WORK PLAN
FOR
ADDITIONAL WORK

Mandela Trucking
1255 Mandela Parkway
Oakland, California 94607
STID # 4153

BY
GOLDEN GATE TANK REMOVAL

Project No. 7519
October 23, 1998

John Carver
CE 23772
Expires December 31, 1999

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MANDELA TRUCKING
WORK PLAN

INTRODUCTION

Purpose

This work plan was prepared in response to The Directive and Order Pursuant to Health and Safety Code Section 25299 dated August 11, 1997. The Alameda County Health Care Services Agency (HCSA) has request a Work Plan for soil sampling at the subject site in order to the tank gasoline and diesel tank removal case to proceed to closure.

The site was at one time a service station and as such had four underground storage tanks (USTs). Two diesel and one gasoline tank were removed by others in 1996 but the activities were not completed. Golden Gate Tank Removal (GGTR) removed a waste oil tank from the site in 1998. The removal activities for the waste oil tank have been completed and the final report will be issued upon performance of all contract requirements.

The purpose of this work plan is to describe the procedures and methods to be used in sampling the soil involved in the removal of the two diesel and one gasoline tanks

The information developed from the work performed in this Work Plan may be used in evaluating closure of the tank removal case. The sampling is part of the continuing work required by the State Water Resources Control Board's Leaking Underground Fuel Tank (LUFT) manual and The TRI-Regional Board Staff Recommendation for Preliminary Evaluation and Investigation of Underground Tank Sites when evidence of an unauthorized fuel release has been found.

Scope

The scope of this work plan includes descriptions of:

- Previous Work carried out at the site,
- Required pre-field work activities and permitting,
- Sampling equipment and methods,
- Soil and groundwater (if required) sampling equipment and techniques,
- Soil and groundwater (if required) sample handling and transportation,
- Management of soil cuttings,
- Sample analyses,
- Data interpretation and reporting procedures.

Site Location and Description

The subject site is located at 1225 Mandela Parkway in Oakland, California. The general location of the site is shown on the Vicinity Map, Figure 1 of Appendix A. The project site is currently a truck repair operation and consists of one building surrounded by paved parking area and the excavation and stockpiles resulting from the removal of the diesel and

gasoline USTs. The general location of the site is shown on the vicinity map, Figure 1 attached. A Site Plan showing the building, nearby streets, the tank removal areas and other details is attached as Figure 2 of Appendix A.

Site History

The site is the location of a former gas station. As such there were two 4,000 gallon diesel tanks, one 4000 gallon gasoline tank, and one 425 gallon waste oil tank in use.

The two diesel and one gasoline tanks were removed from the site on July 7, 1996 by Accutite. The tanks were removed and loaded onto disposal trucks on that date under the supervision of Jennifer Eberle of the HCSA. Twelve soil samples were also taken at that time under the observation of Ms. Eberle.

The results were faxed by Accutite to the HCSA on August 1, 1998. No further work was carried out in regards to the diesel and gasoline tanks. The excavations remained open and the overburden soil stockpiled on site. An HCSA letter dated January 3, 1997 required extra work that would lead to the backfilling of the excavation and closure of the site. This letter also required removal of the waste oil tank.

No work was accomplished in regards to the diesel and gasoline tanks as of today. However the waste oil tank was removed in accordance with permits obtained by GGTR.

The following chronology presents the significant tank removal events involving the site:

CHRONOLOGY

07/11/96	Two diesel tanks and one gasoline tank removed from the site by Accutite under HCSA observation.
08/01/96	Accutite faxes analytical results of twelve soil samples to HCSA.
01/03/97	HCSA publishes letter to owner indicating that no tank removal report has been filed and that the excavation and stockpiles remain as on the day of the removal.
08/11/97	ALAMEDA COUNTY ENVIRONMENTAL ENFORCEMENT REVIEW PANEL served a Directive and Order to the site owner requiring further work and sampling.
06/17/98	GGTR removed the waste oil tank from the site under Oakland Fire Department permit and procedures.
06/24/98	GGTR reviewed the analytical results of waste oil tank with Mr. Leroy Griffin of the Oakland Fire Department. Mr. Griffin indicted the waste oil tank excavation could be backfilled with clean import soil and that the stockpiled overburden waste oil tank soil must be disposed of.
07/24/98	GGTR backfilled and repaved waste oil tank excavation.
07/24/98	GGTR completes report of Waste Oil Tank Removal and holds report for performance of contract requirements.

