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November 29, 2004

Mr. Don Hwang
Alameda County
Department of Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Fuel Leak Case No. RO0000317-5725 Thornhill Drive, Oakland, CA

Dear Don:

Enclosed for your review is SOMA's "Workplan for Soil and Groundwater Investigation and Monitoring Well Installation" for the subject property.

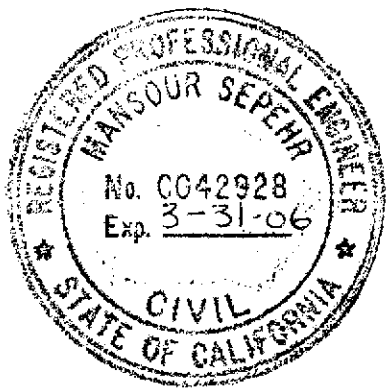
Thank you for your time in reviewing our workplan. If you have any questions or comments, please call me at (925) 244-6600.

Sincerely,

Mansour Sepehr, Ph.D.,PE
Principal Hydrogeologist

Enclosure

cc: Mr. Mo Mashhoon



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WORKPLAN FOR SOIL AND GROUNDWATER INVESTIGATION AND MONITORING WELL INSTALLATION AT

5725 Thornhill Drive
Oakland, California

November 29, 2004

Project 2830

Prepared for

Mr. Mo Mashhoon
1721 Jefferson Street
Oakland, California

Prepared by

SOMA Environmental Engineering, Inc.
2680 Bishop Drive, Suite 203
San Ramon, California

CERTIFICATION

This report has been prepared by SOMA Environmental Engineering, Inc., (SOMA) on behalf of Mr. Mo Mashhoon, the former property owner of 5725 Thornhill Drive, Oakland, California. This report was prepared in response to the Alameda County Health Care Services' request dated October 13, 2004.

Mansour Sepehr, Ph.D., PE
Principal Hydrogeologist

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1.0 INTRODUCTION

This report has been prepared by SOMA Environmental Engineering, Inc. (SOMA) on behalf of Mr. Mo Mashhoon, the former property owner of 5725 Thornhill Drive, Oakland, California (the "Site"). As shown in Figure 1, the Site is bordered on the northwest by residential property, on the northeast by commercial property, on the southeast by Thornhill Drive, and on the southwest by church property. The Site has been a gasoline service station since the 1950s.

This workplan has been prepared to comply with the Alameda County Health Care Services' (ACHCS') request dated October 13, 2004.

1.1 Previous Activities

In November 1998, Penn Environmental removed a 550-gallon steel underground waste oil tank (WOT) from the Site. Soil samples collected from the WOT excavation contained up to 1,100,000 µg/Kg of total petroleum hydrocarbons as gasoline (TPH-g), 2,700,000 µg/Kg of total petroleum hydrocarbons as diesel (TPH-d), and 4,200,000 µg/Kg of total petroleum hydrocarbons as motor oil (TPH-Mo).

On February 4, 1999, Penn Environmental over-excavated the contaminated soil surrounding the former WOT. Aqua Science Engineers, Inc., (ASE) collected confirmation soil samples from two sidewalls of the excavation. The only compound detected in one of these two soil samples was methyl tertiary butyl ether (MtBE) at 40 µg/Kg.

In July 1999, ASE drilled borehole BH-A in the vicinity of the former WOT. The only compounds that were detected at concentrations above the California

Department of Health Services' (DHS') maximum contaminant levels (MCLs) for drinking water were MtBE and cadmium. On September 6, 2000, ASE drilled two more soil borings, BH-B and BH-C. On October 23, 2000, ASE drilled soil boreholes BH-D and BH-E. ASE also collected water samples from Temescal Creek. No hydrocarbons were detected in the water sample collected from Temescal Creek. The results of the laboratory analysis on the groundwater samples collected from BH-B, BH-C and BH-D showed elevated levels of TPH-g, TPH-d, TPH-mo and MtBE. For instance, a groundwater sample collected from BH-D contained 16,000 µg/L of MtBE. The groundwater sample collected from boring BH-C, which is in close proximity of Temescal Creek, contained 5,300 µg/L of MtBE.

On March 1 and 2, 2004, SOMA oversaw the drilling of nine temporary well boreholes, HP-1 through HP-7, HP-9, and HP-10. Due to the excessive traffic hazards and the disruption of local traffic flow posed by advancing HP-8 in the middle of the street, this borehole was not drilled. Groundwater samples were collected following the completion of each temporary well borehole. The locations of the "HP" and the previously drilled "BH" boreholes are shown in Figure 2, and soil and groundwater analytical data from these boreholes are presented in Tables 1 and 2.

Contrary to ASE's investigation results, the results of SOMA's recent investigation did not show elevated levels of MtBE in the groundwater samples collected from the "HP" sampling locations. For instance, the maximum concentration of MtBE was detected at 1,100 µg/L in HP-10, which is located midway between BH-B and BH-C, where ASE reported higher concentrations of MtBE. The groundwater samples collected from HP-7 and HP-9, which is in close proximity of BH-B and BH-D, showed insignificant levels of MtBE.

