ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017
PROJECT BASELINE AGREEMENT
Pavement Preservation SR-134 from SR-170 to I-210 (EA 07-31170)

Resolution SHOPP-P-1819-04B
(will be completed by CTC)

1. FUNDING PROGRAM

- ☐ Active Transportation Program
- ☐ Local Partnership Program (Competitive)
- ☐ Solutions for Congested Corridors Program
- ☒ State Highway Operation and Protection Program
- ☐ Trade Corridor Enhancement Program

2. PARTIES AND DATE

2.1 This Project Baseline Agreement (Agreement) for the *Pavement Preservation SR-134 from SR-170 to I-210 (EA 07-31170)*, effective on, OCTOBER 17, 2018 (will be completed by CTC), is made by and between the California Transportation Commission (Commission), the California Department of Transportation (Caltrans), the Project Applicant, *Caltrans*, and the Implementing Agency, *Caltrans*, sometimes collectively referred to as the "Parties".

3. RECITAL

3.2 Whereas at its March 22, 2018 meeting the Commission approved the State Highway Operation and Protection Program, and included in this program of projects the *Pavement Preservation SR-134 from SR-170 to I-210 (EA 07-31170)*, the parties are entering into this Project Baseline Agreement to document the project cost, schedule, scope and benefits, as detailed on the Project Programming Request Form attached hereto as Exhibit A and the Project Report attached hereto as Exhibit B, as the baseline for project monitoring by the Commission.

3.3 The undersigned Project Applicant certifies that the funding sources cited are committed and expected to be available; the estimated costs represent full project funding; and the scope and description of benefits is the best estimate possible.

4. GENERAL PROVISIONS

The Project Applicant, Implementing Agency, and Caltrans agree to abide by the following provisions:

4.1 To meet the requirements of the Road Repair and Accountability Act of 2017 (Senate Bill [SB] 1, Chapter 5, Statutes of 2017) which provides the first significant, stable, and on-going increase in state transportation funding in more than two decades.

4.2 To adhere, as applicable, to the provisions of the Commission:

- ☐ Resolution *Insert Number* , "Adoption of Program of Projects for the Active Transportation Program", dated
- ☐ Resolution *Insert Number* , "Adoption of Program of Projects for the Local Partnership Program", dated
- ☐ Resolution *Insert Number* , "Adoption of Program of Projects for the Solutions for Congested Corridors Program", dated
- ☒ Resolution G-18-13, "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated March 22, 2018
- ☐ Resolution *Insert Number* , "Adoption of Program of Projects for the Trade Corridor Enhancement Program", dated

4.3 All signatories agree to adhere to the Commission's State Highway Operation and Protection Program, Guidelines. Any conflict between the programs will be resolved at the discretion of the Commission.

4.4 All signatories agree to adhere to the Commission's SB 1 Accountability and Transparency Guidelines and policies, and program and project amendment processes.

4.5 Caltrans agrees to secure funds for any additional costs of the project.

4.6 Caltrans agrees to report on a quarterly basis; after July 2019, reports will be on a semi-annual basis on the progress made toward the implementation of the project, including scope, cost, schedule, outcomes, and anticipated benefits.

4.7 Caltrans agrees to prepare program progress reports on a quarterly basis; after July 2019, reports will be on a semi-annual basis and include information appropriate to assess the current state of the overall program and the current status of each project identified in the program report.

4.8 Caltrans agrees to submit a timely Completion Report and Final Delivery Report as specified in the Commission's SB 1 Accountability and Transparency Guidelines.

4.9 All signatories agree to maintain and make available to the Commission and/or its designated representative, all work related documents, including without limitation engineering, financial and other data, and methodologies and assumptions used in the determination of project benefits during the course of the project, and retain those records for four years from the date of the final closeout of the project. Financial records will be maintained in accordance with Generally Accepted Accounting Principles.

4.10 The Transportation Inspector General of the Independent Office of Audits and Investigations has the right to audit the project records, including technical and financial data, of the Department of Transportation, the Project Applicant, the Implementing Agency, and any consultant or sub-consultants at any time during the course of the project and for four years from the date of the final closeout of the project, therefore all project records shall be maintained and made available at the time of request. Audits will be conducted in accordance with Generally Accepted Government Auditing Standards.

5. SPECIFIC PROVISIONS AND CONDITIONS

5.1 Project Schedule and Cost
See Project Programming Request Form, attached as Exhibit A.

5.2 Project Scope
See Project Report or equivalent, attached as Exhibit B. At a minimum, the attachment shall include the cover page, evidence of approval, executive summary, and a link to or electronic copy of the full document.

5.3 Other Project Specific Provisions and Conditions

Attachments:

Exhibit A: Project Programming Request Form
Exhibit B: Project Report

SIGNATURE PAGE
TO
PROJECT BASELINE AGREEMENT

Pavement Preservation on SR-134 from SR-170 to I-210 EA 07-31170

Resolution SHOPP-P-1819-04B

for Reza Fateh — 8-3-18 Date

Project Manager

Project Applicant

Derek Higa — 8/3/18 Date

Interim SB 1 Program Manager

Implementing Agency

FOR Shirley Choate, Interim — 8/3/2018 Date

District Director

California Department of Transportation

For Laurie Berman — 9/18/18 Date

Director

California Department of Transportation

Susan Bransen — 10/26/18 Date

Executive Director

California Transportation Commission

Baseline agreement information was extracted from Caltransâ„¢ project data systems. Project description, funding and performance measures are from CTIPS. Project delivery milestones are from PRSM. All information is current and accurate.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

BASELINE AGREEMENT

Date:	08/03/18 07:21:01 AM

District	EA	Project ID	PPNO	Project Manager
07	31170	0715000013	4817	FATEH, REZA

County	Route	Begin Postmile	End Postmile	Implementing Agency	
LA	134	0.0	R 13.3	PA&ED	Caltrans
				PS&E	Caltrans
				Right of Way	Caltrans
				Construction	Caltrans

Project Nickname

LA-134 Pavement Preservation

Location/Description

In the cities of Los Angeles, Burbank, Glendale and Pasadena, from Route 170 to Route 210. Rehabilitate pavement, upgrade guardrail and Americans with Disabilities Act (ADA) curb ramps to current standards.

Legislative Districts

Assembly:	43, 46	Senate:	18, 24, 25	Congressional:	28, 30, 34

PERFORMANCE MEASURES

	Primary Asset	Good	Fair	Poor	New	Total	Units
Existing Condition	Pavement	6.2	109.6	1.3		117.1	Lane-miles
Programmed Condition	Pavement	117.1				117.1	Lane-miles

Project Milestone	Actual	Planned
Project Approval and Environmental Document Milestone	12/29/17	
Right of Way Certification Milestone		01/30/19
Ready to List for Advertisement Milestone		04/30/19
Begin Construction Milestone (Approve Contract)		09/30/19

FUNDING

Component	Fiscal Year	SHOPP					Total
PA&ED	17/18	1,380					1,380
PS&E	17/18	4,744					4,744
RW Support	17/18	254					254
Const Support	18/19	5,735					5,735
RW Capital	18/19	376					376
Const Capital	18/19	34,034					34,034
Total		46,523					46,523

Capital Preventive Maintenance Project Report

To Request Programming in 2017 SHOPP

On Route **134**

Between **Route 170**

And **Route 210**

I have reviewed the right-of-way information contained in this report and the right-of-way data Sheet attached hereto, and find the data to be complete, current and accurate:

Andrew P. Nierenberg, Deputy District *Director, Right of Way*

APPROVAL RECOMMENDED:

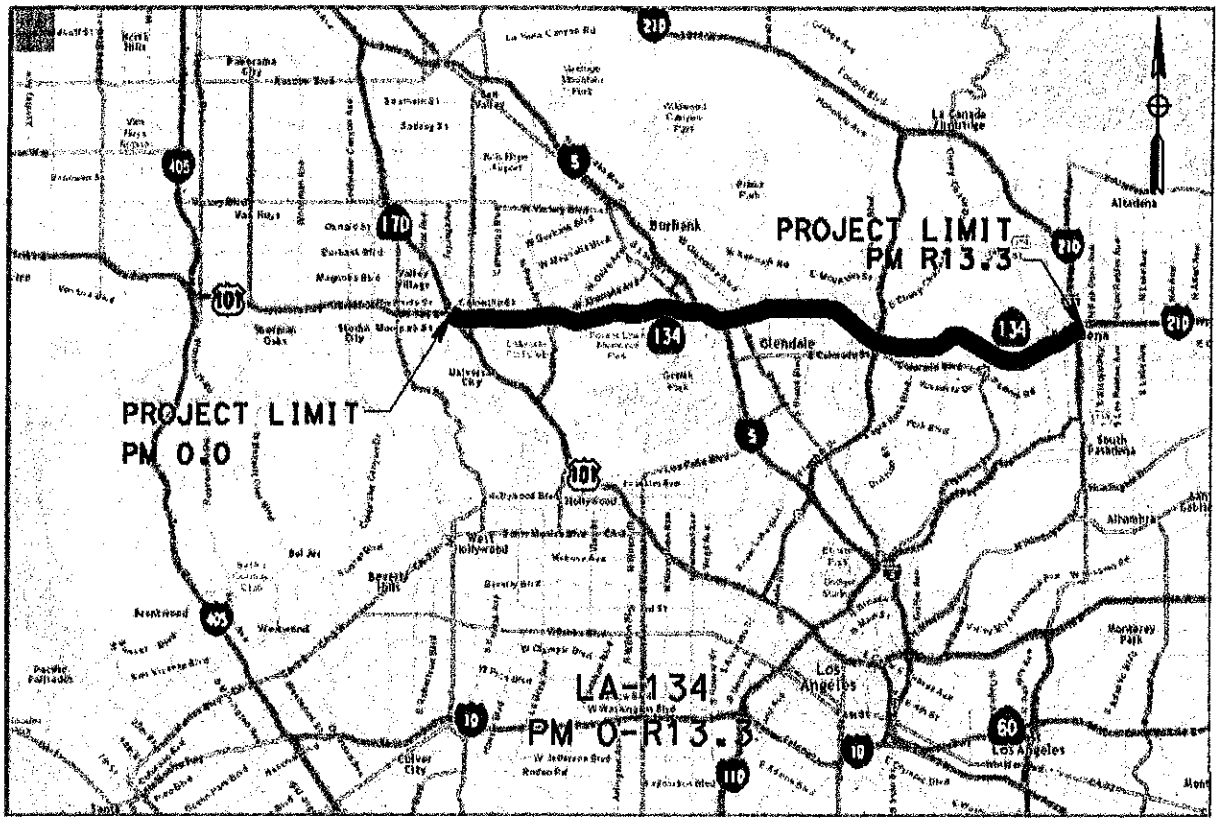
David H. Miraaney, *Project Manager*

APPROVED

FOR **Jerrel Kam**, Deputy District Director, Design

12/29/17
Date

Vicinity Map



This capital preventive maintenance project report has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

12/29/2017

REGISTERED CIVIL ENGINEER *DATE*

Table of Contents

1. INTRODUCTION AND BACKGROUND

Project Description;

This Capital Preventive Maintenance Project (CAPM) project on Route 134 is located in Los Angeles County in the Cities of Los Angeles, Burbank, Glendale, and Pasadena. The purpose of this project is to preserve and extend the life of the existing pavement and improve ride quality. The project limit runs on state Route 134 from Route 170 interchange (PM 0.0) to Route 210 interchange (PM R13.3). The work mainly involves about 3,500 concrete slabs replacement on the mainline, grinding the HOV lane pavement to restore surface friction, replace 24 approach/departure slabs at 6 locations, cold plane and overlay for all ramps and mainline shoulders, upgrades 4,901 ft. of Metal Beam Guard Railing (MBGR) and end treatments on various locations, restripe pavement delineations, and upgrade 54 existing nonstandard ADA curb ramps. This project also includes repairs of settlements on WB 134 east of Forest Lawn drive UC and on the EB 134 on-ramp from Forest Lawn Drive. The estimated project construction cost in year 2017 is $35.804 million. Based on 5% escalation factor per year, the construction costs for the proposed program year 2018/2019 is $37.594 million. Total project cost including construction, right-of-way and support ($35.804 million + $0.801 million + $8.22 million) in year 2017 is $44.825 million.

Project Limits	07-LA-134 PM 0.0 to R13.3	
	Current Cost Estimate	**Escalated Cost Estimate**
Current Capital Outlay Support Estimate	$8.22 million	
Current Capital Outlay Construction Estimate	$35.804 million	$37.594 Million
Current Capital Outlay Right-of-Way Estimate	$606,000	$801,000
Funding Source	20.XX.201.121	
Funding Fiscal Year	2018/19	
Type of Facility	2 HOV and 8 lanes freeway	
Number of Structures	75	
SHOPP Project Output	112 Lane Miles	
Environmental Determination or Document	Mini PEAR	
Legal Description	In Los Angeles County, on Route 134 between Rte. 170 Interchange and Rte. 210 Interchange	
Project Development Category	5	

2. RECOMMENDATION

It is recommended that this pavement preservation project report be included in the 2016 State Highway Operation and Protection Program (SHOPP) cycle; and be funded in 2018/2019 fiscal year from the Roadway Rehabilitation Program (20.XX.201.121).

3. PURPOSE AND NEED

Purpose:
The purpose of this project is to restore the facility to a state of good repair and improve ride quality by replacing the damaged slabs on mainline, grinding the HOV lane, resurfacing the mainline shoulders, and ramps, upgrading existing MBGR and ADA curb ramps to current standard.

Need:
The 2015 Pavement Condition Survey for this section of road has an overall PCS/PMS priority number 9, which characterizes the road as having pavement distress. (Attachment Q)

4. EXISTING FACILITY, DEFICIENCIES AND TRAFFIC DATA

Existing Facility

Route 134 is an east-west freeway that stretches from Route 170 (PM 0.0) in the City of Los Angeles, North Hollywood area to Route 210 (PM R13.3) of the city of Pasadena. The route, provides access to the cities of Los Angeles, Burbank, Glendale and Pasadena. It consists of 4 PCC lanes and an HOV lane in each direction separated by concrete barrier. Throughout the route, there are nonstandard left and right shoulder lane width, nonstandard MBGR's and ADA curb ramps.

