

INFORMATION HANDOUT

For Contract No. 11-406404
At 11-SD-8, 54, 67, 94, 125, 163, 805, 905-Var

Identified by
Project ID 1100020325

MATERIALS INFORMATION

[Supplemental Geotechnical Review Report, May 13, 2014](#)

[Geotechnical Review Report, April 10, 2014](#)

[Kleinfelder Aerially Deposited Lead Sampling and Testing Storm Water Mitigation Project on SR-94 and I-805, December 21, 2012](#)

[Group Delta Consultants Aerially Deposited Lead Study SR-94/SR-125 Connector Project, March 5, 2014](#)

[Geocon Site Investigation Report Route 94, March 16, 1999](#)

[Geocon Site Plan Route 8, March 26, 1999](#)

[Limited Asbestos Survey Report, August 21, 2013](#)

[United States Fish and Wildlife Service Informal Section 7 Consultation, January 6, 2014](#)

M e m o r a n d u m*Flex your power!
Be energy efficient!*

To: MR. MANUEL REYES
Project Engineer
District 11 - Traffic Project Development
MS-230

Date: May 13, 2014

File: 11-SD-Various
11-406400
Proj. ID: 1100020325
Guardrail Locs. No. 1 through No. 66

From: DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Geotechnical Services
Office of Geotechnical Design – South 2 MS #5
Design Branch B

Subject: Supplemental Geotechnical Review Report for Guardrail Locations No. 1 through No. 66.

This supplemental Geotechnical Review Report includes the corrosion test results that were not included in the original Geotechnical Review Report, dated April 10, 2014 for the Guardrail Locations No. 1 through No. 66 which was recently sent to your office.

Corrosion

Corrosion testing was conducted in soil samples collected at all 66 guardrail locations. The test results indicate that most of the soil samples are considered noncorrosive. However, soil samples No. 10, No. 20 and No. 35 are considered **corrosive** to foundation elements based on current Caltrans standards. Corrosion test results are presented below in Table 1.

Table 1 - Corrosion Test Summary

Location	SIC Number	pH	Minimum Resistivity (Ohm-cm)	Chloride Content (ppm)	Sulfate Content (ppm)
1	CR20140073	7.53	1416	N/A	N/A
2	CR20140074	8.10	2247	N/A	N/A
3	CR20140075	7.79	2256	N/A	N/A
4	CR20140076	7.76	2559	N/A	N/A
5	CR20140077	7.66	1610	N/A	N/A
6	CR20140078	7.77	1317	N/A	N/A
7	CR20140079	7.42	804	177	84
8	CR20140080	6.60	808	118	226
9	CR20140133	6.88	3627	N/A	N/A
10	CR20140134	4.87	7030	2.4	0
11	CR20140135	7.52	8473	N/A	N/A
12	CR20140136	8.09	4122	N/A	N/A
13	CR20140137	7.69	3003	N/A	N/A
14	CR20140081	6.44	3578	N/A	N/A
15	CR20140138	7.28	2180	N/A	N/A
16	CR20140139	7.72	2599	N/A	N/A
17	CR20140082	7.32	1175	N/A	N/A

Table 1 - Corrosion Test Summary (Continued)

18	CR20140083	7.46	1729	N/A	N/A
19	CR20140084	6.96	1600	N/A	N/A
20	CR20140085	7.38	569	670	69
21	CR20140086	7.69	2123	N/A	N/A
22	CR20140087	7.60	1796	111	97
23	CR20140140	7.29	1362	N/A	N/A
24	CR20140141	7.88	2252	N/A	N/A
25	CR20140142	7.21	2434	N/A	N/A
26	CR20140143	7.90	3313	N/A	N/A
27	CR20140144	7.58	2848	N/A	N/A
28	CR20140145	7.47	1563	N/A	N/A
29	CR20140146	6.68	1638	N/A	N/A
30	CR20140088	7.81	2206	N/A	N/A
31	CR20140089	7.96	1663	N/A	N/A
32	CR20140090	6.88	3495	N/A	N/A
33	CR20140091	7.17	948	183	528
34	CR20140092	7.66	1704	N/A	N/A
35	CR20140093	7.24	858	506	1600
36	CR20140094	7.55	1153	N/A	N/A
37	CR20140095	7.74	2773	N/A	N/A
38	CR20140096	8.13	2223	N/A	N/A
39	CR20140099	8.34	3987	N/A	N/A
40	CR20140100	7.90	1065	95	95
41	CR20140101	8.00	1893	N/A	N/A
42	CR20140102	7.77	2399	N/A	N/A
43	CR20140103	7.89	2174	N/A	N/A
44	CR20140104	7.67	2030	N/A	N/A
45	CR20140105	5.65	4909	10	20
46	CR20140106	7.74	2824	N/A	N/A
47	CR20140107	8.38	2621	N/A	N/A
48	CR20140108	7.34	1873	N/A	N/A
49	CR20140109	7.42	2766	N/A	N/A
50	CR20140110	7.13	3700	N/A	N/A
51	CR20140111	7.90	2700	N/A	N/A
52	CR20140112	8.02	1964	N/A	N/A
53	CR20140113	7.60	6122	N/A	N/A
54	CR20140114	7.78	1508	N/A	N/A
55	CR20140115	8.02	1386	N/A	N/A
56	CR20140116	8.20	1116	N/A	N/A
57	CR20140117	7.53	702	234	65.7
58	CR20140118	8.03	1293	N/A	N/A
59	CR20140119	8.24	1099	N/A	N/A
60	CR20140120	8.05	1888	N/A	N/A
61	CR20140121	7.78	1959	N/A	N/A
62	CR20140122	8.25	3828	N/A	N/A
63	CR20140123	8.27	2030	N/A	N/A
64	CR20140124	8.21	2209	N/A	N/A
65	CR20140125	8.54	1876	N/A	N/A
66	CR20140126	8.27	1443	N/A	N/A

Note: Caltrans currently defines a corrosive environment as an area where the soil has either a chloride concentration of 500 ppm or greater, a sulfate concentration of 2000 ppm or greater, or has a pH of 5.5 or less. With the exception of MSE walls, soil and water are not tested for chlorides and sulfates if the minimum resistivity is greater than 1,000 ohm-cm.

MR. MANUEL REYES
May 13, 2014
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SUPPLEMENTAL GEOTECHNICAL REVIEW
LOCS. NO. 1 THROUGH NO. 66
11-406400
PID: 1100020325

Any questions regarding the above corrosion test results should be directed to the attention of Fernando De Haro, (916) 227-4556, or Mark DeSalvatore, (916) 227-5391, at the Office of Geotechnical Design-South 2, Branch B.

Prepared by: Date: 5/13/2014



Fernando De Haro, R.C.E., 65281
Transportation Engineer
Office of Geotechnical Design-South 2
Design Branch B

cc: Richard Estrada – District 11 (Project Manager)
Art Padilla – District 11 (Materials Engineer)
Lauren Kemp – District 11 Environmental
Angela Ezekiel – PCE
Mark DeSalvatore – OGDS-2
Abbas Abghari – OGDS-2 

Memorandum

*Flex your power!
Be energy efficient!*

To: MR. MANUEL REYES
Project Engineer
District 11 - Traffic Project Development
MS-230

Date: April 10, 2014

File: 11-SD-Various
11-406400
Proj. ID: 1100020325
Guardrail Locs. No. 1 through No. 66

From: DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Geotechnical Services
Office of Geotechnical Design – South 2 MS #5
Design Branch B

Subject: Geotechnical Review for Guardrail Locations No. 1 through No. 66.

Pursuant to a request by District 11 Traffic Project Development, this report presents a Geotechnical Review of the site of the proposed upgrade of the guardrails at Locations No. 1 through No. 66, located on various State Routes including SR-54, SR-67, SR-78, SR-94, SR-125, SR-163, I-805, and SR-905 in San Diego County. The following Geotechnical Review is based on information provided by District 11, as well as “As-built” information and field visit in March 2014.

Project Description

District 11 Traffic Project Development is preparing a Project Report that will address safety concerns along SR-54, SR-67, SR-78, SR-94, SR-125, SR-163, I-805 and SR-905 at various postmiles. The project proposes to upgrade nonstandard bridge rails to current standards. The proposed improvements are to remove metal beam guard railings (MBGR), install concrete Anchor Blocks, install Midwest Guardrail System (MGS) transition railings (Type WB-31), install Midwest Guardrail System railings, install concrete barriers (Type 60), place new or revise existing drainage systems, relocate signs and sign posts, and pavement rehabilitation.

Corrosion

No corrosion information currently exists for the soils underlying the proposed guard rail locations. Soil samples from the site were collected during our field visit, and will be tested for corrosion potential. The results of those tests will be forwarded to your office when available.

Geotechnical Findings

The fill material underlying the proposed guardrail locations No. 1 through No. 66 should be adequate to support the anchor block and guard rail systems. The fill material was granular, consisting mainly of silty sand with various amounts of gravel. No unusual conditions were observed during our field visit. However, we have some observations to be considered when installing the anchor blocks. The observed comments are presented in Table 1 below.

Table 1 – Guardrail Locations - Field Observations

Location	Direction	Description	Route	PM	Comments
1	WB	Left Side WB Rte 54 to SB Rte 805 Conn.	54	1.93	No Unusual Conditions
2	WB	Right Side WB Rte 54 to SB Rte 805 Conn.	54	1.93	No Unusual Conditions
3	EB	Right Side 0.15 miles east of Sweetwater Rd. OC	54	2.50	No Unusual Conditions
4	EB	Right Side 0.20 miles east of Sweetwater Rd. OC	54	2.50	No Unusual Conditions
5	WB	Right Side 0.2 miles west of Reo Dr. OC	54	2.50	No Unusual Conditions
6	EB	Right Side 0.5 miles east of Reo Dr. OC	54	3.90	No Unusual Conditions
7	EB	Right Side 0.1 miles west of Woodman St. OC	54	4.10	No Unusual Conditions
8	EB	Right Side 0.07 miles west of Briarwood Rd. OC	54	4.85	No Unusual Conditions
9	WB	Right Side Old Greenfield Dr. OC	67	R0.71	No Unusual Conditions
10	EB	Right Side Winter Gardens Blvd. OC	67	R4.83	No Unusual Conditions
11	WB	Left Side Winter Gardens Blvd. OC	67	R4.83	No Unusual Conditions
12	WB	Left Side WB Rte 67 On-Ramp from Industry Rd.	67	R4.90	No Unusual Conditions
13	WB	Right Side WB Rte 67 On-Ramp from Industry Rd.	67	R4.90	No Unusual Conditions
14	EB	Right Side El Camino Real EB Exit Ramp	78	1.31	Stormwater runs across existing guardrail at end of concrete barrier. Soil erosion is seen under the sidewalk
15	WB	Left Side WB Rte 94 to NB Rte 805	94	4.15	No Unusual Conditions
16	WB	Left Side WB Rte 94 to SB Rte 805	94	4.22	No Unusual Conditions
17	EB	Right Side Kelton Rd. OC	94	5.79	No Unusual Conditions
18	WB	Right Side Kelton Rd. OC	94	5.79	No Unusual Conditions
19	EB	Right Side Broadway On-Ramp OC	94	7.83	No Unusual Conditions
20	EB	Right Side 0.12 miles east of Massachusetts Ave. UC	94	8.39	No Unusual Conditions
21	EB	Right Side Grove St. UP	94	9.23	No Unusual Conditions
22	WB	Right Side Grove St. OC	94	9.25	No Unusual Conditions
23	EB	Right Side Bancroft Dr. UC	94	R11.08	No Unusual Conditions
24	WB	Right Side Bancroft Dr. UC	94	R11.10	No Unusual Conditions
25	EB	Right Side Kenwood Dr. UC	94	R11.80	No Unusual Conditions
26	WB	Right Side Kenwood Dr. UC	94	R11.83	Stormwater runs across existing guardrail at end of concrete barrier
27	EB	Right Side Barcelona St. UC	94	R12.33	No Unusual Conditions
28	WB	Right Side Barcelona St. UC	94	R12.33	No Unusual Conditions
29	NB	Right Side Mariposa St. OC	125	14.12	No Unusual Conditions
30	NB	Right Side Sixth St. On-Ramp UC	163	3.81	No Unusual Conditions
31	NB	Right Side Genesee Ave. UC	163	5.79	No Unusual Conditions
32	SB	Right Side Genesee Ave. UC	163	5.83	Electrical box near concrete barrier
33	NB	Left Side NB 163/NB 805 Connector	163	6.85	No Unusual Conditions
34	NB	Right Side NB 163/NB 805 Separation	163	6.96	No Unusual Conditions
35	SB	Right Side SB 163/ 805 Connector	163	7.19	No Unusual Conditions
36	SB	Left Side Rte 805/5 Separation	805	0.55	No Unusual Conditions
37	NB	Left Side San Ysidro Blvd. UC	805	0.65	No Unusual Conditions
38	NB	Right Side San Ysidro Blvd. UC	805	0.65	Stormwater runs across existing guardrail at end of concrete barrier
39	SB	Right Side San Ysidro Blvd. UC	805	0.69	No Unusual Conditions
40	SB	Right Side SB Rte 805 to EB Rte 905 Conn. OC	805	2.06	No Unusual Conditions
41	SB	Left Side SB Rte 805 to EB Rte 905 Conn. OC	805	2.06	Severe soil erosion seen along the existing guardrail
42	NB	Right Side Main St. UC	805	3.67	No Unusual Conditions

Location	Direction	Description	Route	PM	Comments
43	SB	Right Side Main St. UC	805	3.67	Electrical box located at end of concrete barrier
44	SB	Right Side Naples St. UC	805	5.54	No Unusual Conditions
45	SB	Right Side SB Exit to EB Rte 54 Separation	805	8.90	No Unusual Conditions
46	SB	Right Side SB On-Ramp From Sweetwater Rd.	805	8.93	No Unusual Conditions
47	NB	Left Side WB Rte 54 to NB Rte 805 at Euclid Ave. UC	805	9.19	No Unusual Conditions
48	NB	Right Side WB Rte 54 to NB Rte 805 at Euclid Ave. UC	805	9.19	No Unusual Conditions
49	NB	Right Side NB Rte 805 to WB Rte 94 Conn.	805	13.44	No Unusual Conditions
50	NB	Right Side NB On-Ramp from Home Ave.	805	13.95	No Unusual Conditions
51	NB	Left Side NB On-Ramp from Home Ave.	805	13.95	No Unusual Conditions
52	NB	Left Side NB Rte 805 to WB Rte 8 Conn. OC	805	17.49	No Unusual Conditions
53	SB	Right Side Mission Valley Viaduct	805	18.20	No Unusual Conditions
54	SB	Right Side EB direction on Clairemont Mesa Blvd.	805	22.56	Electrical box near concrete barrier
55	NB	Left Side NB Rte 805 to WB Rte 52 Conn. OC	805	23.49	No Unusual Conditions
56	EB	Left Side Del Sur Blvd. UC	905	3.82	No Unusual Conditions
57	WB	Left Side Del Sur Blvd. UC	905	4.13	No Unusual Conditions
58	WB	Left Side Picador Blvd. UC	905	4.41	No Unusual Conditions
59	WB	Right Side Picador Blvd. UC	905	4.41	Electrical conduit (~4") at end of concrete barrier may need to be relocated.
60	EB	Left Side Picador Blvd. UC	905	4.41	No Unusual Conditions
61	EB	Right Side Picador Blvd. UC	905	4.41	No Unusual Conditions
62	EB	Left Side Rte 905 / Rte 805 Separation	905	5.14	No Unusual Conditions
63	EB	Left Side EB Rte 905 / NB Rte 805 Conn.	905	5.14	No Unusual Conditions
64	EB	Right Side EB Rte 905 / NB Rte 805 Conn.	905	5.14	No Unusual Conditions
65	WB	Left Side Rte 905 / Rte 805 Separation	905	5.14	No Unusual Conditions
66	WB	Right Side WB Rte 905 / SB Rte 805 Conn.	905	5.14	No Unusual Conditions

The findings contained in this report are based on specific project information that has been provided by District 11 – Traffic Project Development. If any conceptual changes are made during final project design, the Office of Geotechnical Design-South 2, Design Branch B, should review those changes to determine if these findings are still applicable. Any questions regarding the above findings should be directed to the attention of Erich Neupert, (916) 227-4565, or Mark DeSalvatore, (916) 227-5391, at the Office of Geotechnical Design-South 2, Branch B.

MR. MANUEL REYES
April 10, 2014
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Guardrail Locs. No. 1 through No. 66
11-406400
PID: 1100020325

Prepared by: Date: 4/10/2014

Reviewed by: Date: 4/10/14



Fernando De Haro, R.C.E., 65281
Transportation Engineer
Office of Geotechnical Design-South 2
Design Branch B



Erich Neupert, P.G., 8137
Engineering Geologist
Office of Geotechnical Design-South 2
Design Branch B

cc: Richard Estrada – District 11 (Project Manager)
Art Padilla – District 11 (Materials Engineer)
Lauren Kemp – District 11 Environmental
Angela Ezekiel – PCE
Mark DeSalvatore – OGDS-2 *FDH for MD*
Abbas Abghari – OGDS-2



December 21, 2012
Project No. 129349

Ms. Diane Vermeulen, P.E.
Department of Transportation, District 11
Environmental Engineering
4050 Taylor Street, MS-242
San Diego, California 92110

**Subject: Aerially Deposited Lead Sampling and Testing
Storm Water Mitigation Project on SR-94 and I-805
Caltrans District 11 EA282500
San Diego, California
Contract 11A1996, Task Order 6**

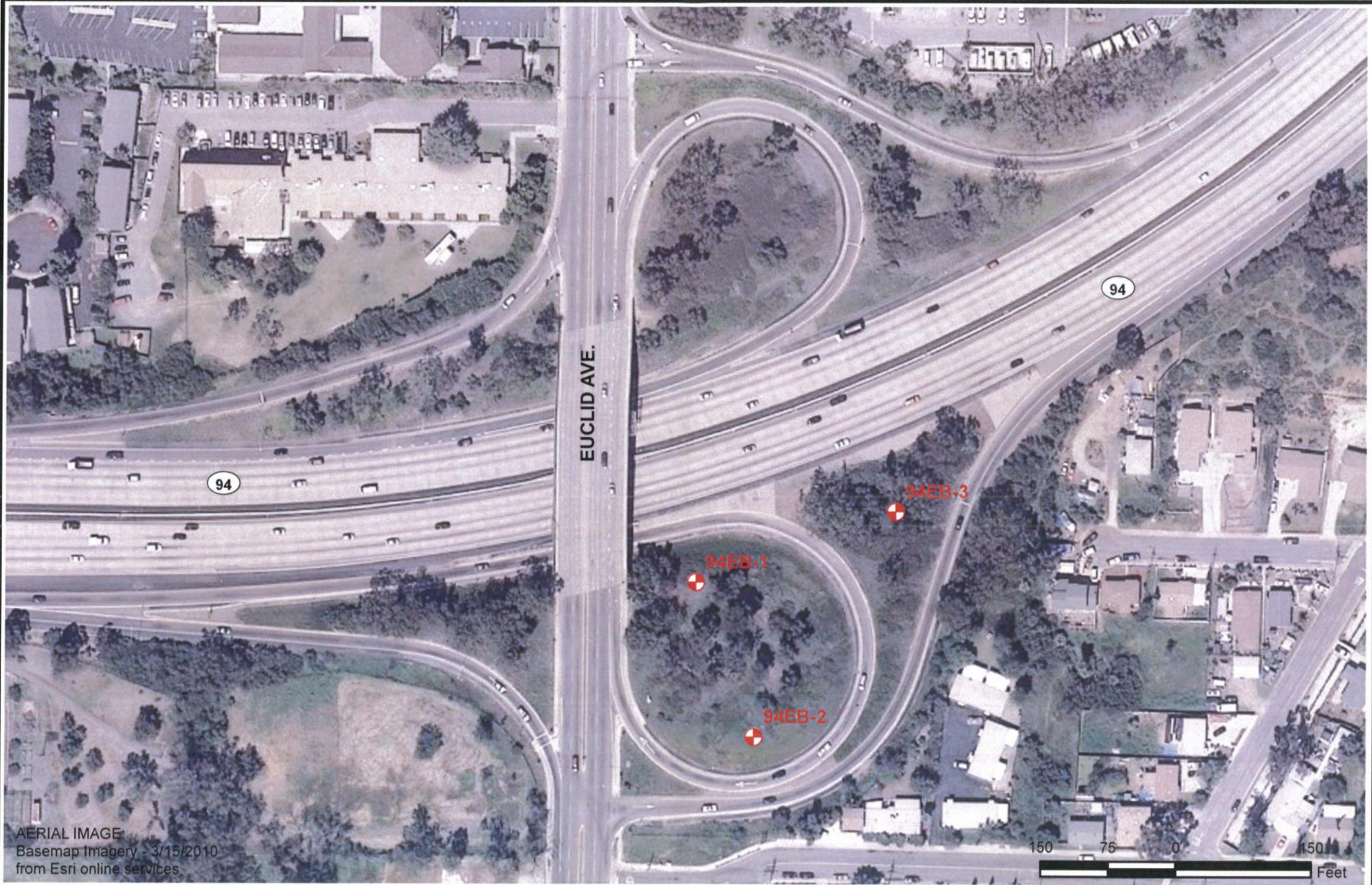
Dear Ms. Vermeulen:

This report summarizes the field activities performed for collecting shallow soil samples adjacent to roadway shoulders for aerially deposited lead (ADL). Soil samples for ADL analysis were collected on November 13, 2012 along State Road 94 (SR-94) and Interstate 805 (I-805) at locations near Euclid Avenue, Massachusetts Avenue, and College Avenue in the City of San Diego, San Diego County, California for the State of California Department of Transportation (Caltrans) (Site, Plate 1). The purpose of this investigation was to evaluate the potential of ADL presence within shallow exposed soil (i.e. upper three feet) at Caltrans select planned storm water mitigation strategy locations within the project limits. This work was performed for Caltrans, consistent with Contract No. EA-282500, Task Order No. 6.

