylbenzene, xylenes (BTEX) distinction (EPA method 5030/8020), at a state certified laboratory.

Minimal soil cuttings are expected to be generated during the borehole advancement. Any cuttings generated will be stored on site in 5 gallon buckets. On site treatment or off site disposal of contaminated drill cuttings is not a part of this work scope. It is likely that a licensed hauler will be contracted to transport the soils as non hazardous waste, under appropriate manifests, to a local landfill facility. The costs associated with disposal of the soils will depend on the nature and degree of contamination of the soils.

## 5.0 SITE SAFETY

Prior to commencement of field activities, a site safety meeting will be held at a designated command post near the working area. Emergency procedures will be outlined at this meeting. Also, the hazards of the known or suspected chemicals of interest will be explained. Level D personal protection equipment is the anticipated maximum amount of protection needed. A site safety plan which conforms to Part 1910.120 (i) (2) of 29 CFR will be on site at all times during the performance of this project.

A working area will be established with barricades and warning tape to delineate the zone where hard hats and steel toed shoes must be worn, and where unauthorized personnel will not be allowed. If, during drilling, fuel product odors are deemed to be substantial, half face respirators with organic vapor cartridges will be worn.

A nearby hospital will be designated in the site safety plan as the emergency medical facility of first choice. A map with a course plotted to the hospital will be on site.

## 6.0 ESTIMATED SCHEDULE

Upon acceptance of this workplan by the ACHCSA, work will commence within a two week period. The ACHCSA will be given adequate notification of the scheduled day of drilling. Laboratory analytical results will be obtained within two weeks of collection. The final report will be prepared and copies will be delivered to the ACHCSA. A table describing the project schedule is as follows:

Week 1:	Workplan Preparation
Week 2 & 3:	Review of Workplan by the ACHCSA
Week 4:	Drilling and Laboratory Analysis
Week 5:	Preparation of Final Report

## 7.0 FINAL REPORT

A complete and final report of methods, findings, and conclusions from work proposed herein will be submitted to the client for forwarding to the appropriate agencies. The report will be submitted under the seal of a State Registered Engineering Geologist.

## 8.0 SIGNATURES

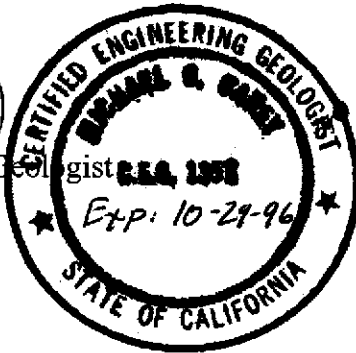
This workplan was performed by the following personnel of All Environmental, Inc.

Prepared By:

  
Jennifer Anderson  
Project Manager

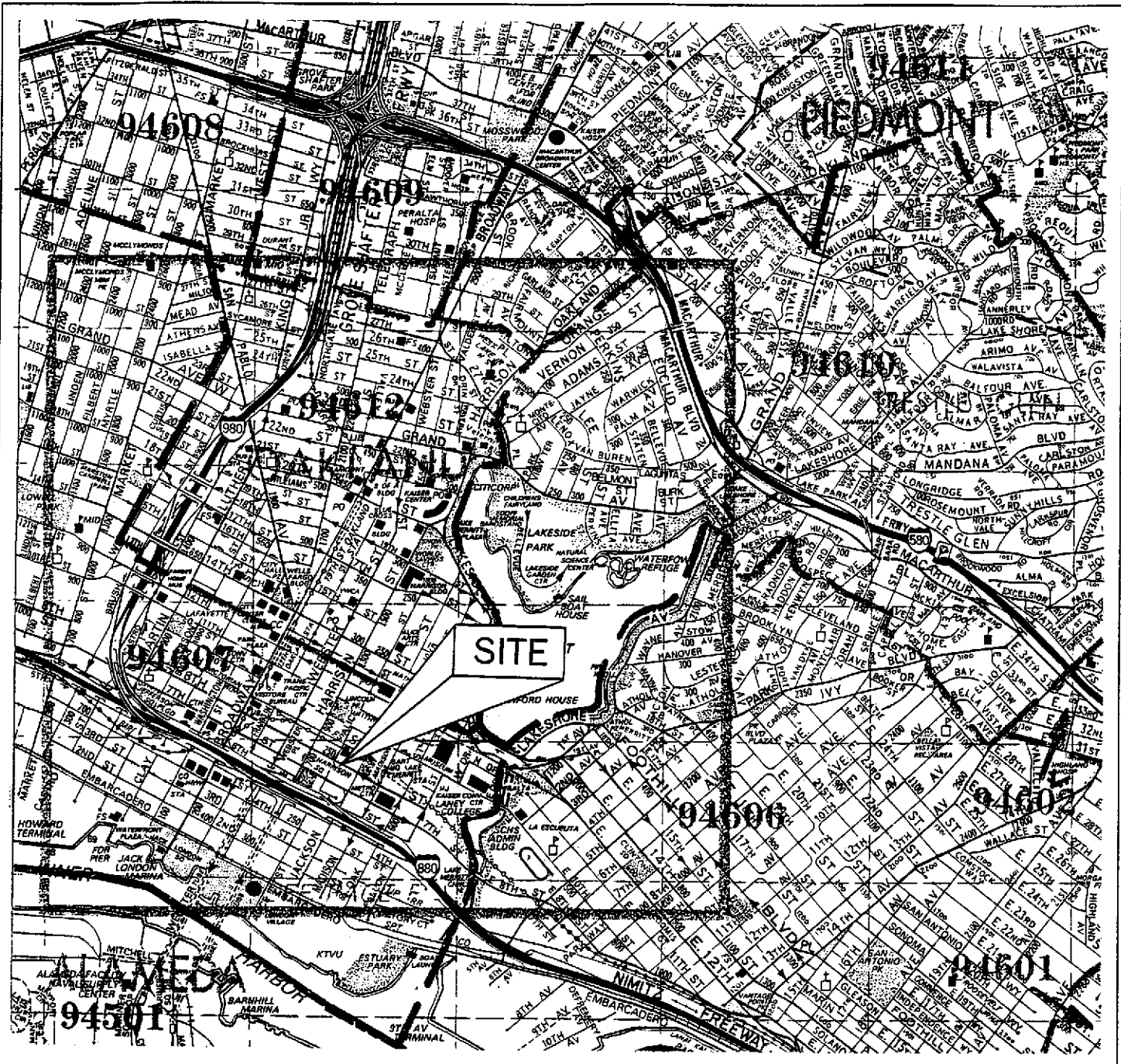
Reviewed By:

  
Michael Carey  
Certified Engineering Geologist









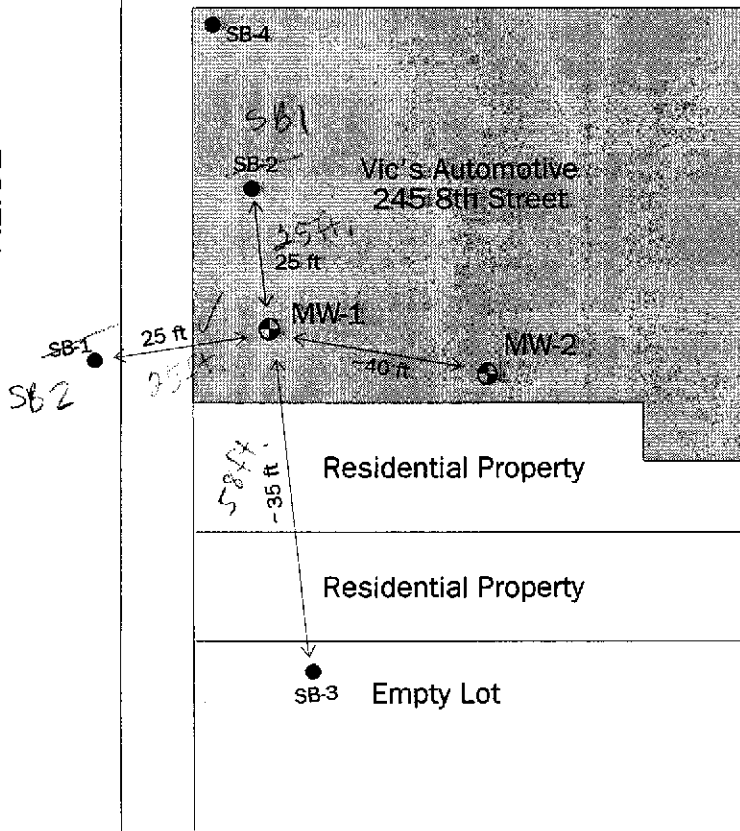
FROM:  
THOMAS BROS. MAPS  
1995

<b>ALL ENVIRONMENTAL, INC.</b> 2641 CROW CANYON ROAD, SAN RAMON		
SCALE: 1" = 1/4 MI	APPROVED BY:	DRAWN BY:
DATE: 3 OCTOBER 95		REVISED:
<b>SITE LOCATION MAP</b>		
245 8TH STREET, OAKLAND		DRAWING NUMBER: <b>FIGURE 1</b>

STREET

8TH STREET

ALICE



- ⊕ Monitoring Well
- Proposed Soil Boring Location

**ALL ENVIRONMENTAL, INC.**  
2641 CROW CANYON ROAD, SAN RAMON

SCALE: Not to Scale

APPROVED BY:

DRAWN BY:

DATE: 20 FEBRUARY 96

REVISED:

### SOIL BORING LOCATION MAP

245 8TH STREET, OAKLAND

DRAWING NUMBER:  
FIGURE 2

**ALL ENVIRONMENTAL, INC.**

**2641 Crow Canyon Road, Suite 5**

**San Ramon, CA 94583**

**(510) 820-3224**

**FAX: (510) 838-2687**

**FAX TRANSMITTAL SHEET**

TO: Jennifer Eberle

FAX NUMBER: 337 9335

FROM: Jennifer Anderson

MESSAGE: Hardcopy to follow via mail.