10/14/98 Approximately 10 tens of the stockpiled overburden soil from the waste oil tank was delivered to Chem Waste Management for disposal.

1015/98 GGTR publishes letter documenting overburden disposal.

Site Geology, Soil Conditions and Hydrogeology

Knowledge of the nearby area indicates that the near surface soils at the site are probably silty sands. Groundwater would be expected to be shallow, at about 10-15 feet below ground surface.

Diesel And Gasoline Tank Removal Analytical Results

The following table summarized the results of the Accutite removal and sampling of the diesel and gasoline tank. The locations of the samples are shown on the attached Figure 3.

TABLE 1
GASOLINE AND DIESEL TANK EXCAVATION SAMPLE RESULTS
(all results are in parts per million - ppm)

SAMPLE I.D.	TPH-D	TPH-G	B/T/E/X	MTBE	LEAD
D-1-N-11 north end of Tank 1 (diesel) at 11 feet	ND	--	ND/ND/ND/0.015	0.014	--
D-1-S-11 south end of Tank 1 (diesel) at 11 feet	110	--	ND/ND/ND/0.015	ND	--
D-2-N-11 north end of Tank 2 (diesel) at 11 feet	1,300		ND/ND/ND/0.061	ND	--
D-2-S-11 north end of Tank 2 (diesel) at 11 feet	320		ND/ND/ND/0.063	ND	--
G-1-N-11 north end of Tank 3 (gasoline) at 11 feet	--	0.680	0.005/0.013/0.005/0.021	0.035	350
G-1-S-11 south end of Tank 3 (gasoline) at 11 feet	--	ND	ND/ND/ND/ND	0.070	91

TABLE 2
GASOLINE AND DIESEL STOCKPILE SAMPLE RESULTS
(all results are in parts per million - ppm)

SAMPLE I.D.	TPH-D	TPH-G	B/T/E/X	MTBE	LEAD
D-ST-N diesel overburden stockpile	32	--	ND/ND/ND/0.041	ND	--
D-ST-M diesel overburden stockpile	390	--	ND/ND/ND/0.011	ND	--
D-ST-S diesel overburden stockpile	72	--	ND/ND/ND/0.017	0.013	--
G-ST-S gasoline overburden stockpile	--	0.500	ND/ND/ND/ND	ND	--
G-ST-N gasoline overburden stockpile	--	5.3	0.006/0.019/ND/0.045	0.009	--
G-ST-M gasoline overburden stockpile	--	ND	ND/ND/ND/ND	0.001	51

PLANNED WORK

Sequence

The following is the planned sequence of activities at the site:

- Scrape the area of moderate TPH-D contamination (samples D2-N-11, D2-S-11 and D1-S-11),
- Collect soil samples from the side walls and bottom of the scraped areas,
- Remove the dispenser islands and piping,
- Collect soil samples from the dispenser and piping areas,
- Collect composite soil samples from the stockpiled overburden soil,
- Analyze all soil samples,
- Discuss results with HCSA,
- Dispose of all "contaminated" stockpiled overburden soil and all scraped soil,
- Backfill the excavation, dispenser area and piping runs with clean imported backfill or clean stockpiled overburden soil as approved of by HCSA,
- Prepare a summary report of the work accomplished along with a tabulation of all test data.

Pre-field Activities

GGTR will obtain all permits which are required by HCSA. The HCSA, property owners and tenants will be notified of all field work dates and the precise locations so access is available. Underground Service Alert will be notified at least 72 hours before any excavation. GGTR will arrange and schedule all excavation and laboratory subcontractor services. Appropriate excavation equipment be scheduled and a State Certified Laboratory notified of the impending samples.