Kleinfelder performed the following field activities during the ADL investigation:

- Obtained an encroachment permit prepared by a representative of Caltrans. Kleinfelder prepared a Stormwater Pollution Prevention Plan as a supporting document of the encroachment permit. Prior to the start of work, Caltrans was notified of the planned work on the unpaved shoulders and median of SR-94 and I-805.
- Prepared a Site-specific work plan and prepared a Site-specific health and safety plan.
- Marked soil sample locations with 3-foot lathes and flagging material. Underground Service Alert (USA) was contacted 48 hours in advance of subsurface sampling activities to mark out utilities that may be present in the

Date: 12/18/2012 User: scontreras Name: SLC12A108



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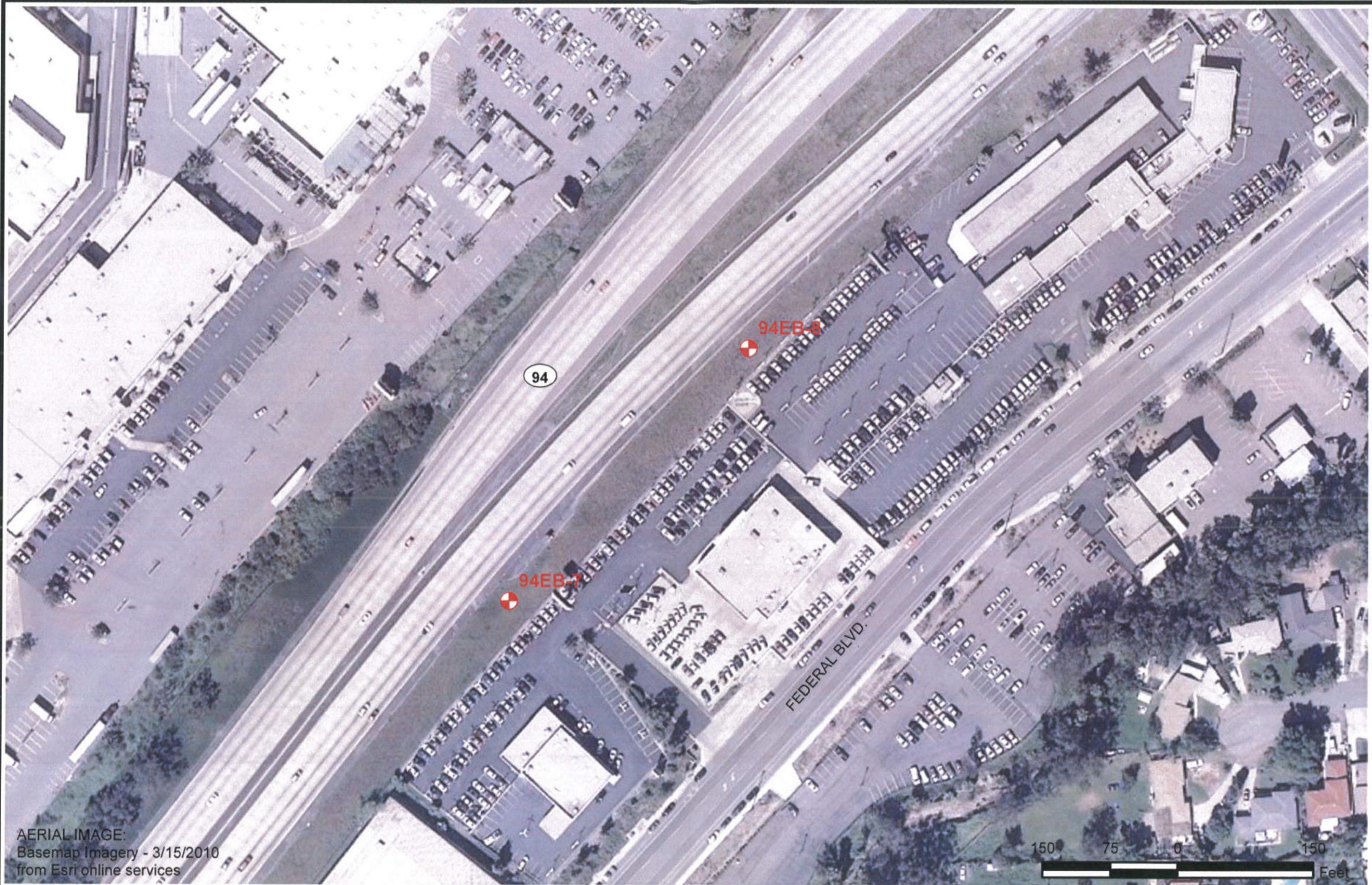


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SAMPLE LOCATION MAP EB SR-94 AT EUCLID AVE. LOOP OFF RAMP
AERIALY DEPOSITED LEAD SAMPLING AND TESTING STORM WATER MITIGATION PROJECT, SR-94/I-805 CALTRANS DISTRICT 11, EA 282500 SAN DIEGO, CALIFORNIA

PLATE
2

Date: 12/18/2012 User: sconteras Name: SLC12A109



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 APPROXIMATE SAMPLE LOCATION

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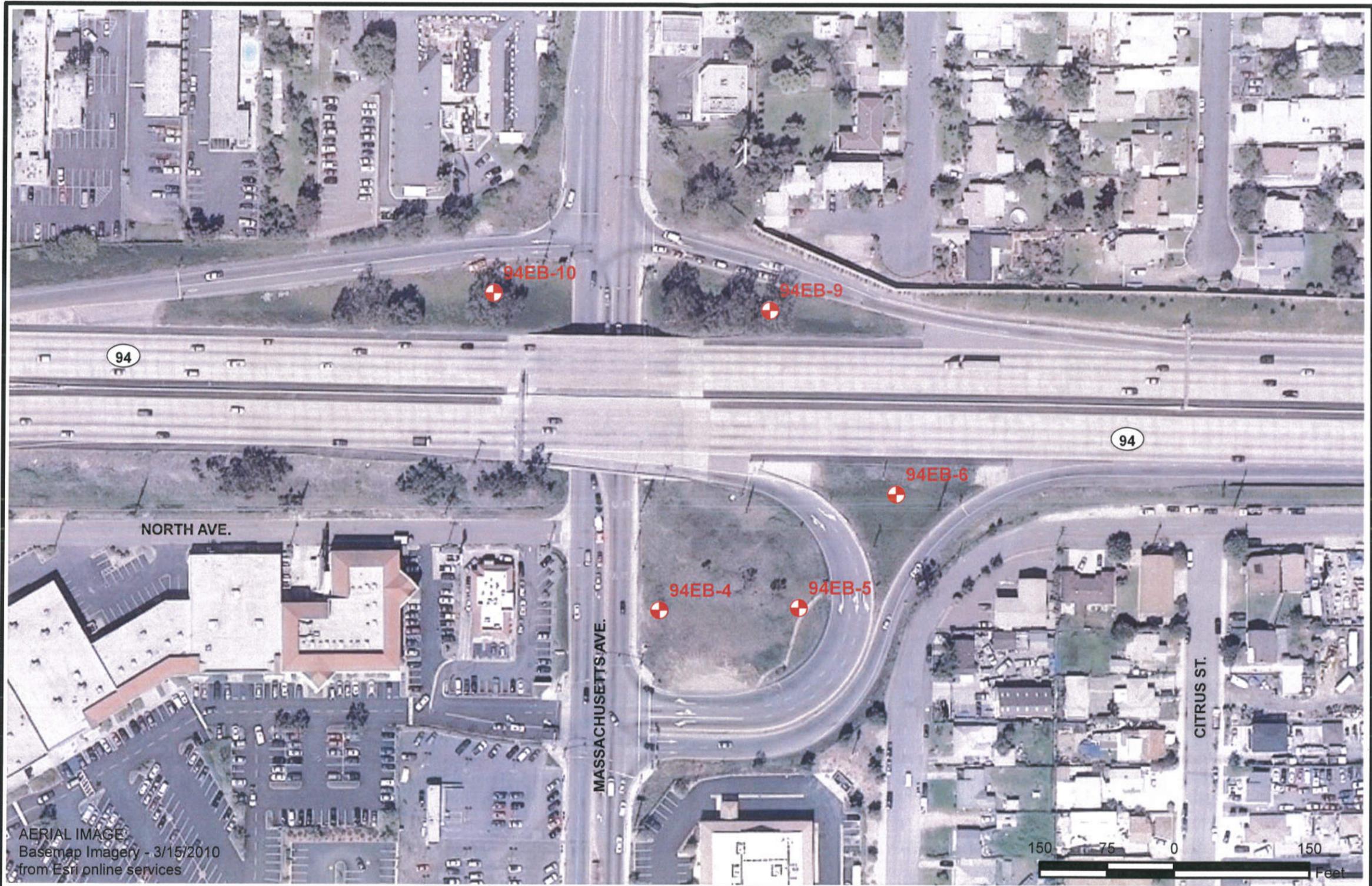
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SAMPLE LOCATION MAP EB SR-94 AT COLLEGE AVE.

AERIALY DEPOSITED LEAD SAMPLING AND TESTING
STORM WATER MITIGATION PROJECT, SR-94/I-805
CALTRANS DISTRICT 11, EA 282500
SAN DIEGO, CALIFORNIA

PLATE

3



Date: 12/18/2012 User: scontreras Name: SLC12A110

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**SAMPLE LOCATION MAP
 SR-94 AT MASSACHUSETTS AVE.**

AERIALY DEPOSITED LEAD SAMPLING AND TESTING
 STORM WATER MITIGATION PROJECT, SR-94/I-805
 CALTRANS DISTRICT 11, EA 282500
 SAN DIEGO, CALIFORNIA

PLATE
4

Table 1
Soil Analytical Results Summary
ADL Sampling SR-94 and I-805
CALTRANS EA 11-282500



California Hazardous Waste Criteria ¹						1,000	5.0			
RCRA Hazardous Waste Criteria ²									5.0	
CALTRANS Variance Criteria ³						Condition 9.c/9.e		1.50		5.5
						Condition 9.d/9.e		150.00		5.0 - 5.5
Chemical Name						Lead ^{5,6}	Lead	Lead	Lead	pH
Method						SW6010B	SW6010B	SW6010B	SW6010B	SW9045D
Preparation						TTLIC	STLC (WET)	STLC (WET_DI)	TCLP	--
Units						mg/kg	mg/L	mg/L	mg/L	pH units
Location Name	Sample Name	Sample Type	Date	Depth (feet)	Refusal (Yes / No)					
94EB-1	94EB-1-0.5	N	11/13/2012	0.5	No	38.2	2.13	NA	NA	NA
	94EB-1-1.5	N	11/13/2012	1.5	No	24.5	0.648	NA	NA	NA
94EB-2	94EB-2-0.5	N	11/13/2012	0.5	No	118	3.44	< 0.100 U	< 0.100 U	NA
	94EB-2-1.5	N	11/13/2012	1.5	No	19.3	2.20	NA	NA	NA
	94EB-2-100	FD	11/13/2012	1.5	No	32.5	1.29	NA	NA	NA
94EB-3	94EB-3-0.5	N	11/13/2012	0.5	No	63.7	2.85	< 0.100 U	NA	NA
94EB-4	94EB-4-0.5	N	11/13/2012	0.5	No	15.0	0.701	NA	NA	NA
	94EB-4-100	FD	11/13/2012	0.5	No	34.8	1.47	NA	NA	NA
94EB-5	94EB-5-0.5	N	11/13/2012	0.5	No	95.2	6.27	0.136	NA	NA
	94EB-5-1.5	N	11/13/2012	1.5	No	4.90	0.200	NA	NA	NA
94EB-6	94EB-6-0.5	N	11/13/2012	0.5	No	51.7	3.53	< 0.100 U	NA	NA
	94EB-6-3.0	N	11/13/2012	3	No	8.54	0.223	NA	NA	7.81
94EB-7	94EB-7-0.5	N	11/13/2012	0.5	No	27.8	1.57	NA	NA	NA
94EB-8	94EB-8-0.5	N	11/13/2012	0.5	No	50.8	3.78	< 0.100 U	NA	NA
94EB-9	94EB-9-0.5	N	11/13/2012	0.5	No	7.59	0.285	NA	NA	NA
	94EB-9-3.0	N	11/13/2012	3	No	4.23	< 0.100 U	NA	NA	NA
94EB-10	94EB-10-0.5	N	11/13/2012	0.5	No	151	8.10	0.173	0.104	5.49
	94EB-10-3.0	N	11/13/2012	3	No	1.51	< 0.100 U	NA	NA	NA

Notes:

- 1 - California hazardous waste criteria from California Code of Regulations 66261.21-24
- 2 - RCRA hazardous waste criteria from California Code of Federal Regulations, Title 40, Part 261.24
- 3 - CALTRANS specific criteria for ADL impacted soil and re-use within CALTRANS right-of-way (CALEPA Variance V09HQSCD006, dated July 1, 2009)
- 4 - Refusal was noted from approximately 0.5 to 1 foot below the sample depth
- 5 - DI WET analysis performed if total lead was equal to or greater than 50 mg/kg or soluble (WET) analysis greater than 5 mg/L.
- 6 - TCLP analysis performed if total lead was equal to or greater than 100 mg/kg
- FD - field duplicate sample
- mg/kg - milligrams per kilogram
- mg/L - milligrams per liter
- NA - not analyzed
- N - normal environmental sample
- TCLP - USEPA toxicity characteristic leaching procedure
- STLC - soluble threshold limit concentration
- TTLIC - total threshold limit concentration
- U - chemical was not detected at or above the value listed
- WET - California waste extraction test using citric acid
- WET-DI - California waste extraction test using deionized water

**AERIALY DEPOSITED LEAD STUDY
SR-94/SR-125 CONNECTOR PROJECT
LA MESA AND SPRING VALLEY, CALIFORNIA**

Prepared for:

**TY LIN INTERNATIONAL
404 Camino Del Rio South, Suite 700
San Diego, CA 92108**

Prepared By:

**GROUP DELTA CONSULTANTS, INC.
32 Mauchly, Suite B
Irvine, California 92618
Phone 949.450.2100
Fax 949.450.2108**



**Group Delta Project No. EN010
March 5, 2014**



B-25		
Depth (ft)	Total Lead (mg/kg)	STLC-WET (mg/L)
0-0.5	4.61	0.18
1-1.5	8.28	0.18
2-2.5	7.3	0.05

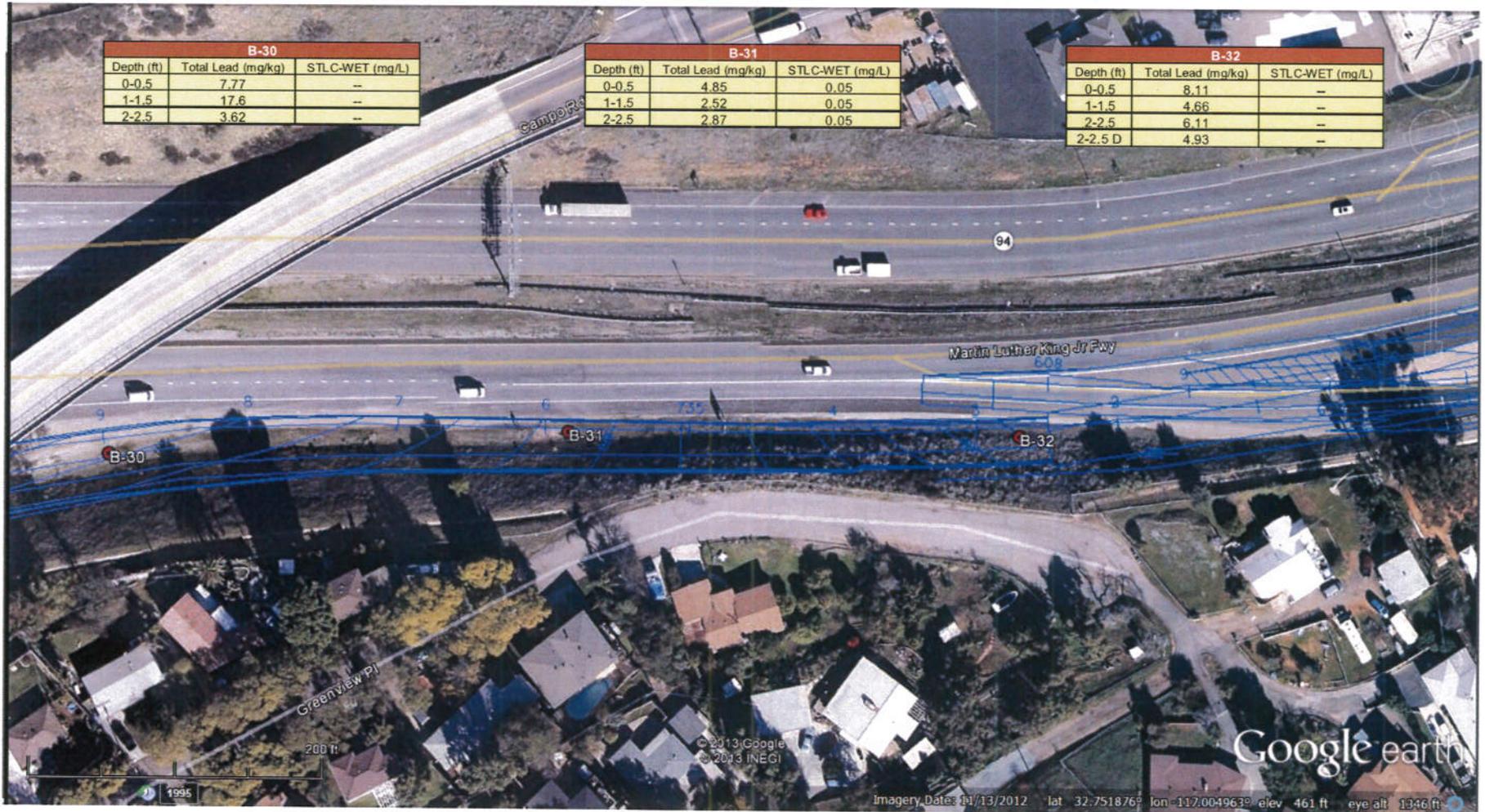
B-27		
Depth (ft)	Total Lead (mg/kg)	STLC-WET (mg/L)
0-0.5	8.04	--
1-1.5	7.69	--
2-2.5	2.28	--

B-28		
Depth (ft)	Total Lead (mg/kg)	STLC-WET (mg/L)
0-0.5	1.01	0.05
1-1.5	2.41	0.05
2-2.5	0.729	0.05

B-29		
Depth (ft)	Total Lead (mg/kg)	STLC-WET (mg/L)
0-0.5	61.80	1.64
0-0.5 D	15.7	--
1-1.5	10.3	--
1-1.5 D	6.68	--
2-2.5	4.14	--
2-2.5 D	7.18	--

Notes:
 mg/kg – Milligrams per kilogram
 mg/L – Milligrams per liter
 STLC-WET – Soluble Threshold Limit Concentration – Waste Extraction Test (Citric Acid)

	GROUP DELTA CONSULTANTS, INC. ENGINEERS AND GEOLOGISTS 32 MAUCHLY, SUITE B IRVINE, CA 92618 (949) 450-2100	FIGURE NUMBER 2h
	PROJECT NAME: SR-94/SR-125 CONNECTOR PROJECT	PROJECT NUMBER EN-010
	ADL SAMPLE LOCATION MAP	



Notes:
 mg/kg – Milligrams per kilogram
 mg/L – Milligrams per liter
 STLC-WET – Soluble Threshold Limit Concentration – Waste Extraction Test (Citric Acid)

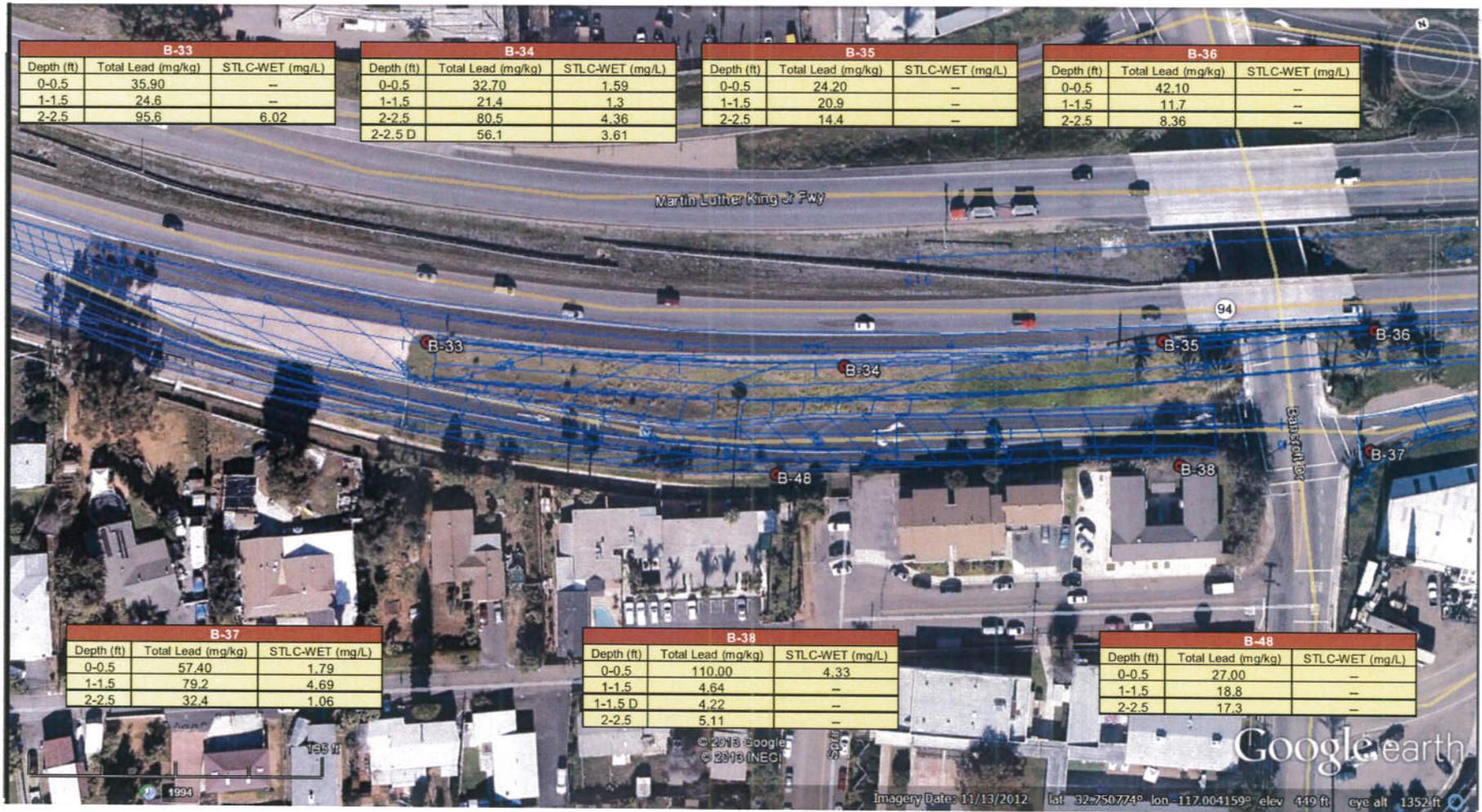


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FIGURE NUMBER
2i
 PROJECT NUMBER
 EN-010

