

July 30, 1993

**SEACOR**  
*Science & Engineering  
Analysis Corporation*

Ms. Jennifer Eberle  
Alameda County Department of Environmental Health  
Hazardous Materials Specialist  
80 Swan Way, Room 200  
Oakland, California 94621

**RE: WORKPLAN  
SAN FRANCISCO FRENCH BREAD  
3924 MARKET STREET  
OAKLAND, CALIFORNIA**

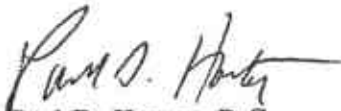
Dear Ms. Eberle:

Please find enclosed the updated workplan for installation of three monitor wells at the site referenced above. Pending the approval of this workplan and the acquisition of the appropriate well permits and encroachments, Science & Engineering Analysis Corporation (SEACOR) will proceed with the work. immediately.

Please call me with any questions or comments you may have at 510/686-9780.

Sincerely,

**Science & Engineering Analysis Corporation**

  
Paul D. Horton, R.G.  
Principal Hydrogeologist

Enclosures

cc: Mr. Peter Sher, San Francisco French Bread Company

SFFBOAKL.L06  
07/30/93  
Job No. #70007-005-01

**WORK PLAN FOR  
PRELIMINARY SITE ASSESSMENT  
3924 MARKET STREET  
OAKLAND, CALIFORNIA**

**Job No. #70007-005-01**

**Submitted by:  
Science & Engineering Analysis Corporation**

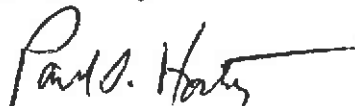
for  
Mr. Peter Sher  
San Francisco French Bread  
7801 Edgewater Dr.  
Oakland, California 94621

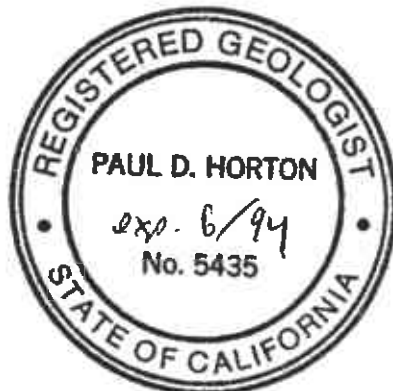
July 30, 1993

Prepared by:

Daniel E. Madsen  
Staff Geologist

Reviewed by:

  
Paul D. Horton, R.G.  
Principal Hydrogeologist



## TABLE OF CONTENTS

1.0	INTRODUCTION .....	1-1
2.0	BACKGROUND .....	2-1
3.0	SCOPE OF WORK .....	3-1
3.1	HEALTH AND SAFETY PLAN .....	3-1
3.2	UTILITY CLEARANCE .....	3-1
3.3	SOIL BORINGS AND MONITORING WELL INSTALLATIONS .....	3-1
3.4	MONITORING WELL DEVELOPMENT AND SURVEYING .....	3-2
3.5	GROUNDWATER MONITORING AND SAMPLING .....	3-2
3.6	DECONTAMINATION PROCEDURES .....	3-3
4.0	FINAL REPORTING .....	3-4

## LIST OF FIGURES

- FIGURE 1     Site Location Map
- FIGURE 2     Site Plan with proposed boring locations

## 1.0 INTRODUCTION

Science & Engineering Analysis Corporation (*SEACOR*) has prepared the following work plan for a groundwater investigation on behalf of San Francisco French Bread Company (SFFB). The groundwater investigation has been requested by the Alameda County Health Care Services Agency Department of Environmental Health (ACDEH) in a letter dated January 7, 1993, and subsequent telephone conversations. In the letter the ACDEH requests that a work plan for groundwater investigation be prepared. The work will adhere to: 1) the Tri-Regional Board staff recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites, dated August 10, 1990; 2) the State Water Resources Control Board LUFT Field Manual; and 3) Article 11 of Title 23, California Code of Regulations.

