



CITY OF OAKLAND



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Susan Hugo
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

JUN 05 2001

June 1, 2001

Subject: 655 12th Street (aka, Preservation Park Residential Redevelopment)

Dear Susan:

Please find attached a copy of the revised Risk Management Plan (RMP) for the subject site. The RMP has been amended to reflect the changes discussed during our conference call of May 18, 2001, and memorialized in my email of May 22, 2001. The most significant changes to the RMP may be found in Section 4.0 ("Long-Term Risk Management Requirements").

Based on our conversation, I believe that the submittal of this RMP satisfies the requirements of your office and the Regional Water Quality Control Board for issuance of a "no further action" letter for the subject site. Per our discussions, I trust that you have already begun the administrative process for issuing such a letter. According to the time-line agreed to in our conference call, I would expect the letter to be issued by June 29, 2001. *Please let me know as soon as possible if this target date cannot be met for any reason.*

Thank you in advance for your time and effort to bring this case to a close. If you have any questions, please contact me at (510) 238-7314 or mmgomez@oaklandnet.com.

Sincerely,

Mark Gomez
Environmental Program Specialist

- c Chuck Headlee. RWQCB
- Ariu Levi. Alameda County Environmental Health
- John Richard. Lalanne Group
- Susan Gallardo. Geomatrix
- Patrick Lane. City of Oakland. CEDA
- Glenn Young. Subsurface Consultants, Inc

**RISK MANAGEMENT PLAN
PRESERVATION PARK RESIDENTIAL
REDEVELOPMENT
655 12TH STREET (AKA, MLK JR. WAY
BETWEEN 11TH AND 12TH STREET)
OAKLAND, CALIFORNIA
SCI 272.054**

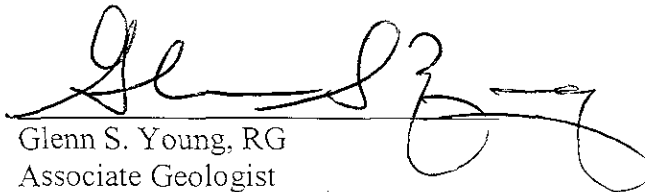
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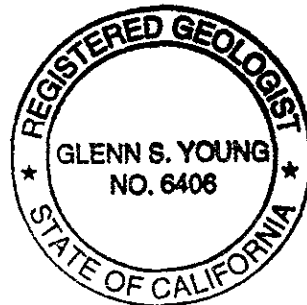
Mr. Mark Gomez
City of Oakland Public Works Agency
Environmental Services Division
250 Frank H. Ogawa Plaza, Suite 5301
Oakland, California 94612-2034

By:



Subsurface Consultants, Inc.


Glenn S. Young, RG
Associate Geologist



April 2, 2001
revised June 1, 2001

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DISTRIBUTION:

6 copies: Mr. Mark Gomez
City of Oakland Public Works Agency
Environmental Services Division
250 Frank H. Ogawa Plaza, Suite 5301
Oakland, California 94612

1.0 INTRODUCTION

Subsurface Consultants, Inc. (SCI) has prepared this Risk Management Plan (RMP) on behalf of the City of Oakland, Public Works Agency, Environmental Services Division (City). This RMP describes soil management procedures for the anticipated excavation work at the subject site (Site), which is located at 655 12th Street, on the western side of Martin Luther King Jr. Way between 11th and 12th Street in Oakland, California (Plates 1 through 3). The Site is currently owned by the Oakland Redevelopment Agency (ORA), which plans to sell the Site to Preservation Park, LLC for development Based on discussions with the City, Preservation Park, LLC, Alameda County Health Care Services Agency (ACHCSA), and the Regional Water Quality Control Board (RWQCB) during a teleconference on May 18, 2001, this revised version of the RMP also addresses the "long-term risk management" requirements presented by the ACHCSA in their letter dated April 26, 2001.

1.1 Redevelopment Plan

The Site is currently fenced and vacant with no surface improvement features. ORA has contracted with Preservation Park, LLC to redevelop the Site as a 2- to 4-story, 92-unit residential structure with a parking structure extending one-half story below ground across the entire property. Planned construction activities will involve excavation of the upper 6 to 8 feet of soil across the Site, as well as excavation of soil to a depth of 12 feet at the location of the proposed elevator shaft. The parking structure will include ventilation consistent with City building requirements. Soil excavated from the Site will not be reused onsite. Based on investigations at this and nearby properties, excavation is not expected to reach groundwater, which is documented to occur at approximately 25 feet below ground surface (bgs).

1.2 Background

The Site is the former location of a gasoline service station, including 5 underground storage tanks (USTs). Results of previous investigations identified the presence of relatively low concentrations of total petroleum hydrocarbons and lead in soil; grab groundwater samples collected within and immediately adjacent to the former UST location contained petroleum hydrocarbons, including benzene, toluene, ethylbenzene, and xylenes (BTEX). Results of previous investigations are presented in the following reports:

- *Draft Soil Contamination Assessment*, dated June 17, 1991 by SCI,
- *Preliminary Environmental Assessment*, dated June 19, 1991 by SCI,
- *Draft Phase 1 Site Assessment for Preservation Park 3* dated October 13, 1998 by Tetra Tech EM, Inc., and
- *Phase II Environmental Site Assessment Summary Report* dated June 23, 2000, by Tetra Tech EM, Inc.

