

July 29, 1998

Alameda County Department of
Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

Attention: Eva Chu

Subject: Workplan to Conduct Soil Boring Investigation
3838 West Street UST Site
Oakland, California
GA Project No. 140-01-01

Dear Ms. Chu;

Gribi Associates is submitting this workplan on behalf of Mr. Johnny Houston to drill and sample one soil boring immediately adjacent to a gasoline underground storage tank (UST) formerly located at the subject site in Oakland, California. The purpose of the proposed soil boring investigation will be to assess soil and groundwater quality adjacent to the former UST in order to address regulatory site closure.

Background

One 550-gallon gasoline UST, which apparently had been unused for at least 20 years, was removed from the project site on January 8, 1992. Prior to removing the UST, approximately 650 gallons of water was pumped from the tank. Following removal of the UST, the Alameda County Department of Environmental Health inspector noted holes in the tank, and hydrocarbon odors and sheens in the excavation. Two soil samples collected at about eight feet in depth in the UST excavation cavity contained no detectable gasoline constituents and low levels of lead (see Figure 2 for soil sample locations). One four-point composite soil sample collected from the excavated soil stockpile contained 4.3 parts per million (ppm) of TPH-G, with low levels of BTEX constituents and 32 ppm of Total Lead. A grab groundwater sample collected from the UST excavation cavity following tank removal contained 16 ppm of TPH-G, with low or no detectable levels of BTEX constituents.

Project Approach

Based on our recent conversations with Ms. Eva Chu of Alameda County Department of Environmental Health on a review of available site documents, and on a brief site visit, we recommend drilling and sampling one investigative soil boring immediately southwest, in the expected downgradient groundwater flow direction, from the former UST using hand augering equipment. The hand auger, while slower than mechanical drilling methods, is generally less expensive when drilling a small number of shallow borings. We believe that soil and groundwater

sampling from a single boring immediately southwest from the former UST excavation cavity will help to determine whether or not groundwater has been significantly impacted from possible hydrocarbon releases from the former UST.

Note that if field screening results indicate significant hydrocarbon impacts, then Gribi Associates recommends installing a temporary monitoring well in the boring to provide a better assessment of true groundwater quality.

Scope of Work

Based on the above project approach, Gribi Associates proposes to conduct the following tasks. All activities will be conducted in accordance with applicable State and Federal guidelines and statutes.

Task 1 Conduct prefield activities. Gribi Associates will: (1) Obtain a drilling permit from Alameda County Department of Public Works; (2) Mark the proposed boring location with white paint; and (3) Notify Underground Services Alert (USA) at least 48 hours prior to drilling.

Task 2 Conduct drilling and sampling activities. Gribi Associates will: (1) Drill one soil boring immediately southwest from the former UST excavation cavity to about 12 feet below surface grade using hand auger equipment; (2) Collect one soil sample and one grab groundwater sample from the boring; and (3) Grout the boring to match existing surface grade.

The soil sample will be collected in a brass sampling tube and will be preserved in accordance with standard sampling protocols. The grab groundwater sample will be collected as follows: (1) 1-1/4-inch diameter well casing will be placed in the boring; (2) Two to three feet of filter sand will be placed around the well casing to help filter out silt; (3) The well casing will be purged of at least one well volume using a clean PVC bailer; (4) Groundwater will be poured directly from the bailer into laboratory-supplied containers; and (5) Each sample container will be preserved in accordance with standard sampling protocols.

If field screening results warrant, then Gribi Associates will deepen the hand auger boring to about 15 feet in depth and install a temporary monitoring well in the boring. The well will be installed using 1-1/4-inch diameter Schedule 40 PVC casing as follows: (1) 0.020 inch slotted well screen will be placed from 15 feet to 5 feet in depth; (2) Filter sand will be placed around the well casing to about 4 feet in depth; (3) Bentonite pellets will be placed around the well casing from 4 feet to 3 feet in depth; and (4) The remaining annulus will be grouted with a cement slurry. The top of the well will be enclosed in a traffic-rated well box set in concrete slightly above grade.

Task 3 Conduct laboratory analyses. Gribi Associates will analyze one soil sample and one grab groundwater sample for the following parameters

USEPA 8015M Total Petroleum Hydrocarbons as Gasoline (TPH-G)
USEPA 8020/602 Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)
USEPA 8020/602 Methyl-t-butyl Ether (MTBE)

All analyses will be conducted by a California-certified analytical laboratory with two-week turn around on lab results.

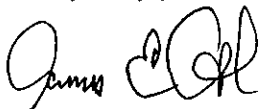
Task 4 Prepare report of findings. Gribi Associates will prepare a brief letter report for submittal to Alameda County Department of Environmental Health which will describe all investigative activities and provide results of the investigation. If results indicate no significant release, then this report will also request regulatory site closure.