PROJECT NAME
 SR-94/SR-125
 CONNECTOR PROJECT

ADL SAMPLE LOCATION MAP



Notes:
 mg/kg – Milligrams per kilogram
 mg/L – Milligrams per liter
 STLC-WET – Soluble Threshold Limit Concentration – Waste Extraction Test (Citric Acid)



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 ENGINEERS AND GEOLOGISTS
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 IRVINE, CA 92618 (949) 450-2100
 PROJECT NAME
 SR-94/SR-125
 CONNECTOR PROJECT

FIGURE NUMBER
2j
 PROJECT NUMBER
 EN-010

ADL SAMPLE LOCATION MAP



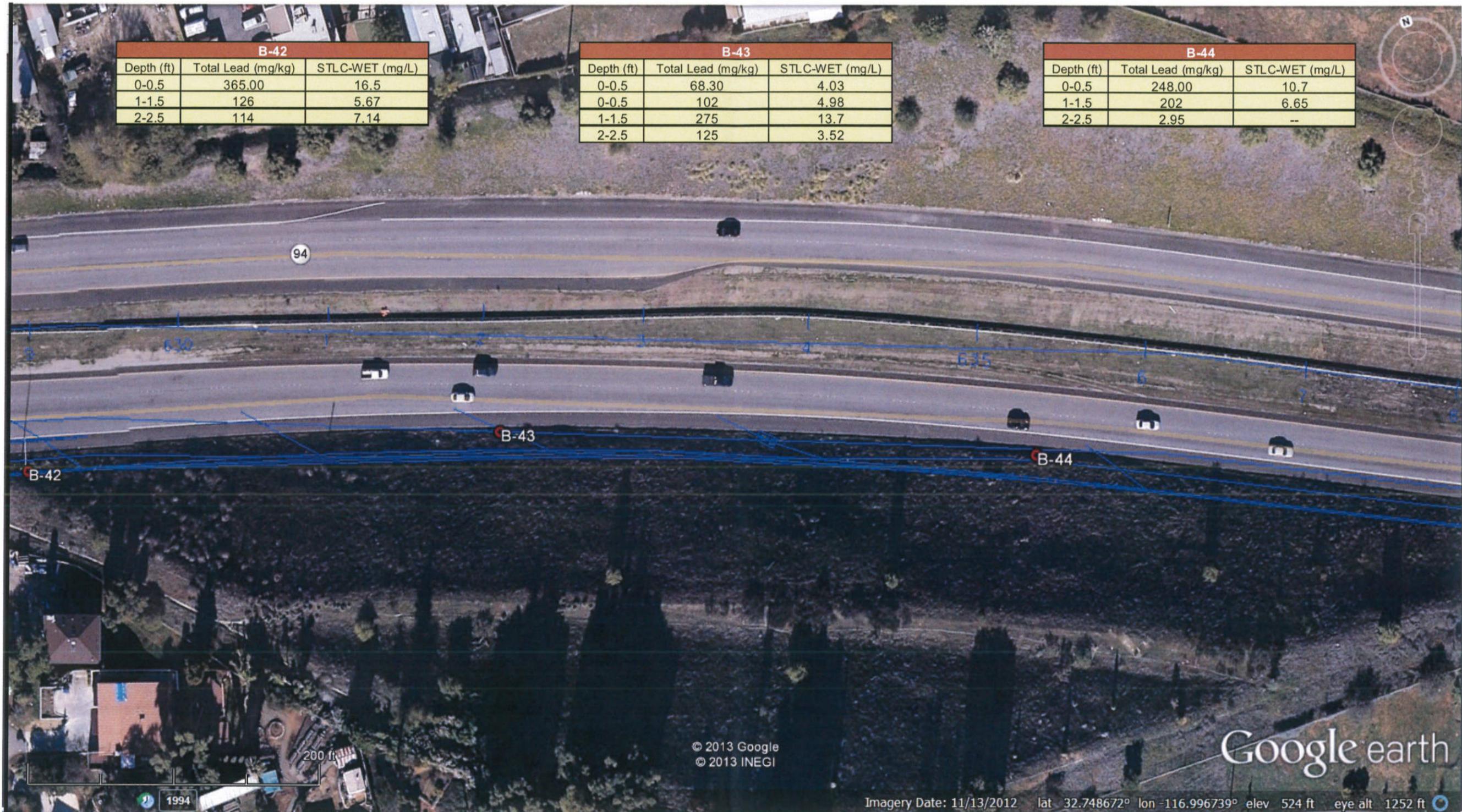
Notes:
 mg/kg – Milligrams per kilogram
 mg/L – Milligrams per liter
 STLC-WET – Soluble Threshold Limit Concentration – Waste Extraction Test (Citric Acid)



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FIGURE NUMBER
2k
 PROJECT NUMBER
EN-010

PROJECT NAME
 SR-94/SR-125
 CONNECTOR PROJECT
ADL SAMPLE LOCATION MAP



Notes:

mg/kg – Milligrams per kilogram

mg/L – Milligrams per liter

STLC-WET – Soluble Threshold Limit Concentration – Waste Extraction Test (Citric Acid)



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PROJECT NAME
 SR-94/SR-125
 CONNECTOR PROJECT

FIGURE NUMBER

21

PROJECT NUMBER
 EN-010

ADL SAMPLE LOCATION MAP



Notes:
 mg/kg – Milligrams per kilogram
 mg/L – Milligrams per liter
 STLC-WET – Soluble Threshold Limit Concentration – Waste Extraction Test (Citric Acid)



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PROJECT NAME
 SR-94/SR-125
 CONNECTOR PROJECT

FIGURE NUMBER
2m
 PROJECT NUMBER
 EN-010

ADL SAMPLE LOCATION MAP



Notes:
 mg/kg – Milligrams per kilogram
 mg/L – Milligrams per liter
 STLC-WET – Soluble Threshold Limit Concentration – Waste Extraction Test (Citric Acid)



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FIGURE NUMBER
2d
 PROJECT NUMBER
 EN-010

PROJECT NAME
 SR-94/SR-125
 CONNECTOR PROJECT

ADL SAMPLE LOCATION MAP

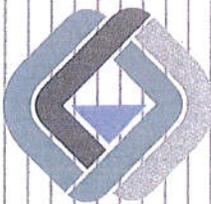
Imagery Date: 11/13/2012 lat 32.760174° lon -117.004296° elev 555 ft eye/alt 1512 ft

Rte 94

PM 6.16-8.77
KP 9.86-14.03

SITE INVESTIGATION REPORT

ROUTE 94 FROM
FEDERAL BOULEVARD ON-RAMP
UNDERCROSSING TO WAITE
DRIVE IN LEMON GROVE
AND SAN DIEGO, CALIFORNIA
CONTRACT NO. 43A0012
TASK ORDER NO. 11-0019U1-PD;
EA 066001



GEOCON

GEOTECHNICAL
&
ENVIRONMENTAL
CONSULTANTS

PREPARED FOR

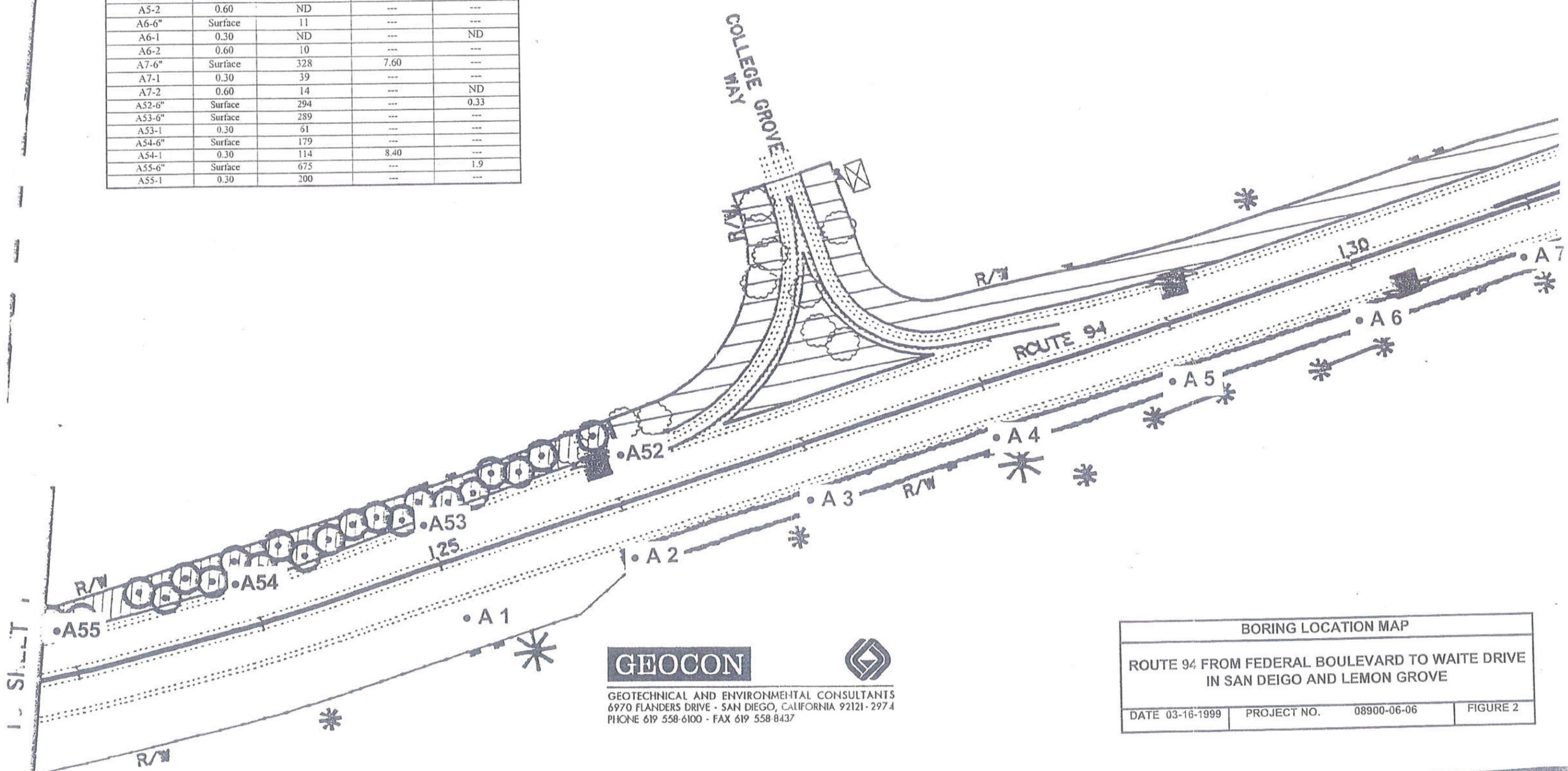
CALIFORNIA DEPARTMENT
OF TRANSPORTATION
DISTRICT 11
SAN DIEGO, CALIFORNIA

MARCH 1999

Sample Identification	Depth in meters	Total Lead EPA Test Method 6010 (mg/kg)	Soil pH EPA Test Method 9045A	Wet DI EPA Test Method 7420 (mg/l)
A1-6"	Surface	3020	---	---
A1-1	0.30	427	---	1.9
A2-6"	Surface	282	---	0.48
A2-1	0.30	173	---	---
A3-6"	Surface	ND	6.80	ND
A3-1	0.30	50	---	---
A3-2	0.60	7.8	---	---
A4-6"	Surface	153	---	---
A4-1	0.30	14	---	---
A4-2	0.60	12	---	---
A5-6"	Surface	69	---	ND
A5-1	0.30	6.9	---	---
A5-2	0.60	ND	---	---
A6-6"	Surface	11	---	---
A6-1	0.30	ND	---	ND
A6-2	0.60	10	---	---
A7-6"	Surface	328	7.60	---
A7-1	0.30	39	---	---
A7-2	0.60	14	---	ND
A52-6"	Surface	294	---	0.33
A53-6"	Surface	289	---	---
A53-1	0.30	61	---	---
A54-6"	Surface	179	---	---
A54-1	0.30	114	8.40	---
A55-6"	Surface	675	---	1.9
A55-1	0.30	200	---	---

RECOMMENDATIONS FOR RE-USE

Soil excavated at the site should be placed under 0.30 meters of clean-fill at least 1.5 meters above the maximum groundwater level. It is further recommended that Caltrans notify the contractors performing the construction activities that hazardous concentrations of lead may be present in on-site soil and that appropriate health and safety measures should be taken to minimize the exposure to lead.



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BORING LOCATION MAP

**ROUTE 94 FROM FEDERAL BOULEVARD TO WAITE DRIVE
 IN SAN DIEGO AND LEMON GROVE**

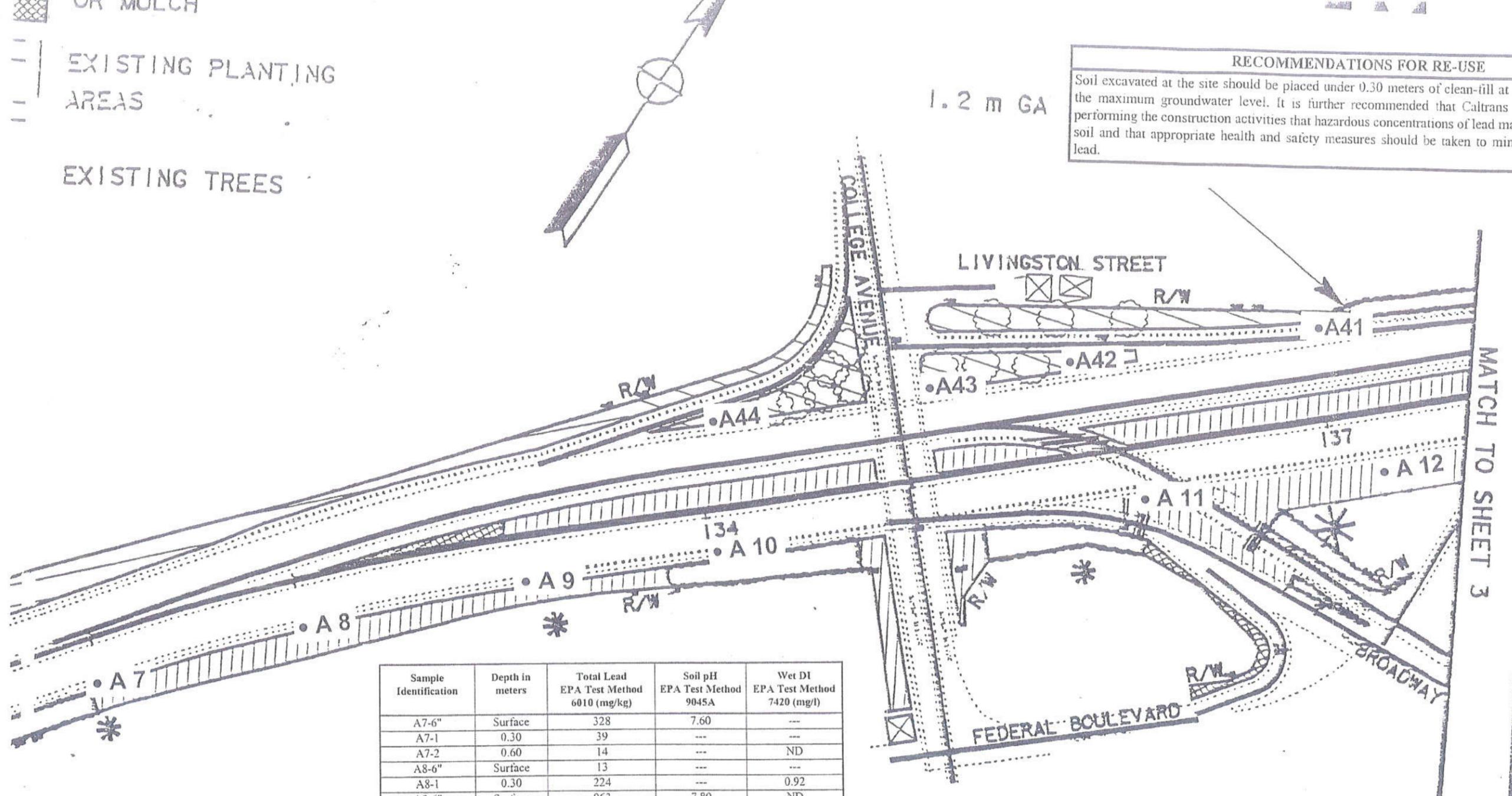
DATE 03-16-1999	PROJECT NO. 08900-06-06	FIGURE 2
-----------------	-------------------------	----------

1 - SHEET 1

-  OR MULCH
-  EXISTING PLANTING AREAS
-  EXISTING TREES

RECOMMENDATIONS FOR RE-USE

Soil excavated at the site should be placed under 0.30 meters of clean-fill at least 1.5 meters above the maximum groundwater level. It is further recommended that Caltrans notify the contractors performing the construction activities that hazardous concentrations of lead may be present in on-site soil and that appropriate health and safety measures should be taken to minimize the exposure to lead.



Sample Identification	Depth in meters	Total Lead EPA Test Method 6010 (mg/kg)	Soil pH EPA Test Method 9045A	Wet DI EPA Test Method 7420 (mg/l)
A7-6"	Surface	328	7.60	---
A7-1	0.30	39	---	---
A7-2	0.60	14	---	ND
A8-6"	Surface	13	---	---
A8-1	0.30	224	---	0.92
A9-6"	Surface	963	7.80	ND
A9-1	0.30	19	---	---
A9-2	0.60	8.7	---	---
A10-6"	Surface	134	---	---
A10-1	0.30	6.6	---	---
A10-2	0.60	9.8	---	---
A11-6"	Surface	267	---	0.53
A11-1	0.30	286	---	---
A12-6"	Surface	6.3	---	ND
A12-1	0.30	9.5	---	---
A12-2	0.60	ND	---	ND
A41-6"	Surface	ND	8.90	---
A41-1	0.30	70	---	---
A41-1.5	0.45	186	---	---
A42-6"	Surface	940	---	0.54
A42-1	0.30	488	---	0.41
A42-1.5	0.45	560	---	0.63
A43-6"	Surface	56	---	---
A43-1	0.30	11	---	ND
A43-1.5	0.45	33	---	---
A44-6"	Surface	463	---	0.26
A44-1	0.30	106	---	---
A44-1.5	0.45	181	---	ND

LEGEND

-  EXISTING WATER METER AND BACKFLOW
-  EXISTING CONTROLLER TO BE REPLACED
-  NEW WATER METER FROM HELIX WATER DISTRICT

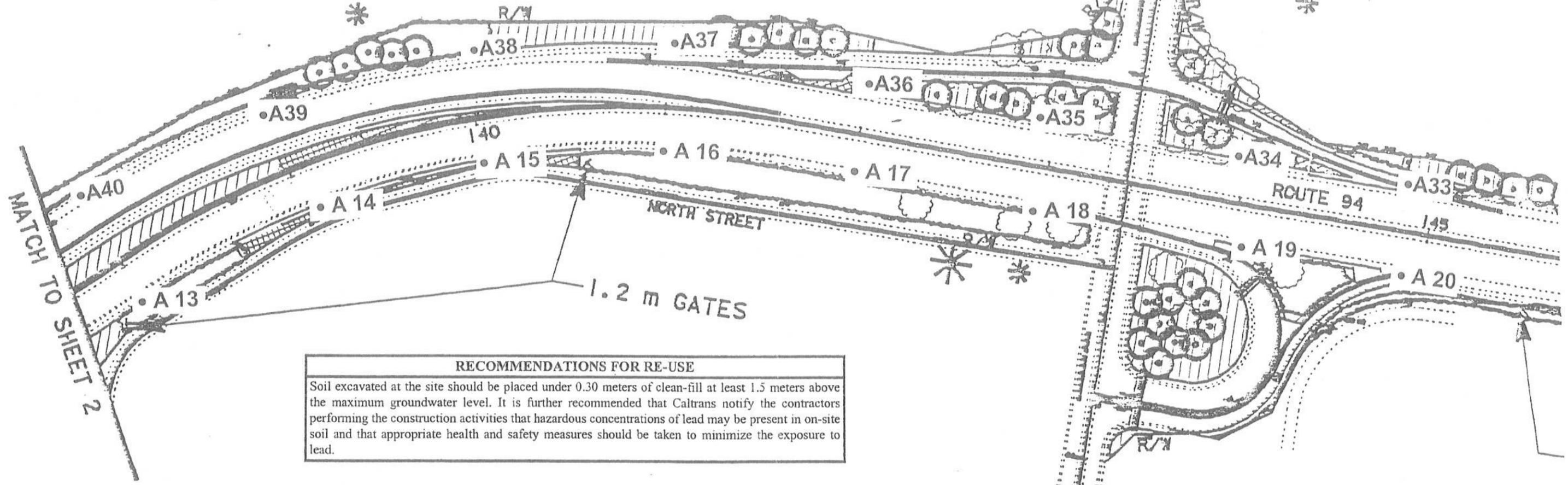
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BORING LOCATION MAP

ROUTE 94 FROM FEDERAL BOULEVARD TO WAITE DRIVE
 IN SAN DIEGO AND LEMON GROVE

DATE 03-16-1999	PROJECT NO. 08900-06-06	FIGURE 3
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RECOMMENDATIONS FOR RE-USE
 Soil excavated at the site should be placed under 0.30 meters of clean-fill at least 1.5 meters above the maximum groundwater level. It is further recommended that Caltrans notify the contractors performing the construction activities that hazardous concentrations of lead may be present in on-site soil and that appropriate health and safety measures should be taken to minimize the exposure to lead.

