A·C·C
ENVIRONMENTAL
CONSULTANTS

ddement@accew.com

October 4, 2000

Give 48 hours notice prior to drilling

00 OCT -6 PM 4:21
ENVIRONMENTAL
PROTECTION

Mr. Sai Itula
First Samoan Congregational Church
1911 Everett Street
Alameda, California 94501

RE: Subsurface Investigation Work Plan
2526 Blanding Avenue, Alameda, California

Dear Mr. Itula:

ACC Environmental Consultants, Inc. (ACC), is pleased to provide this Work Plan for work to be performed at 2526 Blanding Avenue, Alameda, California (Figure 1) as requested by the Alameda County Health Care Services Agency (ACHCSA). The proposed work includes advancing three to four exploratory soil borings to a maximum depth of approximately 15 feet and collecting soil and grab groundwater samples.

BACKGROUND

While performing a Phase I Environmental Site Assessment (ESA), ACC identified a fill pipe and 280-gallon heating oil underground storage tank (UST) in the center of the subject property adjacent to the sidewalk border on Blanding Avenue. Regulatory file review revealed installation of a 280-gallon UST in approximately 1929 but no information was found regarding UST removal. ACC confirmed the UST to be 1.5 feet deep, 3 feet in diameter, approximately five feet long.

ACC and its contractor, DCM Construction and Services, Inc., exposed and removed the UST on August 28, 2000. The UST was found to be oriented parallel with Blanding Avenue and located immediately adjacent to the public sidewalk. Previously thought to be abandoned and cleaned with kerosene, the tank was found to be a kerosene fuel tank. Upon removal, the steel UST was observed to be in fairly good condition with no holes and minor, uniform corrosion. The bottom of the UST sat at a depth of approximately 5.5 feet below ground surface (bgs). The location of the former UST is illustrated on Figure 2. Following overexcavation of approximately 9 cubic yards of discolored soil beneath the UST to 8.5 to 9.0 feet bgs, the hole was backfilled with overburden soil and clean fill sand and the materials recompacted. Send analytical results of stockpiled soil

Soil sampling results ranged from less than 1 part per million (ppm) kerosene to 680 ppm kerosene Analytical results of the two soil samples collected at the bottom of the excavation reported a high of 1 7 ppm kerosene with minor concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) up to 0.023 ppm xylenes. Minor amounts of water were observed in the excavation but an insufficient volume was present to collect a representative grab water sample. Groundwater is anticipated at approximately 10 to 11 feet bgs.

RATIONALE FOR PROPOSED SCOPE OF WORK

This proposed scope of work is designed to obtain additional subsurface site assessment data in a cost-effective fashion. Two geoprobe® borings will be advanced to 15 feet below ground surface (bgs) on two sides of the former UST excavation to allow visual observation and sampling of soil most likely to be impacted at depths of 7 to 9 feet bgs and for the collection of a grab groundwater sample in the immediate vicinity of the former UST. In addition, one geoprobe® boring will be advanced to 15 feet in the assumed downgradient direction for the collection of a second grab groundwater sample. ACC anticipates encountering low to medium permeability soils to the depth of investigation.

Sample analyses will be for constituents of concern only. Soil and grab groundwater samples will be analyzed for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by EPA Methods 8020 and 8015 Modified, and total extractable petroleum hydrocarbons as kerosene(TPHk) by EPA Method 3550/8015M. In addition, one grab groundwater sample will be analyzed for all fuel oxygenates and lead scavengers by EPA Method 8260 in accordance with requirements recently enacted by the Regional Water Quality Control Board (RWQCB).

Boring B1

Boring B1 will be advanced to seven feet bgs and a continuous two-foot long core from seven to nine feet bgs will be collected. A representative soil interval will be prepared for laboratory analysis for TPHk, TPHg, and BTEX/MTBE. The boring will be advanced to approximately 15 feet bgs and a grab groundwater sample obtained for analysis for TPHk, TPHg, BTEX, and all fuel oxygenates by EPA Method 8260. ACC feels this sample location is ideal for a grab groundwater sample because it is located at the midpoint of the fill port and the soil sample location with the highest concentrations of TPHk and BTEX.

