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GEOMATRIX

March 12, 1987
Project 1175A

The Martin Company
4256 Hacienda Drive, Suite 101
Pleasanton, California 94566

Attention: Mr. Walt Kaczmarek

SUPPLEMENTAL SOIL QUALITY ASSESSMENT
DAYS INN PARKING LOT
Emeryville, California

Gentlemen:

As requested by Alan McKay, we have made a supplemental assessment of soil quality at the Days Inn parking lot in Emeryville, California. The purpose of this study is to better define the limits of lead contaminated soil previously encountered in the Days Inn parking lot. This report describes the supplemental soil sampling and testing program and gives our opinion regarding the probable limits of the previously encountered lead contaminated soil.

BACKGROUND

As part of assessing soil quality at the 14 acre PIE Freight Terminal site, soil samples were obtained from five borings drilled in the westernmost parking lot at the adjacent Days Inn. The locations of the five borings (EB8 through EB12) are shown in Figure 1 and in greater detail in Figure 2.

The results of laboratory tests performed on selected soil samples from 10 of the 12 borings drilled for the PIE site assessment study showed relatively low concentrations of lead except for a sample recovered at a depth of 2 feet in Boring EB8. The measured concentration of lead in the sample from Boring EB8 was 24,000 mg/kg. A retest of soil from the same sample gave a lead concentration of 11,000 mg/kg. A more detailed description of the field exploration and laboratory testing programs for the PIE Freight Terminal site is given in the January 28, 1987 report.

SOIL SAMPLING AND LABORATORY TESTING

In order to assess the lateral and vertical extent of high lead concentration in the soil, seven borings were drilled in a circular pattern around Boring EB8 as shown in Figure 3. Specifically, four borings (EB13

through EB16) were drilled 5 feet from Boring EB8 and three borings (EB17 through EB19) were drilled 10 feet from Boring EB8. Boring EB18 encountered a concrete slab just below the asphalt surfacing and could not be completed. The boring was relocated (EB18A) and again encountered refusal on a concrete slab. As a result, no samples were obtained from Boring EB18 for testing.

The drilling and sampling was performed by Bay Area Exploration, Inc. on February 26, 1987. The borings were advanced with an 8-inch diameter hollow stem auger. Soil samples were obtained with a 2-inch diameter (ID) modified California drive sampler containing thin brass liners. The sampler was driven 18 inches into the soil at the bottom of the borehole at depths of 1, 2-1/2 and 4 feet in each boring. After the sampler was driven, it was withdrawn from the borehole and the brass tubes removed and sealed with plastic caps and stored for delivery to the laboratory.

Before drilling and sampling started at each borehole, the augers, sampler and sampler liners were steam-cleaned to minimize the possibility of cross-contamination between borings. In addition, the sampler was thoroughly washed and rinsed between samples taken in the same boring.

Soil samples from the six completed borings were delivered to the Brown and Caldwell Analytical Laboratory in Emeryville for testing. Tests for lead were initially requested for the upper two samples from Borings EB13 through EB16. It was planned to review the results of the first eight tests and then decide if additional laboratory testing is required. The concentration of lead detected in all eight samples was well below the established threshold limit so additional testing was not required. Results of the testing program are presented in Table 1 and in Appendix A.

FINDINGS AND CONCLUSIONS

Results of laboratory tests performed on the eight soil samples indicated lead concentrations of between 5 and 71 mg/kg. These values are well below the threshold limit concentration (TTLC) of 1000 mg/kg established by the State of California in Title 22 of the California Administrative Code. In view of the low concentrations of lead encountered in the nearest borings nearest to Boring EB8, no additional tests were ordered for samples from Boring EB17 and EB18.

Results of the supplemental soil sampling and testing program indicate that the high concentration of lead encountered in Boring EB8 is limited in both lateral and vertical extent. Specifically, the lead contaminated soil is limited to a localized area with a radius of less than 5 feet from Boring EB8.

Please call us should questions regarding the supplemental soil quality assessment arise or if we can be of further assistance.