The results of SOMA's investigation showed elevated levels of TPH-g, TPH-d and TPH-mo in the soil and groundwater in the vicinity of the former underground storage tanks (USTs). This finding is consistent with ASE's investigation conducted in 1999 and 2000.

During the site investigation activities, SOMA oversaw the decommissioning of the three existing tank pit wells: MW-1, MW-2 and MW-3. On March 12, 2004, SOMA oversaw the installation of three new monitoring wells: SOMA-1, SOMA-2 and SOMA-3. Figure 2 shows the locations of the monitoring wells.

1.2 Regional Geology

The U.S. Geologic Survey (USGS) mapped the Site within the San Antonio Formation. The USGS (Radbruch, 1969) described the upper member of the San Antonio Formation as clay, silt, sand, and gravel, and the lower member of the unit as gravel with a silty clay matrix.

In developed urban areas such as the Bay Area, earthwork construction often involves the emplacement of artificial fill derived from nearby cuts or quarries. Artificial fill is emplaced over native earth materials to provide level building pads and base rock for roadways.

2.0 Scope of Work

Based on the results of previous investigations and the October 13, 2004 ACHCS directive, the proposed work at the Site is directed toward providing a more thorough understanding of the subsurface stratigraphy, nature and extent of the soil and groundwater contamination, and the hydraulic communication between the underlying water-bearing zones and Temescal Creek.

In this investigation SOMA will first attempt to verify whether the contaminant plume indicated in ASE's earlier investigation is still present. In particular, groundwater data from ASE's downgradient boring BH-C showed concentrations of the most mobile contaminant, MtBE, at 5,300 µg/L. These data, however, are four years old; SOMA's March 2004 data for nearby boring HP-10 showed significantly lower MtBE concentrations of 1,100 µg/L. It is necessary, therefore, to gain a better definition of the present-day contaminant plume and define the current extent of the contaminant plume in the on- and off-site areas. Thus, the focus of this work will be:

- To validate and verify the current extent of the MtBE plume in the groundwater in the on- and off-site areas;
- To characterize the stratigraphy and the vertical and horizontal extent of TPH-g, TPH-d and TPH-mo around the source area near the UST pit;
- To address the question of hydraulic connection between the groundwater and Temescal Creek; and
- To conduct a preferential flow pathway study and sensitive receptor survey within a 2,000-foot radius of Site.

SOMA organized the scope of the proposed investigation into the following tasks:

Task 1: **Acquire Permits, Prepare/Update Site Health and Safety Plan, and Clear Utilities**

Task 2: **Conduct Preferential Flow Pathway and Sensitive Receptor Survey**

Task 3: **Conduct CPT and MIP Study**

Task 4: **Collect Groundwater and Soil Samples**

Task 5: **Laboratory Analysis**

Task 6: **Install, Develop, and Survey Groundwater Monitoring Well**

Task 7: **Prepare a Technical Report**

The following are descriptions of the above tasks.

2.1 Acquire Permits, Prepare Site Health and Safety Plan, and Clear Utilities

Prior to commencing field activities, SOMA will obtain the necessary drilling permits from the ACHCS and the City of Oakland Public Works Agency Office of Planning and Building and Transportation Services Division.

A site-specific health and safety plan (HASP) will be prepared by SOMA. The HASP is designed to address safety provisions during field activities. It provides procedures to protect the field crew from physical and chemical hazards resulting from drilling as well as soil and groundwater sampling. The HASP establishes personnel responsibilities, general safe work practices, field procedures, personal protective equipment standards, decontamination procedures and emergency action plans.

SOMA will contact Underground Service Alert (USA) to clear the drilling areas of underground utilities. Following USA clearance, a private utility locator will survey the drilling areas to locate any additional subsurface conduits.

2.2 Conduct Preferential Flow Pathway and Sensitive Receptor Survey

In order to evaluate the potential preferential flow pathways beneath the Site, records documenting the locations of sewer, storm drain, and main water lines will be obtained from the City of Oakland Department of Public Works. These data will be presented on map(s) and cross-section(s), and evaluated with regard to potential for spreading contamination along conduit trenches, particularly in the horizontal direction. SOMA will also contact the State Department of Water Resources and the East Bay Municipal Utilities District to obtain data on all wells

installed within a quarter-mile radius of the Site. As with the utility survey, SOMA will map the results of the well survey and tabulate the well construction details. The preferential pathway study will be completed prior to initiating the fieldwork, as its results could influence the ultimate placement of boreholes and chosen sampling intervals.

Information on recent and past water table levels will be obtained from the well survey, and hydraulic gradients derived. SOMA will plot this data on a rose diagram showing magnitudes and directions of the historical gradients.