Sample Identification	Depth in meters	Total Lead EPA Test Method 6010 (mg/kg)	Soil pH EPA Test Method 9045A	Wet DI EPA Test Method 7420 (mg/l)
A13-6"	Surface	101	---	---
A13-1	0.30	7.5	7.70	---
A13-2	0.60	ND	---	ND
A14-6"	Surface	20	---	---
A14-1	0.30	8.3	---	ND
A14-2	0.60	12	---	---
A15-6"	Surface	220	---	---
A15-1	0.30	127	---	---
A16-6"	Surface	43	---	ND
A16-1	0.30	8.1	---	---
A16-2	0.60	7.9	---	---
A17-6"	Surface	84	7.60	ND
A17-1	0.30	95	---	---
A18-6"	Surface	6.5	---	---
A18-1	0.30	ND	---	---
A18-2	0.60	ND	---	ND
A19-6"	Surface	387	---	---
A19-1	0.30	117	---	---
A19-2	0.60	ND	---	---
A20-6"	Surface	535	---	0.19
A20-1	0.30	469	---	ND
A20-2	0.60	7.7	7.60	---

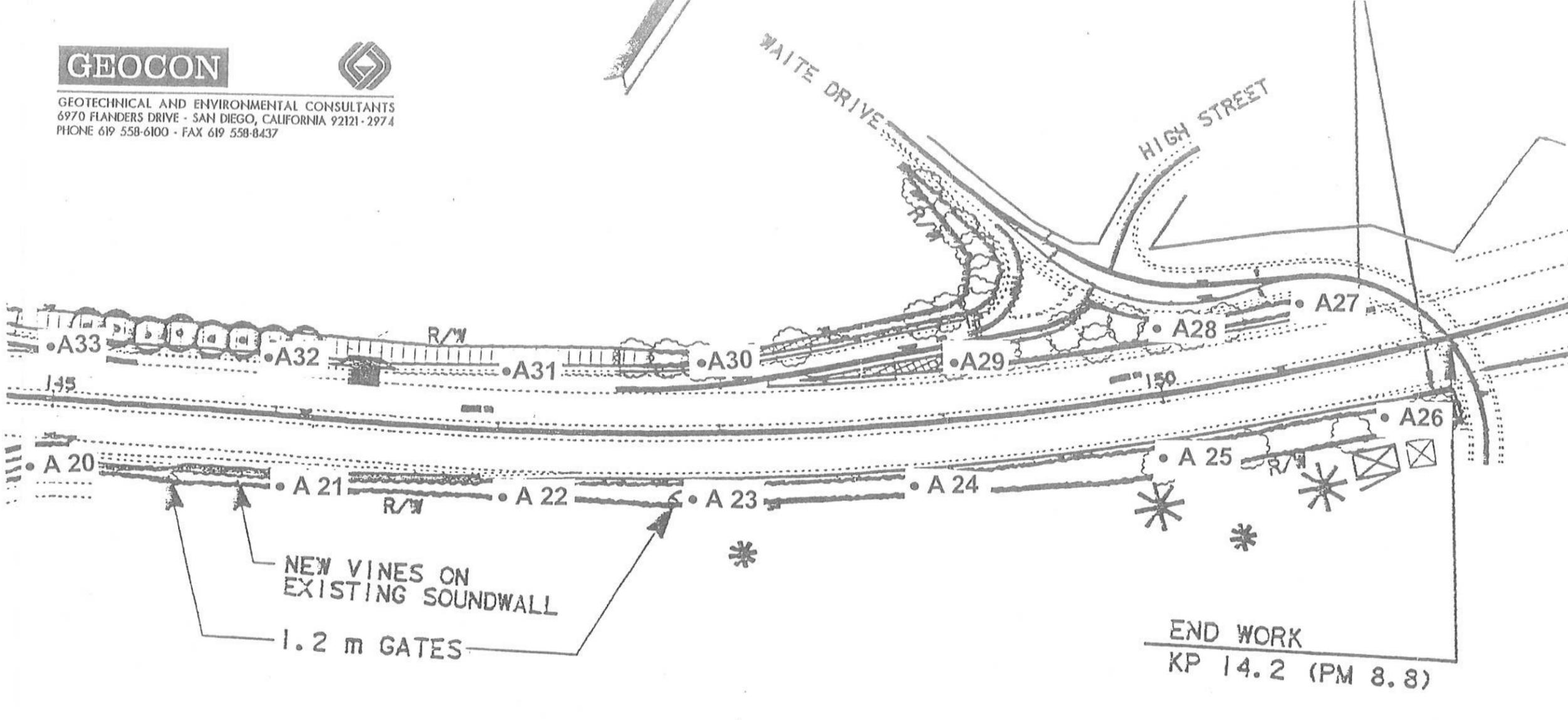
Sample Identification	Depth in meters	Total Lead EPA Test Method 6010 (mg/kg)	Soil pH EPA Test Method 9045A	Wet DI EPA Test Method 7420 (mg/l)
A33-6"	Surface	791	---	ND
A33-1	0.30	214	---	---
A33-1.5	0.45	285	8.60	---
A34-6"	Surface	814	---	0.26
A34-1	0.30	160	---	---
A34-1.5	0.45	467	---	0.31
A35-6"	Surface	333	8.10	---
A35-1	0.30	316	---	---
A35-1.5	0.45	281	---	---
A36-6"	Surface	896	---	0.87
A36-1	0.30	134	---	---
A37-6"	Surface	97	---	ND
A37-1	0.30	105	---	ND
A38-6"	Surface	48	---	---
A38-1	0.30	13	---	---
A38-2	0.60	ND	7.60	---
A39-6"	Surface	478	---	0.47
A39-1	0.30	ND	---	---
A39-2	0.60	ND	---	---
A40-6"	Surface	12	---	ND
A40-1	0.30	ND	---	---



BORING LOCATION MAP

ROUTE 94 FROM FEDERAL BOULEVARD TO WAITE DRIVE
 IN SAN DIEGO AND LEMON GROVE

DATE 03-16-1999	PROJECT NO. 08900-06-06	FIGURE 4
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RECOMMENDATIONS FOR RE-USE

Soil excavated at the site should be placed under 0.30 meters of clean-fill at least 1.5 meters above the maximum groundwater level. It is further recommended that Caltrans notify the contractors performing the construction activities that hazardous concentrations of lead may be present in on-site soil and that appropriate health and safety measures should be taken to minimize the exposure to lead.

Sample Identification	Depth in meters	Total Lead EPA Test Method 6010 (mg/kg)	Soil pH EPA Test Method 9045A	Wet DI EPA Test Method 7420 (mg/l)
A20-6"	Surface	535	---	0.19
A20-1	0.30	469	---	ND
A20-2	0.60	7.7	7.60	---
A21-6"	Surface	18	---	---
A21-1	0.30	60	---	---
A21-1.5	0.45	28	---	---
A22-6"	Surface	220	---	---
A22-1	0.30	209	---	---
A23-6"	Surface	948	---	0.16
A23-1	0.30	590	7.50	0.48
A23-2	0.60	114	---	---
A24-6"	Surface	19	---	---
A24-1	0.30	20	---	---
A24-2	0.60	ND	---	---
A25-6"	Surface	78	---	---
A25-1	0.30	14	---	---
A25-2	0.60	8.9	---	---

Sample Identification	Depth in meters	Total Lead EPA Test Method 6010 (mg/kg)	Soil pH EPA Test Method 9045A	Wet DI EPA Test Method 7420 (mg/l)
A26-6"	Surface	111	---	---
A26-1	0.30	24	---	ND
A26-2	0.60	19	7.50	---
A27-6"	Surface	26	---	---
A27-1	0.30	35	---	ND
A28-6"	Surface	150	---	---
A28-1	0.30	405	8.00	0.40
A28-2	0.60	273	---	ND
A29-6"	Surface	21	---	---
A29-1	0.30	ND	---	0.17
A29-2	0.60	21	---	---
A30-6"	Surface	388	---	0.46
A30-1	0.30	244	---	---
A30-1.5	0.45	203	---	---
A31-6"	Surface	22	---	---
A31-1	0.30	7.6	---	ND
A31-2	0.60	ND	---	---
A32-6"	Surface	82	---	---
A32-1	0.30	394	---	ND
A33-6"	Surface	791	---	ND
A33-1	0.30	214	---	---
A33-1.5	0.45	285	8.60	---

ING WATER METER
ACKFLOW
NG CONTROLLER
REPLACED
TER METER FROM
WATER DISTRICT
NTROLLER AND NE
ICAL CONNECTION
RIGATION
CROSSOVER

BORING LOCATION MAP

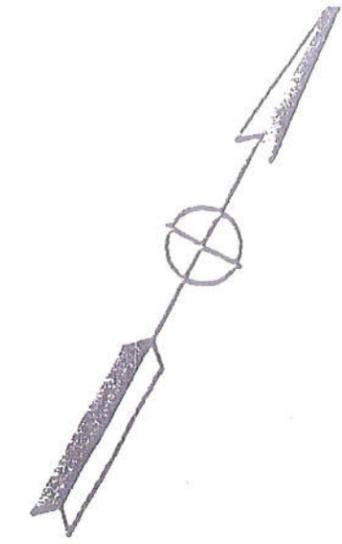
ROUTE 94 FROM FEDERAL BOULEVARD TO WAITE DRIVE
IN SAN DIEGO AND LEMON GROVE

DATE 03-16-1999 PROJECT NO. 08900-06-06 FIGURE 5

EXISTING TR

EXISTING TREES

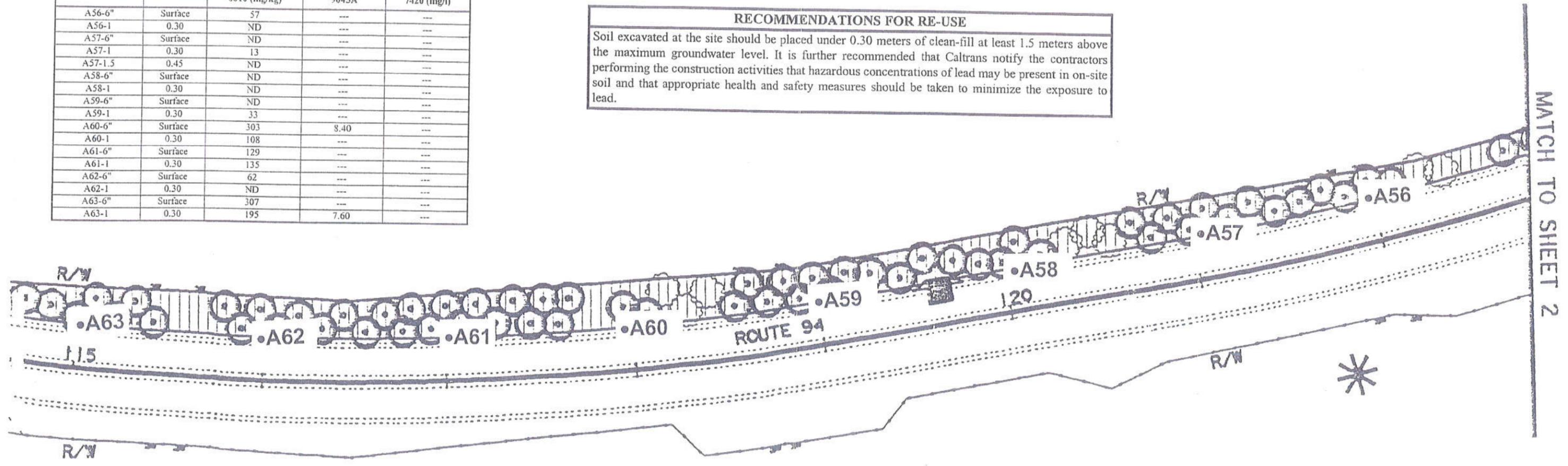
-  NEW CONTROLLER AND NEW ELECTRICAL CONNECTION
-  NEW IRRIGATION CROSSOVER
-  MAINTENANCE VEHICLE PULLOUT
-  1.2 METER GATES



Sample Identification	Depth in meters	Total Lead EPA Test Method 6010 (mg/kg)	Soil pH EPA Test Method 9045A	Wet DI EPA Test Method 7420 (mg/l)
A56-6"	Surface	57	---	---
A56-1	0.30	ND	---	---
A57-6"	Surface	ND	---	---
A57-1	0.30	13	---	---
A57-1.5	0.45	ND	---	---
A58-6"	Surface	ND	---	---
A58-1	0.30	ND	---	---
A59-6"	Surface	ND	---	---
A59-1	0.30	33	---	---
A60-6"	Surface	303	8.40	---
A60-1	0.30	108	---	---
A61-6"	Surface	129	---	---
A61-1	0.30	135	---	---
A62-6"	Surface	62	---	---
A62-1	0.30	ND	---	---
A63-6"	Surface	307	---	---
A63-1	0.30	195	7.60	---

RECOMMENDATIONS FOR RE-USE

Soil excavated at the site should be placed under 0.30 meters of clean-fill at least 1.5 meters above the maximum groundwater level. It is further recommended that Caltrans notify the contractors performing the construction activities that hazardous concentrations of lead may be present in on-site soil and that appropriate health and safety measures should be taken to minimize the exposure to lead.



MATCH TO SHEET 2

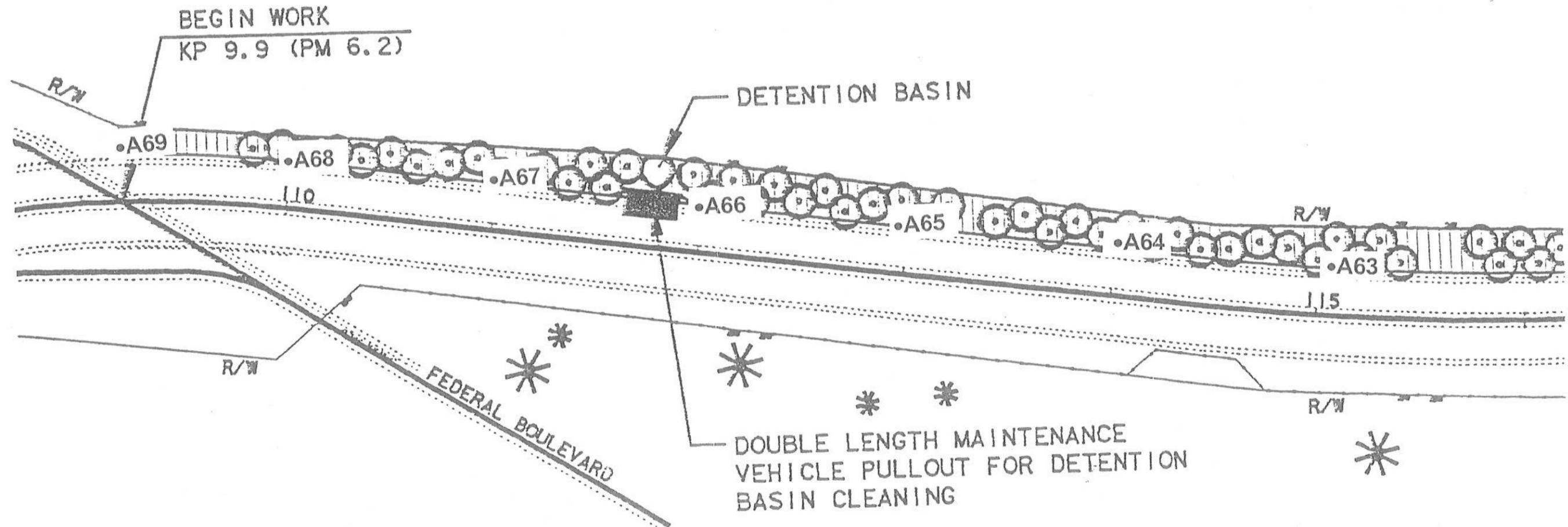
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BORING LOCATION MAP			
ROUTE 94 FROM FEDERAL BOULEVARD TO WAITE DRIVE IN SAN DIEGO AND LEMON GROVE			
DATE 03-16-1999	PROJECT NO.	08900-06-06	FIGURE 6

Sample Identification	Depth in meters	Total Lead EPA Test Method 6010 (mg/kg)	Soil pH EPA Test Method 9045A	Wet DI EPA Test Method 7420 (mg/l)
A63-6"	Surface	307	---	---
A63-1	0.30	195	7.60	---
A64-6"	Surface	69	---	---
A64-1	0.30	61	---	---
A65-6"	Surface	134	---	---
A65-1	0.30	132	---	---
A66-6"	Surface	33	---	---
A66-1	0.30	74	---	---
A67-6"	Surface	136	---	---
A67-1	0.30	49	---	---
A68-6"	Surface	50	---	---
A68-1	0.30	21	8.50	---
A68-2	0.60	16	---	---
A69-6"	Surface	971	---	1.0
A69-1	0.30	99	---	ND

RECOMMENDATIONS FOR RE-USE

Soil excavated at the site should be placed under 0.30 meters of clean-fill at least 1.5 meters above the maximum groundwater level. It is further recommended that Caltrans notify the contractors performing the construction activities that hazardous concentrations of lead may be present in on-site soil and that appropriate health and safety measures should be taken to minimize the exposure to lead.



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BORING LOCATION MAP

**ROUTE 94 FROM FEDERAL BOULEVARD TO WAITE DRIVE
 IN SAN DIEGO AND LEMON GROVE**

DATE 03-16-1999	PROJECT NO.	08900-06-06	FIGURE 7
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TABLE I

SUMMARY OF ANALYTICAL LABORATORY RESULTS

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOIL pH EPA TEST METHOD 9045A	WET DI EPA TEST METHOD 7420 (mg/l)
A1-6"	Surface	3020	---	---
A1-1	0.30	427	---	1.9
A2-6"	Surface	282	---	0.48
A2-1	0.30	173	---	---
A3-6"	Surface	ND	6.80	ND
A3-1	0.30	50	---	---
A3-2	0.60	7.8	---	---
A4-6"	Surface	153	---	---
A4-1	0.30	14	---	---
A4-2	0.60	12	---	---
A5-6"	Surface	69	---	ND
A5-1	0.30	6.9	---	---
A5-2	0.60	ND	---	---
A6-6"	Surface	11	---	---
A6-1	0.30	ND	---	ND
A6-2	0.60	10	---	---
A7-6"	Surface	328	7.60	---
A7-1	0.30	39	---	---
A7-2	0.60	14	---	ND
A8-6"	Surface	13	---	---
A8-1	0.30	224	---	0.92
A9-6"	Surface	963	7.80	ND
A9-1	0.30	19	---	---
A9-2	0.60	8.7	---	---
A10-6"	Surface	134	---	---
A10-1	0.30	6.6	---	---
A10-2	0.60	9.8	---	---
A11-6"	Surface	267	---	0.53
A11-1	0.30	286	---	---
A12-6"	Surface	6.3	---	ND
A12-1	0.30	9.5	---	---
A12-2	0.60	ND	---	ND
A13-6"	Surface	101	---	---
A13-1	0.30	7.5	7.70	---
A13-2	0.60	ND	---	ND
A14-6"	Surface	20	---	---
A14-1	0.30	8.3	---	ND

TABLE I (continued)

SUMMARY OF ANALYTICAL LABORATORY RESULTS

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOIL pH EPA TEST METHOD 9045A	WET DI EPA TEST METHOD 7420 (mg/l)
A14-2	0.60	12	---	---
A15-6"	Surface	220	---	---
A15-1	0.30	127	---	---
A16-6"	Surface	43	---	ND
A16-1	0.30	8.1	---	---
A16-2	0.60	7.9	---	---
A17-6"	Surface	84	7.60	ND
A17-1	0.30	95	---	---
A18-6"	Surface	6.5	---	---
A18-1	0.30	ND	---	---
A18-2	0.60	ND	---	ND
A19-6"	Surface	387	---	---
A19-1	0.30	117	---	---
A19-2	0.60	ND	---	---
A20-6"	Surface	535	---	0.19
A20-1	0.30	469	---	ND
A20-2	0.60	7.7	7.60	---
A21-6"	Surface	18	---	---
A21-1	0.30	60	---	---
A21-1.5	0.45	28	---	---
A22-6"	Surface	220	---	---
A22-1	0.30	209	---	---
A23-6"	Surface	948	---	0.16
A23-1	0.30	590	7.50	0.48
A23-2	0.60	114	---	---
A24-6"	Surface	19	---	---
A24-1	0.30	20	---	---
A24-2	0.60	ND	---	---
A25-6"	Surface	78	---	---
A25-1	0.30	14	---	---
A25-2	0.60	8.9	---	---
A26-6"	Surface	111	---	---
A26-1	0.30	24	---	ND
A26-2	0.60	19	7.50	---
A27-6"	Surface	26	---	---
A27-1	0.30	35	---	ND
A28-6"	Surface	150	---	---
A28-1	0.30	405	8.00	0.40
A28-2	0.60	273	---	ND
A29-6"	Surface	21	---	---
A29-1	0.30	ND	---	0.17

TABLE I (continued)