4A. Roadway Geometric Information

Facility (PM)	Minimum Curve Radius (ft)	Through Traffic Lanes				Paved Shoulder Width				Median Width (ft)	Shoulder is a Bicycle Lane (Y/N)
		No. of Lanes		Lane Width (ft)	Type	WB (ft)		EB (ft)			
		WB	EB			Left	Right	Left	Right		
0.0/0.33	3,715	2	4	12	PCC	2	8	2	8	6	N
0.33/0.54	Tangent	5	5	11	PCC	2	8	2	8	6	N
0.54/0.78	10,000	5	5	11	PCC	2	8	2	8	6	N
0.78/1.11	Tangent	5	5	11	PCC	2	8	2	8	6	N
1.11/1.50	7,500	5	5	11	PCC	2	8	2	8	6	N
1.50/1.62	Tangent	5	5	11	PCC	2	8	2	8	6	N
1.62/1.95	5,000	5	5	11	PCC	2	8	2	8	6	N
1.95/2.13	Tangent	5	5	11	PCC	2	8	2	8	6	N
2.13/2.25	4,600	5	5	11	PCC	2	8	2	8	6	N
2.25/2.39	Tangent	5	5	11	PCC	2	8	2	8	6	N
2.39/2.60	2,000	5	5	11	PCC	2	8	2	8	6	N
2.60/3.22	Tangent	5	5	11	PCC	2	8	2	8	6	N
3.22/3.40	2,000	5	5	11	PCC	2	8	2	8	6	N
3.40/3.53	Tangent	5	5	11	PCC	2	8	2	8	6	N

3.53/3.71	2,000	5	5	11	PCC	2	8	2	8	6	N
3.71/4.10	Tangent	5	5	11	PCC	2	8	2	8	6	N
4.10/4.35	2,917	5	5	11	PCC	2	8	2	8	6	N
4.35/4.65	Tangent	5	5	11	PCC	2	8	2	8	6	N
4.65/4.79	4,600	5	5	11	PCC	2	8	2	8	6	N
4.79/R5.0	Tangent	5	5	11	PCC	2	8	2	8	6	N
L5.0/L5.22	1,500	4	*	12	PCC	8	10	*	*	*	N
L5.22/L5.40	Tangent	4	*	12	PCC	8	10	*	*	*	N
L5.40/L5.71	1,764	3	*	12	PCC	8	10	*	*	*	N
R5.0/R5.27	Tangent	*	5	12	PCC	*	*	8	10	*	N
R5.27/R5.49	1,700	*	5	12	PCC	*	*	10	10	*	N
R5.49/R5.71	Tangent	*	4	12	PCC	*	*	10	10	*	N
R5.71/R6.41	Tangent	3-6	6-5	11	PCC	2	10	2	8-10	6	N
R6.41/R6.70	6,000	6-5	5	11	PCC	2	10	2	10	6	N
R6.70/R7.62	Tangent	5-6	5-6	11	PCC	2	10-8	2	10-8	6	N
R7.62/R8.05	3,000	6-5	6-5	11	PCC	2	8	2	10-8	6	N
R8.05/R8.36	Tangent	6	6	11	PCC	2	8	2	8	6	N
R8.36/R9.65	9,000	6-4	6-4	11	PCC	2-3	10	2-3	8-10	6-8	N
R9.65/R9.90	Tangent	4	4	12	PCC	3	10	3	8-10	8	N
R9.90/R10.20	4,000	4	4	12	PCC	3	10	3	10	8	N
R10.20/R10.42	Tangent	4	4	12	PCC	2	10	2	10	6	N
R10.42/R10.80	2,000	4	4	12	PCC	2	10	2	10	6	N
R10.80/R11.51	Tangent	4	4	12	PCC	2-3	10	2-3	10	6-8	N
R11.51/R12.34	3,450	4	4	12	PCC	3	10	3	10	8	N
R12.34/R12.48	Tangent	4	4	12	PCC	3	10	3	10	8	N
R12.48/12.57	3,000	4-5	4-5	12	PCC	3	10	3	10	8	N
R12.57/R12.69	2,035	5-7	5-7	11-12	PCC	3	10	3	10	8	N
R12.69/R12.85	Tangent	7-5	7-5	11-12	PCC	3	10	3	10	8	N
R12.85/R13.03	3,500	5-4	5-4	12	PCC	3	10	3	10	8	N
R13.03/R13.30	Tangent	4-7	4-7	11-12	PCC	3	10	3	10	8	N

* At Route 134/5 Interchange Separation

4B. Condition of Existing Facility (Repeat for each homogeneous segment):

1) Traveled Way Data

PMS Category (1-29) 9 Priority Classification (.1-.4) .3

International Roughness Index (IRI) 138

Rigid Pavement: (Attachment C) Flexible Pavement: N/A

3rd Stage Cracking % 0.1 Alligator B Cracking % N/A

Faulting Yes Patching % N/A

Joint Spalls Yes Rutting N/A

Pumping Yes Bleeding N/A

Corner Breaks % 0.04 Raveling N/A

Locations(s) of subsurface or pounded surface-water problem: N/A

2) Pedestrian Facility Data/Signal/Loops at Ramps

No.	Post mile	Name	Detectable Warning Surface	Corners ADA Need Upgrade				Upgrade Signal	Lanes for Bicycle Loops	Electrical Comments
				NW	NE	SW	SE			Type D Loops
1	0.267	WB On Fr Vineland Ave			1		1		1	
2	0.561	EB Off To Cahuenga Blvd		1		1		Y	2	2
3	0.631	WB Off Lankershim Blvd	SE	1	1			Y	2	2
4	0.750	EB On Fr Riverside/Lankersh		1	1				1	
5	0.986	WB Off Cahuenga Blvd			1		1	Y	2	2
6	1.005	EB On Cahuenga Bl			1		1	Y	1	
7	1.669	EB Off Pass Ave		1		1		Y	2	2
8	1.896	WB On Alameda	SW						1	
9	1.958	Seg WB On From Sb Alameda							1	
10	1.959	Seg WB On From Nb Alameda							1	
11	2.155	EB On Fr Hollywood/Alameda		1		1			1	
12	2.293	WB Off Alameda					1	Y	3	3
13	2.565	EBoff B Hope Dr/Buena Vista						Y	2	2
14	2.769	WB On Fr Sb Buena Vista						Y	1	
15	2.973	Seg EB On Fr Bob Hope Dr							1	