Project Schedule

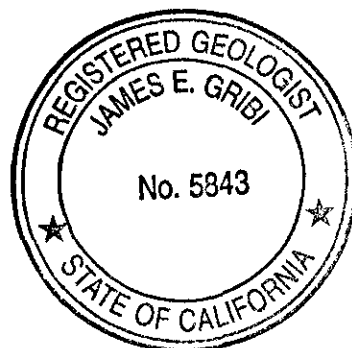
Gribi Associates is prepared to begin project activities immediately. Based on our understanding of the project, we expect to complete the project scope of work within three to four weeks after receiving workplan approval.

We appreciate the opportunity to present this workplan for your review. Please call if you have questions or require additional information. We look forward to working with you on this important project.

Very truly yours,

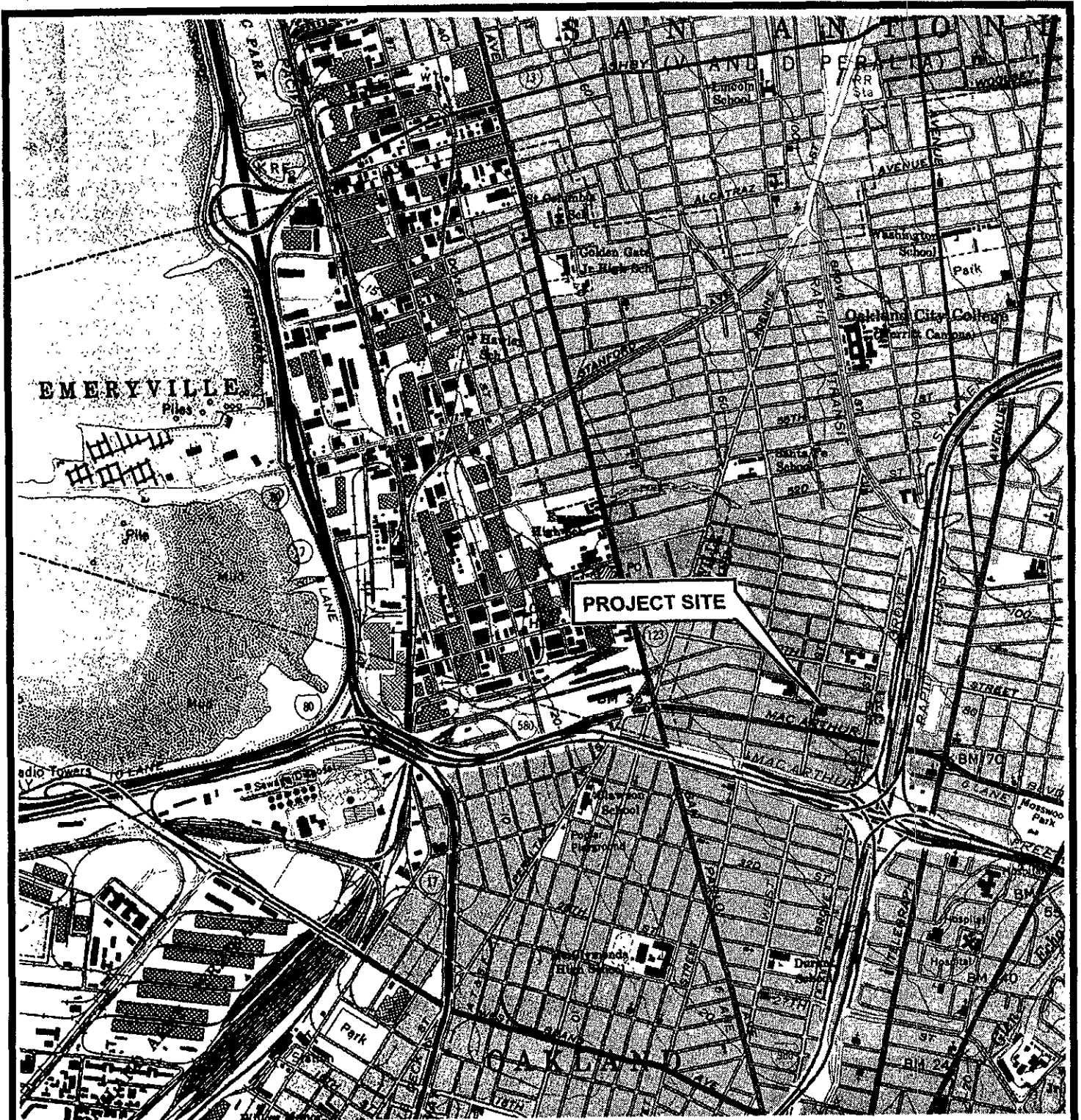


James E. Gribi
Registered Geologist
California No. 5843



JEG/ct

GA-19/jh-west.wpl



TOPOGRAPHY FROM USGS OAKLAND, WEST
7.5-MINUTE QUADRANGLE MAP, (TOPOI 1997).