2.3 Conduct CPT and MIP Study

To address the site hydrogeology and investigate the presence of discrete water-bearing zones, and the vertical extent of heavy hydrocarbons such as TPH-g, TPH-d and motor oil around the USTs, the apparent source area, SOMA proposes conducting a cone penetrometer test (CPT) coupled with a membrane interface probe (MIP) study at the Site. CPT determines subsurface soil characteristics using direct push methodology (DPT). The cone penetrometer is pushed into the subsurface using a hydraulic ram and provides a continuous log of the soil stratigraphy, relative density, strength and hydrogeologic information.

In conjunction with CPT we propose to utilize MIP to evaluate the vertical extent of the petroleum hydrocarbons. A Geoprobe 6600 or 66DT rig will drive the combined CPT/MIP probe. By calibrating the MIP device the relative levels of the petroleum hydrocarbons present at different depth intervals can be identified. The extent of petroleum hydrocarbon contamination as indicated in real time by the MIP study will be used in determining the depths to which the CPT/MIP boreholes will be advanced.

To accurately interpret the CPT readings, SOMA proposes drilling a calibration borehole adjacent to one of the CPT boreholes using hollow-stemmed auger (HSA) drilling technology. This borehole will be continuously sampled and logged throughout and compared closely with the CPT readings to calibrate CPT lithology. The calibrated CPT lithology will be used to determine the stratigraphy and hydrogeology of the site investigation area.

SOMA proposes advancing seven CPT/MIP boreholes (CPT-1 through 7, as shown in Figure 3) to resolve the extent of the soil and groundwater contamination near and downgradient from the source area and to characterize the site stratigraphy and number of potential water-bearing zones. SOMA selected these CPT locations based on their proximity to locations that showed relatively high levels of contaminants in the past. Thus, several CPT/MIP boreholes are proposed adjacent to HP-3 and HP-4, which contained high levels of soil contamination as deep as 24 to 26.5 feet below ground surface (bgs). Proposed CPT/MIP boreholes are also located southwest of the source area, in the narrow zone along Thornhill Drive, where relatively high groundwater contamination levels have been detected in the past. This data will be used to evaluate the site conceptual model (SCM) and define the extent of the soil and groundwater contamination. The data will provide essential information for the construction of the geologic cross-section along the groundwater flow direction beneath the on- and off-site areas.

In order to define the vertical extent of the contamination, the CPT/MIP boreholes will be advanced beyond the 28-foot bgs maximum depth of the previously advanced borings and wells at the Site. SOMA will advance the CPT/MIP boreholes to approximately 50 feet bgs, but their actual depths will be dependent upon the extent of the petroleum hydrocarbons as indicated in real time by the MIP study. Their actual depths may also be impacted by the presence of gravel or bedrock or other factors that may result in shallow refusal.

2.4 Collect Groundwater and Soil Samples

Once the Site's stratigraphy is defined, and the potential vertical extent of the contaminants using MIP data is defined, confirmatory groundwater sampling will be performed adjacent to the locations of the CPT/MIP boreholes. In some cases soil samples may also be collected where CPT/MIP data indicate relatively high contamination. To collect samples at the identified depth intervals, temporary boreholes will be advanced with a Geoprobe Dual Tube groundwater profiler and soil sampler (DT-21 or SP-15) mounted on a Geoprobe 6600 or 66DT drill rig. Prior to drilling each temporary well borehole, the sampler, drilling rods, and outer casing will be thoroughly washed and decontaminated to avoid cross-contamination between boreholes. Geoprobe designed the cased-rod system for discrete soil and groundwater sampling without cross-contaminating water-bearing zones. The dual-walled DPT sampler involves hydraulically driving or hammering a cased set of rods into the ground with the lead rod section consisting of a hollow acetate-lined sampler. After pushing the cased rods to a desired depth, the 1-inch diameter drilling rods are withdrawn from within the 2.125-inch diameter outer casing to retrieve the 1.25-inch diameter soil-filled liner or to insert the screened sampler.

After collecting the first encountered groundwater, the drilling crew will advance the cased DPT sampler to collect discrete groundwater samples from deeper water-bearing zones, if any, based on the CPT data. SOMA will implement this procedure to evaluate the vertical extent of the groundwater contamination in the investigation area. The Geoprobe DT-21 sampling system is ideal for sampling water-bearing zones with low hydraulic head because the sampling chamber can be decontaminated down-hole. Water-bearing zones with high hydraulic head, however, will flood the sampling chamber and cross-contaminate subsequent samples and water–bearing zones, and decontaminating the DT-21 profiler under these conditions is awkward, time consuming, and inefficient. For such water-

bearing zones under high hydraulic pressure, the Geoprobe SP-15 groundwater sampling system would be more appropriate than the DT-21. The SP-15 sampler can conveniently be withdrawn with the groundwater samples and, after decontamination, replaced inside the same borehole. The CPT data will reveal whether a water-bearing zone is under a relatively low or high hydraulic head. In addition, for a more precise determination of hydraulic conductivity, slug tests will be performed in water-bearing zones using a Geoprobe GW1600 Pneumatic Slug Test Kit integrated with the groundwater sampling system.