16	2.974	Seg EB On Fr Sb Buena Vista						Y	1	
17	3.062	WB Off Buena Vista		1				Y	3	3
18	3.091	EB On Fr Buena Vista							1	
19	3.684	EB Off Forest Lawn							2	0
20	3.722	WB On Forest Lawn							1	
21	3.931	WB Off Forest Lawn							1	0
22	3.935	EB On Forest Lawn							1	
23	4.660	WB On Fr Victory Blvd	SW						1	
24	4.686	EB Off To Victory Blvd		1					1	3
25	R 5.322	L Dum WB On Fr Nb Rte 5								
26	R 5.332	R EB Off To Sb Rte 5								
27	R 5.369	L WB On Fr San Fernando Rd								
28	R 5.386	R Dum EB On From Sb Rte 5								
29	R 5.621	R Seg EB On From Zoo Drive								
30	R 5.674	Seg WB Off To Zoo Dr								0
31	R 5.675	Seg WB To Zoo Dr/WB 134							1	
32	R 5.676	Seg WB To Nb 5/Zoo Dr							1	
33	R 5.678	EB On Fr Nb 5/Zoo Dr								
34	R 5.910	EB Off San Fernando Rd						Y	2	2
35	R 5.967	Seg WB Fr San Fernando								
36	R 5.968	Seg WB Off To Rte 5								
37	R 5.969	Dum WB Off To Rte 5/Zoo								
38	R 6.173	EB On Fr San Fernando Rd			1			Y	1	
39	R 6.175	WB Off San Fernando Rd							2	3
40	R 6.476	EB Off Pacific		1		1			2	2
41	R 6.477	WB On From Pacific		1		1			1	
42	R 6.690	EB Off To Central Ave	SW				1		2	3
43	R 6.709	WB On Fr Central Ave						Y	1	
44	R 6.858	WB Off To Pacific Av			1		1	Y	2	2
45	R 6.866	EB On Fr Pacific Av			1		1	Y	1	
46	R 7.254	WB Off Brand Blvd						Y	2	3
47	R 7.255	EB On Brand Blvd						Y	1	
48	R 7.624	WB On Fr Glendale Ave	NW & SW					Y	1	
49	R 7.678	EB Off Glendale Ave				1	1	Y	2	3
50	R 7.852	WB Off Glendale Ave	NE					Y	2	2
51	R 7.860	EB On Fr Sb Glendale Ave	NW					Y	1	
52	R 8.041	EB On Fr Nb Glendale Ave					1		1	
53	R 8.387	WB On Fr La 2 Sb								
54	R 8.510	EB Off To Rte 2								
55	R 8.580	WB On Fr Harvey Dr		1		1		Y	1	
56	R 8.666	EB Off To Harvey Dr		1		1		Y	2	3
57	R 8.753	Dum WB On From EB Rte 2								
58	R 8.755	Seg EB Off To EB Rte 2								
59	R 8.949	WB Off To Harvey Dr	NE & SE					Y	2	3
60	R 9.067	EB On Fr Harvey Dr			1		1	Y	1	
61	R 9.257	Seg WB Off To EB 2								
62	R 9.267	EB On Fr WB Off Rte 25								
63	R 9.396	WB Off To Rte 2								
64	R 9.459	Dum EB On From EB Rte 2								
65	R 11.425	EB Off Figueroa St		1	1				2	2
66	R 11.500	WB On From Figueroa	SE					Y	1	
67	R 11.525	Seg EB On Colorado Blvd	Median		1			Y	1	
68	R 11.526	Seg EB On Fr Figueroa					1		1	
69	R 11.639	Seg WB Off To Colorado Blvd					1	Y		
70	R 11.640	Seg WB Off To Figueroa St	NE							
71	R 11.657	EB Fr Figueroa/Colorado								
72	R 11.754	WB Off To Figueroa St/Color								2
73	R 12.268	WB On From San Rafael	NW & SW					Y	1	
74	R 12.272	EB Off San Rafael	NW & SW					Y	1	2
75	R 12.446	EB On Fr San Rafael	NE & SE					Y		

76	R 12.468	WB Off To San Rafael	NE & SE					Y		3
77	R 12.784	WB On From Orange Grove	NW					Y		
78	R 12.821	EB Off To Orange Grove						Y		3
79	R 12.995	WB On Fr EB Rte 210/Nb 710								
80	R 13.041	EB Off To WB Rte 210/Sb 710								
81	R 13.117	EB Off Seg WB Rte 210								
82	R 13.131	WB Off To Orange Grove	NE					Y		2
83	R 13.188	EB On Fr Orange Grove Blvd	SE					Y	1	
Total			**24**	**12**	**11**	**8**	**12**	**36**	**74**	**59**

4C. Structures Information

Structures			Vertical Clearance		
No	**Structure Number**	**Structure Name**	**Existing (ft)**	**RRR Standard (ft)**	**Proposed (ft)**
1	53 1693S	Riverside Drive Off-Ramp OC	15.91	16.50	Existing
2	53 1452F	W134-N170 Connector OC	15.06	16.50	Existing
3	53 1345F	Riverside Drive UC	14.99	15.00	Existing
4	53 1272	Vineland Avenue UC	15.16	15.00	Existing
5	53 1273	Lankershim Blvd UC	14.99	15.00	Existing
6	53 1274	Cahuenga Blvd UC	16.24	15.00	Existing
7	53 1275	Ledge Avenue UC	15.98	15.00	Existing
8	53 1276	Forman Avenue UC	15.55	15.00	Existing
9	53 1277	Pass Avenue OC	15.91	16.50	Existing
10	53 1278	Alameda Avenue OC	15.91	16.50	Existing
11	53 1279	Hollywood Way OC	14.83	16.50	Existing
12	53 1280	Olive Avenue OC	15.49	16.50	Existing
13	53 1281	California Street OC	15.06	16.50	Existing
14	53 1282	Bob Hope Drive UC	14.99	15.00	Existing
15	53 3072	Buena Vista Park Channel	-	-	Existing
16	53 1283	Riverside Drive UC	15.22	15.00	Existing
17	53 1469	Disney Equestrian UC	-	-	Existing
18	53 1285	Los Angeles River	-	-	Existing
19	53 1377	Mariposa Equestrian UC	-	15.00	Existing
20	53 1286	Forest Lawn Drive UC	14.99	15.00	Existing
21	53 1378	Ruberta Equestrain UC	-	-	Existing
22	53 1287	Riverside Drive OC	14.99	16.50	Existing
23	53 1075L	Los Angeles River Br & Sep	14.99	16.50	Existing
24	53 1075R	Los Angeles River Br & Sep	14.99	16.50	Existing
25	53 1074R	Route 134/5 Separation	14.83	16.50	Existing
26	53 1790	Los Angeles River Boh	17.32	16.50	Existing
27	53 1790H	W134-5 Connector Boh	16.08	16.50	Existing
28	53 1744	Concord Street UC	15.22	15.00	Existing
29	53 1745	Kenilworth Avenue PUC	-	-	Existing
30	53 1746	Pacific Avenue UC	14.99	15.00	Existing
31	53 1747	Columbus Avenue POC	17.98	18.50	Existing
32	53 1748	Central Avenue OC	16.73	16.50	Existing
33	53 1749	Brand Blvd OC	18.31	16.50	Existing
34	53 1750	Louise Street OC	16.57	16.50	Existing
35	53 1751	Jackson Street OC	15.98	16.50	Existing
36	53 1752	Geneva Street OC	16.47	16.50	Existing
37	53 1875	Glendale Avenue OC	17.32	16.50	Existing
38	53 1877	Doran Street POC	17.98	18.50	Existing
39	53 1863	Verdugo Road UC	15.75	15.00	Existing