SUMMARY OF ANALYTICAL LABORATORY RESULTS

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOIL pH EPA TEST METHOD 9045A	WET DI EPA TEST METHOD 7420 (mg/l)
A29-2	0.60	21	---	---
A30-6"	Surface	388	---	0.46
A30-1	0.30	244	---	---
A30-1.5	0.45	203	---	---
A31-6"	Surface	22	---	---
A31-1	0.30	7.6	---	ND
A31-2	0.60	ND	---	---
A32-6"	Surface	82	---	---
A32-1	0.30	394	---	ND
A33-6"	Surface	791	---	ND
A33-1	0.30	214	---	---
A33-1.5	0.45	285	8.60	---
A34-6"	Surface	814	---	0.26
A34-1	0.30	160	---	---
A34-1.5	0.45	467	---	0.31
A35-6"	Surface	333	8.10	---
A35-1	0.30	316	---	---
A35-1.5	0.45	281	---	---
A36-6"	Surface	896	---	0.87
A36-1	0.30	134	---	---
A37-6"	Surface	97	---	ND
A37-1	0.30	105	---	ND
A38-6"	Surface	48	---	---
A38-1	0.30	13	---	---
A38-2	0.60	ND	7.60	---
A39-6"	Surface	478	---	0.47
A39-1	0.30	ND	---	---
A39-2	0.60	ND	---	---
A40-6"	Surface	12	---	ND
A40-1	0.30	ND	---	---
A41-6"	Surface	ND	8.90	---
A41-1	0.30	70	---	---
A41-1.5	0.45	186	---	---
A42-6"	Surface	940	---	0.54
A42-1	0.30	488	---	0.41
A42-1.5	0.45	560	---	0.63
A43-6"	Surface	56	---	---
A43-1	0.30	11	---	ND
A43-1.5	0.45	33	---	---
A44-6"	Surface	463	---	0.26
A44-1	0.30	106	---	---
A44-1.5	0.45	181	---	ND

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR HIGHWAY EROSION CONTROL ON
STATE HIGHWAY

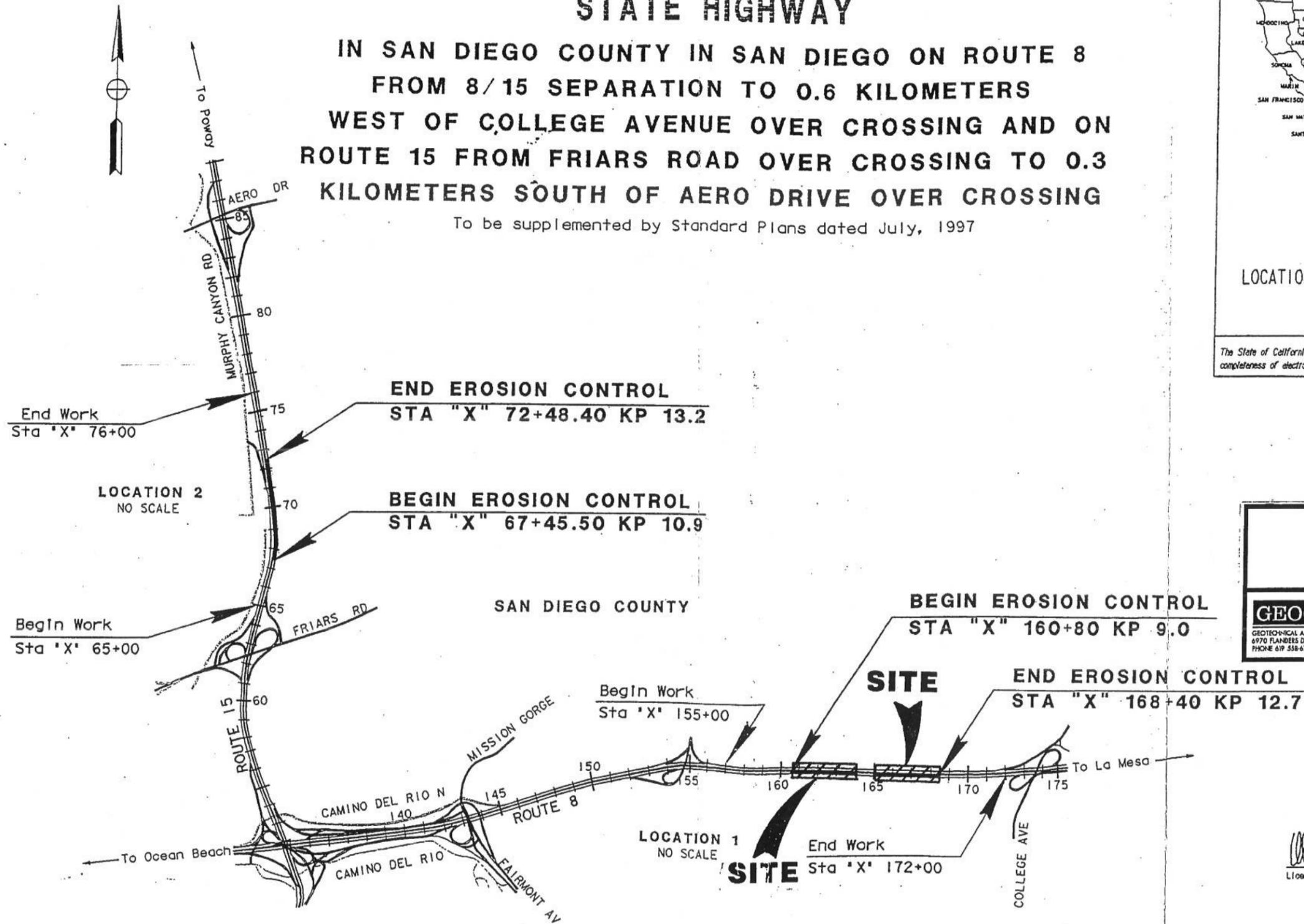
IN SAN DIEGO COUNTY IN SAN DIEGO ON ROUTE 8
FROM 8/15 SEPARATION TO 0.6 KILOMETERS
WEST OF COLLEGE AVENUE OVER CROSSING AND ON
ROUTE 15 FROM FRIARS ROAD OVER CROSSING TO 0.3
KILOMETERS SOUTH OF AERO DRIVE OVER CROSSING

To be supplemented by Standard Plans dated July, 1997

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEET
11	SD	8, 15	R9.0, R12.7 10.9/13.2	1	



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SITE PLAN
ROUTE 8 BETWEEN FAIRMONT AVE.
AND COLLEGE AVE
SAN DIEGO, CALIFORNIA

GEOCON	SCALE	DATE	3-26-99
GEO-TECHNICAL AND ENVIRONMENTAL CONSULTANTS 6970 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974 PHONE 619 558-6100 - FAX 619 558-8437		PROJECT NO.	08900 - 06 - 07
SHEET		OF	1

Mike Peltz
Licensed Landscape Architect

8/31/99
10-26-98
STATE OF CALIFORNIA

Plans Approval Date

BROWN AND CALDWELL
9040 FRIARS ROAD STE 220
SAN DIEGO, CA 92108-1601

PROJECT LANDSCAPE ARCHITECT
MIKE PELTZ
DESIGN OVERSIGHT APPROVAL
CID TESORO
DATE

Approved as to impact on State facilities and conformances with applicable State standards and practices and that technical oversight was performed as desired in the California Department of Transportation A & E Consultant Services Manual.

The Contractor shall possess the Class (or Classes) of license

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD VIA WET DI WATER (mg/L)	SOIL pH EPA TEST METHOD 9045
B1-1	Surface	333	26	---	---
B1-2	0.30	176	15	---	---
B2-1	Surface	314	40	---	---
B3-1	Surface	147	14	---	---
B4-1	Surface	505	86	0.54	7.5
B4-2	0.30	45	---	---	---
B5-1	Surface	54	---	---	---
B5-2	0.30	32	---	---	---
B5-3	0.60	18	---	---	---
B6-1	Surface	293	24	---	---
B6-2	0.30	126	10	---	---
B7-1	Surface	85	7.2	---	---



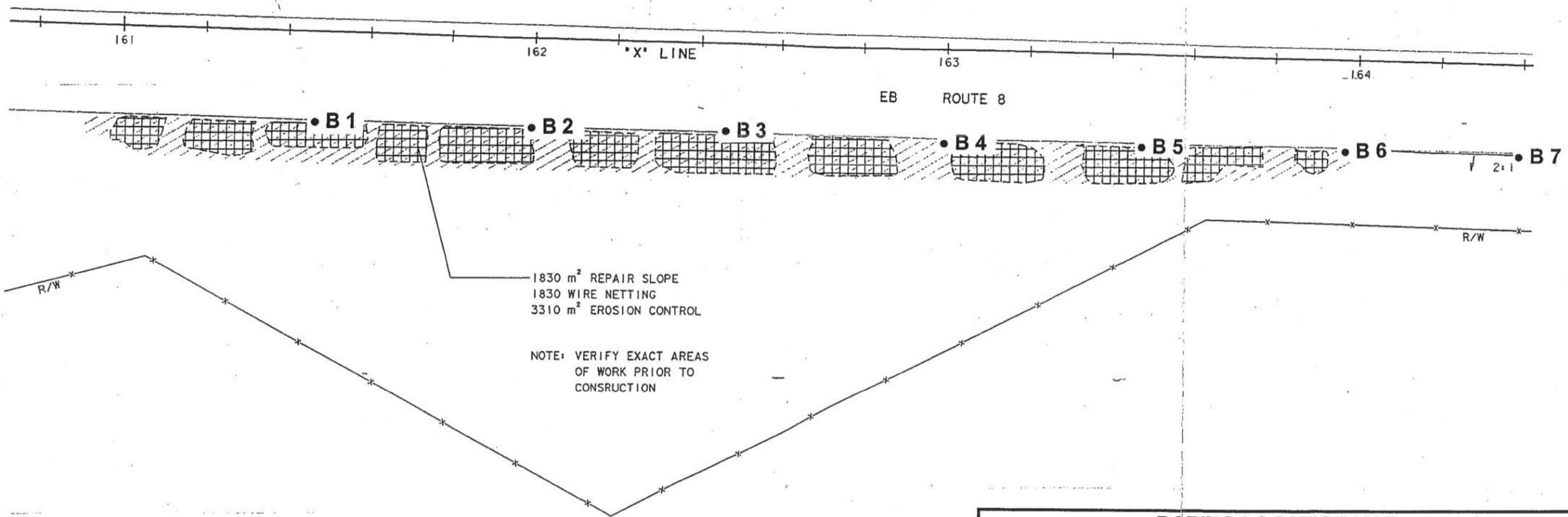
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	SH
11	SD	8, 15	R9.0/R12.7, 10.9/13.2	4	
REGISTERED LANDSCAPE ARCHITECT			DATE	10-30-98	
PLANS APPROVAL DATE					
KTU+A 6165 GREENWICH DR. SUITE 200 SAN DIEGO, CA 92122					



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It is recommended that if the upper 0.6 meters of soil excavated is to be re-used on-site, it should be placed under pavement at least 1.5 meters above the maximum groundwater level in accordance with the Department of Toxic Substances Control (DTSC) variance issued to Caltrans. If the soil is to be exported to another Caltrans right-of-way location, it should be re-used in the same manner as described above. Should the soil excavated to a depth of 0.6 meters at the site require disposal, it should be disposed as a hazardous waste with regard to lead concentrations.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 DESIGN OVERSIGHT
 CALCULATED DESIGNED BY
 CHECKED BY
CID TESORO
 Caltrans



GEOCON
 GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
 6970 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974
 PHONE 619 558-6100 - FAX 619 558-8437
 PROJECT NO.
 FIGURE
 DATE

SCALE 1:500

NOTE: SEE SHEET C-1 FOR LEGEND AND CONSTRUCTION DETAILS
 THIS PLAN ACCURATE FOR EROSION CONTROL WORK ONLY
 ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN.

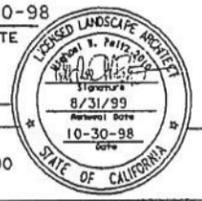
BORING LOCATION MAP			
ROUTE 8 FROM THE 8/15 SEPARATION TO 0.6 KILOMETERS WEST OF COLLEGE AVENUE OVERCROSSING			
DATE	PROJECT NO.	08900-06-07	FIGURE 2
3-26-99			

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD VIA WET DI WATER (mg/L)	SOIL pH EPA TEST METHOD 9045
B8-1	Surface	74	---	---	---
B9-1	Surface	31	---	---	---
B9-2	0.30	19	---	---	---
B10A-1	Surface	156	15	---	---
B10B-1	Surface	20	---	---	---
B10B-2	0.30	72	---	---	---
B10B-3	0.60	29	---	---	6.3
B10C-1	Surface	35	---	---	---
B11-1	Surface	124	7.7	---	7.0
B11-2	0.30	42	---	---	---
B12A-1	Surface	1010	135	0.95	---
B12A-2	0.30	102	12	---	---
B12B-1	Surface	77	3.7	---	---

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD VIA WET DI WATER (mg/L)	SOIL pH EPA TEST METHOD 9045
B12C-1	Surface	35	---	---	---
B13-1	Surface	456	42	0.49	---
B13-2	0.30	199	19	---	---
B14A-1	Surface	1310	102	0.94	---
B14A-2	0.30	111	14	---	---
B14B-1	Surface	220	16	---	---
B14C-1	Surface	185	9.0	---	---
B14D-1	Surface	31	---	---	---
B14E-1	Surface	ND	---	---	---
B15-1	Surface	361	29	---	---
B16-1	Surface	1060	99	1.1	---
B16-2	0.30	1160	128	0.38	7.4



DIS: 11	UNIT: SD	ROUTE: 8, 15	TOTAL PROJECT: R9.0/R12.7, 10.9/13.2	NO. SHEET: 5
REGISTERED LANDSCAPE ARCHITECT			DATE: 10-30-98	
PLANS APPROVAL DATE				
KTU+A 6165 GREENWICH DR. SUITE 200 SAN DIEGO, CA 92122				

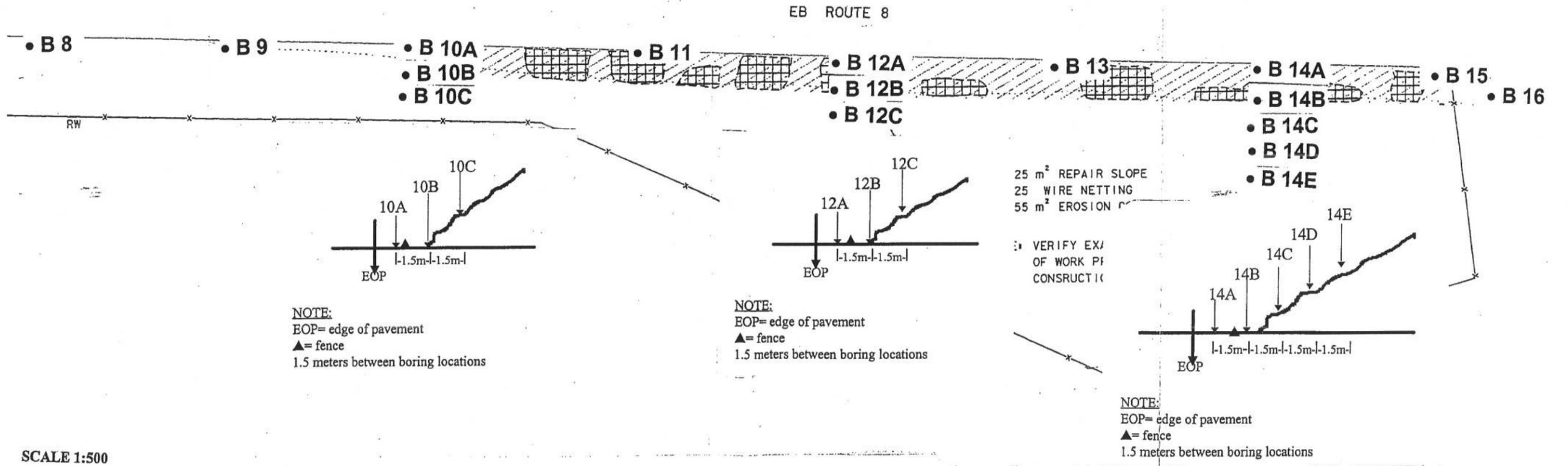
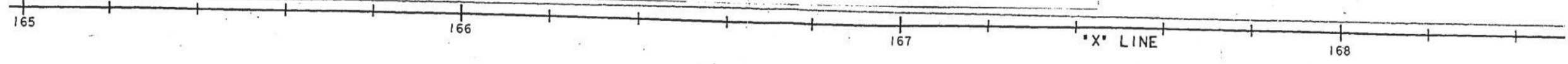


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CHECKED BY

DESIGN OVERSIGHT
CID TESORO

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans



Soil excavated from the vicinity of step-out borings B14B and B14C to a depth of approximately 0.15 meters should be handled in the same manner as described for the borings advanced along the shoulder of the roadway. Soil excavated from the vicinity of borings B10B, B10C, B12B, B12C, B14D, and B14E may be re-used on-site, at another Caltrans location, or disposed of as non-hazardous with respect to lead impacts.

It is recommended that if the upper 0.6 meters of soil excavated is to be re-used on-site, it should be placed under pavement at least 1.5 meters above the maximum groundwater level in accordance with the Department of Toxic Substances Control (DTSC) variance issued to Caltrans. If the soil is to be exported to another Caltrans right-of-way location, it should be re-used in the same manner as described above. Should the soil excavated to a depth of 0.6 meters at the site require disposal, it should be disposed as a hazardous waste with regard to lead concentrations.

BORING LOCATION MAP		
ROUTE 8 FROM THE 8/15 SEPARATION TO 0.6 KILOMETERS WEST OF COLLEGE AVENUE OVERCROSSING		
DATE 3-26-99	PROJECT NO. 08900-06-07	FIGURE 3

GEOCON

GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
6970 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974
PHONE 619 558-6100 - FAX 619 558-8437

PROJECT NO.
FIGURE
DATE

**LIMITED ASBESTOS SURVEY REPORT
BRIDGE STRUCTURES ASSOCIATED WITH
BRIDGE RAIL END TREATMENTS
UPGRADE PROJECT
SAN DIEGO COUNTY, CALIFORNIA**

**CALTRANS DISTRICT 11 EA 407600 AND 406400
CONTRACT NO. 11A1996
TASK ORDER NO. 11**

August 21, 2013

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Only the client or its designated representatives may use this document and
only for the specific project for which this report was prepared.

A Report Prepared for:

Mr. Joel Kloth, P.G., Department Task Order Manager
California Department of Transportation
District 11
4050 Taylor Street
San Diego, California 92110

**LIMITED ASBESTOS SURVEY REPORT
BRIDGE STRUCTURES ASSOCIATED WITH
BRIDGE RAIL END TREATMENTS UPGRADE PROJECT
SAN DIEGO COUNTY, CALIFORNIA
CALTRANS DISTRICT 11 EA 407600 AND 406400
CONTRACT NO. 11A1996
TASK ORDER NO. 11**

Kleinfelder Project No. 133297

Prepared by:



Richard H. Stevenson
Certified Asbestos Consultant No. 06-3992

Reviewed by:



Margaret R. Carroll
Project Professional

KLEINFELDER WEST, INC.
5015 Shoreham Place
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August 21, 2013

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APPENDICES

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	Table 1 – Summary of Asbestos Survey Results
Appendix B	Plates
	Plates 1 through 11 – Sample Location Maps
Appendix C	Photographs
Appendix D	Analytical Laboratory Report and Chain-of-Custody Documentation

1 INTRODUCTION AND SITE DESCRIPTION

1.1 INTRODUCTION

This report presents the results of a limited survey conducted to assess the presence, quantities, and conditions, of asbestos-containing guard rail post shims associated with bridge rail end treatments on 11 bridge structures (collectively referred to as the “Site”) in various locations of San Diego County, California. The limited asbestos survey was performed consistent with the Scope of Services in Task Order Number (No.) 11 of Contract No. 11A1996. Kleinfelder conducted the survey between July 10 and 12, 2013, and on July 16, 2013. Kleinfelder understands that the California Department of Transportation (Caltrans; the Client) is planning to upgrade the end treatments of the 11 bridge structures. The survey is considered “limited” because only guard rail post shim materials associated with the bridge rail end treatments were included in the scope of the survey.

1.2 SITE DESCRIPTION

The limited asbestos survey was conducted at the following 11 locations in San Diego County, California:

- Winter Gardens Boulevard Overcrossing (OC), along State Route (SR) 67;
- El Camino Real Eastbound Exit Ramp, along SR-78;
- Barcelona Street Undercrossing (UC), along SR-94;
- Sixth Street On-ramp UC, along SR-163;
- Friars Road OC, along SR-163;
- Genesee Avenue UC, along SR-163;
- SR-163/ I-805 Separation, along SR-163;
- San Ysidro Boulevard UC, along I-805;
- Main Street UC, along I-805;
- Del Sur Boulevard UC, along SR-905; and,
- SR-905/I-805 Separation, along SR-905.

1.3 PHYSICAL LIMITATIONS

The survey only included assessment and sampling of accessible guard rail post shims associated with bridge rail end treatments on the 11 bridge structures included in the scope of Task Order No. 11. No other suspect asbestos-containing materials (ACMs) were assessed as part of the survey. If other suspect ACMs are encountered during the planned bridge rail end treatment upgrade activities, they either may be assumed to be hazardous and handled accordingly, or may be sampled and analyzed to assess whether they are hazardous.

2 ASBESTOS SURVEY

2.1 ASBESTOS SURVEY METHODS

Kleinfelder personnel conducted a visual survey of each of the 11 bridge structures at the Site. Based on observations made during the visual surveys, representative bulk samples of guard rail post shim materials were collected from each of the 11 bridge structures.

Mr. Richard Stevenson, a California Division of Occupational Safety and Health (DOSH, also known as Cal/OSHA) Certified Asbestos Consultant (CAC) No. 06-3992 performed the survey. The survey was completed consistent with Federal Asbestos Hazard Emergency Response Act (AHERA) methods (40 Code of Federal Regulations [CFR] Part 763) as a guideline. Bulk samples were collected using various hand tools (e.g., utility knives, chisels, and pliers). Destructive inspection and sampling methods were not used, since the bridges are still in use.