Excavation (Scraping)

The sidewalls of the excavation in the area of samples D2-N-11, D2-S-11 and D1-S-11. The approximate area is shown on Figure mnmn attached. Scraping will be continued until there is no visual evidence of contamination nor are there any odors.

Dispenser and piping removal

The backhoe will then be used to remove the dispenser islands and the piping runs. the concrete will be disposed of as construction debris. any soil generated will be stockpiled sampled and analyzed and then be disposed of as appropriate.

Soil Sampling

Soil samples will be obtained in the scraped areas, about two feet under the dispensers and every 20 feet of piping run. samples will be collected using the backhoe, hand augering equipment or driving brass tubes as appropriate to the area and the soil conditions. Two inch diameter brass tubes will be used. Each tube will be labeled, stored in a cooled environment. The samples stored in an ice chest for transportation to the analytical laboratory.

Analysis of Samples Obtained During Drilling

A Chain-of-Custody form will be initiated by GGTR personnel at the time of sampling and will accompany the soil samples to a state certified laboratory using California Department of Health Services approved methods. The soil samples associated with the gasoline tanks will be analyzed for:

- Total Petroleum Hydrocarbons as Gasoline (TPH-G),
- Volatile aromatic hydrocarbons Benzene, Toluene, Ethylbenzene and total Xylenes (BTEX),
- Methyl Tertiary Butyl Ether (MTBE),
- Total Lead.

The soil samples associated with the diesel tanks will be analyzed for:

- Total Petroleum Hydrocarbons as Diesel (TPH-D),
- Volatile aromatic hydrocarbons Benzene, Toluene, Ethylbenzene and total Xylenes (BTEX),
- Methyl Tertiary Butyl Ether (MTBE).

Data Interpretation and Soil and Groundwater Report

Following the completion of all field work, GGTR will review the data obtained and prepare a Soil and Groundwater Investigation Report. The report will describe the details of the field work, summarize the analytical results, discuss the findings, and provide conclusions and recommendations.

The information obtained during the work described will be used in assessing the soil contamination at the site and to provide data to the HCSA for closure consideration.

The purpose of the investigation is to sample the soil for possible gasoline and diesel fuel contamination. However if conditions are found which vary during the field work, modifications to the Scope of this Work Plan may be requested to meet the actual conditions.

Schedule

GGTR anticipates beginning the excavation within two weeks of receiving approval to proceed and authorization from the property owner. The report described in the preceding section should be available within 2 weeks of receipt of all soil analytical results.

Report Distribution

All reports that are prepared during the continuing work on this project will be sent to:

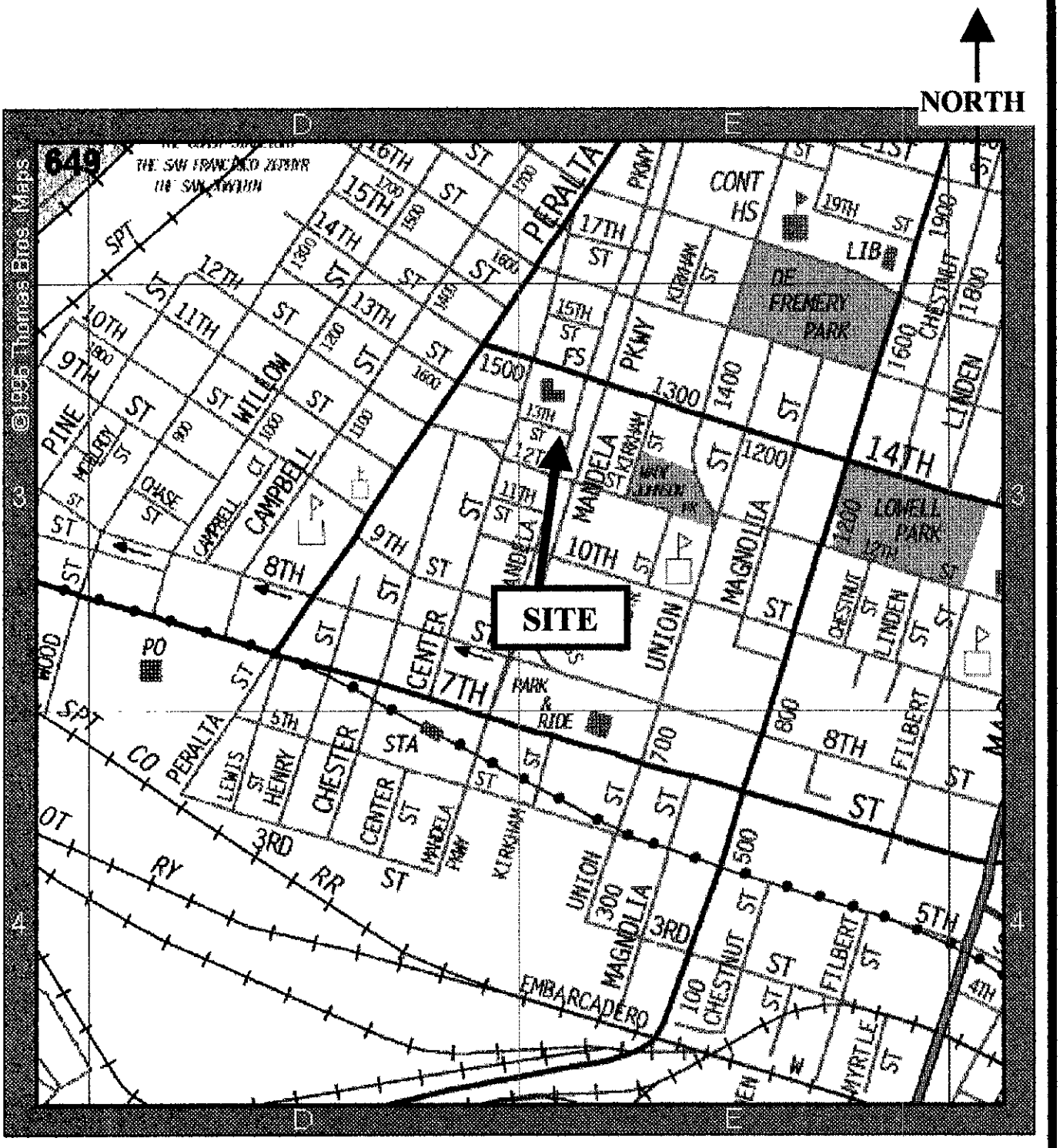
Mr. Larry Seto
Sr. Hazardous Materials Specialist
Alameda Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