40	53 1866	Chevy Chase Drive UC	17.75	15.00	Existing
41	53 1878	Sinclair Avenue UC	15.49	15.00	Existing
42	53 1907G	E134-E&W2 Connector OC	15.49	16.50	Existing
43	53 1884	Harvey Drive UC	17.39	15.00	Existing
44	53 1907G	E134-E&W2 Connector OC	15.49	16.50	Existing
45	53 1918G	E134-W2 Connector OC	25.00	16.50	Existing
46	53 1919	Route 134/2 Separation	17.22	16.50	Existing
47	53 1917F	W134-S2 Connector OC	15.98	16.50	Existing
48	53 1919S	Route 134/2 Separation	15.75	16.50	Existing
49	53 1921F	W2-W134 Connector OC	15.42	16.50	Existing
50	53 2693H	E&W134-E2 Connector OC	25.00	16.50	Existing
51	53 1917F	W134-S2 Connector OC	15.98	16.50	Existing
52	53 1948F	Holly Drive UC	19.39	15.00	Existing
53	53 1939	W134-W2 Connector UC	14.90	15.00	Existing
54	53 2026L	Arbor Del-Hillmont UC	25.00	15.00	Existing
55	53 2026R	Arbor Del-Hillmont UC	25.00	15.00	Existing
56	53 2151L	Figueroa Street UC	25.00	15.00	Existing
57	53 2151R	Figueroa Street UC	25.00	15.00	Existing
58	53 2151S	Figueroa Street UC	25.00	15.00	Existing
59	53 2148K	Colorado Blvd On-Ramp	18.73	16.50	Existing
60	53 2137K	Colorado Blvd Off-Ramp OC	16.24	16.50	Existing
61	53 2140	Patrician Way OC	17.98	16.50	Existing
62	53 2097	San Rafael OC	16.90	16.50	Existing
63	53 0166	Arroyo Seco	16.01	16.50	Existing
64	53 2197K	Orange Grove Blvd On-Ramp	19.49	16.50	Existing
65	53 2226	Wb Colorado Blvd OC	16.57	16.50	Existing
66	53 0763	Orange Grove Blvd OC	17.75	16.50	Existing
67	53 2269S	Orange Grove Blvd E134/134 OC	18.83	16.50	Existing
68	53 2253K	W134-Orange Grove Bl/E210 & N710	17.65	16.50	Existing
69	53 2431Y	Dynameter Dr OC	17.65	16.50	Existing
70	53 2263	Green St OC	21.10	16.50	Existing
71	53 2264	Colorado Blvd OC	18.24	16.50	Existing
72	53 2265	St John Ave/E134-S710 OC	18.67	16.50	Existing
73	53 2537	Union St OC	17.32	16.50	Existing
74	53 2317	Route 134, 210/710, 210 Sep	16.57	16.50	Existing
75	53 2318G	E134-W210 Connector OC	18.01	16.50	Existing

4D. Traffic Data

Construction Year ADT 12448

DHV 127,780 % Trucks 4.3

Safety Review Date: 12-11-2014 (According to Traffic Investigation Unit, all the data are valid for PA&ED phase, PR use).

5. CORRIDOR AND SYSTEM COORDINATION

Route 134, also known as the Ventura Freeway is an interregional east/west freeway located entirely within Los Angeles County. It originates at Route 134/170/101 interchanges (PM 0.0) and runs a distance of 13.3 miles, terminating at Route 134/210/710 interchange (PM R13.3). The topography along this route is primarily under three percent grades. The District 7 Highway Inventory Classifies this route as Typical "flat". Route 134 traverses through the incorporated cities of Los Angeles, Burbank, Glendale and Pasadena.

6. ALTERNATIVES

6A. CAPM strategy:

1- Replace damaged concrete slabs with Jointed Plain Concrete Pavement-Rapid Strength Concrete (JPCP-RSC) or Individual Precast Slab Replacement (IPSR). The pavement strategy for each slab will be determined in the design phase.
2- Upgrade MBGR to current standard. (Attachment R)
3- Upgrade non-compliant ADA curb ramps to current standard.(Attachment R)
4- Install delineators as recommended in Traffic Safety Analysis Report.
5- Pavement major distress settlement repair at westbound Route 134 just east of Forest Lawn UC and at eastbound Route 134 on-ramp from Forest Lawn Drive (Attachment O).
6- Cold plane and overlay 0.25' of Hot Mix Asphalt Type A (HMA-A) on all existing mainline shoulders.
7- Cold plane and overlay 0.15' of Rubberized Hot Mix Asphalt Type G (RHMA-G) on all ramps and ramp- shoulders.
8- Grind HOV lane and connectors.
9- Upgrade existing AC dike.

Life Cycle Cost Analysis (LCCA)

Per Life Cycle Cost Analysis Manual (LCCA), Appendix 8; LCCA is not required for CAPM projects.

Enhancements

Where replacing slabs that impact loop detectors on the freeway, the entire row of slabs need to be replaced to ensure connectivity of the loops.

Date of Traffic Safety Analysis Report 12/11/2014 (District Traffic Investigation Unit agreed to use these values as a valid data for PA&ED phase of PR document).

6B. Hazardous waste disposal site required? If yes, where are sites?

A full evaluation of potential hazardous waste or contamination issues will be addressed during the design phase of the project. Based on historical information from prior projects within the project vicinity, the following issues may be encountered (Attachment E):

a. Removal of Yellow Stripping, Pavement Marking and Metal Beam Guard Railings.
b. Minor ADL from MBGR posts excavation and ADA Ramps.

6C. Material and/or disposal site need and availability?

Any material that cannot be properly disposed or salvaged shall become property of the contractor and shall be disposed of outside the State's Right of Way in accordance with Caltrans Standard Specification.

6D. Roadside design and management

Not applicable.

6E. Right of way and utility issues:

Right of Way: All works will be within Caltrans Right of Way.
Utilities: It's anticipated that some utilities will be impacted. Total of $801,000 is considered for utilities which include $570,000 for pot-holing. Right of Way Data Sheet is issued dated 12/29/2017 (Attachment J).

6F. Railroad involvement:

This project does not involve with the railroad.

6G. Recycled materials:

This project will recycle all applicable material on site. Material not recycled on site shall be transported to a recycling center.

6H. Local and regional input:

Not applicable.

6J. What are the consequences of not doing this entire project?

If the proposed project cannot proceed as planned, the existing pavement will continue to deteriorate and result in decreased ride quality, road hazard and maintainability. It will lead to increase maintenance activities, costs, and worker exposure to traffic. Frequent maintenance activities will cause undue delays to motorists and postponing the project will cost much more in the future than the current estimated cost in this critical urban corridor.

7. TRANSPORTATION MANAGEMENT

7A. Transportation Management Plan

This Transportation Management Plan (TMP) is for handling traffic during construction. The key elements of TMP are Press Release, Lane Closure and COZEEP Memo dated 11/28/2017 (Attachment C).

7B. Vehicle Detection Systems

Due to the replacement of slabs, Vehicle Detection Loops might be affected and will be replaced during construction. Preliminary cost estimate for Traffic Loop Detection is included in the Traffic Upgrade estimate.

8. ENVIRONMENTAL COMPLIANCE

A Mini Preliminary Environmental Analysis Report (Mini PEAR) was prepared for this project. The Project is categorically exempt under State CEQA guidelines and categorically excluded under NEPA guidelines. Date Approved: 01/22/2015 (Attachment G).