Sincerely yours,
GEOMATRIX CONSULTANTS

Carl Basore

Carl Basore
Principle Engineer

ckk

Attachments
Table 1
Appendix A
Figures 1 through 3

cc: Alan McKay

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TABLE 1

RESULTS OF LABORATORY TESTS ON SOIL SAMPLES

Boring No.	Sample No.	Sample Depth (ft)	Lead (mg/kg)
EB13	1	2	8.9
EB13	2	3.5	39
EB14	1	2	20
EB14	2	3.5	71
EB15	1	2	7.3
EB15	2	3.5	5.4
EB16	1	2	45
EB16	2	3.5	69

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APPENDIX A

RESULTS OF LABORATORY TESTS ON SOIL SAMPLES

BROWN AND CALDWELL LABORATORIES
1255 POWELL STREET EMERYVILLE, CA 94608 • (415) 428-2300

ANALYTICAL REPORT

LOG NO: E87-02-548

Received: 26 FEB 87
Reported: 03 MAR 87

Mr. Carl Basore
Geomatrix Consultants
1 Market Plaza, Spear Tower, Ste.717
San Francisco, California 94105

Project: 1175A

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
02-548-1	EB13-1-3	26 FEB 87
02-548-2	EB13-2-4	26 FEB 87
02-548-3	EB14-1-3	26 FEB 87
02-548-4	EB14-2-4	26 FEB 87
02-548-5	EB15-1-3	26 FEB 87

PARAMETER	02-548-1	02-548-2	02-548-3	02-548-4	02-548-5
Lead, mg/kg	8.9	39	20	71	7.3
Nitric Acid Digestion, Date	02.27.87	02.27.87	02.27.87	02.27.87	02.27.87

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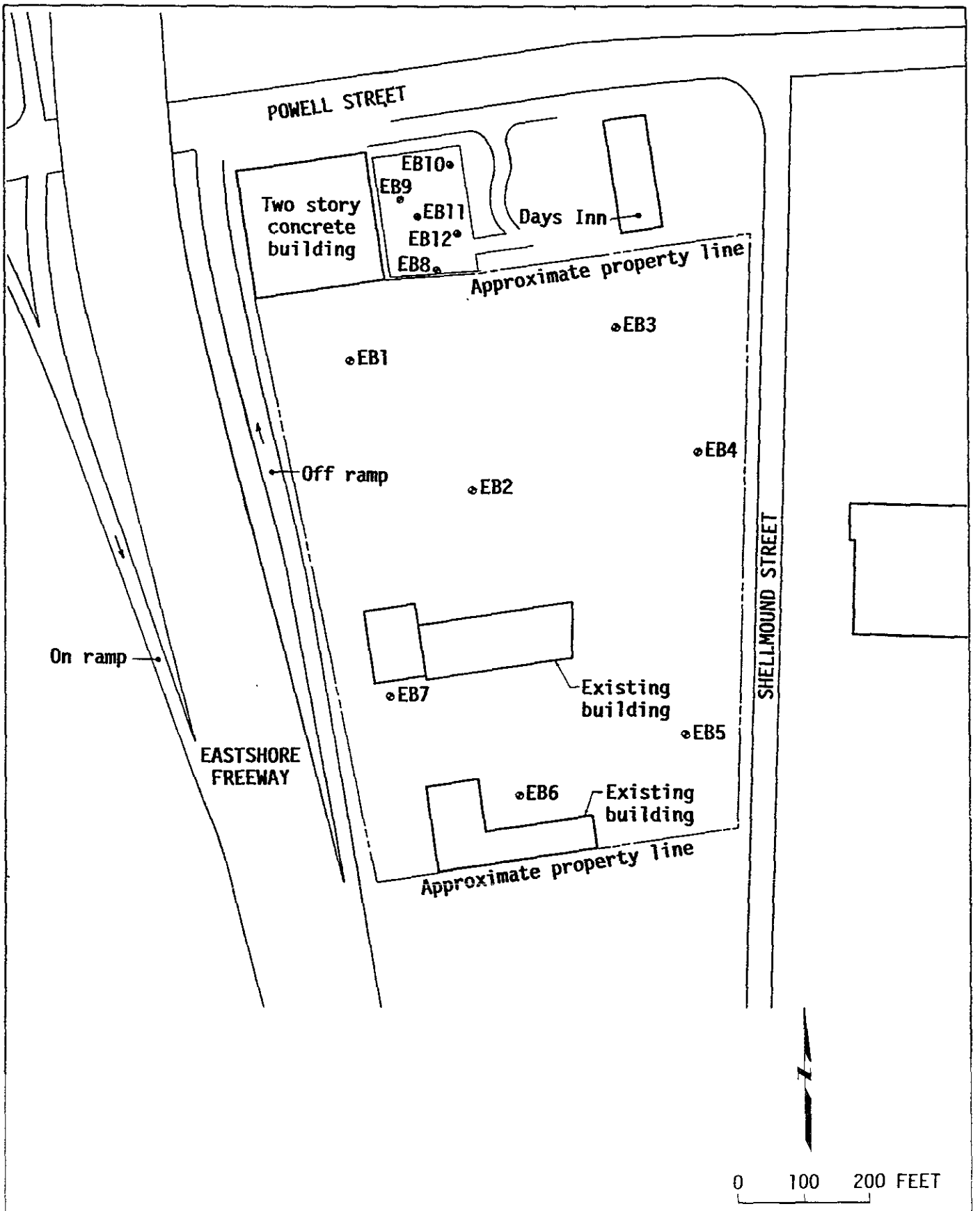
REPORT OF ANALYTICAL RESULTS