## 2.0 BACKGROUND

The subject site located at 3924 Market Street in Oakland, California (see Figure 1) is the former Toscana Baking Company facility. The site was formerly used to produce and distribute baked food products. A small 500 gallon underground diesel storage tank was utilized at the property to fuel distribution vehicles. On March 29, 1991 the tank and associated piping was removed by Paridiso Construction Company. Representatives of Kappraelian Engineering Inc. were present during tank removal operations to document the tank removal, collect soil samples and if necessary, direct soil excavation activities.

The results of soil sampling conducted at the time of tank removal by Kappraelian Engineering Inc., indicated the presence of diesel and gasoline hydrocarbons in the soil beneath the tank pit. However, the initial concentrations detected were at a maximum of 26 parts per million (ppm) total petroleum hydrocarbons as gasoline (TPH-g) and 4.7 ppm total petroleum hydrocarbons as diesel (TPH-d).

On June 21, 1991, the tank-pit was over-excavated to a depth of 14 feet below grade to remove any hydrocarbon impacted soil. Following this excavation, five soil samples were collected from the excavation sidewalls and bottom. No TPH-as-Diesel was detected in any of these samples. Gasoline hydrocarbons were detected in all of these samples. Benzene was detected at a maximum of 0.04 ppm and TPH-g was detected at a maximum of 210 ppm in one side-wall sample from 13 feet below grade. Tank pit over-excavation was documented by Groundwater Technology Inc. in their report "Underground Storage Tank Closure, July 1991" (GTI, 1991).

In April 1993, SEACOR conducted a file review of project sites in proximity to the SFFB facility to document local groundwater flow directions. A leaking underground fuel tank (LUFT) and local oversight program (LOP) file review was conducted using files stored at both the Regional Water Control Board's Oakland office and the ACDEH. Four regulated sites within a half-mile radius of the SFFB facility were reviewed for historical groundwater flow directions. Two sites located upgradient from the SFFB facility, Arco Service Station 4931 at 731 West MacArthur Boulevard and Shell Service Station 4903 at 500 Fortieth Street, both showed a westerly to west-southwesterly groundwater flow direction. The California Linen Rental Company located downgradient of the SFFB facility at 989 Forty First Street showed a north-northwesterly groundwater flow direction. Shell Service Station 5306 located at 3420 San Pablo Avenue also showed a westerly flow direction. In summary, all of these sites showed a predominant westerly direction of groundwater flow. A westerly groundwater flow direction is expected in this area due to the regional hydrology. The SFFB facility is located in the relatively flat lying alluvial plain between the East Bay Hills and the San Francisco Bay. Geomorphic and topographical features control groundwater flow and influence regional groundwater flow to be in a predominately westerly direction.

### 3.0 SCOPE OF WORK

This proposed environmental assessment program is based upon preliminary characterization data provided from the Tank Closure Report (GTI, 1991). Preliminary groundwater characterization work will involve the preparation of a Health and Safety Plan, permitting, and the installation and sampling of three groundwater monitor wells located in the vicinity of the former tank location. Gradient direction at the site will be determined through review of existing monitoring data from sites in the immediate area. The installation of the three monitor wells will determine groundwater gradient and flow direction beneath the site. The following sections detail the specific work steps to be conducted.

#### 3.1 HEALTH AND SAFETY PLAN

Prior to conducting any field work, a site-specific health and safety plan as required by 29 CFR 1910.120 will be prepared. The health and safety plan will detail field procedures regarding various potential safety hazards and potential chemical hazards that may be encountered during site activities.

#### 3.2 UTILITY CLEARANCE

Prior to conducting any field work, a utility clearance survey will be conducted in the drilling area to ensure that the drilling activities do not encounter any subsurface utilities. Additionally, Underground Service Alert (USA) will be notified at least 48 hours prior to drilling on site.

#### 3.3 SOIL BORINGS AND MONITORING WELL INSTALLATIONS

Three soil borings will be drilled at or near the locations shown on Figure 2 using a truck mounted drill rig equipped with 8.5 inch outside diameter hollow stem augers. The borings will be drilled to a total depth of approximately 25-feet below grade, or 15-feet below first encountered groundwater, unless a competent aquitard is intercepted. During drilling, continuous cores will be collected from the borings using a 3.5-inch diameter by 5-foot long core barrel. The cores will be logged in the field by a geologist in accordance with the Unified Soil Classification System (USCS) to produce an accurate lithologic and stratigraphic profile.