9. PROJECT ESTIMATE

Total Lane-Miles of CAPM Work 112 Lane Miles

Pavement Work	*Quantity*	*Unit*	*Unit Cost*	*Estimate*
Flexible Shoulder Cold Planing AC	1744,064	SQYD	$2	$348,128
Pave 0.25' HMA-A on the shoulders	23,661	T	$100	$2,336,182
Rigid Pavement Work (slab replacement Precast)	17,500	CY	$450	$7,875,000
Ramps Cold Plane	570,712	SYQD	$2.5	$1,301,780
Ramps pave 0.15' RHMA-G	25,482	T	$100	$2,548,234
Upgrade AC Dike to type "D"	12,000	LF	$15	$180,000
HOV and Connectors Grinding	245,000	SQYD	$5	$1,225,000
Subtotal				**$15,844,208**

Non-Pavement Work:				*Estimate*
ADA Curb Ramp Upgrade involve bridge structures	11	EA	$67,288	$740,160
ADA Curb Ramp upgrade	42	EA	$7,000	$294,000
Detectable Warning Surface for ADA Curb Ramps	23	EA	$444	$10,212
Traffic Signal Light Upgrade (Loop detectors, relocate electrolier, control system, ….)	1	LS		$4,149,370
Lead Compliance (Excavation, MBGR Wood & Yellow Stripe Removal)	1	LS		$193,000
ITS Impact	1	LS		$400,000
Traffic Management Plan	1	LS		$865,000
Traffic Control	1	LS		$817,000
Inlet Grate	6	EA	$1,500	$9,000
Delineators	883	EA	$50	$44,150
Sign Post (2 Single and 14 Double Posts)	1	LS		$15,250
Minor Concrete (Vegetation Control)	458	CY	$60	$27,480
Striping and Pavement Markings	231,622	LF	$2.24	$518,833
Pavement Markers	44,295	EA	$0.99	$43,852
Metal Beam Guard Railing	24,901	LF	$24	$597,624
Terminal End Sections	21	EA	$530	$11,130
Utilities	1	LS		$606,000
Storm water	1	LS		$560,000

Approach/Departure Slabs	24	EA	$24,100	$578,000
Aggregate (approach Slab)	41	CY	$450	$18,450
Subtotal				**$10,498,911**

Total	Estimate
Pavement Work Subtotal	$15,844,208
Non-Pavement Work Subtotal	$10,498,911
Pavement settlement repair (at Forest Lawn interchange)	2,300,000
Sum of Subtotals	$28,643,119
5% Mobilization	$1,432,156
20% Contingency (for Time Related Overhead & Contingencies)	$5,728,624
TOTAL PROJECT ESTIMATE	**$35,803,899**
Call	**$35,804,000**

10. FUNDING/PROGRAMMING

It is recommended that this project to be included in the 2016 State Highway Operation and Protection Program (SHOPP), and to be funded in 2018/2019 fiscal year from Pavement Preservation Program (20.XX.201.121).
It has been determined that this project is eligible for federal-aid funding.

Capital Outlay Support and Project Estimates

Fund Source	Fiscal Year Estimate							
20.XX.201.121	Prior	2015/16	2016/17	2018/19	2019/20	2020/21	Future	Total
Component	In thousands of dollars ($1,000)							
PA&ED Support		350						350
PS&E Support		1,500	1,500	500				3,500
Right-of-Way Support				520	350			870
Construction Support				400	1,800	1,300		3,500
Right-of-Way				801				801
Construction				35,804				35,804
Total		1,850	1,500	38,025	2150	1,300		44,825

The support cost ratio is 18.34%.

11. DELIVERY SCHEDULE

Project Milestones		Scheduled Delivery Date (Month/Day/Year)
Program Project	M015	08/10/2016
Begin Environmental	M020	08/10/2016
PA & ED	M200	12/29/2017
Project PS&E	M380	09/06/2018
Right Of Way Certification	M410	11/16//2018
Ready To List	M460	12/28/2018
Award	M495	05/09/2019
Approve Contract	M500	05/23/2019
Contract Acceptance	M600	08/10/2021
End Project	M800	03/11/2024

12 RISKS

Attachment M.

13. EXTERNAL AGENCY COORDINATION

Federal Highway Administration (FHWA)

This project is considered to be an Assigned Project in accordance with the current Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans) Joint Stewardship and Oversight Agreement.

14. PROJECT REVIEWS

Scoping team field review _____ Date 10/03/2014
District Program Advisor _____ Date 04/17/2015
HQ Maintenance Field Review Leonardo Mahserelli Date 04/10/2015
Headquarters SHOPP Program Advisor Steve Tran Date 02/20/2015
District Maintenance Hamid Saadatnejadi Date 02/20/2015
Project Manager David Miraaney Date 12/29/2017
Design C (Acting Chief) Refugio Dominguez Date 12/29/2017
Headquarters Delivery Coordinator Peter Vacura Date 02//20/2015

Quality Review _____ Date 04/15/2015

15. PROJECT PERSONNEL

Andranik Arzumanian, P. E	Senior T.E. (Acting)	(213) 897-1234
Yessuf Tegegne, P.E.	Project Engineer	(213) 897-5607
Keith Hong	T.E. (Civil)	(213) 897-5650
David Miraaney	Project Manager	(213) 897-2270
Jinous Saleh	Environmental Planner	(213) 897-2824
Dan Murdoch	Office Chief, Right of Way	(213) 897-1816

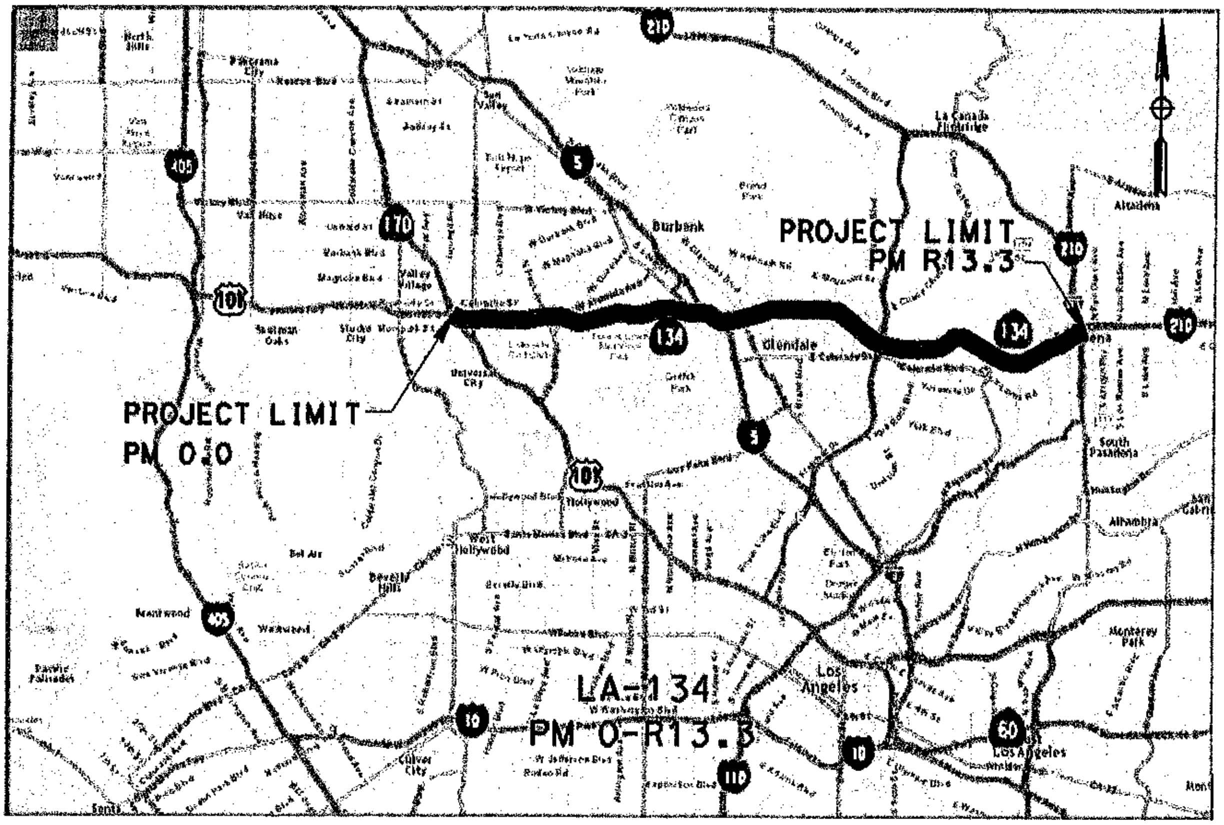
16. ATTACHMENTS (Number of Pages)