DESIGNED BY:

CHECKED BY:

SITE VICINITY MAP

DATE: 07/28/98

FIGURE: 1

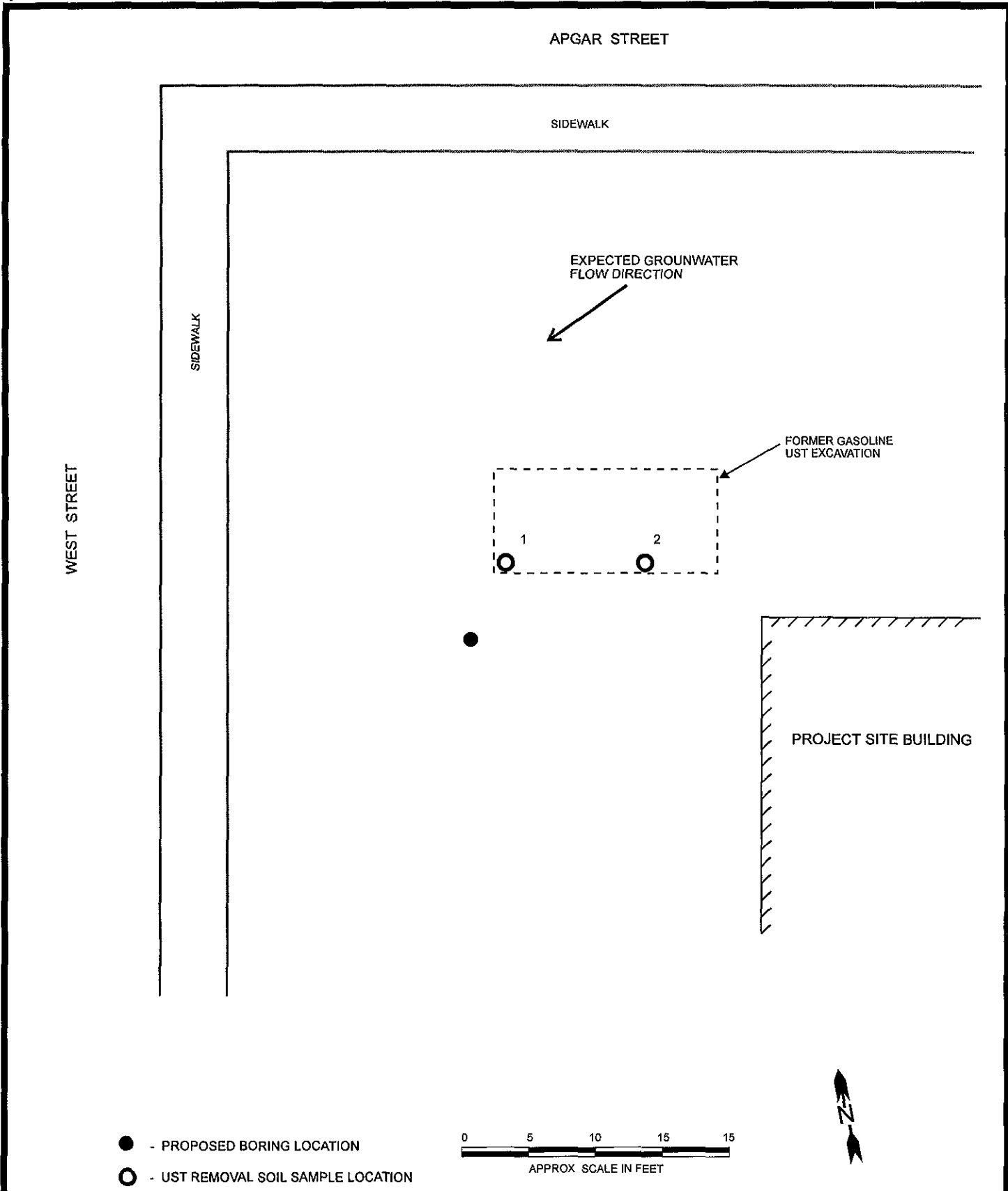
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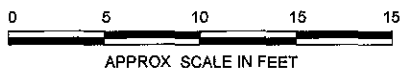
3838 WEST STREET UST SITE
OAKLAND, CALIFORNIA

PROJECT NO: 140-01-01

GRIBI Associates



- - PROPOSED BORING LOCATION
- - UST REMOVAL SOIL SAMPLE LOCATION



DESIGNED BY:	CHECKED BY:	PROPOSED BORING LOCATION	DATE: 07/29/98	FIGURE: 2
DRAWN BY: JG	SCALE:		GRIBI Associates	
PROJECT NO: 140-01-01		3838 WEST STREET OAKLAND, CALIFORNIA		