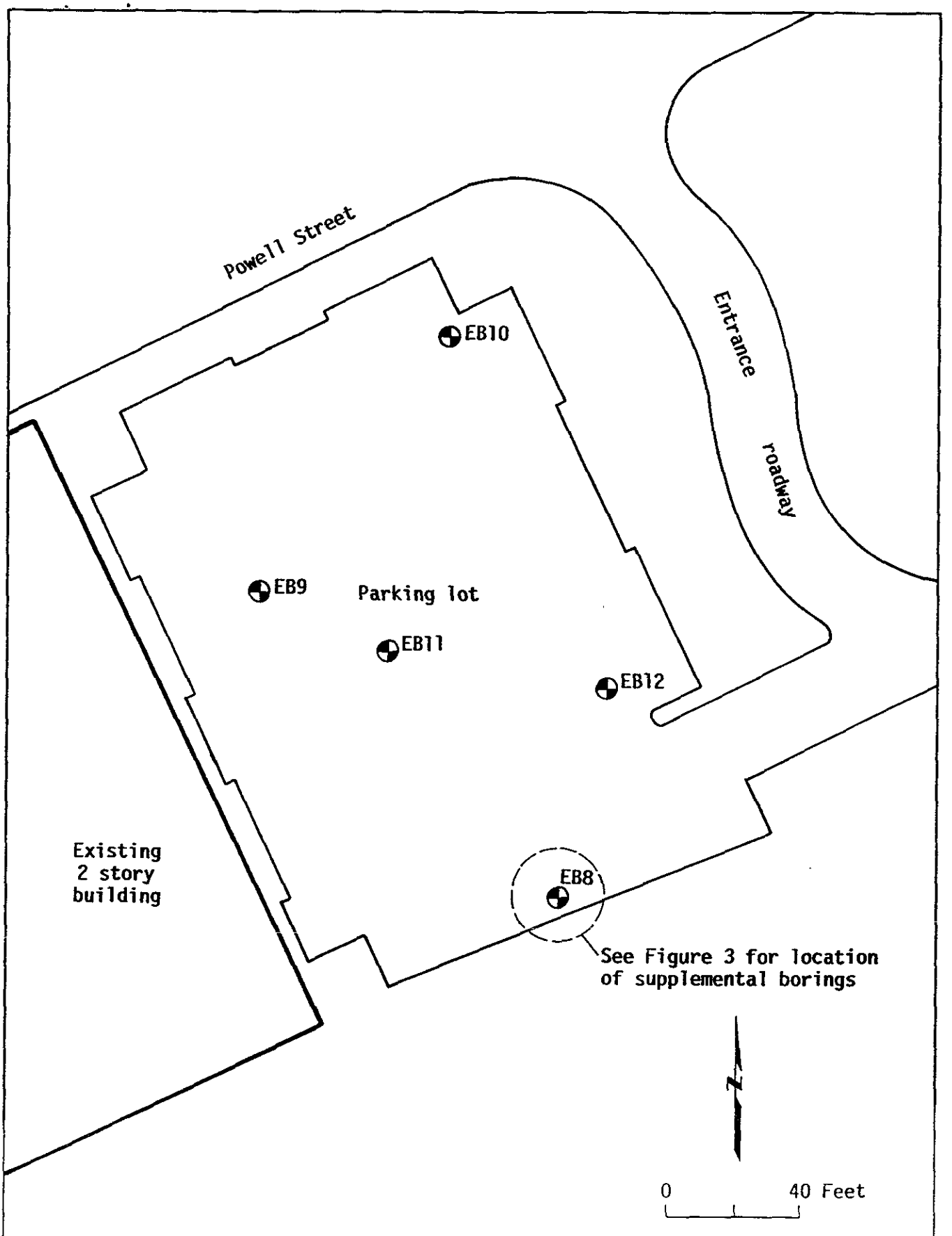
LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
02-548-6	EB15-2-4	26 FEB 87
02-548-7	EB16-1-3	26 FEB 87
02-548-8	EB16-2-4	26 FEB 87