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DATE: 3/12/96

No. of Pages (Including cover page): 9



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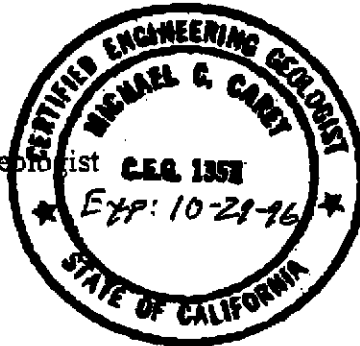


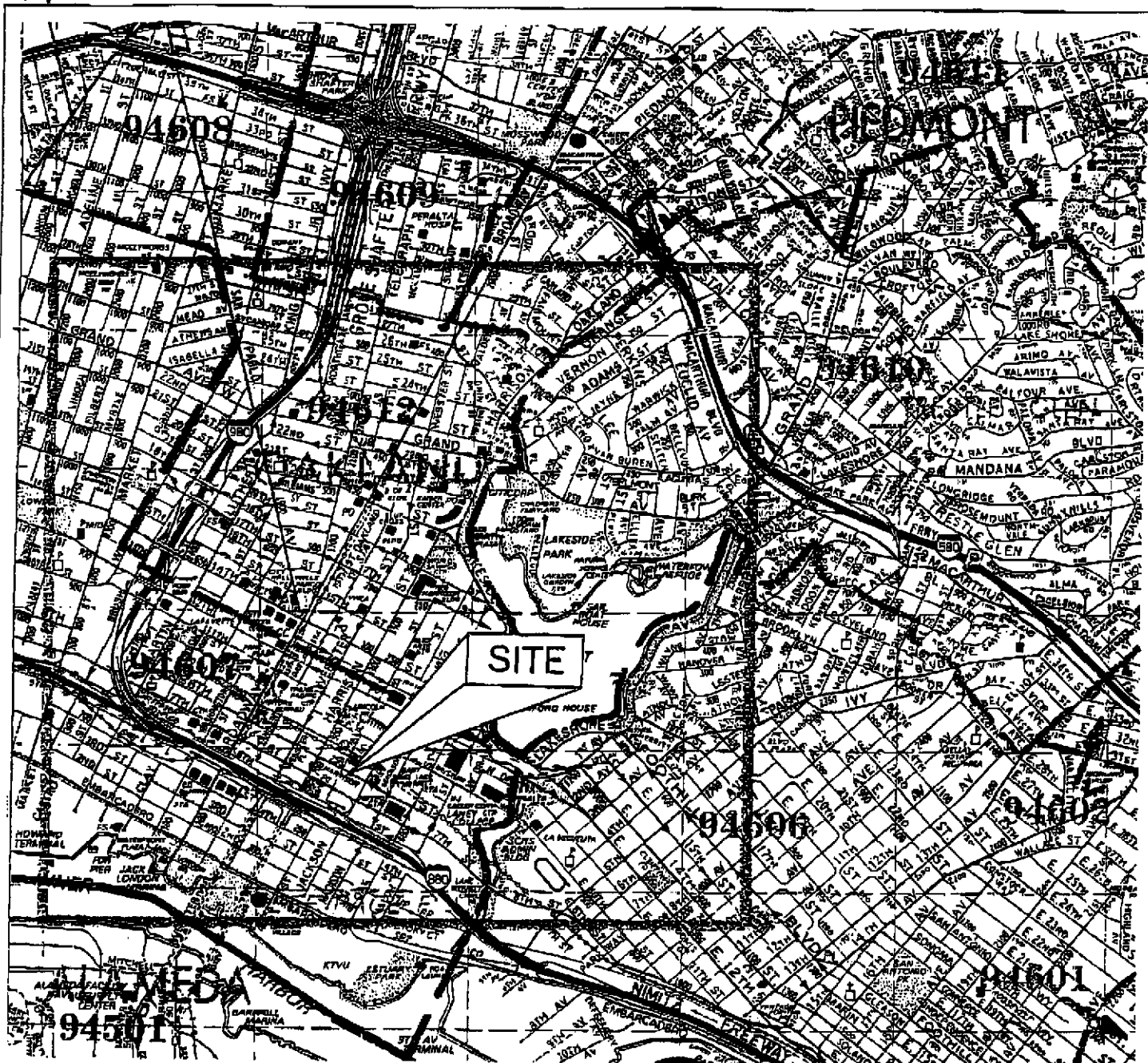
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Project Manager