Soil@ 7-9
GW@ 15'

highest [MTBE] in soil to be confirmed w/ 8260 for MTBE + oxygenates

Boring B2

Boring B2 will be advanced to seven feet bgs and a continuous two-foot long core from seven to nine feet bgs will be collected. A representative soil interval will be prepared for laboratory analysis for TPHk, TPHg, and BTEX/MTBE. ACC feels this sample location is ideal for a step-out soil sample because it is located adjacent to the fill port and overspilling appears to be the most likely cause of soil impact around and under the former UST.

SS@ 7-9

Boring B3

Boring B2 will be advanced to approximately 15 feet bgs and a grab groundwater sample obtained for analysis for TPHk, TPHg, and BTEX/MTBE. ACC feels this sample location is ideal for a downgradient grab groundwater sample because it is located in the assumed downgradient groundwater flow direction from the former UST at an appropriate distance to evaluate potential TPHk and BTEX impacts to groundwater

confirm MTBE w/ 8260

also SS from adjacent grab for soil parameters: bulk density, porosity, total organic carbon content, water content

ACC believes this scope of work will successfully address concerns of the ACHCSA and obtain the information necessary to further evaluate current subsurface conditions and justify regulatory case closure with concurrence of the RWQCB.

DRILLING PROGRAM

A drilling permit will be obtained from the Alameda County Public Works Agency before drilling activities. The locations of the proposed borings will be marked with white paint, and Underground Service Alert will be notified at least 48 hours prior to drilling. Proposed boring locations are illustrated on Figure 2. Actual boring locations may vary slightly based on field observations, safety, utilities, or unknown physical constraints.

Three soil borings will be advanced using a truck-mounted hydraulic Geoprobe® sampling tool equipped with 2.0-inch inside diameter clear, acetate liners. Drilling will be performed under the direction of a California Registered Geologist, and all subsurface materials will be identified and logged according to the Unified Soil Classification System. The sampling probe and rods will be pre-cleaned prior to use and between sample drives by washing them with a trisodium phosphate and potable water solution, a potable water rinse, and distilled water rinse. The work will be conducted in one day. No drill cuttings will be generated.

Grab groundwater samples will be collected in two of the three exploratory borings. Samples will be collected with the use of a temporary stainless steel screen. The pre-cleaned Geoprobe will be hydraulically driven to the desired depth, retracted, and the 4-foot long screen exposed to the formation. Water samples will then be collected using disposable polyethylene tubing equipped with a check valve or polyethylene bailers which were inserted into the Geoprobe screen. The grab groundwater samples will be placed in approved, laboratory-supplied sample vials without headspace, sealed, and stored in a pre-chilled, insulated container pending transport to a state-certified analytical laboratory. Every effort will be made to minimize disturbance of the groundwater samples prior to placement in the sample containers.

Following drilling and sample collection, each soil boring will be abandoned with neat cement to just below the surface (1 to 2 inches). The surface of each boring location will be completed with concrete or asphalt to grade to match the surrounding material.

REPORT PREPARATION

A technical report discussing the subsurface investigation and summarizing groundwater and soil sampling will be submitted to the client and the ACHCSA for review and acknowledgement.

HEALTH AND SAFETY PLAN

A site-specific health and safety plan which encompasses the proposed work at the site and complies with the requirements of 29 CFR Part 1910 120 will be prepared and present at the site during field activities