The bulk samples collected during the survey were delivered to EMS Laboratories in Pomona, California, a United States Environmental Protection Agency (US EPA) and California State-certified laboratory and National Voluntary Laboratory Accreditation Program (NVLAP) participant for analysis by Polarized Light Microscopy (PLM). A summary of bulk samples collected, sample locations, asbestos content, condition, friability, and quantity estimates are summarized in Table 1 of Appendix A. Sample location maps are provided in Appendix B. Photographs of the bridge structures and representative sample locations are presented in Appendix C. Copies of the analytical laboratory report and chain-of-custody documentation are included in Appendix D.

2.2 ASBESTOS SURVEY RESULTS

Kleinfelder collected one sample of guard rail post shim material from each bridge structure where guard rail post shims were observed. Guard rail post shims were observed and samples were collected from the following bridge locations:

- Winter Gardens Boulevard OC, along State Route (SR) 67;
- El Camino Real Eastbound Exit Ramp, along SR-78;
- Barcelona Street UC, along SR-94;
- Sixth Street On-ramp UC, along SR-163;

- Friars Road OC, along SR-163;
- Genesee Avenue UC, along SR-163;
- SR-163/ I-805 Separation, along SR-163;
- San Ysidro Boulevard UC, along I-805;
- Main Street UC, along I-805;
- Del Sur Boulevard UC, along SR-905; and,
- SR-905/I-805 Separation, along SR-905.

Asbestos was detected in each of the sampled guard rail post shims with an asbestos content ranging from 65 percent (%) to 85% asbestos. A listing of asbestos content at each sampled bridge structure is included in Table 1 of Appendix A.

2.3 REGULATORY OVERVIEW FOR ASBESTOS

Regulatory oversight for the management, removal, and disposal of ACMs is provided by a variety of Federal, State, and local agencies.

The three primary regulations enforced by regulatory agencies that govern various activities (e.g., inspection, assessment, abatement, etc.) relating to ACMs include the following: AHERA, National Emission Standard for Hazardous Air Pollutants (NESHAP), and the Asbestos Standard for the Construction Industry (as codified in Federal OSHA and Cal/OSHA regulations). US EPA regulations concerning the identification, handling, management, and abatement of ACMs (as found in the AHERA and NESHAP) are implemented locally by the San Diego County Air Pollution Control District (SDCAPCD). Both Cal/OSHA and Federal OSHA regulate asbestos as a worker health and safety issue. In addition, the transportation and disposal of asbestos-containing wastes are overseen by the California EPA Department of Toxic Substance Control (DTSC). The Federal OSHA, US EPA, DTSC, and SDCAPCD define ACMs as materials containing greater than 1% asbestos.

The following is a brief description of the three major regulations relating to ACMs.

Asbestos Hazard Emergency Response Act (AHERA)

AHERA (40 CFR part 763), as implemented by the US EPA, primarily pertains to the assessment and management of ACMs in Kindergarten through Grade 12, non-profit

schools. However, many of the procedures, training requirements, and certifications defined by AHERA have become the industry standard for other facilities. For this survey, AHERA protocols were generally utilized in the identification, assessment, and sampling of suspect ACM.

National Emission Standard for Hazardous Air Pollutants (NESHAP)

NESHAP (40 CFR Part 61, Subpart M) is an asbestos standard that protects the general public from asbestos exposure due to renovation or demolition activities. NESHAP requires surveying for suspect materials (as defined above), notifying of intent to renovate or demolish, removing regulated ACM (RACM) prior to renovation or demolition, and properly managing asbestos-containing wastes. RACM is defined by NESHAP as follows:

- Any friable ACM;
- A Category I non-friable ACM (such as vinyl floor tiles and asphalt roofing products) that has become friable or will be subject to sanding, grinding, cutting, or abrading during renovation or demolition activities; or,
- A Category II non-friable ACM (all other non-friable ACMs) that has a high probability of becoming friable during demolition or renovation activities.

NESHAP requires that demolition activities be conducted with no visible emissions using wet methods. It should be noted that while NESHAP regulates renovation and demolition activities, it does not protect individual workers performing asbestos abatement, or provide instructions for how asbestos abatement projects should be performed.

Asbestos Standard for the Construction Industry

The Asbestos Standard for the Construction Industry (Federal OSHA, 29 CFR 1926.1101 and Cal/OSHA California Code of Regulations [CCR], Title 8 Section 1529) regulate asbestos exposure in the work place. This includes both persons working in a building containing ACMs and asbestos workers/contractors. For asbestos workers and contractors, the Asbestos Standard for Construction (i.e., the Construction Standard) regulates the following:

- Protection of workers and the public during removal;
- Medical surveillance requirements for workers;
- Detailed requirements for how asbestos is to be removed; and,
- Training requirements for abatement personnel.

Cal/OSHA defines asbestos-containing construction material (ACCM) as any building material that contains more than 0.1% (one-tenth of 1%) asbestos by weight. In addition, building materials presumed or known to contain at least “trace” amounts (less than 1%, but greater than 0.1% by weight) of asbestos should be considered as ACCM and managed according to Cal/OSHA regulations (as presented in CCR, Title 8 Section 1529).

3 CONCLUSIONS AND RECOMMENDATIONS

Based upon the limited asbestos survey and subsequent laboratory analysis of guard rail post shim materials, asbestos-containing guard rail post shims are present at the bridge rail end treatments at each of the bridge structures associated with Task Order 11.

Future bridge rail end treatment upgrade activities that could disturb guard rail post shims at each bridge structure should be performed by properly trained and certified personnel, in accordance with applicable Federal, State, and local regulations, as implemented by Cal/OSHA, Federal OSHA, US EPA, DTSC, and the SDCAPCD. Prior to future bridge expansion activities, Kleinfelder recommends that the following actions be taken:

- Caltrans should provide notification to contractors and subcontractors as to the presence and location of guard rail post shims at each bridge structure where asbestos was detected. Notification should be provided to workers who may contact these materials or if the materials will be disturbed. At this time, and in their current physical state, the guard rail post shims do not pose a significant health risk as long as they are not disturbed.
- The removal of ACMs is regulated by SDCAPCD and Cal/OSHA. ACMs should be removed and disposed of only by properly licensed California asbestos contractors in compliance with applicable Federal, State, and local regulations. The general contractor for the bridge rail end treatments upgrade project may be a source for local licensed asbestos contractors. Kleinfelder can also provide names of licensed and qualified asbestos contractors in the area upon request.
- A 10-working-day notification is required for every demolition project even when ACMs are not present, and for each abatement project where the amount of friable ACM is equal to or greater than 160 square feet or 260 linear feet. However, since the quantity of guard rail post shims at each bridge location does not exceed the quantity required for notification, and demolition of the bridge structures is not planned as part of the bridge rail end treatments upgrade project, notification to SDCAPCD should not be required.
- A 24-hour advance written notification to the local Cal/OSHA office is required from the asbestos contractor regarding their "Intent to Conduct Asbestos Related Work."

4 LIMITATIONS

This work was performed in a manner consistent with that level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. Our conclusions, opinions and recommendations are based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no other representation, guarantee or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

This report may be used only by the Client and the registered design professional in responsible charge and only for the purposes stated for this specific engagement within a reasonable time from its issuance, but in no event later than two years from the date of the report.

The work performed was based on project information provided by the Client. If the Client does not retain Kleinfelder to review any plans and specifications, including any revisions or modifications to the plans and specifications, Kleinfelder assumes no responsibility for the suitability of our recommendations. In addition, if there are any changes in the field to the plans and specifications, the Client must obtain written approval from Kleinfelder's engineer that such changes do not affect our recommendations. Failure to do so will vitiate Kleinfelder's recommendations.

Kleinfelder offers various levels of investigative and engineering services to suit the varying needs of different clients. It should be recognized that definition and evaluation of environmental conditions are a difficult and inexact science. Judgments leading to conclusions and recommendations are generally made with incomplete knowledge of the site conditions present due to the limitations of data from field studies. Although risk can never be eliminated, more-detailed and extensive studies yield more information, which may help understand and manage the level of risk. Since detailed study and analysis involves greater expense, our clients participate in determining levels of service that provide adequate information for their purposes at acceptable levels of risk. More extensive studies, including field tests, should be performed to reduce uncertainties. Acceptance of this report will indicate that the Client has reviewed the document and determined that it does not need or want a greater level of service than provided.

During the course of the performance of Kleinfelder's services, hazardous materials may have been discovered. Kleinfelder assumes no responsibility or liability whatsoever for any claim, loss of property value, damage, or injury that results from pre-existing hazardous materials being encountered or present on the project Site, or from the discovery of such hazardous materials. Nothing contained in this report should be construed or interpreted as requiring Kleinfelder to assume the status of an owner, operator, or generator, or person who arranges for disposal, transport, storage, or treatment of hazardous materials within the meaning of any governmental statute, regulation, or order. The Client is solely responsible for directing notification of all governmental agencies, and the public at large, of the existence, release, treatment, or disposal of any hazardous materials observed at the project site, either before or during performance of Kleinfelder's services. The Client is responsible for directing all arrangements to lawfully store, treat, recycle, dispose, or otherwise handle hazardous materials, including samples resulting from Kleinfelder's services.

APPENDIX A

Table

**Table 1
Summary of Asbestos Survey Results
Bridge Rail End Treatments Upgrade Project
San Diego County, California**



Sample No.	Sample Description	Sample Location	Asbestos Content	Condition/Friability	Amount of Material
Sixth Street On-Ramp Undercrossing (UC)					
KLF-1	Guard rail post shim	Guard rail post adjacent to bridge end treatment on southeastern side of UC	65% CH	Good/NF	3 shims
Friars Road Overcrossing (OC)					
KLF-2	Guard rail post shim	Guard rail post adjacent to bridge end treatment on northeastern side of OC	70% CH	Good/NF	2 shims
Genesee Avenue UC					
KLF-3	Guard rail post shim	Guard rail post adjacent to bridge end treatment on southeastern side of UC	75% CH	Good/NF	4 shims
State Route (SR)-163 / Interstate (I)-805 Interchange					
KLF-4	Guard rail post shim	Guard rail post adjacent to bridge end treatment on northbound SR-163	70% CH	Good/NF	3 shims
Winter Gardens Boulevard OC					
KLF-5	Guard rail post shim	Guard rail post adjacent to bridge end treatment on northeastern side of OC	65% CH	Good/NF	3 shims
Barcelona Street UC					
KLF-6	Guard rail post shim	Bridge end treatment, vertical rail post on eastbound SR 94, southwestern side of undercrossing	85% CH	Good/NF	5 shims
El Camino Real Eastbound Exit Ramp					
KLF-7	Guard rail post shim	Guard rail post adjacent to bridge end treatment on southern side of eastbound exit ramp	75% CH	Good/NF	2 shims
Main Street UC					
KLF-8	Guard rail post shim	Guard rail post adjacent to bridge end treatment on southbound I-805, northwestern side of UC	70% CH	Good/NF	4 shims
San Ysidro Boulevard UC					
KLF-9	Guard rail post shim	Guard rail post adjacent to bridge end treatment on southbound I-805, northwestern side of UC	65% CH	Good/NF	2 shims

Table 1
Summary of Asbestos Survey Results
Bridge Rail End Treatments Upgrade Project
San Diego County, California



Sample No.	Sample Description	Sample Location	Asbestos Content	Condition/Friability	Amount of Material
I-905 / I-805 Interchange					
KLF-10	Guard rail post shim	Guard rail post adjacent to bridge end treatment at interchange of westbound I-905 and southbound I-805	65% CH	Good/NF	2 shims
Del Sur UC					
KLF-11	Guard rail post shim	Guard rail post adjacent to bridge end treatment on westbound I-905, southwestern side of UC	65% CH	Good/NF	1 shim

Notes:

CH = Chrysotile asbestos

NF = Non-friable

Shim quantity estimates are based on number of shims observed on bridge end treatment posts and guard rail posts adjacent to bridge end treatment. Quantity does not take into account guard rail post shims that may be present at other locations on a bridge structure.

Contractor should verify shim quantities prior to bid.

APPENDIX B

Plates



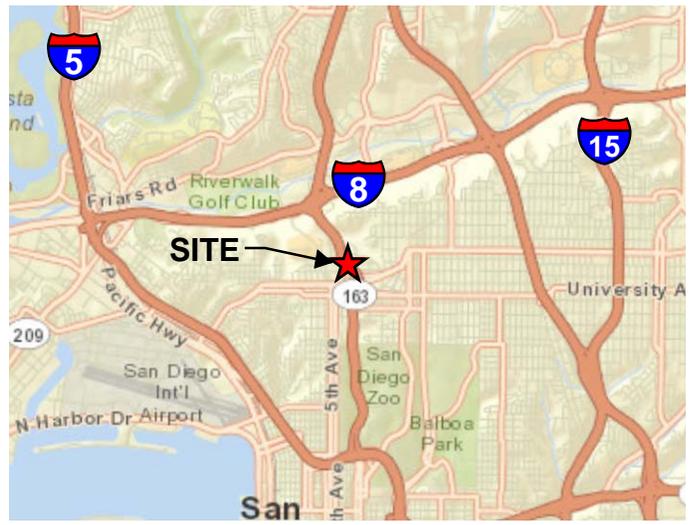
LEGEND

- ⊕ SAMPLE IDENTIFICATION AND APPROXIMATE LOCATION OF GUARD RAIL POST SHIM SAMPLE

BASEMAP SOURCES:
 ESRI ONLINE MAPS, IMAGERY
 MAY 3, 2010 AND STREETS



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VICINITY MAP

NOT TO SCALE

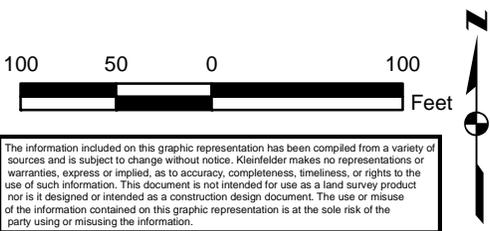
	PROJECT NO. 133297	SAMPLE LOCATION MAP SIXTH STREET ON-RAMP UNDERCROSSING	PLATE
	DRAWN: 8/19/2013		1
	DRAWN BY: JP	BRIDGE RAIL END TREATMENTS UPGRADE PROJECT TASK ORDER 11, CALTRANS EA 407600 AND 406400 SAN DIEGO COUNTY, CALIFORNIA	
	CHECKED BY: RS		
FILE NAME: 133297_Samp4.MXD			



LEGEND

☉ SAMPLE IDENTIFICATION AND APPROXIMATE LOCATION OF GUARD RAIL POST SHIM SAMPLE

BASEMAP SOURCES:
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VICINITY MAP

NOT TO SCALE

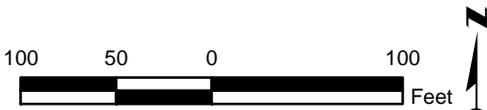
	PROJECT NO. 133297	SAMPLE LOCATION MAP FRIARS ROAD OVERCROSSING	PLATE 2
	DRAWN: 8/19/2013		
	DRAWN BY: JP	BRIDGE RAIL END TREATMENTS UPGRADE PROJECT TASK ORDER 11, CALTRANS EA 407600 AND 406400 SAN DIEGO COUNTY, CALIFORNIA	
	CHECKED BY: RS		
FILE NAME: 133297_Samp5.MXD			



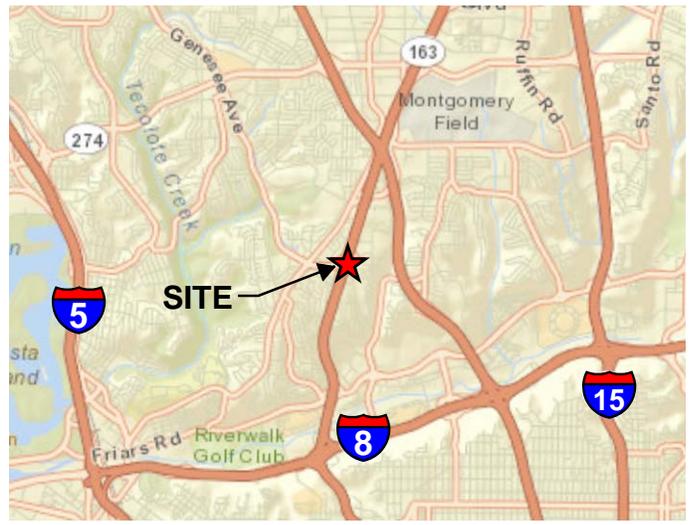
LEGEND

 SAMPLE IDENTIFICATION AND APPROXIMATE LOCATION OF GUARD RAIL POST SHIM SAMPLE

BASEMAP SOURCES:
ESRI ONLINE MAPS, IMAGERY
MAY 3, 2010 AND STREETS



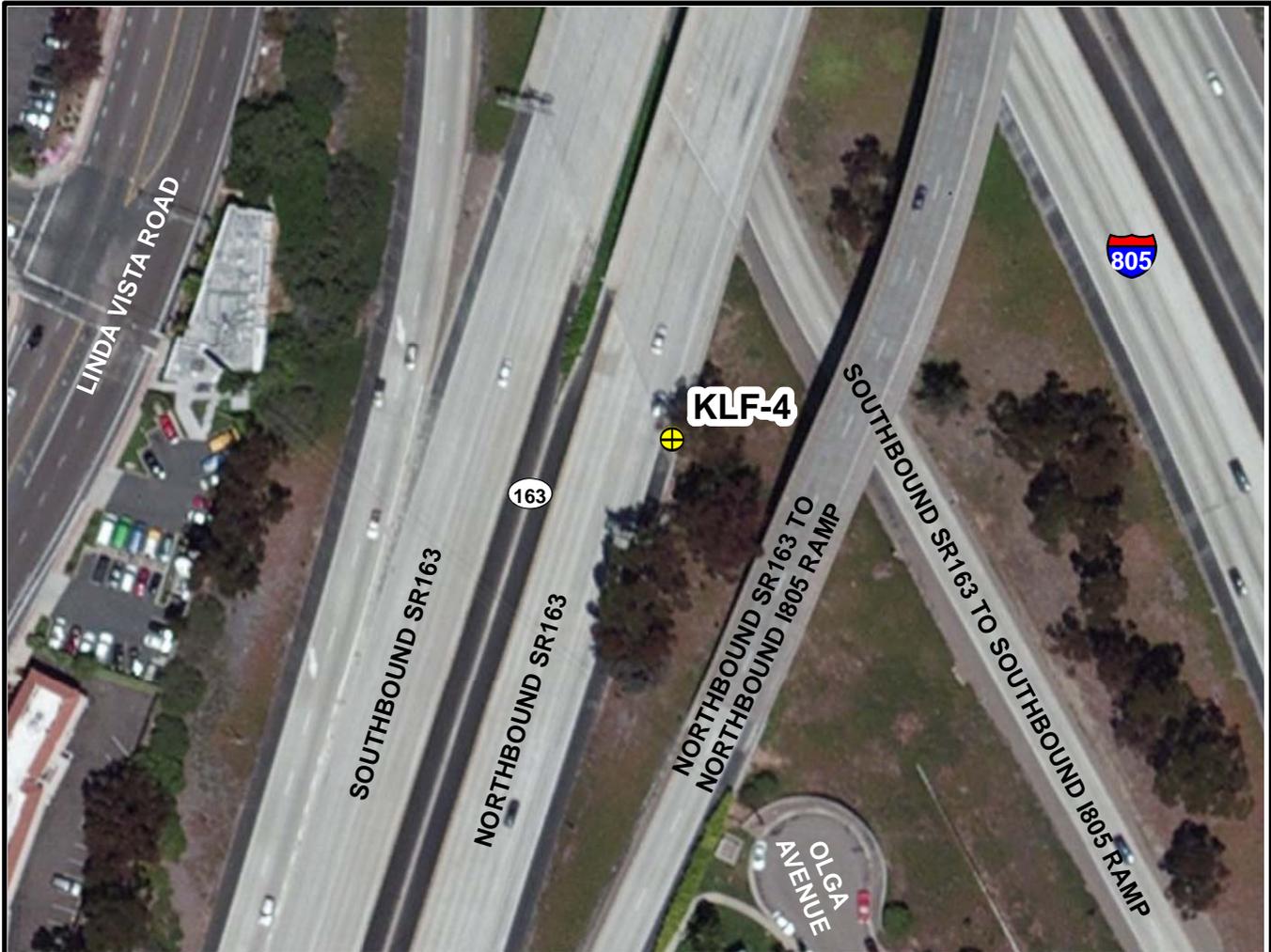
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VICINITY MAP

NOT TO SCALE

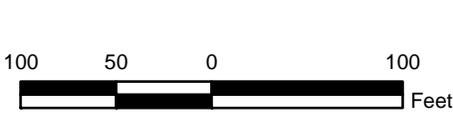
 <p>KLEINFELDER Bright People. Right Solutions. www.kleinfelder.com</p>	PROJECT NO. 133297	SAMPLE LOCATION MAP GENESEE AVENUE UNDERCROSSING	PLATE
	DRAWN: 8/19/2013		3
	DRAWN BY: JP	BRIDGE RAIL END TREATMENTS UPGRADE PROJECT TASK ORDER 11, CALTRANS EA 407600 AND 406400 SAN DIEGO COUNTY, CALIFORNIA	
	CHECKED BY: RS		
FILE NAME: 133297_Samp6.MXD			