Samples from the cores will be field screened using a photo-ionization detector (PID) equipped with a 10.2 eV lamp. Soil samples will be collected from the 5-foot cores in 6-inch long brass tubes and sealed with teflon tape, plastic end caps and duct tape. The soil samples will be labeled with the appropriate borehole information, time and date of collection, and placed on ice for subsequent transport and analysis at a State of California certified analytical laboratory. Chain-of-custody procedures will be followed at all times. Selected soil samples will be analyzed for TPH-g, TPH-d, and BTEX compounds.

A monitoring well will be constructed in the borings consisting of 2-inch diameter, 0.020-inch machine slotted, schedule 40 polyvinylchloride (PVC) well screen. The well screen will be installed from the bottom of the borehole to approximately 5-feet above the discovered groundwater surface. A 2-inch diameter blank PVC casing will complete the well from the top of the screened interval to within 1-foot of surface grade. A gravel pack consisting of #2/12 Lonestar sand will be placed in the annular space from the bottom of the boring to approximately 2-feet above the screened interval. A sanitary seal consisting of 2-feet of hydrated bentonite pellets will be placed on top of the gravel pack, and cement/bentonite grout will fill the remaining annulus to surface grade. The monitor wells will be completed at surface grade with water tight traffic rated street boxes set in cement, and a water tight, locking well cap.

### **3.4 MONITORING WELL DEVELOPMENT AND SURVEYING**

Monitoring well development will be achieved using a bailer to alternately surge the screened portion of the well bore and purge the sediment laden water. Development will continue until the water produced is relatively sediment free. The top of the well casings of each well will subsequently be measured to 0.01-foot based on a U.S.G.S. mean sea level (MSL) bench mark by a State of California registered Surveying engineer.

### **3.5 GROUNDWATER MONITORING AND SAMPLING**

Depth-to-groundwater elevations will be obtained from the top-of-casing in the monitoring well using a water level indicator graduated to 0.01 foot.

Groundwater samples will be collected from the new monitor wells subsequent to well development and purging. The well will be purged prior to sampling by hand bailing at least four well volumes. After allowing the water level in the monitoring well to recover adequately for sampling, groundwater samples will be collected using a clean teflon bailer and will subsequently be decanted in laboratory supplied sample vessels. Samples will be tightly capped with zero headspace, then labelled with the sample number, sample time and date, and immediately placed on ice in an insulated cooler. All samples will be logged onto a chain of custody manifest for delivery to a state certified laboratory.

Groundwater samples will be chemically analyzed for TPH-g, TPH-diesel, and BTEX compounds. One rinsate blank will also be analyzed by the same methods as part of the quality assurance/quality control (QA/QC) program.

### 3.6 DECONTAMINATION PROCEDURES

During drilling operations, all augers, sampling tools, and down hole equipment will be decontaminated by steam cleaning prior to use. Rinsate water will be contained during drilling operations and will be stored in 55-gallon drums. All soil cuttings generated during the drilling operations will be contained in 55-gallon drums on site pending laboratory analysis for a determination of proper disposal. Prior to using any equipment in a monitoring well, the equipment will be decontaminated by double washing with a laboratory grade detergent in clean water, and rinsing using deionized water. All purge water generated during groundwater sampling procedures will be contained on site in 55-gallon drums pending proper disposal.