ATTACHMENTS

WORK PLAN
FOR
SAMPLING

Mandela Trucking
1255 Mandela Parkway
Oakland, California 94607
STID # 4153

Project No. 7519
October 23, 1998



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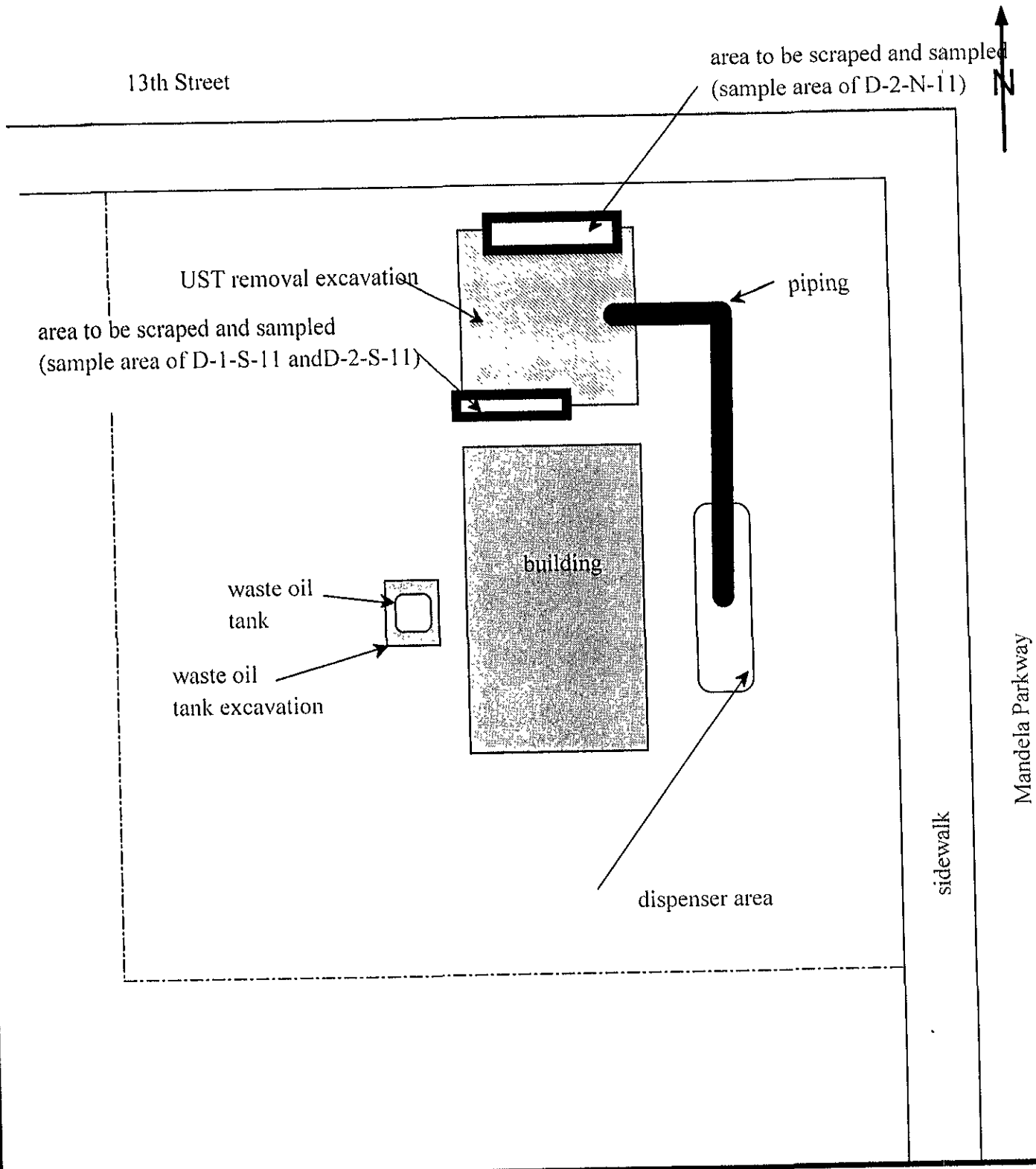
VICINITY MAP