Plate 2 presents a compilation of the sampling locations from the investigations listed above. A summary of the previous analytical results is presented on Tables 1 and 2.

SCI recently completed additional sampling and analyses to evaluate soil to be excavated during the redevelopment project and to evaluate groundwater quality beneath and downgradient of the Site. Results of chemical analyses as well as a Tier 3 RBCA evaluation are presented in SCI's letter report, dated April 2, 2001, and summarized in Section 2.0.

2.0 SUMMARY OF ENVIRONMENTAL CONDITIONS

The primary environmental concern at the Site during construction is the presence of total petroleum hydrocarbons and lead in excavation-zone soils. BTEX and volatile organic compounds (VOCs) are also present in deeper soils and in groundwater; however, these concentrations are anticipated to not impact the proposed construction activities.

2.1 Results of Chemical Analyses

Based on the results of chemical analyses (Table 3), soil from 0 to 1 foot below ground surface (bgs) across the Site as well as from 1 to 4 feet bgs in the northern quarter of the Site exceeds Soluble Threshold Limit Concentration (STLC) criteria for lead and is therefore subject to disposal as a California hazardous waste. Analyses detected no soil exceeding Toxicity Characteristic Leaching Procedure (TCLP) criteria.

Analyses on soil samples collected from the remaining area to be excavated generally detected total lead concentrations consistent with anticipated background conditions. Therefore, that soil is suitable for disposal as nonhazardous material and may be suitable for unrestricted reuse.

2.2 Results of Human Health Risk Assessment

The Tier 3 RBCA evaluation compiled previous and current environmental data; calculated the 95% upper confidence level (UCL) for lead, BTEX, and other VOCs; and analyzed potential health risks to future site users. The BTEX and VOC concentrations detected during environmental testing were evaluated under a residential scenario using the City's Urban Land Redevelopment (ULR) Program RBCA spreadsheet. The potentially complete exposure pathways considered were inhalation of indoor and outdoor air impacted by chemicals volatilizing from the soil and groundwater. Results for total lead were compared to the residential Preliminary Remedial Goal (PRG) established by Region IX of the USEPA.

Assuming removal of the upper 6 to 8 feet of soil during the proposed development, results of the Tier 3 evaluation concluded that BTEX and VOC concentrations in soil and groundwater pose estimated excess cancer risks for both indoor and outdoor air of less than $1E-05$, and noncancer hazards of less than a value of 1 for the residential scenario, which are below the City's respective target cancer risk level of $1E-05$ and noncancer hazard of 1. The calculated 95% UCL for total lead in the remaining soil is 27 mg/kg, with a maximum concentration of 91 mg/kg. These total lead concentrations are well below the PRG criterion for a residential scenario of 400 mg/kg.

Revised construction plans call for excavation ranging from 6 to 8 feet, and excavation to 12 feet at the location of the proposed elevator shaft. This does not change the conclusions of the Tier 3 RBCA evaluation.

3.0 MANAGEMENT OF SOIL DURING CONSTRUCTION

Preservation Park, LLC will contract the planned excavation work, and will notify the City, Alameda County, and SCI of the schedule to perform said work in advance. The City, Preservation Park, LLC, and SCI will coordinate activities to oversee soil management and disposal practices during construction.

3.1 Health and Safety Plan

The contractor (Contractor) for Preservation Park, LLC will prepare and implement a Health and Safety Plan to notify and protect workers during construction activities at the Site, including the excavation and handling of impacted soils. Where applicable, the Health and Safety Plan will consider any and all environmental data collected from the Site.

3.2 Excavation Activities

It is anticipated that the first stage of construction will involve the excavation and offsite disposal of impacted soil from the upper one foot of soil across the Site, followed by excavation and offsite disposal of soil from 1 to 4 feet bgs in the northern quarter of the Site. SCI personnel will delineate and mark off the limits of the excavation zones, as necessary, prior to excavation work. The Contractor will have a grade-checker onsite to confirm that excavation occurs within the designated zones. Soil will be removed by the Contractor using an excavator. To the extent practical, soil will be loaded directly into trucks to minimize double handling.

3.3 Dust Control

The Contractor will prepare and implement standard dust control practices to prevent the generation of dust during soil handling activities. Dust control measures may include, but are not limited to, using water spray to mitigate dust during excavation, loading, and hauling. Excavated soil that is not directly loaded onto trucks will be stockpiled onsite and covered with plastic sheeting as a dust prevention measure. If visible dust is observed leaving the Site, the Contractor will implement additional dust mitigation measures, such as increased watering for dust suppression.