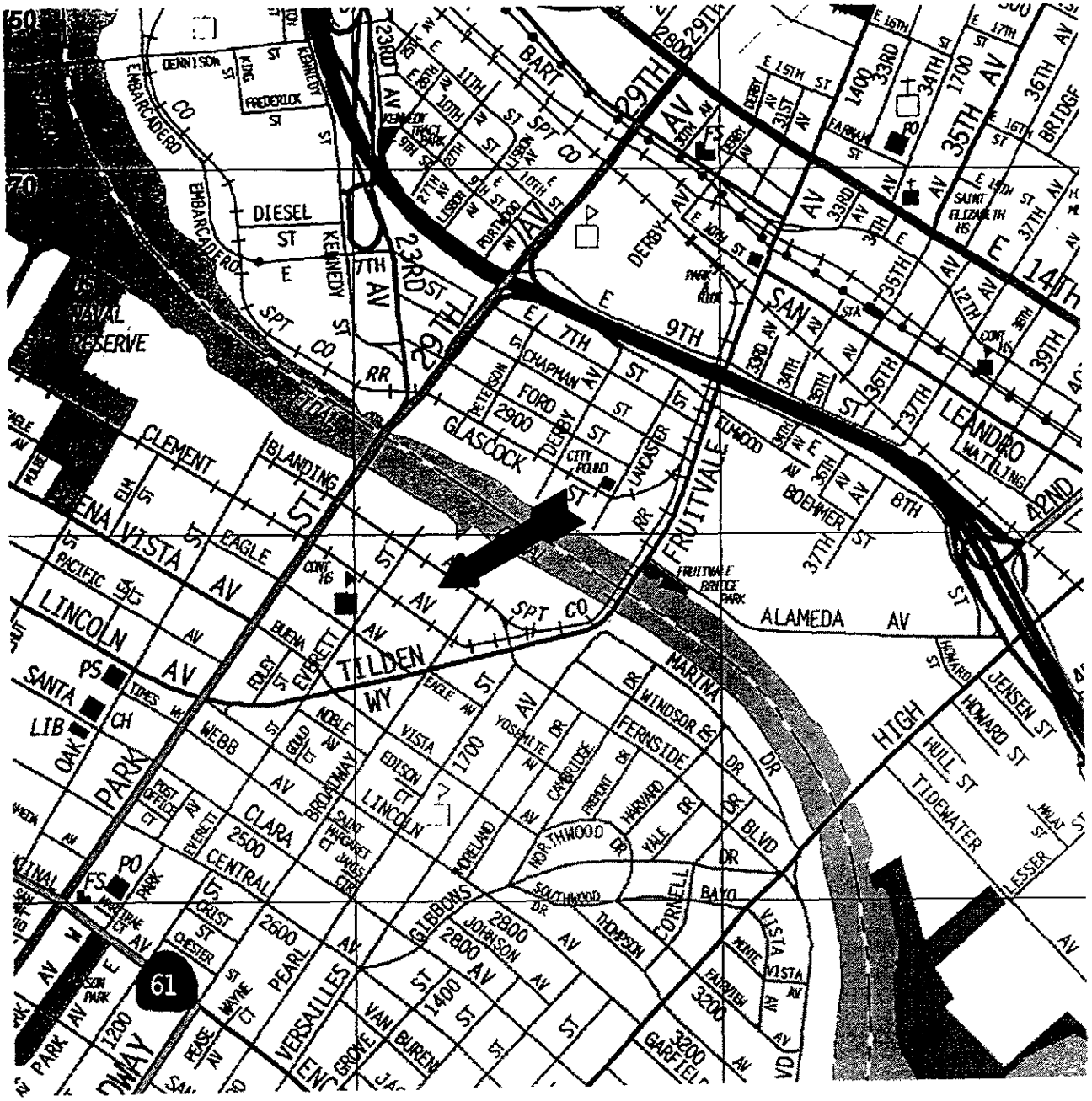
If you have any questions, please call me at (510) 638-8400, extension 109.