1225 Mandela Parkway
Oakland, California

Project 7519	By: jc	Not to scale	October, 1998	Figure 1



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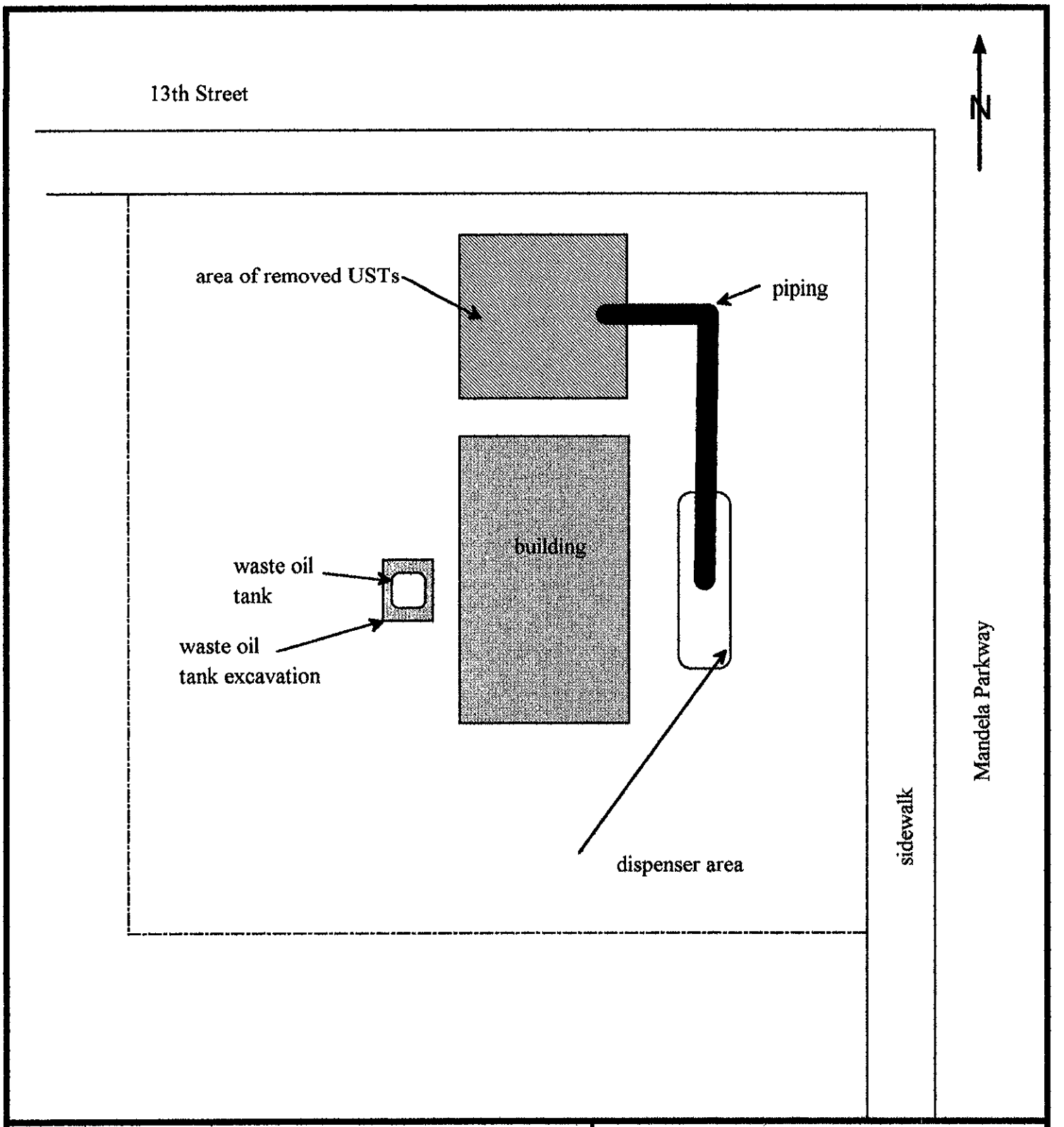
SITE PLAN

1225 Mandela Parkway
Oakland, California

Project 7519	By: jnc	Scale Not to scale	March 1999	Figure 2 (rev)