LEGEND

- SAMPLE IDENTIFICATION AND APPROXIMATE LOCATION OF GUARD RAIL POST SHIM SAMPLE

BASEMAP SOURCES:
 ESRI ONLINE MAPS, IMAGERY
 MAY 3, 2010 AND STREETS



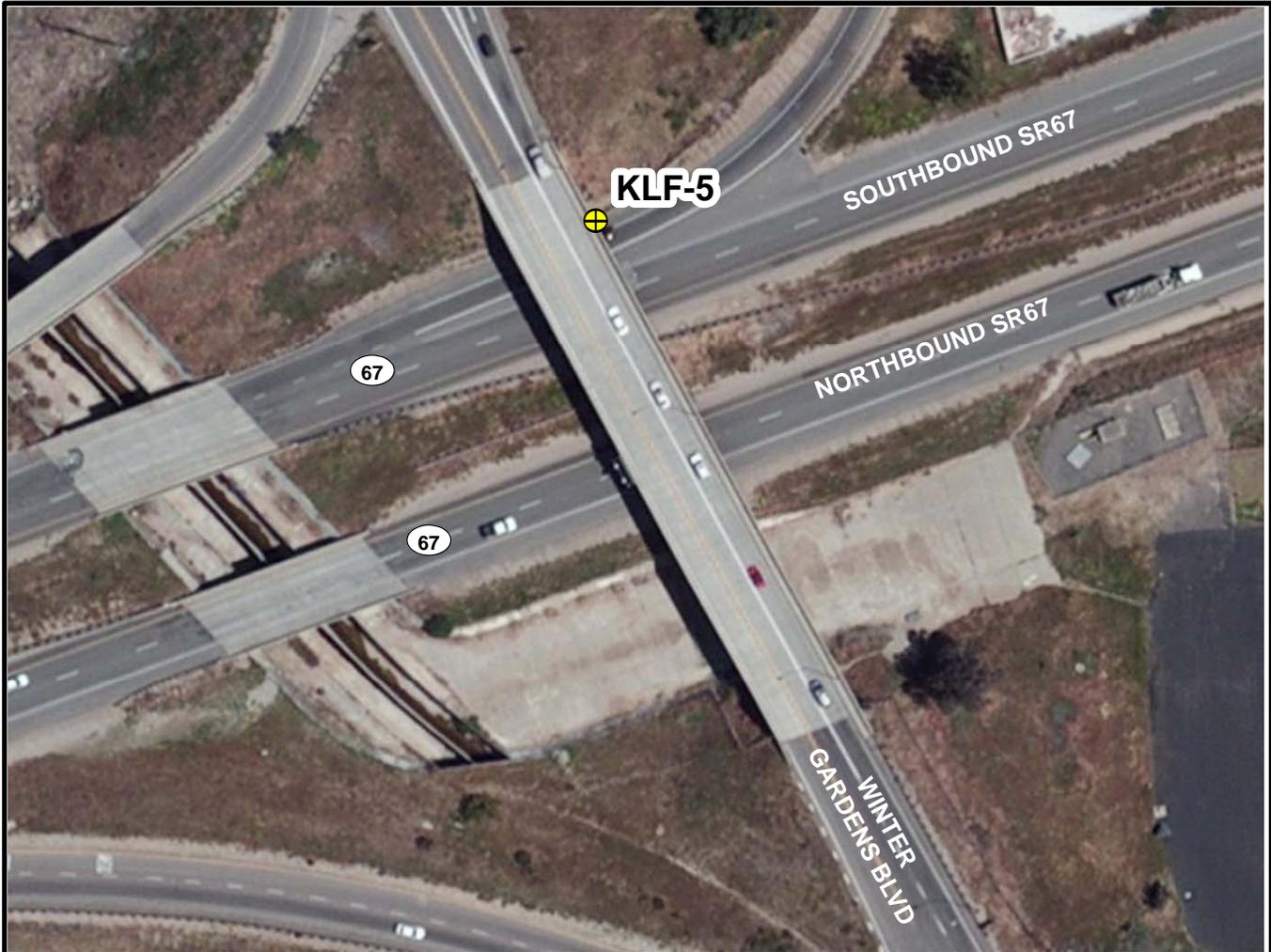
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VICINITY MAP

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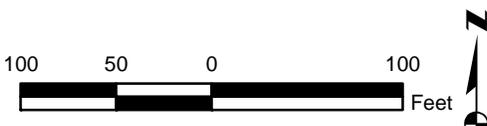
	PROJECT NO. 133297	SAMPLE LOCATION MAP STATE ROUTE 163 / INTERSTATE 805 INTERCHANGE	PLATE
	DRAWN: 8/19/2013		4
	DRAWN BY: JP	BRIDGE RAIL END TREATMENTS UPGRADE PROJECT TASK ORDER 11, CALTRANS EA 407600 AND 406400 SAN DIEGO COUNTY, CALIFORNIA	
	CHECKED BY: RS		
FILE NAME: 133297_Samp7.MXD			



LEGEND

 SAMPLE IDENTIFICATION AND APPROXIMATE LOCATION OF GUARD RAIL POST SHIM SAMPLE

BASEMAP SOURCES:
ESRI ONLINE MAPS, IMAGERY
MAY 3, 2010 AND STREETS



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 Bright People. Right Solutions. www.kleinfelder.com	PROJECT NO. 133297	SAMPLE LOCATION MAP WINTER GARDENS OVERCROSSING	PLATE 5
	DRAWN: 8/19/2013		
	DRAWN BY: JP	BRIDGE RAIL END TREATMENTS UPGRADE PROJECT TASK ORDER 11, CALTRANS EA 407600 AND 406400 SAN DIEGO COUNTY, CALIFORNIA	
	CHECKED BY: RS		
FILE NAME: 133297_Samp1.MXD			



LEGEND

-  SAMPLE IDENTIFICATION AND APPROXIMATE LOCATION OF GUARD RAIL POST SHIM SAMPLE

BASEMAP SOURCES:
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VICINITY MAP

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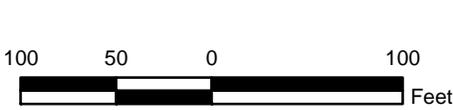
 <p>KLEINFELDER Bright People. Right Solutions. www.kleinfelder.com</p>	PROJECT NO. 133297	SAMPLE LOCATION MAP BARCELONA STREET UNDERCROSSING	PLATE 6
	DRAWN: 8/19/2013		
	DRAWN BY: JP	BRIDGE RAIL END TREATMENTS UPGRADE PROJECT TASK ORDER 11, CALTRANS EA 407600 AND 406400 SAN DIEGO COUNTY, CALIFORNIA	
	CHECKED BY: RS		
FILE NAME: 133297_Samp3.MXD			



LEGEND

- ⊕ SAMPLE IDENTIFICATION AND APPROXIMATE LOCATION OF GUARD RAIL POST SHIM SAMPLE

BASEMAP SOURCES:
ESRI ONLINE MAPS, IMAGERY
MAY 3, 2010 AND STREETS



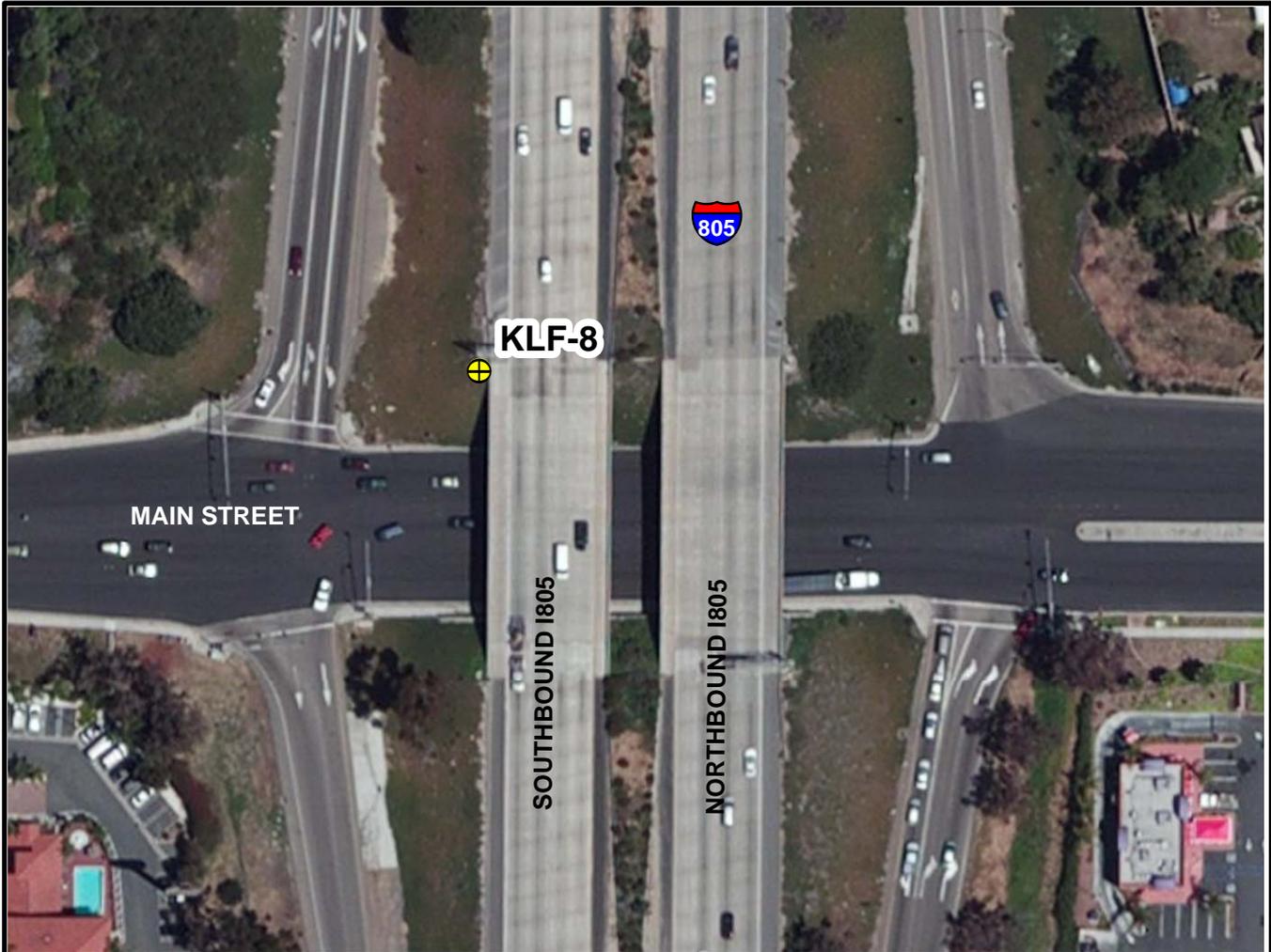
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VICINITY MAP

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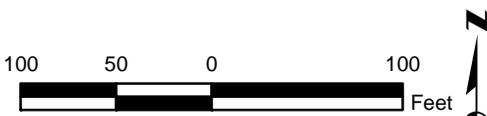
	PROJECT NO. 133297	SAMPLE LOCATION MAP EL CAMINO REAL EASTBOUND EXIT RAMP	PLATE 7
	DRAWN: 8/19/2013		
	DRAWN BY: JP	BRIDGE RAIL END TREATMENTS UPGRADE PROJECT TASK ORDER 11, CALTRANS EA 407600 AND 406400 SAN DIEGO COUNTY, CALIFORNIA	
	CHECKED BY: RS		
FILE NAME: 133297_Samp2.MXD			



LEGEND

-  SAMPLE IDENTIFICATION AND APPROXIMATE LOCATION OF GUARD RAIL POST SHIM SAMPLE

BASEMAP SOURCES:
 ESRI ONLINE MAPS, IMAGERY
 MAY 3, 2010 AND STREETS



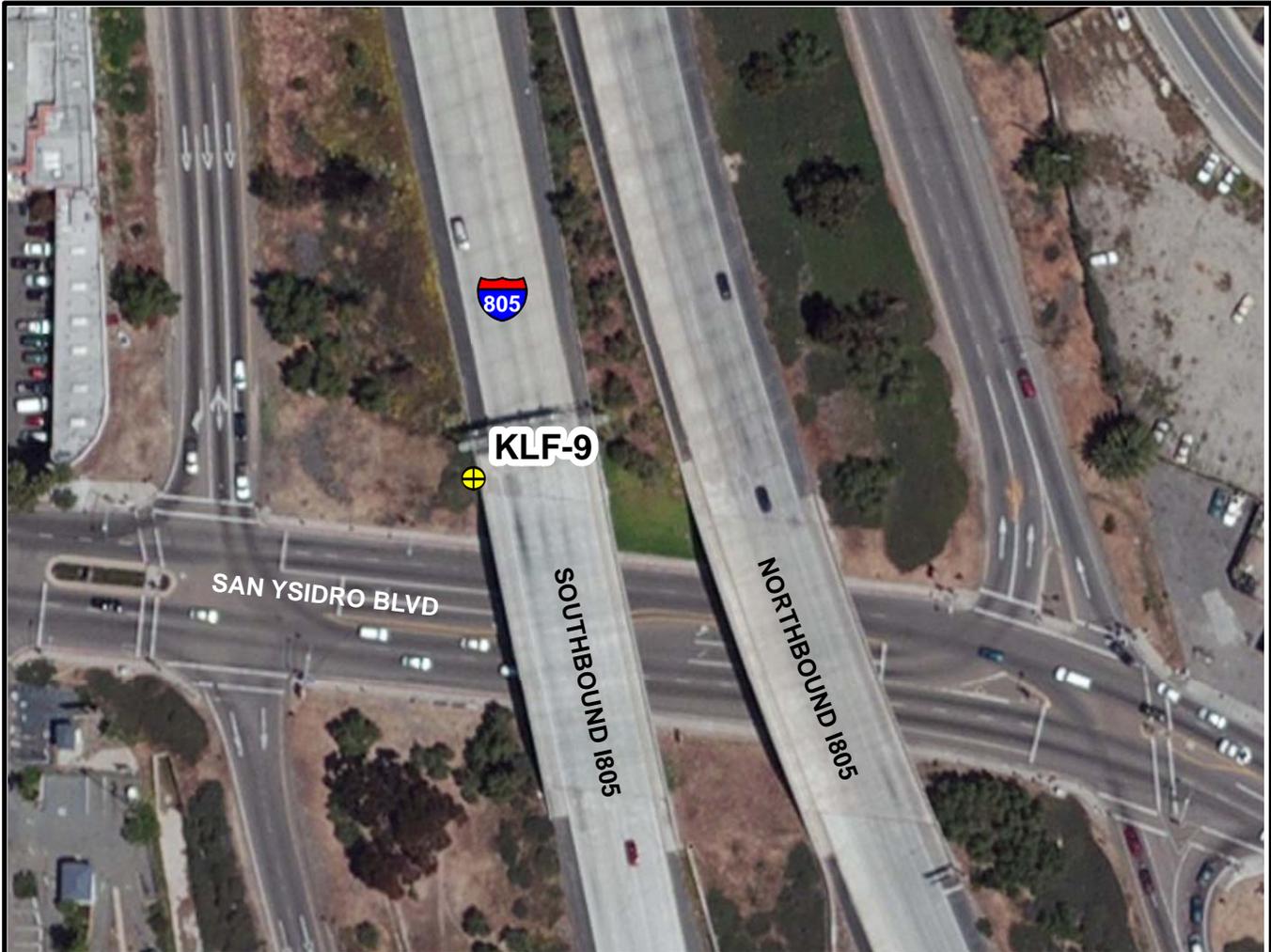
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VICINITY MAP

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 <p>KLEINFELDER Bright People. Right Solutions. www.kleinfelder.com</p>	PROJECT NO. 133297	SAMPLE LOCATION MAP MAIN STREET UNDERCROSSING	PLATE 8
	DRAWN: 8/19/2013		
	DRAWN BY: JP	BRIDGE RAIL END TREATMENTS UPGRADE PROJECT TASK ORDER 11, CALTRANS EA 407600 AND 406400 SAN DIEGO COUNTY, CALIFORNIA	
	CHECKED BY: RS		
FILE NAME: 133297_Samp9.MXD			



LEGEND

 SAMPLE IDENTIFICATION AND APPROXIMATE LOCATION OF GUARD RAIL POST SHIM SAMPLE

BASEMAP SOURCES:
ESRI ONLINE MAPS, IMAGERY
MAY 3, 2010 AND STREETS



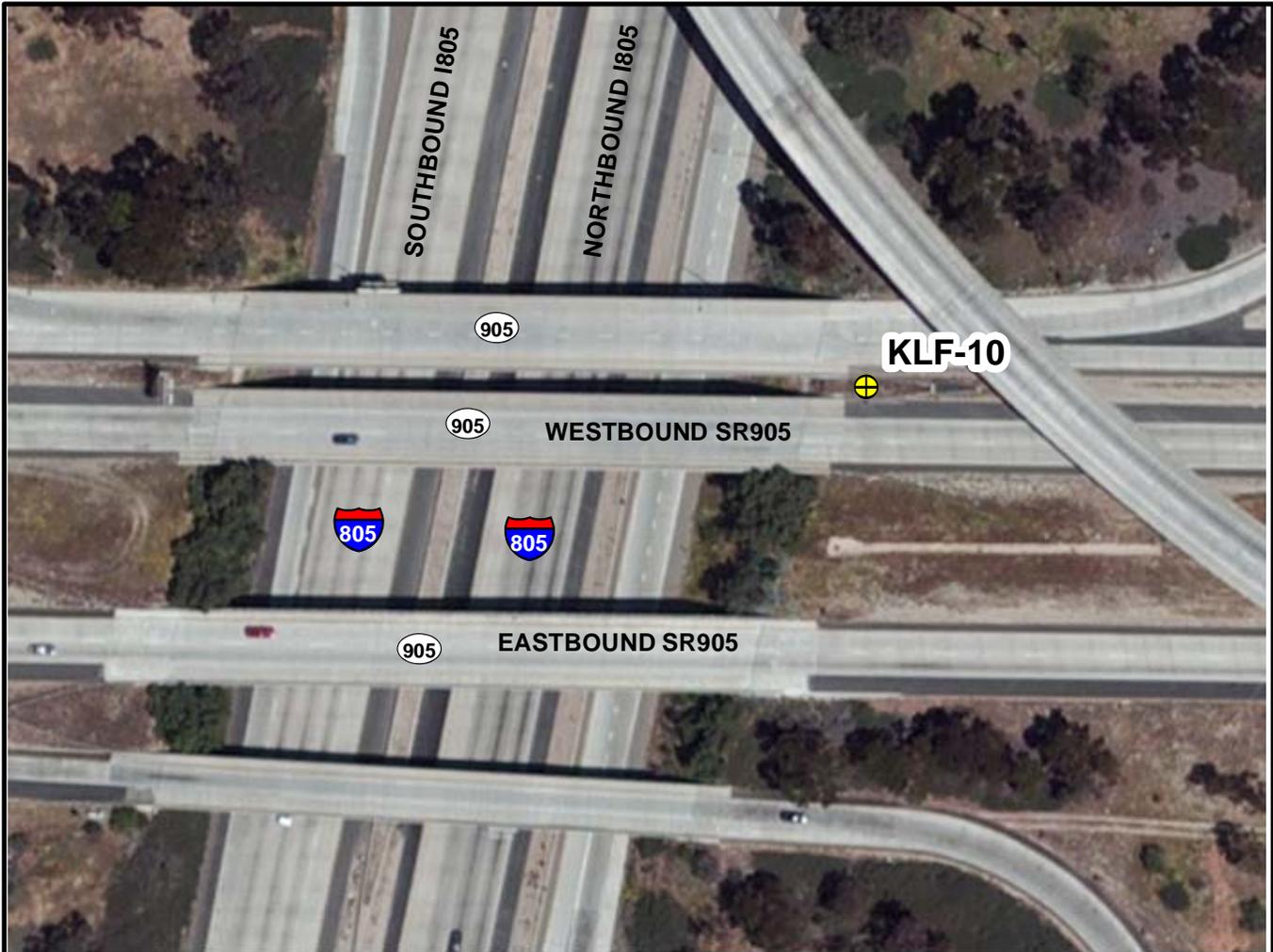
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VICINITY MAP

NOT TO SCALE

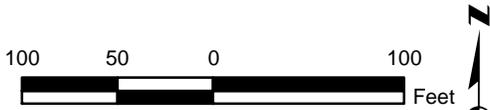
 <p>KLEINFELDER Bright People. Right Solutions. www.kleinfelder.com</p>	PROJECT NO. 133297	SAMPLE LOCATION MAP SAN YSIDRO BOULEVARD UNDERCROSSING	PLATE
	DRAWN: 8/19/2013		9
	DRAWN BY: JP	BRIDGE RAIL END TREATMENTS UPGRADE PROJECT TASK ORDER 11, CALTRANS EA 407600 AND 406400 SAN DIEGO COUNTY, CALIFORNIA	
	CHECKED BY: RS		
FILE NAME: 133297_Samp8.MXD			



LEGEND

 SAMPLE IDENTIFICATION AND APPROXIMATE LOCATION OF GUARD RAIL POST SHIM SAMPLE

BASEMAP SOURCES:
 ESRI ONLINE MAPS, IMAGERY
 MAY 3, 2010 AND STREETS



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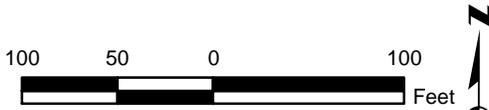
 Bright People. Right Solutions. www.kleinfelder.com	PROJECT NO. 133297	SAMPLE LOCATION MAP STATE ROUTE 905 / INTERSTATE 805 INTERCHANGE	PLATE 10
	DRAWN: 8/19/2013		
	DRAWN BY: JP	BRIDGE RAIL END TREATMENTS UPGRADE PROJECT TASK ORDER 11, CALTRANS EA 407600 AND 406400 SAN DIEGO COUNTY, CALIFORNIA	
	CHECKED BY: RS		
FILE NAME: 133297_Samp11.MXD			



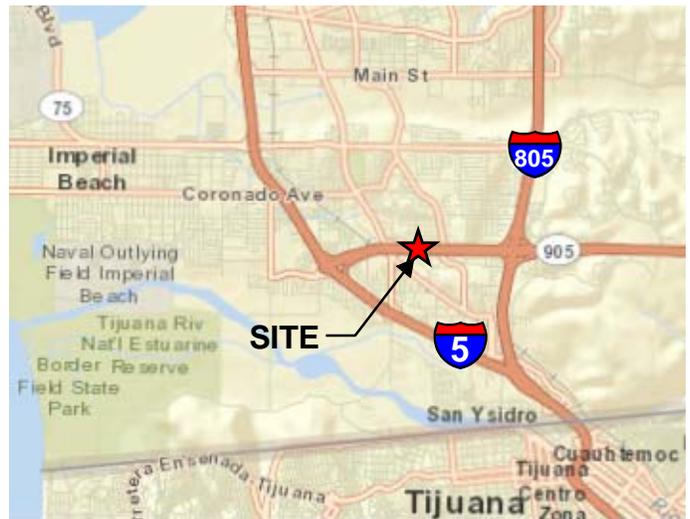
LEGEND

⊕ SAMPLE IDENTIFICATION AND APPROXIMATE LOCATION OF GUARD RAIL POST SHIM SAMPLE

BASEMAP SOURCES:
ESRI ONLINE MAPS, IMAGERY
MAY 3, 2010 AND STREETS



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VICINITY MAP

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	PROJECT NO. 133297	SAMPLE LOCATION MAP DEL SUR BOULEVARD UNDERCROSSING	PLATE
	DRAWN: 8/19/2013		11
	DRAWN BY: JP	BRIDGE RAIL END TREATMENTS UPGRADE PROJECT TASK ORDER 11, CALTRANS EA 407600 AND 406400 SAN DIEGO COUNTY, CALIFORNIA	
	CHECKED BY: RS		
FILE NAME: 133297_Samp10.MXD			

APPENDIX C

Photographs



View of bridge rail end treatment at Sixth Street Avenue On-Ramp Undercrossing.