3.4 Stormwater Runoff Control

The Contractor will prepare and implement standard stormwater runoff control practices to minimize the migration of soils to the storm drains. Stormwater runoff control measures may include, but are not limited to, grading for internal drainage and the placement of erosion and sediment control devices, as necessary. If soil is stockpiled onsite, runoff will be controlled to reduce sediment loading using silt fences, hay bales, or other available techniques.

3.5 Soil Transportation and Disposal

Soil will be transported with trucks that are licensed and permitted to carry materials with the appropriate waste classifications. Trucking will be conducted in compliance with California Department of Transportation (DOT) and other applicable state and local regulations. The Contractor will minimize the tracking of impacted soil from the Site by cleaning wheels upon leaving the Site and sweeping the exit area.

The City will be responsible for signing all hazardous waste manifests and non-hazardous waste bills-of-lading. These shipping documents will accompany the materials to the disposal facility, and fully-executed copies will be returned to the City.

3.6 Contingency Plan for Unexpected Conditions

The Contractor will immediately notify the City and SCI upon encountering any unexpected or previously unknown tanks, associated piping, or other identifiable environmental conditions posing a risk to health, safety, or the environment. The Contractor will immediately implement any provisions of the Health and Safety Plan that may be triggered by encountering these conditions. The City and SCI will notify Alameda County of the conditions found, conduct any sampling and analysis that may be warranted, and make recommendations for addressing the conditions so that construction can proceed. In coordination with Alameda County, the City will authorize any additional work deemed necessary by that regulatory body to remediate or remove conditions posing a risk to human health or the environment.

3.7 Documentation

Upon completion of the excavation and offhaul activities, SCI will prepare a brief report documenting the soil disposal and results of sampling, if any, conducted during construction.

4.0 LONG-TERM RISK MANAGEMENT REQUIREMENTS

The City and Preservation Park, LLC will implement the following activities to address the "long-term risk requirements" specified by ACHCSA. The ACHCSA requirements are listed in bold type below and are followed by the required risk management action.

- 1. The human health risk assessment should be re-evaluated if land use changes to a more conservative scenario (i.e., day care center, school, residential units with back yard scenario, etc.).**

The City will track the Site in their Permit Tracking System (PTS). The Site will be flagged by the PTS to indicate that if Site land uses change from the current residential development plans, the City will require written confirmation from ACHCSA that either a revised human health risk assessment is not required or that a revised human health risk assessment has been completed that meets the ACHCSA requirement. It will be the responsibility of the property owner to obtain the ACHCSA written approval. In this manner, if a change in land use is proposed, no

corresponding approval or permits for the Site will be issued from the City until this ACHCSA risk management requirement is addressed.

2. Shallow groundwater should not be used at the site.

Preservation Park, LLC will stipulate in the Covenants, Conditions and Restrictions (CC&Rs) for the Site that no water wells can be installed at the Site and that no groundwater from the Site can be used. The CC&R will also state that a variance from this stipulation will require written approval from ACHCSA.

3. Health and safety plan for future construction workers such as utility workers who may be exposed to residual contaminants left at the site.

As previously stated, the City will track the Site in their PTS. The Site will be flagged by the PTS to indicate that a Health and Safety Plan (HSP) will be required by the City prior to issuing a permit for intrusive work at the Site. The HSP must specifically address potential exposure of workers to residual contaminants at the Site. The HSP will be reviewed and approved by the City's Building Division, with assistance from the Oakland Fire Department Hazardous Materials Management Program. In this manner, the City will not issue a permit to conduct intrusive work at the Site without a written HSP that satisfies the ACHCSA risk management requirement.

5.0 REFERENCES

Subsurface Consultants, Inc., *Draft Soil Contamination Assessment*, June 17, 1991.

Subsurface Consultants, Inc., *Preliminary Environmental Assessment*, June 19, 1991.

Subsurface Consultants, Inc., *Soil Investigation and Tier 3 RBCA Evaluation*, MLK, Jr. Way between 11th and 12th Street, April 2, 2001.

Tetra Tech EM, Inc., *Draft Phase 1 Site Assessment for Preservation Park 3*, October 13, 1998.

Tetra Tech EM, Inc., *Phase II Environmental Site Assessment Summary Report*, June 23, 2000.

6.0 LIMITATIONS

SCI has prepared this report in a professional manner, using that degree of skill and care exercised for similar projects under similar conditions by reputable and competent environmental consultants. SCI shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time the report was prepared. SCI also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report. SCI believes that conclusions stated herein to be factual, but no guarantee is made or implied. This report has been prepared for the benefit of the City of Oakland. The information contained in this report, including all exhibits and attachments, may not be used by any party other than the City of Oakland, without the express written consent of SCI.