Based on previous experience, groundwater will be collected from the temporary boreholes the same day they are advanced. However, water-bearing zones selected for groundwater sampling may yield groundwater slowly. Low yielding water-bearing layers may result in waiting at least a half hour to obtain enough groundwater for TPH-g and TPH-d analyses, and cumulative waiting time for groundwater sampling may thus result in extended field time. It is also possible that, if gravelly zones are present, driving the 2.125-inch-diameter cased-rod assembly may result in shallow refusal.

The field crew will use disposable bailers or a Watera™ sampler fitted into plastic tubing to collect grab groundwater samples. Grab groundwater samples from each water-bearing zone will be transferred into amber liter bottles and 40 mL VOA vials that will be placed into an ice chest. After completing the fieldwork, the samples will be transported to a state-certified laboratory. After the sampling is complete all temporary well boreholes will be tremie-sealed with neat cement grout.

SOMA will combine the results of the groundwater sampling with the CPT/MIP results to define the vertical and horizontal extent of the groundwater contamination and further characterize the subsurface stratigraphy of the site investigation area.

2.5 Laboratory Analysis

Soil and grab groundwater samples will be submitted to Pacific Analytical Laboratories. The samples will be analyzed for TPH-g, TPH-d and TPH-Mo using EPA Method 8015B; BTEX, MtBE, tert-Butyl Alcohol (TBA), Isopropyl Ether (DIPE), Ethyl tert-Butyl Ether (ETBE), Methyl tert-Amyl Ether (TAME), 1,2-Dichloroethane, 1,2- Dibromoethane (collectively referred to as the gas oxygenates) and Ethanol using EPA Method 8260B.

2.6 Install, Develop, and Survey Groundwater Monitoring Well

One new groundwater monitoring well will be installed off-site, in close proximity to Temescal Creek. The total depth and length of its screened interval will be chosen in light of the results of the CPT/MIP study and the temporary well sampling. The proposed well, SOMA-4, will be drilled adjacent to borehole BH-C (the location previously proposed by ASE in their approved March 22, 2002 workplan), as shown in Figure 3. The location of this well, which is close to where Temescal Creek daylights from its culverted section, will enable SOMA to monitor water table elevations next to the creek; comparing these elevations over time, with same-day measurements of water levels in the creek, will help in determining the nature of the hydraulic connection between the groundwater and the creek.

Using a hollow stem auger (HSA) rig, the borehole for this well will be continuously sampled to approximately 15 to 20 feet, with continuous sampling commencing at approximately five feet above the anticipated first-encountered groundwater. After obtaining one sample from the vadose zone, the sampler will be unlined to allow for the examination of continuous soil cores. If HSA sampling below the contaminated zone is necessary to delineate the vertical extent of the contamination in the well borehole, the field crew will subsequently plug the well

borehole up to the bottom of the selected screen interval, the casing will be installed with factory-slotted two-inch diameter schedule 40 PVC screen with 0.01-inch slots. The drilling crew will attach a PVC cap on the bottom of the casing without adhesives or tape, and the top of the casing will be fitted with a locking well plug.

After the casing is set into the borehole, a sand filter pack will be emplaced outside the casing by slowly pouring 2/12 kiln-dried sand into the annular space from the bottom of the borehole to approximately one-half to one-foot above the screened interval. The drilling crew will then surge the sand pack to ensure proper consolidation and avoid bridging. To prevent grout from infiltrating down into the filter material, a one-foot thick bentonite plug will be placed above the filter pack and hydrated. After thoroughly hydrating the bentonite seal, the well will be sealed from the top of the bentonite layer to about one-foot bgs with neat cement containing approximately 3 to 5% bentonite. Near surface grade the wells will be completed by installing a traffic-rated well vault into a concrete foundation.

SOMA field personnel will develop or oversee the development of the well. It will be bailed to remove sediment and then surged to develop the sand packs. The field crew will then pump the well until the groundwater clarifies substantially and groundwater quality parameters stabilize.

After installing the monitoring wells, a licensed surveyor will horizontally and vertically survey the casing elevation of the monitoring well in accordance with NAD-survey requirements set forth by the UST Fund. The surveyor's report will be included as an appendix to the investigation report.

During subsequent quarterly monitoring events SOMA field personnel will purge and sample the wells.

2.7 Prepare Technical Report

Upon completion of the above-mentioned tasks SOMA will prepare a technical report containing a detailed description of the investigation procedures and the results of the field investigation. The written report will include tables, figures, and lithologic logs to help explain the results of the investigation. Geologic cross-sections integrating stratigraphy, preferential pathway information, and contaminant data, will also be prepared, to aid in constructing and visualizing a 3-dimensional site conceptual model. The report will also include a discussion of our recommendations for further studies, if warranted, particularly regarding downgradient plume definition and issues of groundwater interaction with Temescal Creek.