A. Vicinity Map
B. Transportation Management Plan (TMP)
C. Materials Investigation
D. Hazardous Waste Initial Site Assessment
E. Categorical Exemption (CE)
F. Environmental Clearance (EC)
G. CEQA/NEPA
H. Storm Water Data Report (SWDR)
I. Right of Way Data Sheet
J. Work Plan
K. SHOPP Project Performance Indicator
L. Risk Management
M. Geotechnical Report (Pavement Destress Settlement)
N. Design Resource Worksheet
O. Pavement Condition Survey
P. MGS and ADA Curb ramp Locations
Q. Layout Plans

Attachment A

Vicinity Map

Vicinity Map



Attachment B

Transportation Management Plan (TMP)

TRANSPORTATION MANAGEMENT PLAN DATASHEET
(Preliminary TMP Elements and Costs)

Co/Rte/PM LA-134, PM 0.0/13.34 EA 31170K/0715000013 Alternative No. N/A

Project Limit Route 134 in Los Angeles County, from 101/170/134 Junction to 134/210/710 Junction..

Project Description Pavement Preservation.
The scope of work involves replacing damaged slabs, Cold plane 0.25' AC and pave 0.25' RHMA-G on all existing shoulders, Cold plane 0.33' AC and pave 0.33' RHMA-G on the Ramps, upgrade MBGR and upgrade ADA ramps.

1) Public Information

☐	a. Brochures and Mailers	$
☒	b. Press Release	
☒	c. Paid Advertising	$10,000
☐	d. Public Information Center/Kiosk	$
☐	e. Public Meeting/Speakers Bureau	
☐	f. Telephone Hotline	
☒	g. Internet	
☐	h. Others _____	$

2) Motorists Information Strategies

☐	a. Changeable Message Signs (Fixed)	$0
☐	b. Changeable Message Signs (Portable)	$
☐	c. Ground Mounted Signs	$
☐	d. Highway Advisory Radio	$
☐	e. Caltrans Highway Information Network (CHIN)	
☐	f. Others _____	$

3) Incident Management

☒	a. Construction Zone Enhanced Enforcement Program (COZEEP)	$855,000
☐	b. Freeway Service Patrol	$
☐	c. Traffic Management Team	
☐	d. Helicopter Surveillance	$
☐	e. Traffic Surveillance Stations (Loop Detector and CCTV)	$
☐	f. Others _____	$

4) Construction Strategies

- [x] a. Lane Closure Chart
- [ ] b. Reversible Lanes
- [ ] c. Total Freeway Mainline Closure
- [ ] d. Extended Weekend Closure
- [ ] e. Contra Flow
- [ ] f. Truck Traffic Restrictions $ _____
- [ ] g. Reduced Speed Zone $ _____
- [ ] h. Connector and Ramp Closures
- [ ] i. Incentive and Disincentive $ _____
- [ ] j. Moveable Barrier $ _____
- [ ] k. Others _____ $ _____

5) Demand Management

- [ ] a. HOV Lanes/Ramps (New or Convert) $ _____
- [ ] b. Park and Ride Lots $ _____
- [ ] c. Rideshare Incentives $ _____
- [ ] d. Variable Work Hours
- [ ] e. Telecommute
- [ ] f. Ramp Metering (Temporary Installation) $ _____
- [ ] g. Ramp Metering (Modify Existing) $ _____
- [ ] h. Others _____ $ _____

6) Alternative Route Strategies

- [ ] a. Add Capacity to Freeway Connector/Ramps $ _____
- [ ] b. Street Improvement (widening, traffic signal... etc) $ _____
- [ ] c. Traffic Control Officers $ _____
- [ ] d. Parking Restrictions
- [ ] e. Others _____ $ _____

7) Other Strategies

- [ ] a. Application of New Technology $ _____
- [ ] e. Others _____ $ _____

TOTAL ESTIMATED COST OF TMP ELEMENTS = $865,000

Project Notes:

1. This Revised Data Sheet superceed the one previousely prepared and approved on 1-6-15.
2. The Public Awareness Campaign strategy was prepared by David White on 11-26-2017.
3. The estimate of COZEEP for this project is $855,000 was provided by Construction Traffic Advisor Amjad Obeid on 11-22-2017.
4. It is anticipated all work will be performed behind routine lane closures. All closures shall conform with the hours provided in the Maintaining Traffic Specifications.

5 Existing Fixed Changeable Message Sign (CMS) that may be used:

Route 101:

Sign #7 on SB Rte 101 (at Laurel Cyn Blvd)

Route 134:

Sign #57 on EB Rte 134 (at Forest Lawn Dr), Sign #99 on WB Rte 134 (at Glendale Ave), Sign #78 on WB Rte 134 (w/o Hollywood Way)

Route 210:

Sign #81 on WB Rte 210 (at Allen Ave)

Route 170:

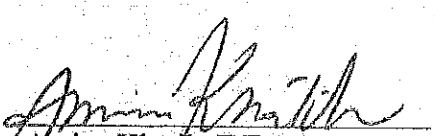
Sign #56 on SB Rte 170 (at Burbank Blvd)

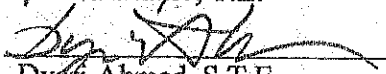
Route 5:

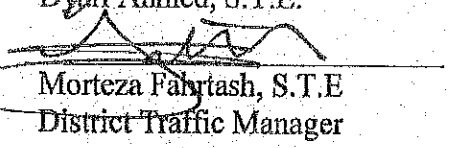
Sign #127 on NB Rte 5 (at Los Feliz Blvd), Sign #40 on SB Rte 5 (at Western Ave)

Route 2:

Sign # 106 on NB Rte 2 (at Verdugo Rd)

PREPARED BY  DATE 11-28-2017
Amina Khatib, T.E.

APPROVAL RECOMMENDED BY  DATE 11/28/2017
Dyari Ahmed, S.T.E.

APPROVED BY  DATE 11/28/2017
Morteza Fahrtash, S.T.E
District Traffic Manager

Attachment C

Materials Investigation

State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

Memorandum

To: **Andranik Arzumanian. P.E.**
Acting Senior Office of Design C
Attn: **Yessuf Tegegne**

November 29, 2017
07-LA-134, PM 0.0/R13.34
CAPM Project
07-311700 (0715000013)

Kirsten Stahl, Sr. P. E.
Office of Engineering Services, Materials Investigations
From : **DEPARTMENT OF TRANSPORTATION**

Subject: **Updated Pavement Structural Section Recommendations**

Per your Memo request dated Nov 13, 2017, Materials Investigations has reviewed the Typical Cross Sections for the project along Route 134 from 0.0 Mile East of Route 101/134 separation to junction Route 210/710. Materials offers the following structural section recommendation:

I. PCC Slab In-kind Replacement:

- Materials concurs with the pavement strategy on Sheet X-1 (PM 0.0 to PM 13.3) of replacing in-kind existing PCC slabs with the new same thickness of Jointed Plain Concrete Pavement-Rapid Strength Concrete (JPCP-RSC) slabs.
- Use Base Bond Breaker (Geosynthetic) between new JPCP-RSC and the LCB-RS.
- Please note that if the existing CTB (Cement Treated Base) is deficient or damaged during construction, replace it with in-kind thickness of treated base as Lean Concrete Base Rapid Setting (LCB-RS). For cost estimating purposes for PS&E, assume that 20% of the replacement slabs will required new treated base with LCB-RS.
- After replacement of the slabs, grind the entire surface within proposed project limit to restore surface friction, correct faulting problems and provide smooth driving condition.