Reviewed By:



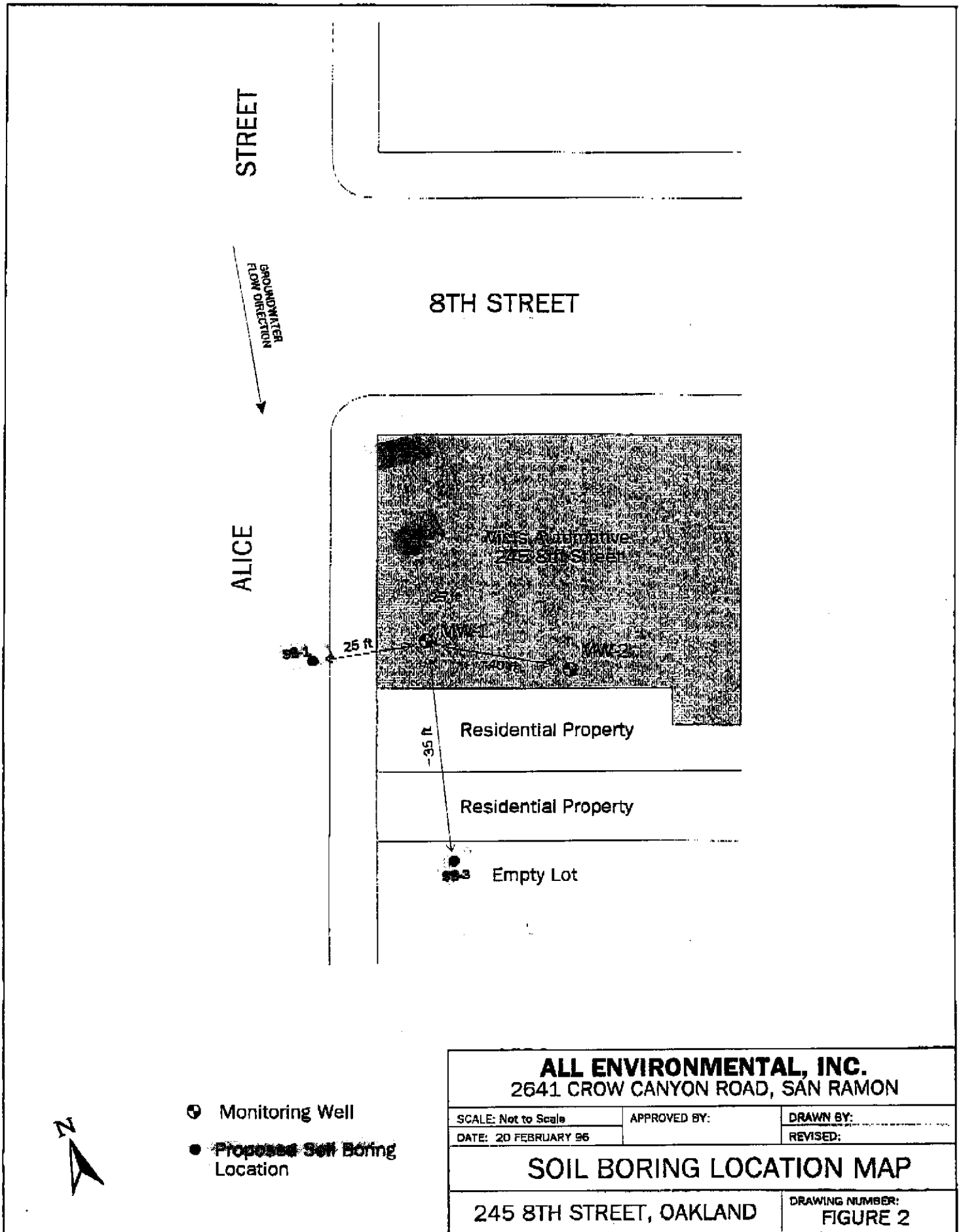
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<b>ALL ENVIRONMENTAL, INC.</b> 2641 CROW CANYON ROAD, SAN RAMON		
SCALE: Not to Scale	APPROVED BY:	DRAWN BY:
DATE: 20 FEBRUARY 96		REVISED:
<b>SOIL BORING LOCATION MAP</b>		
245 8TH STREET, OAKLAND		DRAWING NUMBER: FIGURE 2