3.0 REFERENCES

Alameda County Health Care Services, October 13, 2004. "Fuel Leak Case No. RO0000317; Mash Petroleum, 5725 Thornhill Drive, Oakland, California 94611."

Aqua Science Engineers, Inc., March 22, 2002. "Workplan for Soil and Groundwater Assessment at 5725 Thornhill Drive, Oakland, California."

Radbruch, Dorothy H., 1969, Geologic Quadrangle Maps of the United States Arial and Engineering Geology of the East Quadrangle California: Department of the Interior United States Geologic. Published by the U.S. Geological Survey, Washington, D.C.

SOMA Environmental Engineering, Inc., April 16, 2004. "Soil and Groundwater Investigation and Monitoring Well Installation Report."

Tables

TABLE 1
Soil Analytical Data
5725 Thornhill Drive Oakland, CA

Temporary Well Borehole Field ID	Date Sampled	TPH-Gasoline (µg/kg)	TPH-Diesel (µg/kg)	TPH-Motor Oil (µg/kg)	MtBE (µg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl benzene (µg/kg)	Total Xylenes (µg/kg)
HP1- (5-5.5')	03/01/04	<930	7,800^{HY}	62,000	<4.5	<4.5	<4.5	<4.5	<4.5
HP1- (9-9.5')	03/01/04	16,000^{Y}	6,000^{HY}	17,000	<4.7	<4.7	<4.7	<4.7	<4.7
HP1- (14.5-15')	03/01/04	<1,100	5,400^{HY}	19,000	<4.9	<4.9	<4.9	<4.9	<4.9
HP1- (19.5-20')	03/01/04	<970	2,000^{Y}	<5,000	<4.5	<4.5	<4.5	<4.5	<4.5
HP1- (24.5-25')	03/01/04	<1,000	1,500^{Y}	<5,000	<4.6	<4.6	<4.6	<4.6	<4.6
HP2- (4-4.5')	03/01/04	<1,100	3,500H^{Y}	51,000	<4.7	<4.7	<4.7	<4.7	<4.7
HP2- (9-9.5')	03/01/04	<1,100	210,000^{HY}	910,000	<4.3	<4.3	<4.3	<4.3	<4.3
HP2- (14-14.5')	03/01/04	<1,100	5,200^{HY}	34,000	6.3	<4.6	<4.6	<4.6	<4.6
HP2- (19-19.5')	03/01/04	<970	10,000^{HY}	59,000	<4.4	<4.4	<4.4	<4.4	<4.4
HP2- (25-25.5')	03/01/04	<950	6,500^{HY}	39,000	4.7	<4.3	<4.3	<4.3	<4.3
HP3- (5.5-6')	03/01/04	<950	23,000^{HY}	78,000	<4.8	<4.8	<4.8	<4.8	<4.8
HP3- (10-10.5')	03/01/04	<1,000	22,000^{HY}	65,000	<5.0	<5.0	<5.0	<5.0	<5.0
HP3- (16-16.5')	03/01/04	<930	17,000^{HY}	77,000	<4.7	<4.7	<4.7	<4.7	<4.7
HP3- (21-21.5')	03/01/04	<1,100	11,000^{HY}	60,000	<4.5	<4.5	<4.5	<4.5	<4.5
HP3- (26-26.5')	03/01/04	<980	8,300^{HY}	39,000	<4.2	<4.2	<4.2	<4.2	<4.2
HP4- (4-4.5')	03/01/04	<1.0	3,000^{HY}	17,000	<4.6	<4.6	<4.6	<4.6	<4.6
HP4- (9-9.5')	03/01/04	<0.92	<1,000	<5,000	<4.7	<4.7	<4.7	<4.7	<4.7
HP4- (14-14.5')	03/01/04	<1,000	1,100^{HY}	11,000	<4.9	<4.9	<4.9	<4.9	<4.9
HP4- (19-19.5')	03/01/04	<910	1,100^{Y}	<5,000	<4.8	<4.8	<4.8	<4.8	<4.8
HP4- (24-24.5')	03/01/04	<960	5,000^{HY}	42,000^{H}	<4.7	<4.7	<4.7	<4.7	<4.7
HP5- (5-5.5')	03/01/04	<1,000	22,000^{HY}	140,000	17	<4.4	<4.4	<4.4	<4.4
HP5- (10-10.5')	03/01/04	<1,100	<1,000	<5,000	10	<4.3	<4.3	<4.3	<4.3
HP5- (15.5-16')	03/01/04	2,600^{HY}	6,100^{HY}	33,000	24	<4.5	<4.5	<4.5	<4.5
HP5- (19.5-20')	03/01/04	<1,100	1,700^{Y}	<5,000	<4.6	<4.6	<4.6	<4.6	<4.6
HP5- (27-27.5')	03/01/04	9,100^{HY}	2,800^{Y}	<5,000	11	<4.9	<4.9	<4.9	<4.9
HP6- (4-4.5')	03/01/04	<1,100	<1,000	<5,000	<4.3	<4.3	<4.3	<4.3	<4.3
HP6- (9-9.5')	03/01/04	<960	5,400^{HY}	30,000	<4.3	<4.3	<4.3	<4.3	<4.3
HP6- (14-14.5')	03/01/04	<910	2,200^{HY}	16,000	<4.6	<4.6	<4.6	<4.6	<4.6
HP6- (19-19.5')	03/01/04	<910	2,500^{HY}	8,100	4.9	<4.5	<4.5	<4.5	<4.5
HP6- (23.5-24')	03/01/04	<960	3,200^{HY}	19,000	<4.6	<4.6	<4.6	<4.6	<4.6
HP6- (27.5-28')	03/01/04	<1,00	2,200^{Y}	<5,000	7.0	<4.7	<4.7	<4.7	<4.7