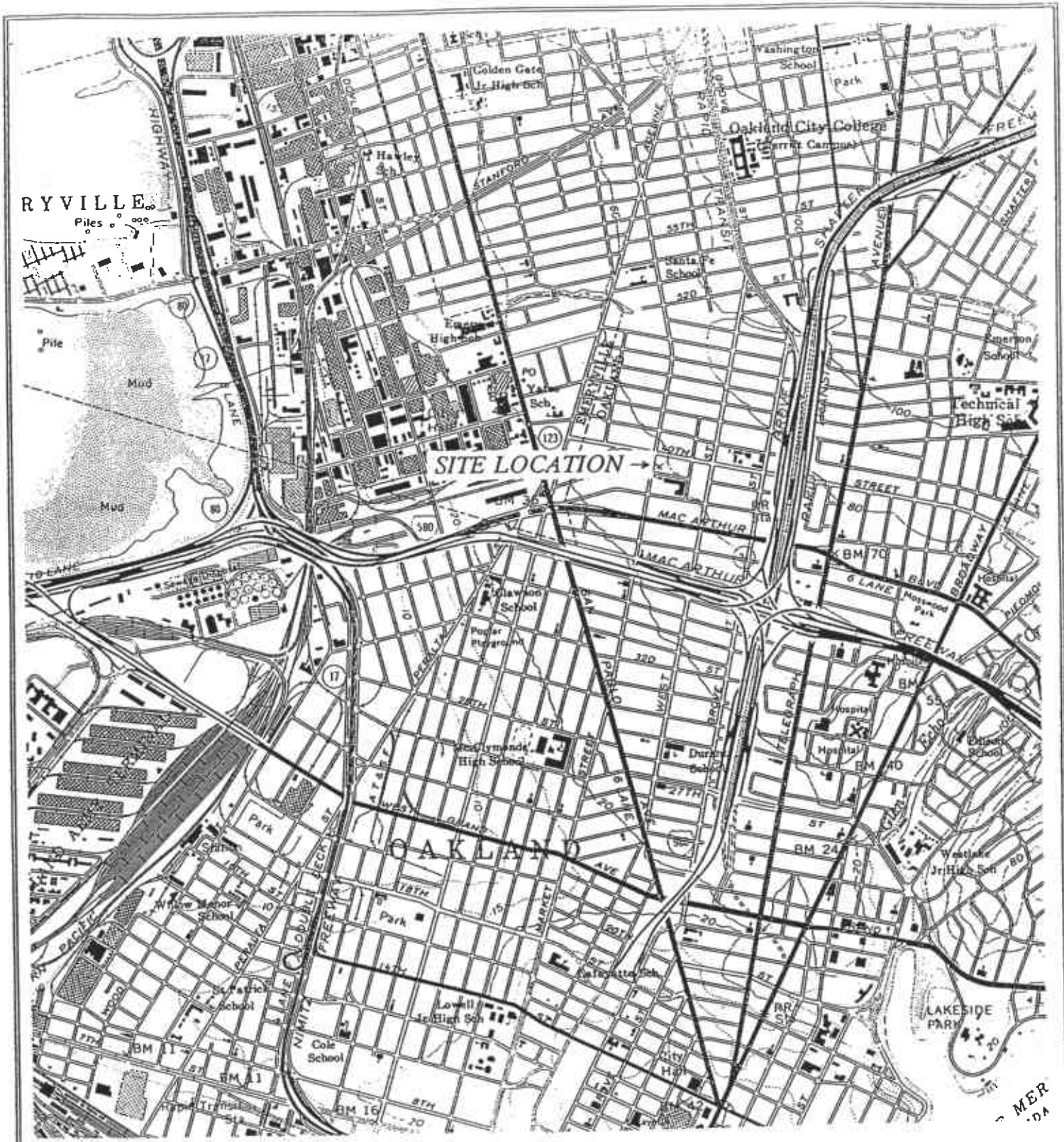


#### 4.0 FINAL REPORTING

A preliminary assessment report will be prepared based on data from the newly installed groundwater monitoring wells. At a minimum, the report will contain the following:

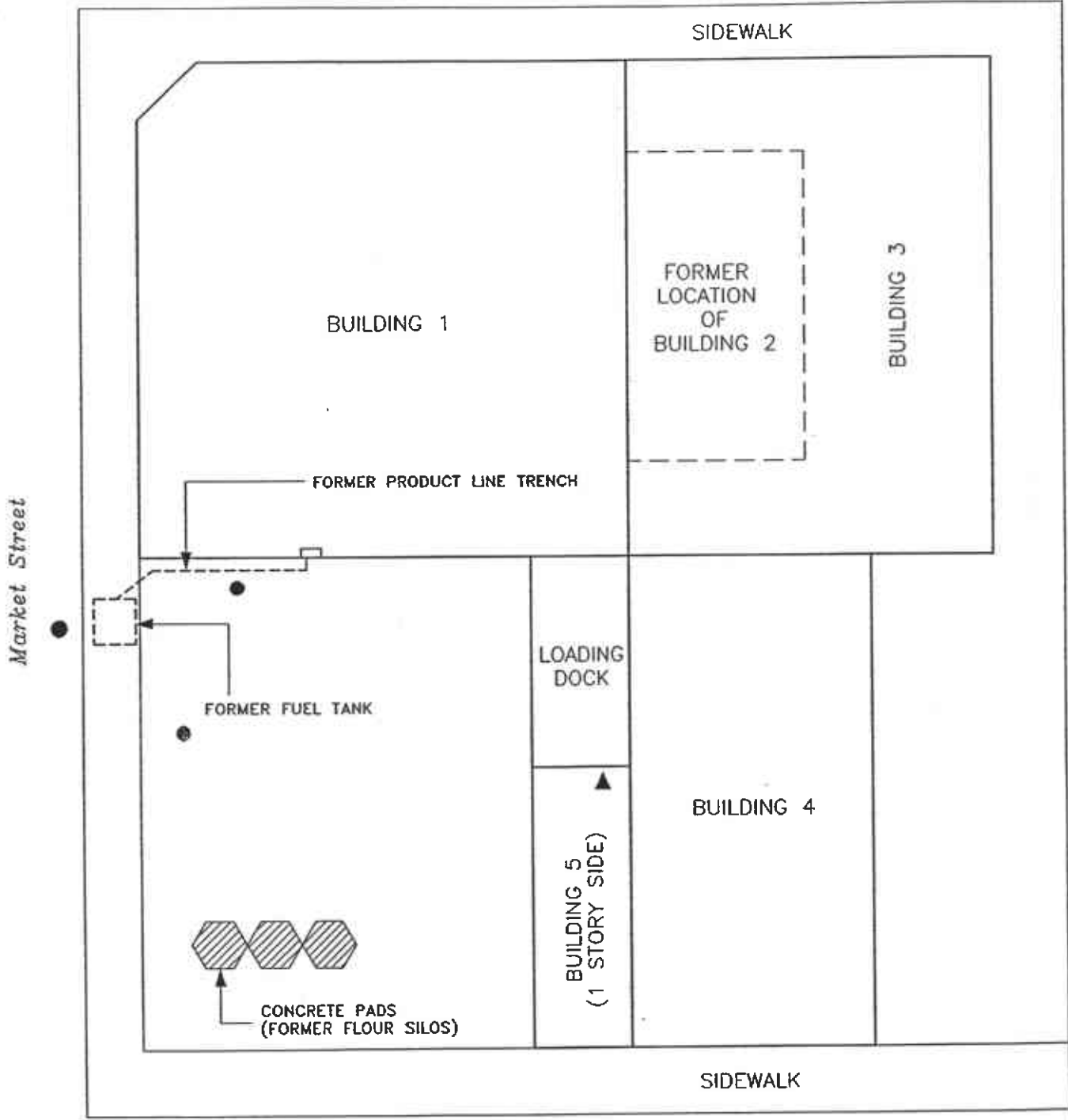
- details of field procedures and operations;
- boring logs with as-built well construction details;
- tabular results of soil and groundwater analysis results; and
- conclusions and discussion of results.

*SEACOR* is pleased to have prepared this work plan on behalf of San Francisco French Bread. If you have any questions or require further information, please feel free to contact us at our Concord office at 510/686-9780.



DRAFTED BY: <b>TS</b>	CHECKED BY: <b>PDH</b>	<b>PROJECT NO. 70007-005-01</b>	<b>FIGURE 1</b>	<b>SEACOR</b> 1390 Willow Pass Road Suite 360 Concord, CA 94520
DWG. DATE: 02/22/93	REV. DATE: 02/22/93			
FILE NAME: <b>SFFBOAKL.F01</b>				

40th Street



39th Street

**LEGEND:**

- PROPOSED MONITORING WELL
- ▲ DOMESTIC WELL



**FIGURE 2**  
**PROPOSED WELLS**  
 3924 MARKET ST., OAKLAND, CA.

Client: San Francisco French Bread Co.	
Project: 70007-005-01	Date: 2/22/93

**SEACOR**  
 1360 Willow Pass Rd. #360 Concord, CA