TABLES

Table 1: Summary of Previous Results - 1991 SCI Soil Investigation
 Martin Luther King Jr. Way, Between 11th and 12th Street
 Oakland, California

Sample ID	Depth	Units	TEH	TVH	Oil and Grease	Lead	Other Detections
1	1.5	mg/kg	--	ND	--	31.0	
	4	mg/kg	--	--	--	ND	
	5.5	mg/kg	--	--	--	ND	
2	1	mg/kg	--	--	--	102	
	3	mg/kg	--	--	--	ND	
	5	mg/kg	--	--	--	ND	
	7	mg/kg	ND	ND	ND	ND	
3	3	mg/kg	--	2,300	--	--	
	6.5	mg/kg	--	51	--	--	
	15.5	mg/kg	--	4,000	--	--	
	20.5	mg/kg	ND	980	ND	--	1,2-Dichloroethane (330 ug/kg)
4	24	mg/kg	--	ND	--	--	
		mg/kg	--	--	--	--	
6	26	mg/kg	ND	ND	--	--	
	27.5	mg/kg	ND	ND	--	--	
7	3	mg/kg	--	--	--	ND	
	5.5	mg/kg	--	--	--	ND	
	21	mg/kg	ND	ND	--	--	
	26	mg/kg	ND	ND	--	--	
8	2	mg/kg	ND	--	--	363	Wet Lead (8,350 ug/l)
	4	mg/kg	--	--	--	ND	
	5.5	mg/kg	--	--	--	ND	
9	1.5	mg/kg	--	--	--	ND	
	7	mg/kg	--	--	--	ND	
10	1	mg/kg	--	--	--	598	
	3	mg/kg	ND	--	58	ND	
	5.5	mg/kg	--	--	--	ND	
11	16.5	mg/kg	620	54	--	--	
	20.5	mg/kg	--	--	ND	--	
	21	mg/kg	1,800	2,000	--	--	
12	20.5	mg/kg	--	--	ND	--	
	21	mg/kg	1,300	650	--	--	Chlorobenzene (280 ug/kg)
	22.5	mg/kg	ND	ND	--	--	
	26	mg/kg	ND	ND	--	--	
13	21	mg/kg	ND	ND	--	--	
	26	mg/kg	ND	ND	--	--	
14	24	mg/kg	ND	ND	--	--	
	26	mg/kg	ND	ND	--	--	
15	19.5	mg/kg	--	--	ND	--	
	20	mg/kg	ND	ND	--	--	1,2-Dichloroethane (52 ug/kg)

Table 1: Summary of Previous Results - 1991 SCI Soil Investigation
 Martin Luther King Jr. Way, Between 11th and 12th Street
 Oakland, California

Sample ID	Depth	Units	TEH	TVH	Oil and Grease	Lead	Other Detections
16	21	mg/kg	ND	ND	--	--	
	26	mg/kg	ND	ND	--	--	
17	25	mg/kg	ND	ND	--	--	
	30	mg/kg	ND	ND	--	--	
S-1	1.0	mg/kg	7.6	ND	ND	--	
S-2	0.5	mg/kg	--	--	--	118	
S-4	0.5	mg/kg	ND	--	ND	--	
S-6	0.5	mg/kg	ND	--	ND	--	
S-8	0.5	mg/kg	ND	--	52	--	
S-10	0.5	mg/kg	ND	--	ND	--	
S-13	0.5	mg/kg	ND	--	82	--	

Notes:

TEH: Total Extractable Hydrocarbons as diesel

TVHg: Total Volatile Hydrocarbons as gasoline

VOCs: Volatile Organic Compounds

mg/kg: milligrams per kilogram

ug/l: micrograms per liter

Detected concentrations shown in bold

--: Sample not analyzed

Reference: *Soil Contamination Assessment*, dated June 17, 1991 by SCI

Table 2: Summary of Previous Results - 1998 Tetra Tech Investigation
 Martin Luther King Jr. Way, Between 11th and 12th Street
 Oakland, California

Boring ID	Depth	Units	TPH Extractables	TPH Purgeables	Benzene	Toluene	Ethyl benzene	Xylenes	Lead	Detectable VOCs
<i>Soil Samples</i>										
SB1	9.5	mg/kg	480.0	1,000.0	0.021	0.096	2.9	12.8	6.6	
	16.5	mg/kg	53.0	38.0	ND	0.03	0.12	1.0	27.4	
	23.5	mg/kg	1,400.0	1,800.0	3.2	26.0	19.0	156.0	4.9	
SB2	9.5	mg/kg	ND	ND	ND	ND	ND	ND	2.9	
	16.5	mg/kg	ND	ND	ND	ND	0.01	0.03	78.6	
	23.5	mg/kg	4.6	190.0	23.5	24.0	14.0	89.0	2.3	
SB3	9.0	mg/kg	ND	ND	ND	ND	ND	ND	2.4	
	16.0	mg/kg	ND	ND	ND	ND	ND	ND	2.3	
	23.5	mg/kg	ND	ND	ND	ND	ND	ND	0.88	
<i>Grab Groundwater Samples</i>										
SB1	-	mg/L	17.0	33.0	0.35	1.8	0.64	ND	0.43	
SB2	-	mg/L	0.09	0.11	0.02	0.026	0.0031	0.02	0.18	1,2,4-Trimethylbenzene (0.0056 mg/L), 1,2-Dichloroethane (0.0014 mg/L), 1,3,5-Trimethylbenzene (0.0017 mg/L), and Napthalene (0.0014 mg/L)
SB3	-	mg/L	ND	ND	ND	ND	ND	ND	0.04	