PARAMETER	02-548-6	02-548-7	02-548-8
Lead, mg/kg	5.4	45	69
Nitric Acid Digestion, Date	02.27.87	02.27.87	02.27.87

D. A. McLean, Laboratory Director



Project No 1175A	P.I.E. Site Emeryville, California	SITE AND BORING LOCATION MAP	Figure 1
Geomatrix Consultants			



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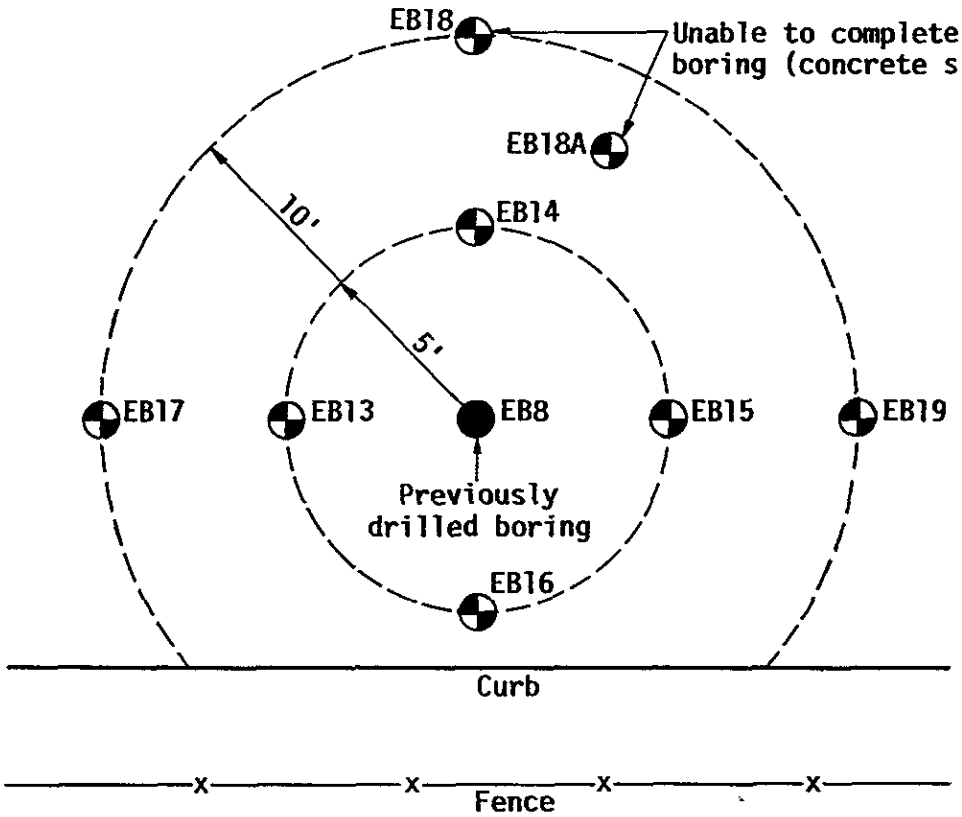
LOCATION OF PREVIOUSLY DRILLED BORINGS
Days Inn Parking Lot
Emeryville, California

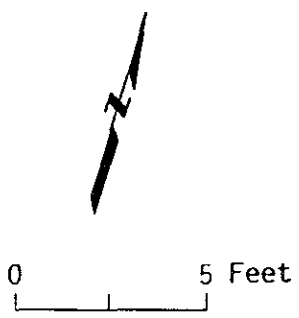
Figure 2

Project No. 1175A



KEY

Supplemental borings drilled for this study



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LOCATION OF SUPPLEMENTAL BORINGS
Days Inn Parking Lot
Emeryville, California

Figure 3

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