TABLE 1
Soil Analytical Data
5725 Thornhill Drive Oakland, CA

Temporary Well Borehole Field ID	Date	TPH-Gasoline (µg/kg)	TPH-Diesel (µg/kg)	TPH-Motor Oil (µg/kg)	MtBE (µg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl benzene (µg/kg)	Total Xylenes (µg/kg)
HP7- (6-6.5')	03/02/04	<970	**6,300^{HY}**	**16,000**	<4.7	<4.7	<4.7	<4.7	<4.7
HP7- (11.5-12')	03/02/04	<1,000	**2,000^{HY}**	**6,400^{HY}**	<4.8	<4.8	<4.8	<4.8	<4.8
HP7- (16.5-17')	03/02/04	<930	**3,700^{Y}**	<5,000	<4.7	<4.7	<4.7	<4.7	<4.7
HP7- (22-22.5')	03/02/04	<920	<1,000	<5,000	<5.0	<5.0	<5.0	<5.0	<5.0
HP7- (26.5-27')	03/02/04	<970	**11,000^{HY}**	**15,000**	<5.0	<5.0	<5.0	<5.0	<5.0
HP9- (7-7.5')	03/02/04	<1,100	**1,900^{Y}**	<5,000	<4.4	<4.4	<4.4	<4.4	<4.4
HP9- (11.5-12')	03/02/04	<960	**4,300^{HY}**	**53,000^{H}**	<4.8	<4.8	<4.8	<4.8	<4.8
HP9- (16-16.5')	03/02/04	<990	**5,300^{HY}**	**52,000^{H}**	<4.6	<4.6	<4.6	<4.6	<4.6
HP9- (21.5-22')	03/02/04	<980	<1,000	**5,600**	**28**	<5.0	<5.0	<5.0	<5.0
HP9- (26.5-27')	03/02/04	<1,100	<990	<5,000	**36**	<4.4	<4.4	<4.4	<4.4
HP10- (6-6.5')	03/02/04	<940	**5,700^{HY}**	**72,000**	<4.7	<4.7	<4.7	<4.7	<4.7
HP10- (11.5-12')	03/02/04	**16,000^{Y}**	**16,000^{LY}**	<5,000	**94**	<5.0	<5.0	<5.0	<5.0
HP10- (18.5-19')	03/02/04	**130,000^{Y}**	**58,000^{HLY}**	**16,000**	**270**	<5.0	<5.0	<5.0	<5.0
HP10- (19.5-20')	03/02/04	<920	<990	<5,000	**11**	<4.8	<4.8	<4.8	<4.8
HP10- (22.5-23')	03/02/04	**3,700^{Y}**	**8,000^{HY}**	**22,000**	<4.9	<4.9	<4.9	<4.9	<4.9

Notes:

(1) µg/kg= micrograms per kilogram

(2) <= Not detected at or above the laboratory reporting limit

(3) ^{H} Heavier hydrocarbons contributed to the quantification

(4) ^{L} Lighter hydrocarbons contributed to the quantification

(5) ^{Y} Sample exhibits chromatographic pattern which does not resemble standard