Notes:

TPH: Total Petroleum Hydrocarbons

VOCs: Volatile Organic Compounds

mg/kg: milligrams per kilogram

mg/l: milligrams per liter

-: Sample not analyzed

ND: Not Detected

Detected concentrations shown in bold

Reference: *Final Phase II - Environmental Site Assessment Report*,
 dated June 23, 2000 by Tetra Tech EM, Inc.

Table 2: Summary of Previous Results - 1998 Tetra Tech Investigation
 Martin Luther King Jr. Way, Between 11th and 12th Street
 Oakland, California

Boring ID	Depth	Units	TPH Extractables	TPH Purgeables	Benzene	Toluene	Ethyl benzene	Xylenes	Lead	Detectable VOCs
<i>oil Samples</i>										
SB1	9.5	mg/kg	480.0	1,000.0	0.021	0.096	2.9	12.8	6.6	
	16.5	mg/kg	53.0	38.0	ND	0.03	0.12	1.0	27.4	
	23.5	mg/kg	1,400.0	1,800.0	3.2	26.0	19.0	156.0	4.9	
SB2	9.5	mg/kg	ND	ND	ND	ND	ND	ND	2.9	
	16.5	mg/kg	ND	ND	ND	ND	0.01	0.03	78.6	
	23.5	mg/kg	4.6	190.0	23.5	24.0	14.0	89.0	2.3	
SB3	9.0	mg/kg	ND	ND	ND	ND	ND	ND	2.4	
	16.0	mg/kg	ND	ND	ND	ND	ND	ND	2.3	
	23.5	mg/kg	ND	ND	ND	ND	ND	ND	0.88	
<i>Grab Groundwater Samples</i>										
SB1	-	mg/L	17.0	33.0	0.35	1.8	0.64	ND	0.43	
SB2	-	mg/L	0.09	0.11	0.02	0.026	0.0031	0.02	0.18	1,2,4-Trimethylbenzene (0.0056 mg/L), 1,2-Dichloroethane (0.0014 mg/L), 1,3,5-Trimethylbenzene (0.0017 mg/L), and Napthalene (0.0014 mg/L)
SB3	-	mg/L	ND	ND	ND	ND	ND	ND	0.04	

Notes:

TPH: Total Petroleum Hydrocarbons

VOCs: Volatile Organic Compounds

mg/kg: milligrams per kilogram

mg/l: milligrams per liter

-: Sample not analyzed

ND: Not Detected

Detected concentrations shown in bold

Reference: *Final Phase II - Environmental Site Assessment Report*,
 dated June 23, 2000 by Tetra Tech EM, inc.

Table 3: Results for Test Pit Samples
 Martin Luther King Jr. Way, Between 11th and 12th Street
 Oakland, California