Sincerely,

David R. DeMent
Environmental Division Manager

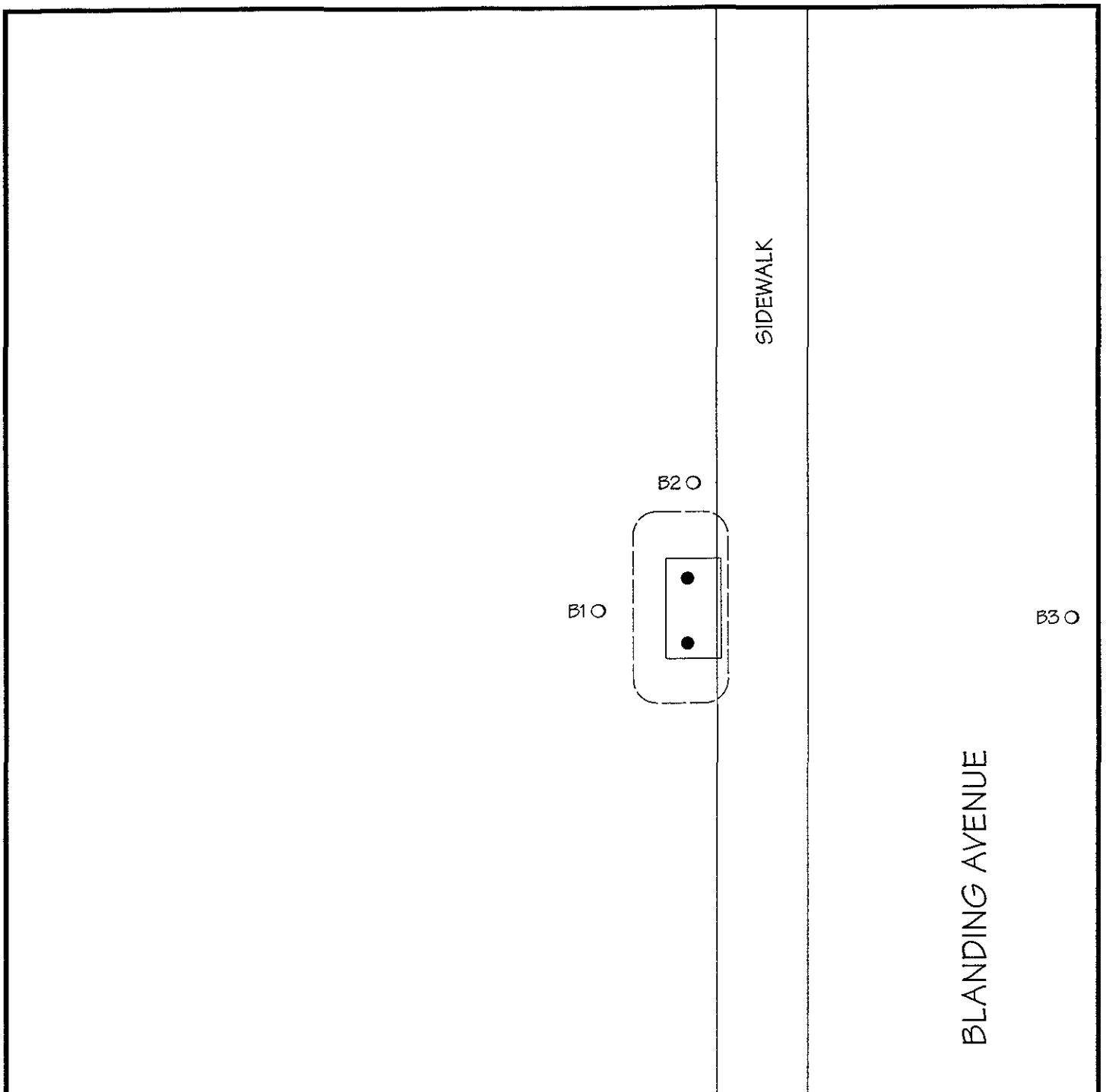
/nhd:drd

attachments



SOURCE: Thomas Guide CD-ROM, 1997

Title: **Location Map** **2526 Blanding Avenue** Alameda, California	
Figure Number 1	Scale 1" = 0.3 Mile
Project Number 6646-01.00	Drawn By NHD
A•C•C ENVIRONMENTAL CONSULTANTS 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 FAX (510) 638-8404	Date 9/11/00 N W E S



LEGEND

- ● - Previous ACC Soil Sample Location (6/00)
- B1 ○ - Proposed ACC Soil Boring Location
- - Former Kerosene UST
- - Approximate Limit of Excavation

Title: **Proposed Soil Boring Locations 2526 Blanding Avenue** Alameda, California 1" = 8'	
Figure Number 2	Scale 1/8" = 1'
Project Number 6646-01.01	Drawn By NHD
	Date 10/5/00

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