TABLE 2
Groundwater Analytical Data
5725 Thornhill Drive Oakland, CA

Temporary Well Borehole Field ID	Date Sampled	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Motor Oil (µg/L)	MtBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)
HP-1	03/01/04	**4,200^{Y}**	**5,900^{HLY}**	**11,000**	**11**	<0.5	<0.5	<0.5	<0.5
HP-2	03/01/04	**360^{Y}**	**10,000^{HY}**	**58,000**	**20**	<0.5	<0.5	<0.5	<0.5
HP-3	03/01/04	<50	**3,500^{HY}**	**5,700**	<0.5	<0.5	<0.5	<0.5	<0.5
HP-4	03/01/04	<50	**740^{HY}**	**6,300H**	<0.5	<0.5	<0.5	<0.5	<0.5
HP-5	03/01/04	**6,700^{Y}**	**3,600^{HLY}**	**650**	**33**	<0.5	<0.5	<0.5	**0.7**
HP-6	03/01/04	**250^{HY}**	**370^{HY}**	**730**	**8.1**	<0.5	**1.5**	<0.5	**2.5**
HP-7	03/02/04	<50	**1,600^{HY}**	**1,400**	<0.5	<0.5	<0.5	<0.5	<0.5
HP-9	03/02/04	<50	**160^{HY}**	**1,700**	**440**	<1.3	<1.3	<1.3	<0.5
HP-10	03/02/04	**9,700^{Y}**	**21,000^{HLY}**	**5,700**	**1,100**	<3.6	<3.6	<3.6	<0.5
MW-1	03/02/04	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
MW-2	03/02/04	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
MW-3	03/02/04	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5

Notes:

(1) µg/L= micrograms per Liter

(2) <= Not detected at or above the laboratory reporting limit stated

(3) ^{H} Heavier hydrocarbons contributed to the quantification

(4) ^{L} Lighter hydrocarbons contributed to the quantification

(5) ^{Y} Sample exhibits chromatographic pattern which does not resemble standard

(6) Methyl tert-Amyl Ether (TAME) was detected in HP-9 at 5.2 µg/L and in HP-10 at 13 µg/L

(7) Monitoring Wells MW-1, MW-2 and MW-3 were deccommisioned as per the Alameda County Health Care Services' directive

Figures

N

approximate scale in feet

0 100 200

Figure 1: Site vicinity map.