View of guard rail post and shim adjacent to bridge rail end treatment at Sixth Street Avenue On-Ramp Undercrossing (Sample KLF-1)



View of bridge rail end treatment at Friars Road Overcrossing.



View of guard rail post and shim adjacent to bridge rail end treatment at Friars Road Overcrossing (Sample KLF-2)



View of bridge rail end treatment at Genesee Avenue Undercrossing.



View of guard rail post and shim adjacent to bridge rail end treatment at Genesee Avenue Undercrossing (Sample KLF-3)



View of bridge rail end treatment along northbound side of State Route 163 at the State Route 163 / Interstate 805 Interchange.



View of guard rail post and shim adjacent to bridge rail end treatment along northbound side of State Route 163 at State Route 163 / Interstate 805 Interchange (Sample KLF-4).



View of bridge rail end treatment at northeastern side of Winter Gardens Boulevard Overcrossing.



View of guard rail post and shim adjacent to bridge rail end treatment at northeastern side of Winter Gardens Boulevard Overcrossing.



View of shim between bridge end rail and vertical support column at northeastern side of Winter Gardens Boulevard Overcrossing (Sample KLF-5).



View of bridge rail end treatment at Barcelona Street Undercrossing, along eastbound State Route 94.



PROJECT NO: 133297
 DRAWN BY: RHS
 CHECKED BY: MRC
 DATE: 8/2013
 REVISED:

SITE PHOTOGRAPHS
 Bridge Rail End Treatments Upgrade
 Project; Task Order 11
 Caltrans EA 407600 and 406400
 San Diego County, California

PLATE
C-6



View of guard rail post and shim adjacent to bridge rail end treatment at Barcelona Street Undercrossing (Sample KLF-6).



View of shims between bridge rail end treatment and vertical support at Barcelona Street Undercrossing.



View of bridge rail end treatment at eastbound exit ramp of El Camino Real Overcrossing.



View of guard rail post shims between guard rail and guard rail post (Sample KLF-7).



View of bridge rail end treatment at Main Street Undercrossing.



View of guard rail post and shim adjacent to bridge rail end treatment at Main Street Undercrossing (Sample KLF-8).



PROJECT NO: 133297
 DRAWN BY: RHS
 CHECKED BY: MRC
 DATE: 8/2013
 REVISED:

SITE PHOTOGRAPHS

Bridge Rail End Treatments Upgrade
 Project; Task Order 11
 Caltrans EA 407600 and 406400
 San Diego County, California

PLATE

C-9



View of bridge rail end treatment at San Ysidro Boulevard Undercrossing.



View of guard rail post and shim adjacent to bridge rail end treatment at San Ysidro Boulevard Overscrossing (KLF-9).



View of bridge rail end treatment along eastbound State Route 905 at State Route 905 / Interstate 805 Interchange.



View of guard rail post and shim at bridge rail end treatment along eastbound State Route 905 at State Route 905 / Interstate 805 Interchange (KLF-10).



View of bridge rail end treatment at Del Sur Boulevard Undercrossing.



View of guard rail post and shim adjacent to bridge rail end treatment at Del Sur Boulevard Undercrossing (Sample KLF-11).

APPENDIX D

Analytical Laboratory Report and Chain-of-Custody Documentation



EMS LABORATORIES INC.

117 W. Bellevue Drive, Pasadena, CA 91105-2548 626-568-4065

National Institute of Standards and Technology (NIST) NVLAP Lab Code 101218-0
California Department of Health Services Environmental Testing Laboratory ELAP 1119
County Sanitation Districts of Los Angeles County ID No. 10120
Nevada Environmental Laboratory Certification CA00245

CUSTOMER: Kleinfelder
2 Ada, suite 250
Irvine CA 92618
CONTACT: Rich stevenson
REFERENCE: Caltran Task Order 11
METHOD: EPA 600/R-93/116

PAGE #: 1 of 2
REPORT #: 0157247
PROJECT: PLM ANALYSIS
DATE COLLECTED: 07/12/2013
COLLECTED BY:
DATE RECEIVED: 07/18/2013
ANALYSIS DATE: 07/22/2013

BULK SAMPLE ANALYSIS FOR ASBESTOS CONTENT BY POLARIZED LIGHT MICROSCOPY

Laboratory ID - Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type (%)	Non-Asbestos Components (%)
0157247-001 KLF-1	Gray, Homogeneous, Fibrous, tease, non-friable Note: 29°C, 1.55 Oil	LAYER 1 100%	Chrysotile 65%	Non-Fibrous Material 35%
0157247-002 KLF-2	Gray, Homogeneous, Fibrous, tease, non-friable Note: 29°C, 1.55 Oil	LAYER 1 100%	Chrysotile 70%	Non-Fibrous Material 30%
0157247-003 KLF-3	Gray, Homogeneous, Fibrous, tease, non-friable Note: 29°C, 1.55 Oil	LAYER 1 100%	Chrysotile 75%	Non-Fibrous Material 25%
0157247-004 KLF-4	Gray, Homogeneous, Fibrous, tease, non-friable Note: 29°C, 1.55 Oil	LAYER 1 100%	Chrysotile 70%	Non-Fibrous Material 30%
0157247-005 KLF-5	Gray, Homogeneous, Fibrous, tease, non-friable Note: 29°C, 1.55 Oil	LAYER 1 100%	Chrysotile 65%	Non-Fibrous Material 35%
0157247-006 KLF-6	Gray, Homogeneous, Fibrous, tease, non-friable Note: 29°C, 1.55 Oil	LAYER 1 100%	Chrysotile 85%	Non-Fibrous Material 15%

CUSTOMER: Kleinfelder
 2 Ada, suite 250
 Irvine CA 92618

PAGE #: 2 of 2
 REPORT #: 0157247
 PROJECT: PLM ANALYSIS

BULK SAMPLE ANALYSIS FOR ASBESTOS CONTENT BY POLARIZED LIGHT MICROSCOPY

Laboratory ID - Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type (%)	Non-Asbestos Components (%)
0157247-007 KLF-7	Gray, Homogeneous, Fibrous, tease, non-friable Note: 29°C, 1.55 Oil	LAYER 1 100%	Chrysotile 75%	Cellulose Fiber 1% Non-Fibrous Material 24%
0157247-008 KLF-8	Gray, Homogeneous, Fibrous, tease, non-friable Note: 29°C, 1.55 Oil	LAYER 1 100%	Chrysotile 70%	Non-Fibrous Material 30%
0157247-009 KLF-9	Gray, Homogeneous, Fibrous, tease, non-friable Note: 29°C, 1.55 Oil	LAYER 1 100%	Chrysotile 65%	Non-Fibrous Material 35%
0157247-010 KLF-10	Gray, Homogeneous, Fibrous, tease, non-friable Note: 29°C, 1.55 Oil	LAYER 1 100%	Chrysotile 65%	Non-Fibrous Material 35%
0157247-011 KLF-11	Gray, Homogeneous, Fibrous, tease, non-friable Note: 29°C, 1.55 Oil	LAYER 1 100%	Chrysotile 65%	Non-Fibrous Material 35%


Analyst - JEFF WAN

Approved Signatory Laboratory Director

The EPA method is a semi-quantitative procedure. The detection limit is between 0.1-1% by area and dependent upon the size of the asbestos fibers, the means of sampling and the matrix of the sampled material. The test results reported are for the sample(s) delivered to us and may not represent the entire material from which the sample was taken. The EPA recommends three samples or more be taken from a "homogeneous sampling area" before friable material is considered non-asbestos-containing. Negative floor tile samples may contain significant amounts (>1%) of very thin fibers which cannot be detected by PLM. Confirmation by TEM is recommended by the EPA (Federal Register Vol.59, No.146). Asbestos fibers bound in a non-friable organic matrix may not be detected by PLM. Alternative preparation methods are recommended. This report, from a NIST-accredited laboratory through NVLAP, must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. government. This report shall not be reproduced, except in full, without the written approval of EMS Laboratories, Inc. Samples were received in good condition unless otherwise noted.



NVLAP Lab Code: 101218-0

ASBESTOS BULK SAMPLE DATA SHEET

157247

Sheet 1 of 1

Kleinfelder, Inc. 2 Ada, Suite 250 Irvine, CA 92618 Tel: (949)727-4466 Fax: (949)727-9242	Project Name : Caltrans Task Order 11 Project No.: 133297 Project Manager: Mark Peabody Site Address: San Diego County, CA	Sampled By: Rich Stevenson Sampled By: Sampled By: Date Sampled: 7/12/13, 7/16/13	Laboratory: EMS Laboratories Pasadena, CA
--------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------

CHAIN OF CUSTODY INFORMATION:

Sample ID	Building Number	Room Number	Sample Location	Date	Time(24 hr.)	Company	Relinquished By: (sign/print)	Received By: (sign/print)	Sample Description	Quantity (SF/LF/E)	Friable (Y/N)	Condition	Laboratory
													Kleinfelder
KLF-1			Sixth Street On-Ramp UC				<i>Rich Stevenson</i>	<i>Annette M. [Signature]</i>	Gravel rail post shim				
KLF-2			Friars Road OC						Gravel rail post shim				
KLF-3			Genesee Ave UC						Gravel rail post shim				
KLF-4			163/805 Interchange						Gravel rail post shim				
KLF-5			Winter Gardens OC						Gravel rail post shim				
KLF-6			Parcelona Street UC						Gravel rail post shim				
KLF-7			El Camino Real OC						Gravel rail post shim				
KLF-8			Main Street UC						Gravel rail post shim				
KLF-9			San Ysidro Blvd UC						Gravel rail post shim				
KLF-10			I-905/805 INTERCHANGE						Gravel rail post shim				
KLF-11			Del Sur UC						Gravel rail post shim				

SUBMITTAL FORM/Laboratory Services

157247

TURNAROUND TIME: STD 48 HR. 24 HR.
 <8 HR. WKND OTHER:

◆ RELINQUISHED BY Rich STEVENSON
 ◆ TIME / DATE 7/17/13 - 15:00
 ◆ DATE OF SHIPMENT 7/17/13 ◆ CARRIER Fed Ex
 ◆ CLIENT P.O. NO. 133297
 ◆ CLIENT JOB/PROJECT ID NO(S). CALTRANS TASK ORDER 11
 ◆ PACKAGE SHIPPED FROM IRVINE, CA

◆ CLIENT RYAN KLEINFELDER
 ◆ ADDRESS 2 ADA, SUITE 250
IRVINE, CA 92618
 ◆ TELEPHONE 949-727-4466
 ◆ CONTACT RICH STEVENSON

◆ RESULTS REQUESTED VIA VERBAL FAX E-MAIL E-MAIL richstevenson@kleinfelder.com
 (NOTE: Complete written reports will follow all analyses, in addition to any prior transmitted verbal, fax or e-mail results) FAX NO. _____

◆ DATE/TIME OF SAMPLE COLLECTION 7/12/13, 7/16/13
 ◆ SAMPLE PRESERVATIVES N/A HOLDING TIMES N/A
 ◆ NO. OF SAMPLES SENT 11 SAMPLER'S NAME [Signature] / RICH STEVENSON
 ◆ TYPE: WATER WASTE WATER SOIL FILTER SORBENT TUBE IMPINGER OTHER Bulk

(FOR EMS ONLY)

EMS Sample No.	CLIENT SAMPLE NO.	DESCRIPTION LOCATION ANALYSIS	VOLUME TIME WEIGHT
<u>157247-1</u>		<u>See attached "asbestos bulk sample data sheet".</u>	
<u>2</u>		<u>Analyze all samples by standard polarized</u>	
<u>3</u>		<u>light microscopy.</u>	
<u>4</u>			
<u>5</u>			
<u>6</u>			
<u>7</u>			
<u>8</u>			
<u>9</u>			
<u>10</u>			
<u>11</u>			

(SF 6/07)

FOR EMS ONLY

◆ Laboratory No. 157247
 ◆ Date of Package Delivery 07-18-13
 ◆ Condition of Package on Receipt OK
 (NOTE: If the package has sustained substantial damage or the custody seal is broken, stop and contact the project manager and the shipper.)
 ◆ No. of Samples 11
 ◆ Date of Acceptance into Sample Bank 07-18-13
 ◆ Disposition of Samples EMS

◆ Received By Annette M ◆ Time 10:10
 ◆ Shipping Bill Retained: YES NONE
 ◆ Condition of Custody Seal WOUND
 ◆ Chain-of-Custody Signature _____
 ◆ Misc. Info. _____



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Ecological Services
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008

In Reply Refer To:
FWS-SDG-14B0046-14I0065

JAN 06 2014

Ms. Kim T. Smith
Chief, Environmental Stewardship and Ecological Studies
California Department of Transportation
4050 Taylor Street
San Diego, California 92110

Attention: Michael Galloway, Associate Biologist

Subject: Informal Section 7 Consultation for the Bridge Rail Safety Improvements Project,
San Diego County, California.

Dear Ms. Smith:

This is in response to your correspondence, dated October 22, 2013, requesting our concurrence with your determination that the subject project is not likely to adversely affect the federally threatened coastal California gnatcatcher (*Poliophtila californica californica*, gnatcatcher), in accordance with section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*). The project is receiving Federal funding through the Federal Highway Administration (FHWA). The California Department of Transportation (Caltrans) has assumed FHWA's responsibilities under the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*), for this consultation in accordance with section 1313 (Surface Transportation Project Delivery Program) of the Moving Ahead for Progress in the 21st Century Act (MAP-21) of 2012, as described in the National Environmental Policy Act assignment Memorandum of Understanding between FHWA and Caltrans (effective October 1, 2012) and codified in 23 U.S.C. 327.

The proposed project will upgrade nonstandard bridge rail end treatments to current standards at 68 locations along various highways throughout San Diego County. Only one of these locations, Location 55, will result in impacts to natural resources. Therefore, only Location 55 is addressed in this consultation.

Location 55 is located along the southbound side of Interstate 805 (I-805) north of Friars Road and east of the Quarry Falls property (Figure 1). Proposed work at this location includes installing a transition block and upgrading the metal beam guard rail along 225 feet of the existing bridge rail (Caltrans 2013). Project construction is scheduled to begin August 16 (if all gnatcatcher nesting within 500 feet of the project site is complete) and end September 30, 2014.

Coastal sage scrub, the preferred habitat for the gnatcatcher, occurs within and adjacent to the project site. Protocol surveys of the adjacent Quarry Falls property in 2005 detected a breeding gnatcatcher pair in coastal sage scrub immediately to the west of the project site (Consultants Collaborative 2005). Since the conditions do not appear to have changed significantly since the 2005 surveys, the coastal sage scrub on the Quarry Falls property may still support a gnatcatcher pair at this location. Because of its close proximity, the project site is likely part of this gnatcatcher pair's territory. However, the coastal sage scrub in the project site is disturbed and subject to a high level of disturbance from the adjacent highway, and therefore may be suitable for gnatcatcher foraging and dispersal, but it is not likely to be used for breeding.

The proposed project will directly impact approximately 0.1 acre of coastal sage scrub between the I-805 and the Caltrans Right-of-Way (ROW) chain link fence. The gnatcatchers occupying the coastal sage scrub on the adjacent Quarry Falls property may use the coastal sage scrub on the project site for foraging and dispersal. However, because large patches of coastal sage scrub remain on the Quarry Falls property, we deem the direct impact to 0.1 acre of coastal sage scrub on the project site to have an insignificant effect on the gnatcatchers on the Quarry Falls property. In addition, Caltrans will restore the impacted area with coastal sage scrub following completion of the project.

Project construction could impact gnatcatcher breeding. To avoid impacts to gnatcatcher breeding, Caltrans will construct the project outside the breeding season (February 15 through August 31), and conduct surveys to determine the presence of gnatcatchers in and adjacent to the project site. To ensure that any effects of clearing activities on individual gnatcatchers are reduced to the level of insignificance, a biologist will conduct surveys prior to clearing activities to determine if gnatcatchers are present. If gnatcatchers are observed, the biologist will direct clearing activities to ensure that no gnatcatchers are injured or killed by the clearing activities. This includes passively flushing gnatcatchers out of the impact area in the direction of adjacent preserved or avoided coastal sage scrub (e.g., slowly walking through sage scrub habitat to effect natural dispersal to adjacent habitat). This low-level flushing activity during the non-breeding season is considered an avoidance and minimization measure that has an insignificant effect on individual gnatcatchers and does not rise to the level of take as defined by the Act. The project may also result in indirect impacts to non-breeding gnatcatchers that may be present in the adjacent habitat such as temporary displacement, increased human presence, noise, and dust. However, due to the short duration of project construction and the high level of existing human disturbance in the project area, the gnatcatcher's potential exposure to indirect impacts will be limited.

In summary, Caltrans will implement significant conservation measures (Enclosure) as part of the project to avoid and minimize potential impacts to the gnatcatcher. Based on the site and species information described above and Caltrans' commitment to implement the conservation measures, we concur that all project impacts to the gnatcatcher will be avoided or reduced to a level of insignificance supporting a determination that the Bridge Rail Safety Improvements project is not likely to adversely affect the gnatcatcher. Therefore, the interagency consultation

requirements of section 7 of the Act have been satisfied. Should project plans change or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered and further section 7 consultation may be required.

Thank you for your coordination on this project. If you have any questions regarding this letter, please contact Lauren Kershek at 760-431-9440, extension 208.

Sincerely,

A handwritten signature in black ink, appearing to read "Karen A. Goebel", with a long, sweeping horizontal flourish extending to the right.

Karen A. Goebel
Assistant Field Supervisor

Enclosure

Literature Cited

[Caltrans] California Department of Transportation. 2013. Biological Assessment for the Bridge Rail Safety Improvements, San Diego County, California. October 2013.

Consultants Collaborative. 2005. Results of protocol surveys for coastal California gnatcatchers on the Quarry Falls project; City of San Diego, California. August 2.



Figure 1. Project location and surrounding land use (Source: Caltrans 2013).

ENCLOSURE

The Bridge Rail Safety Improvements project includes the following conservation measures that Caltrans has committed to implement to avoid and minimize potential adverse effects to the gnatcatcher to an insignificant level. These measures support the U.S. Fish and Wildlife Service's (Service) concurrence with Caltrans' "not likely to adversely affect" determination for the gnatcatcher:

1. Vegetation clearing and project construction will occur between September 1 (or sooner if a Service-approved project biologist¹ demonstrates to the satisfaction of the Service that all nesting within 500 feet of the project impact footprint is complete) and February 14 to avoid the gnatcatcher breeding season.
2. The project biologist will perform a minimum of three focused surveys, on separate days, to determine the presence of gnatcatchers in the project impact footprint outside the gnatcatcher breeding season. Surveys will begin a maximum of seven days prior to performing vegetation clearing and one survey will be conducted the day immediately prior to the initiation of clearing. If any gnatcatchers are found within the project impact footprint, the biologist will direct construction personnel to begin vegetation clearing in an area away from the gnatcatchers. In addition, the biologist will flush birds towards areas of coastal sage scrub to be avoided. It will be the responsibility of the biologist to ensure that gnatcatchers are not in the vegetation to be cleared. The biologist will also record the number and location of gnatcatchers disturbed by vegetation clearing. Caltrans will notify the Service at least seven days prior to vegetation clearing to allow the Service to coordinate with the biologist on bird flushing activities.
3. No work will occur in coastal sage scrub habitat outside of the project impact footprint. This habitat will be designated as an environmentally sensitive area (ESA) on the project plans. In addition, Caltrans will temporarily fence the limits of project impacts (including construction staging areas and access routes) to prevent impacts to gnatcatcher habitat to be avoided. Fencing will be installed in a manner that does not impact gnatcatcher habitat to be avoided, and removed upon project completion.
4. Temporary impacts to 0.1 acre coastal sage scrub will be offset by in-kind restoration of impacted areas with a native coastal sage scrub seed mix approved by the project biologist. Restoration will begin during the concurrent or next planting season (i.e., late fall to early spring) following completion of project construction.
5. All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities will occur in developed areas. The designated developed areas will be located in

¹ The project biologist for conservation measures 1, 2, and 10 will be a trained ornithologist with at least 40 hours in the field observing gnatcatchers and documented experience locating and monitoring gnatcatcher nests. In order to receive Service approval, the biologist's name, address, telephone number, and work schedule on the project must be submitted to the Service at least 5 working days prior to initiating project impacts.

such a manner as to prevent the runoff from any spills from entering waters of the United States or gnatcatcher habitat.

6. Appropriate erosion and siltation controls will be installed prior to construction and maintained until construction completion.
7. Impacts from fugitive dust will be avoided and minimized through watering, monitoring, and other appropriate measures.
8. The project site will be kept as clean of debris as possible.
9. Project personnel will be prohibited from bringing domestic pets.
10. The project biologist will perform the following duties:
 - a. Conduct an employee education program for construction crews working at the project site prior to construction on the biological resources associated with the project; and
 - b. Be on site during work to ensure compliance with all conservation measures and halt work, if necessary, for any project activities that are not in compliance with the conservation measures. The biologist will report to the Service within 24 hours of its occurrence and confer with the Service to ensure the proper implementation of conservation measures.