

**WORK PLAN FOR ADDITIONAL SITE CHARACTERIZATION
FOR SITE LOCATED AT
1200 20th AVENUE, OAKLAND**

This work plan discusses additional site characterization which includes soil and groundwater sampling at the site located at 1200 20th Avenue in Oakland, California. The site is at the northeast corner of 20th Avenue and Solano Way. A site location map is presented on Figure 1.

Based on the presence of soil contamination below the tank, the Alameda County Health Care Services (ACHCSA) requested a subsurface investigation to assess the possible impact of the contamination on groundwater. Three monitoring wells were installed at the locations shown on Figure 2 in February of 1994. The wells have been monitored from 1994 to 1998.

As requested by Mr. Barney Chan, of the ACHCSA, two hydropunches will be installed to the south and east of the former tank location. The proposed locations of the hydropunches are shown on Figure 2. Both locations are within the City of Oakland right-of-way. Permits will be required from the City of Oakland for installation of the hydropunches.

Each hydropunch will extend at least five feet into the saturated zone. The estimated depth to the top of the saturated zone for the area of the two hydropunches is approximately 25 feet. Soil samples will be collected during the advancement of the hydropunches at intervals of five feet, beginning at a depth of ten feet below the ground surface. It is estimated that one soil sample will be collected from the vadose zone from each hydropunch and sent off-site for laboratory chemical analysis. A water sample will be collected from each of the hydropunches screened interval, which will be approximately five feet below the top of the saturated zone. The soil and groundwater samples will be analyzed for total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethyl-benzene, and xylene (BTEX), and methyl tertiary-butyl ether (MTBE) compounds at a State-certified laboratory. The collection, maintenance and transportation of the samples will follow standard QA/QC procedures including chain of custody control.

A summary report will be prepared to document the results of the soil and groundwater investigation. The results of the investigation will also be discussed with the ACHCSA. Based on that meeting, recommendations will be prepared to address any future requirements for the site.

✓ OK Be 3/11/99

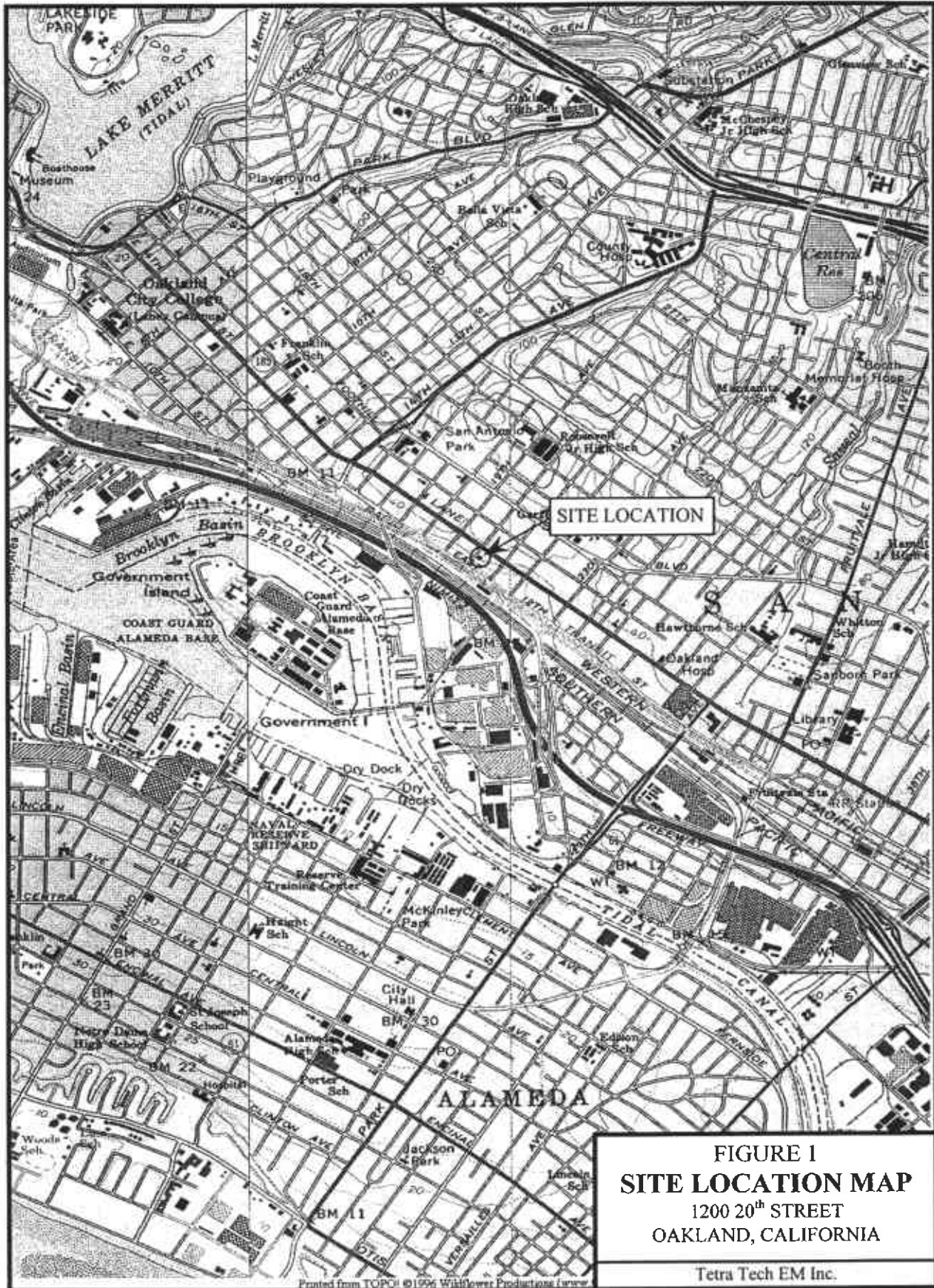


FIGURE 1
SITE LOCATION MAP
 1200 20th STREET
 OAKLAND, CALIFORNIA

Tetra Tech EM Inc.