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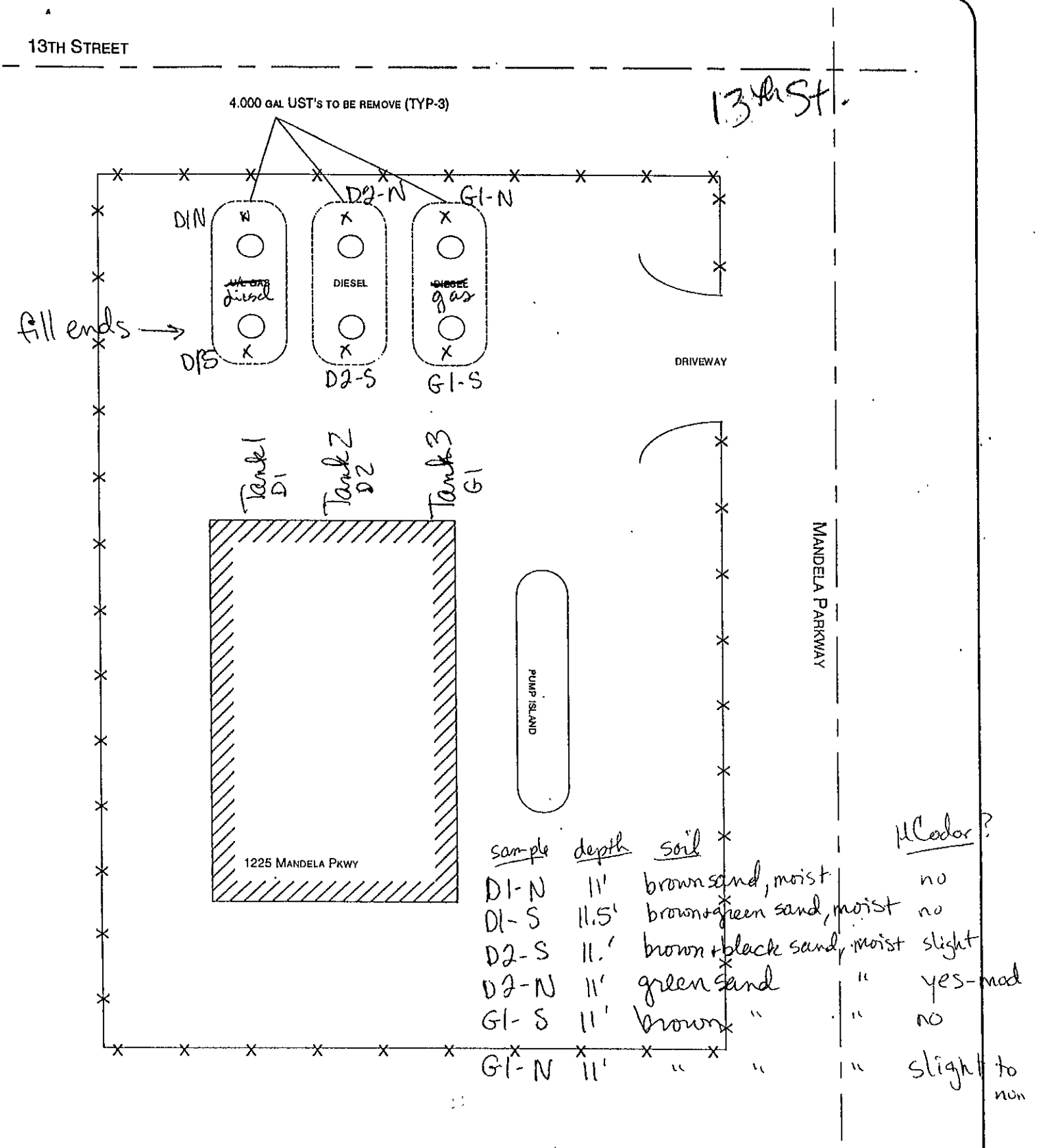
SITE PLAN

1225 Mandela Parkway
Oakland, California

Project 7519	By: jnc	Scale Not to scale	October 1998	Figure 2



sample	depth	soil		Cedar?
D1-N	11'	brown sand, moist		no
D1-S	11.5'	brown+green sand, moist		no
D2-S	11.'	brown+black sand, moist		slight
D2-N	11'	green sand	"	yes-mod
G1-S	11'	brown	"	no
G1-N	11'	"	"	slight to non

GOLDEN GATE TANK REMOVAL	ACCUTITE SAMPLE LOCATION
255 Shipley Street San Francisco, CA 94107 Telephone (415) 512 1555 Fax (415) 512 0964	1225 Mandela Parkway Oakland, California

Project 7519	By: jnc	Scale Not to scale	October 1998	Figure 3

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