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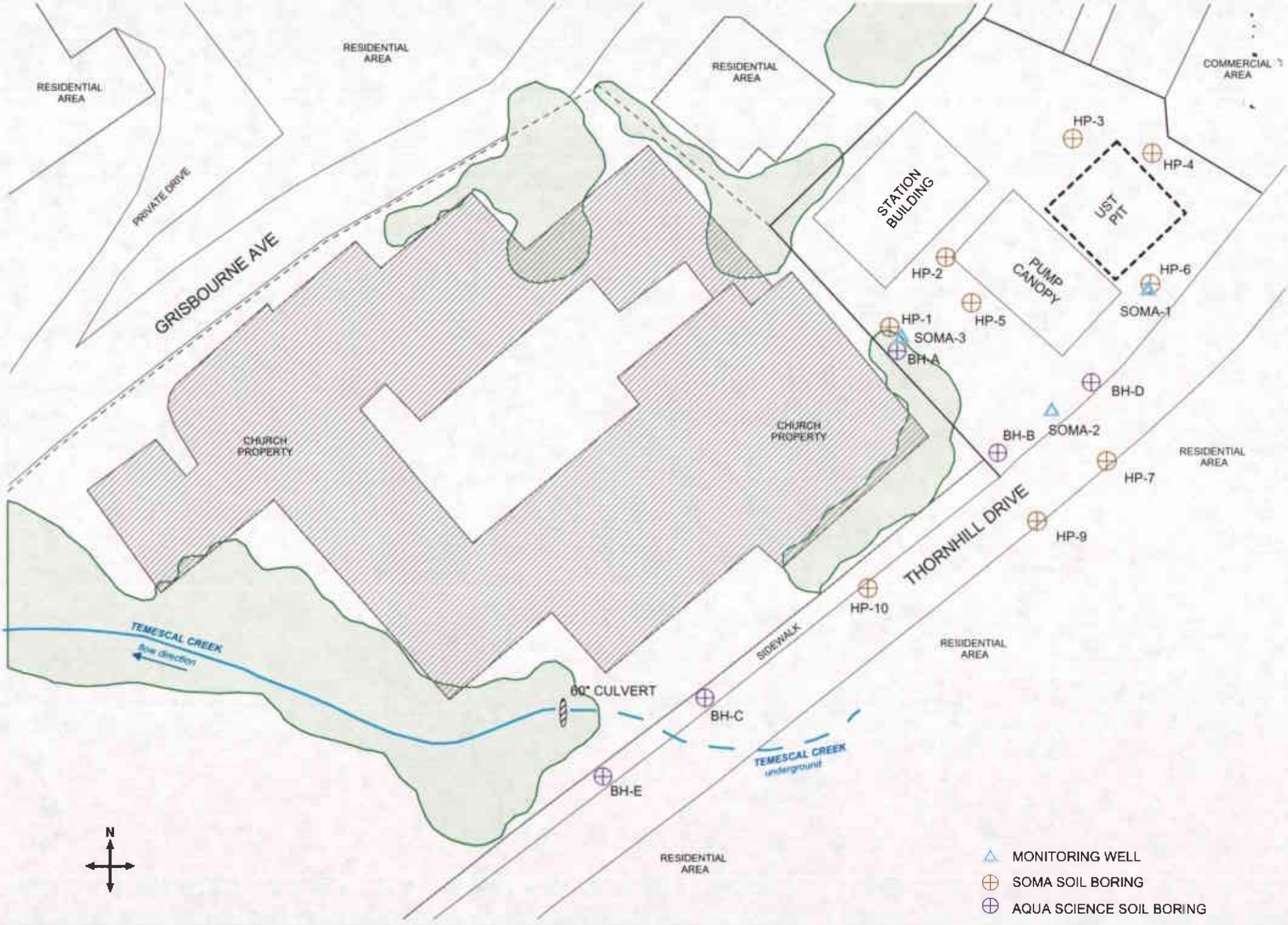
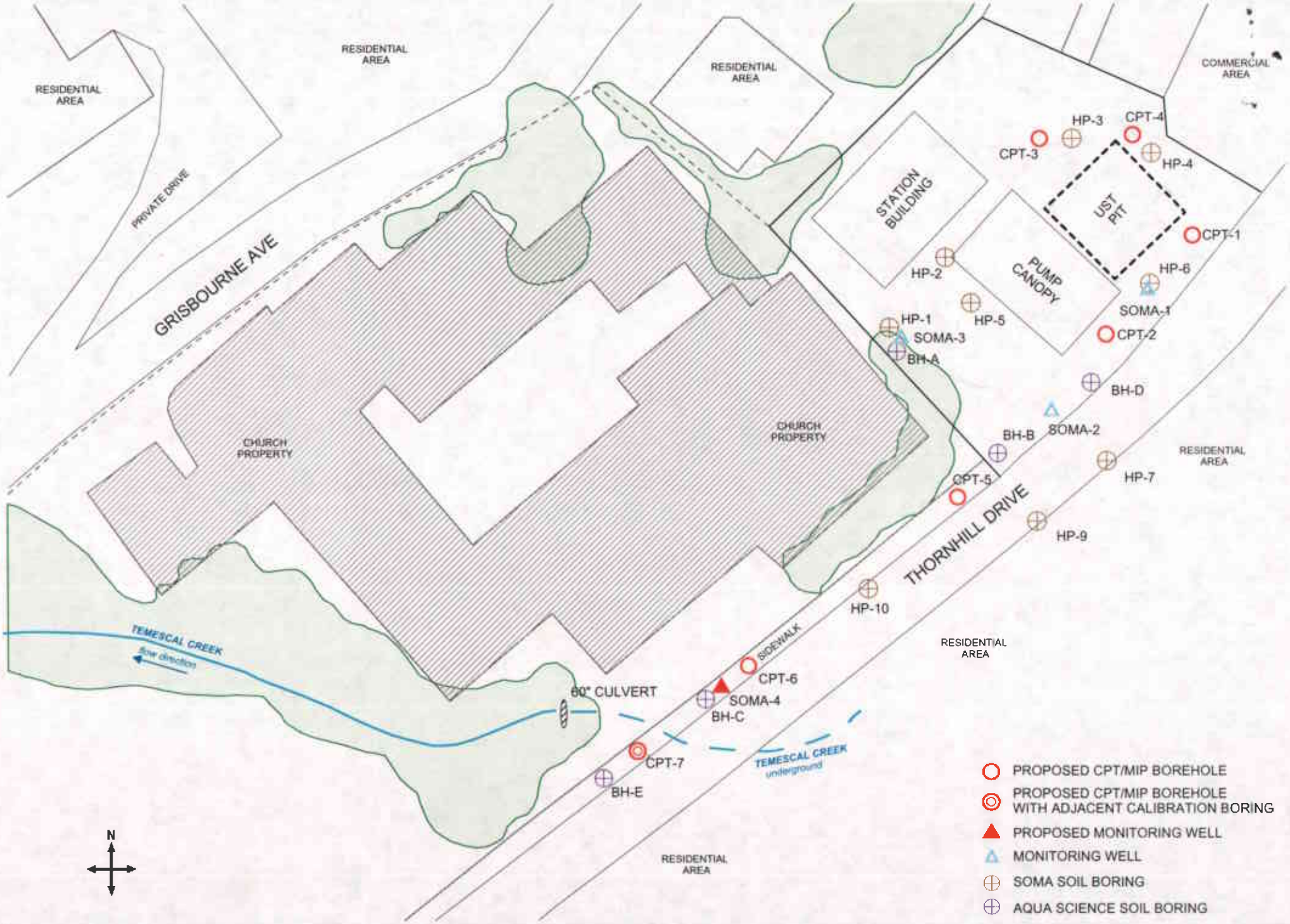


approximate scale in feet

0 25 50

Figure 2: Locations of previously drilled soil borings and installed monitoring wells.



approximate scale in feet

0 25 50

Figure 3: Locations of proposed CPT/MIP boreholes and monitoring well, and existing monitoring wells and soil borings.