Sample ID	Units	TEHd *	TEHo *	TVHg	Benzene	Toluene	Ethyl benzene	Xylenes	Lead	WET Lead	TCLP Lead
TP-1@0.0	mg/kg	--	--	--	--	--	--	--	160	--	--
TP-1@2.0	mg/kg	--	--	--	--	--	--	--	3.1	--	--
TP-1@5.0	mg/kg	<1	<5	<0.97	<4.9	<4.9	<4.9	<4.9	3.6	--	--
TP-2@0.0	mg/kg	--	--	--	--	--	--	--	20	--	--
TP-2@2.0	mg/kg	<1	<5	<0.97	<4.9	<4.9	<4.9	<4.9	1.6	--	--
TP-2@5.0	mg/kg	--	--	--	--	--	--	--	2.1	--	--
TP-3@0.0	mg/kg	--	--	--	--	--	--	--	160	--	--
TP-3@3.0	mg/kg	--	--	--	--	--	--	--	1.8	--	--
TP-3@6.0	mg/kg	<.99	<5	<0.95	<4.8	<4.8	<4.8	<4.8	7.0	--	--
TP-4@0.0	mg/kg	--	--	--	--	--	--	--	170	--	--
TP-4@2.5	mg/kg	6.3	46	<0.97	<4.9	<4.9	<4.9	<4.9	86	--	--
TP-4@6.0	mg/kg	--	--	--	--	--	--	--	91	--	--
TP-5@0.0	mg/kg	--	--	--	--	--	--	--	110	--	--
TP-5@2.0	mg/kg	<1	<5	<0.93	<4.7	<4.7	<4.7	<4.7	4.5	--	--
TP-5@6.0	mg/kg	--	--	--	--	--	--	--	2.4	--	--
TP-6@0.0	mg/kg	--	--	--	--	--	--	--	190	--	--
TP-6@2.5	mg/kg	--	--	--	--	--	--	--	1.9	--	--
TP-6@6.0	mg/kg	<1	<5	<0.92	<4.6	<4.6	<4.6	<4.6	2.0	--	--
TP-7@0.0	mg/kg	--	--	--	--	--	--	--	220	--	--
TP-7@2.0	mg/kg	<1	<5	<0.93	<4.7	<4.7	<4.7	<4.7	2.1	--	--
TP-7@6.0	mg/kg	--	--	--	--	--	--	--	2.5	--	--
TP-8@0.0	mg/kg	--	--	--	--	--	--	--	220	--	--
TP-8@2.5	mg/kg	4.6	36	<0.95	<4.8	<4.8	<4.8	<4.8	180	--	--
TP-8@6.0	mg/kg	--	--	--	--	--	--	--	1.7	--	--
TP-9@0.0	mg/kg	--	--	--	--	--	--	--	220	--	--
TP-9@2.0	mg/kg	--	--	--	--	--	--	--	1.4	--	--
TP-9@5.0	mg/kg	<1	<5	<0.95	<4.8	<4.8	<4.8	<4.8	1.3	--	--
TP-10@0.0	mg/kg	--	--	--	--	--	--	--	150	--	--
TP-10@2.0	mg/kg	<1	<5	<0.94	<4.7	<4.7	<4.7	<4.7	1.9	--	--
TP-10@5.0	mg/kg	--	--	--	--	--	--	--	2.2	--	--
TP-11@0.0	mg/kg	--	--	--	--	--	--	--	200	--	--
TP-11@2.0	mg/kg	--	--	--	--	--	--	--	15	--	--
TP-11@5.0	mg/kg	<1	<5	<0.97	<4.9	<4.9	<4.9	<4.9	1.9	--	--
TP-12@0.0	mg/kg	--	--	--	--	--	--	--	72	--	--
TP-12@2.0	mg/kg	6.6	81	<0.94	<4.7	<4.7	<4.7	<4.7	110	--	--
TP-12@5.0	mg/kg	--	--	--	--	--	--	--	19	--	--
COMP-1	mg/l	--	--	--	--	--	--	--	--	3.6	--
COMP-2	mg/l	--	--	--	--	--	--	--	--	7.7	--
Q1 through Q5	mg/l	--	--	--	--	--	--	--	--	--	<0.5

Notes:

Soil samples collected on August 4, 2000

Detected concentrations shown in bold

TEHd: Total Extractable Hydrocarbons as diesel

TEHo: Total Extractable Hydrocarbons as motor oil

TVHg: Total Volatile Hydrocarbons as gasoline

*: Using silica gel cleanup

WET: Waste Extraction Test

TCLP: Toxic Characteristic Leachability Procedure

mg/kg: milligrams per kilogram

mg/l: milligrams per liter

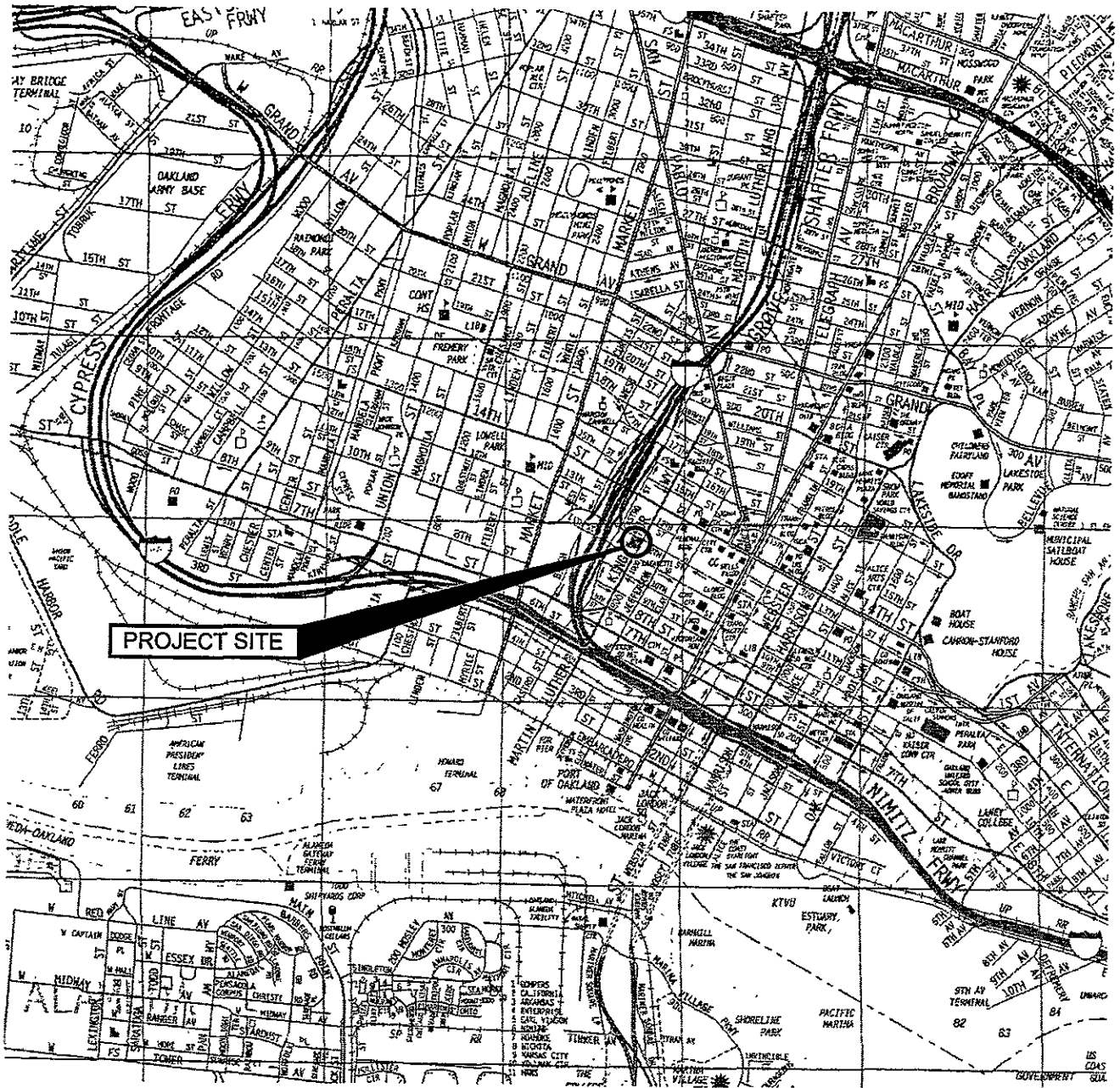
--: Sample not analyzed

<: Not detected at or above the laboratory reporting limit

COMP - 1 is a composite of TP-4@6', TH-8@6', and TP-12@5'

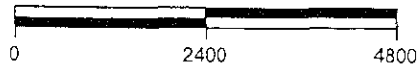
COMP - 2 is a composite of TP-4@2.5', TH-8@2.5', and TP-12@2'

PLATES



PROJECT SITE

APPROXIMATE SCALE IN FEET



NOTE:

THIS VICINITY MAP IS BASED ON A THOMAS GUIDE MAP FOR SAN FRANCISCO, ALAMEDA AND CONTRA COSTA COUNTIES, CALIFORNIA, MAP 649, YEAR 2000

VICINITY MAP

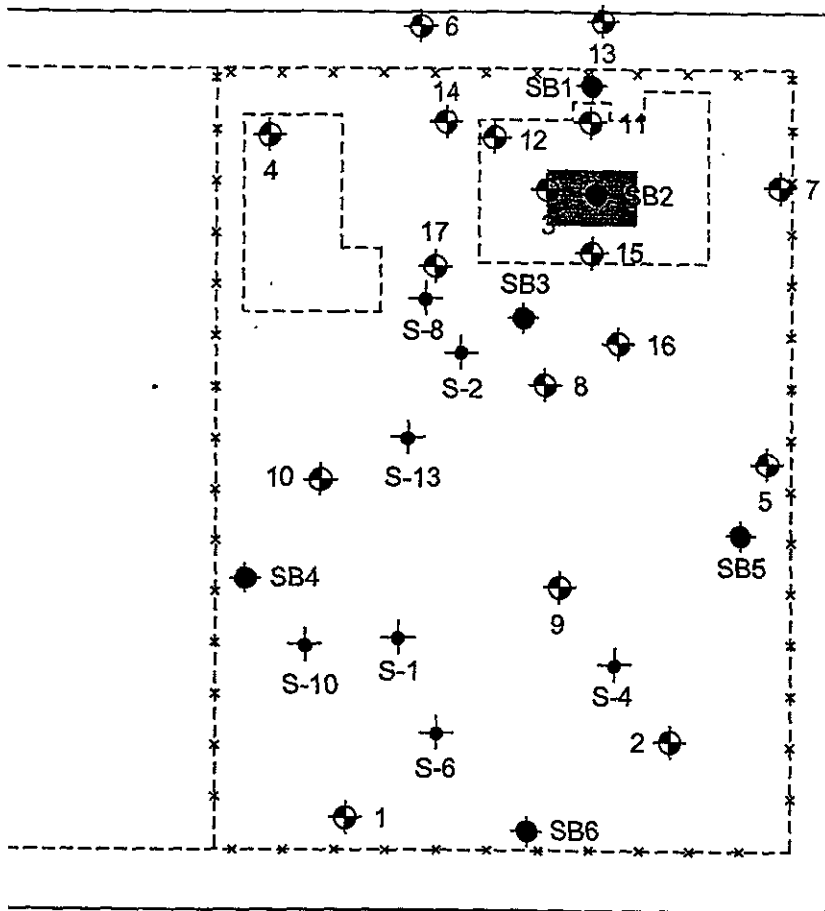
12TH STREET AND MARTIN LUTHER KING JR. WAY
OAKLAND, CALIFORNIA

DRAWN BY CFY	DATE 3/8/01	PLATE 1
JOB NUMBER 272.054	FILE NUMBER A272.054.03	



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12TH STREET



MARTIN LUTHER KING JR. WAY

11TH STREET

LEGEND:



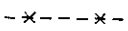
APPROXIMATE LOCATION OF TEST BORING BY SCI



APPROXIMATE LOCATION OF SURFACE SAMPLE BY SCI



SOIL BORING BY OTHERS



FENCE

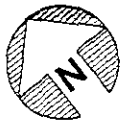
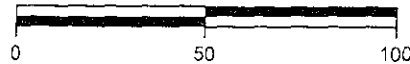


APPROXIMATE LOCATION OF PREVIOUS BASEMENTS



APPROXIMATE LOCATION OF FORMER TANKS

APPROXIMATE SCALE IN FEET



PREVIOUS SAMPLING LOCATIONS

12TH STREET AND MARTIN LUTHER KING JR. WAY
OAKLAND, CALIFORNIA



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DRAWN BY
CFY

DATE
08/21/00

PLATE

2

JOB NUMBER
272.054

FILE NUMBER
A272.054.01

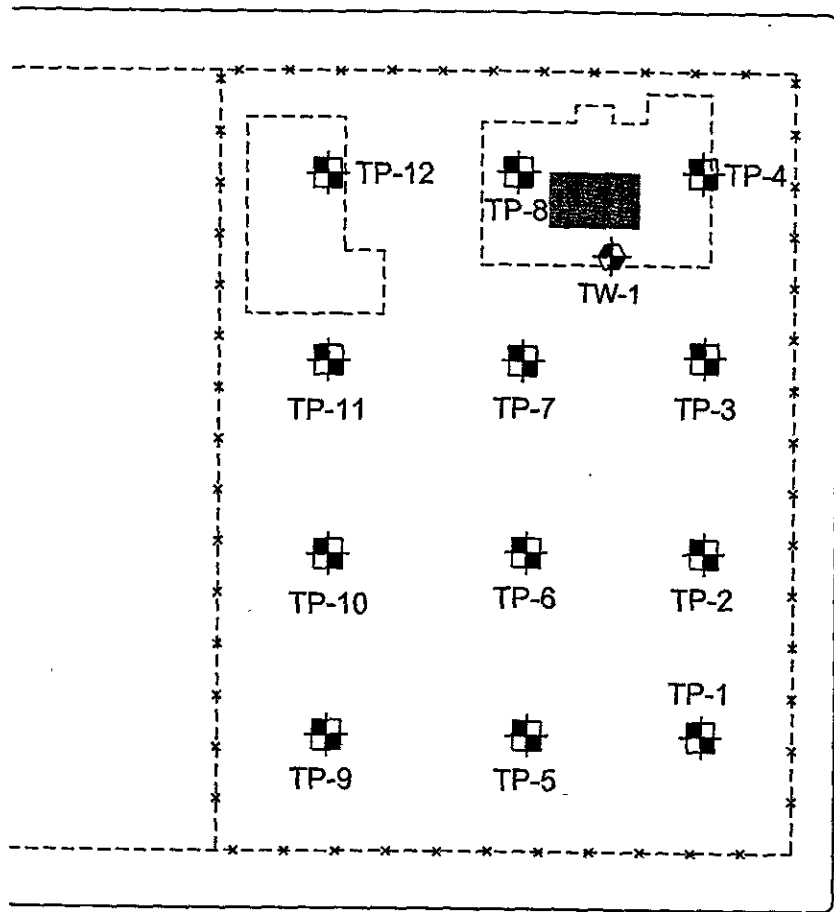


TW-3



TW-2

12TH STREET



MARTIN LUTHER KING JR. WAY

←
APPROXIMATE
GROUNDWATER
FLOW DIRECTION

11TH STREET

LEGEND:



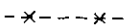
TW-1

APPROXIMATE LOCATION OF MONITORING WELL

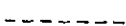


TP-10

APPROXIMATE LOCATION OF TEST PIT
EXCAVATED ON 8/4/00



FENCE

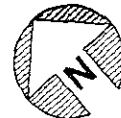
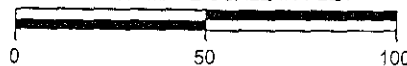


APPROXIMATE LOCATION OF PREVIOUS
BASEMENTS



APPROXIMATE LOCATION OF FORMER
TANKS

APPROXIMATE SCALE IN FEET



SAMPLE LOCATIONS

12TH STREET AND MARTIN LUTHER KING JR. WAY
OAKLAND, CALIFORNIA

DRAWN BY
CFY

DATE
08/21/00

PLATE

3

JOB NUMBER
272.054

FILE NUMBER
A272.054.02



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