Based on the existing pavement structural section shown on sheet X-1, show the proposed pavement structural section on Typical Cross Section as follows:

Inside lanes	Outside lanes
0.67' JPCP-RSC	0.75' JPCP-RSC
------ Base Bond Breaker (Geosynthetic)	------ Base Bond Breaker (Geosynthetic)
0.33' Replace Base (LCB-RS) as needed	0.33' Replace Base (LCB-RS) as needed

II. AC Sections:

Omit the Cold plane & overlay shoulders instead, use the following:

- On mainline shoulders (PM 0.0 to PM 13.3), Materials recommends remove and replace the entire 0.25' of existing AC section with 0.25'of Hot Mix Asphalt, Type A (HMA-A).
- On ramp shoulders (PM 0.0 to PM 13.1), Materials recommends remove and replace the entire 0.25' of existing AC section with 0.25'of Hot Mix Asphalt, Type A (HMA-A).

On all ramps (PM 0.0 to PM 13.1), Materials concurs with the cold plane and overlay 0.15'of Rubberized Hot Mix Asphalt, Type G (RHMA-A).

III. ADA Curb Ramps:

1. ADA Curb Ramps, Sidewalks, and Driveways:

   a. Upgrade/Reconstruct of Existing and New Curb Ramps

   Follow the 2015 (or most current) Revised Standard Plans RSP A88A and RSP A88B. While the curb ramp and landing thickness is 3 ½" minimum per these RSP, for constructability, match the sidewalk thickness specified below.

   b. Sidewalks and Driveways

   Follow the 2015 Standard Plan A87A.
   Sidewalk and driveway ramp thickness must be 4" for residential and 6" for commercial.
   Sidewalks and driveways must sit on top of a compacted subgrade (native or improved soil).

2. Curb and Gutter at ADA Curb Ramps and Driveways:

   Use the following for the curb and gutter at the curb ramps and driveways:

   0.50' Minor Concrete or Rapid Strength Concrete (RSC) Minor Concrete for the curb and gutter.
   0.60' Lean Concrete Base (LCB) or Lean Concrete Base Rapid Setting (LCB-RS) for the base below the curb and gutter.

   The above recommendation for the curb and gutter is due to off-tracking by large trucks, buses, and other vehicles for typical curb and gutter section to support loading by these vehicles.

   For the existing pavement adjacent to the ADA curb ramps and driveway, saw cut the existing pavement "neat" to the exact foot print of the curb and gutter and construct the new curb and gutter of the curb ramp and driveway to match existing pavement. DO NOT over cut the existing pavement beyond the limits of the new curb and gutter to avoid pavement construction issues.

Submit Plans, Specifications, and Cost Estimates during the PS&E stage for further review and comments.

If you have any questions, please call me at 7-0470 or Hung Nguyen of my staff at 7-8665.

for KIRSTEN STAHL, P. E.
District Materials Engineer
Civil Engineering License No. C46857-Exp. 06/30/19

Attachment D

Hazardous Waste Initial Site Assessment

Memorandum

Making Conservation
A California Way of Life.

To: ANDRANIK ARZUMANIAN
ACTING SENIOR TRANSPORTATION ENGINEER
OFFICE OF DESIGN C

Attn: YESSUF TEGEGNE

Date: November 30, 2017

File: 07-LA-134
PM -0.00/13.34
EA: 311700
EFIS: 0715000013

From: PENNY NAKASHIMA
Senior Engineering Geologist
Office of Environmental Engineering (OEE)
District Hazardous Waste Coordinator - North Region

Subject: **HAZARDOUS WASTE ASSESSMENT FOR PROJECT REPORT (PR)**

This is in response to your memorandum dated November 13, 2017 requesting that we provide you with a Hazardous Waste Assessment for the above referenced project. This Capital Prevention Maintenance Project on Route 134 between SR 170 UC and 0.1 mile East of SR 210 UC proposes the following activities within Caltrans right-of-way.

- Replace in kind of stressed concrete slabs on the freeway.
- Cold plane 0.25' AC and pave 0.25' RHMA-G on all existing shoulders on the freeway.
- Cold plane 0.33' AC and pave 0.33' RHMA-G on the ramps.
- Upgrade and add Metal Beam Guardrail Rail (MBGR).
- Upgrade ADA ramps.
- Inject Grout, excavate, backfill, and replace pavement structure at the locations with settlement on WB Main Line at Forest Lawn Drive UC and EB on ramp from Forest Drive UC.
- Replace 24 approach/departure slabs.

Based on the available information, there will be unpaved area excavation at Zoo Drive for construction of ADA ramp. Existing metal beam guard rail (MBGR), sign post, yellow and white traffic stripe will be removed however, removal method is not known.

Based on the available information the following are potential hazardous waste concerns associated with the project:

Aerially Deposited Lead (ADL) in soil

Based on the information provided, we understand that there will be some soil disturbance in the unpaved areas of this project. Potential of Hazardous Waste Contamination Aerially Deposited Lead (ADL) may exist at the project location in unpaved areas. The previous site investigation (SI) report (Task Order No. 7, EA No. 07-266901, LA-2, 134 and VEN-33, dated June 10, 2011, prepared by GEOCON) near the project location indicates the presence of ADL soil in unpaved areas upto a depth of 2.0 feet. The test results indicate that the total lead concentration ranged from 3.5 mg/kg to 700 mg/kg and soluble lead concentration ranged from 0.41 mg/l to 78 mg/l.

A site investigation (SI) to determine concentrations of ADL in soil needs to be performed during early PS&E phase to identify proper management and worker protection measures during construction. The contaminated ADL soil may be reused if it meets the criteria established by DTSC in the ADL agreement (between Caltrans and DTSC). A request to perform the SI should be

submitted early in the design phase because it requires 3-4 months to complete the SI report. For cost estimating purposes, the top 2.0 feet of soil in unpaved areas (within 20-25 feet of edge of pavement) requiring excavation can be considered contaminated with ADL and may require disposal at a Class I Facility. We recommend that you allocate appropriate funds for off-site disposal and for the preparation of a Lead Compliance Plan (LCP). The average unit cost for disposal and the LCP preparation can be obtained at http://sv08web/design/contractcost/.

Existing Yellow and White Traffic Stripe Removal

Yellow traffic stripe contain elevated lead and chromium, which is regulated as California Hazardous waste. Residue produced when these materials are disturbed may exceed threshold levels established by the California Health and Safety Code and Title 22 of the California Code of regulations (CCR). Removal of such material requires proper collection, storage, transportation, and disposal in accordance with Caltrans standard special provisions and State and Federal regulations. The contractor is required to develop a project-specific LCP and training program to ensure compliance with health and safety requirements established by Cal/OSHA prior to start of the removal operations.

In areas where the yellow traffic stripes are being removed along with asphalt or concrete, the lead concentration may be below hazardous waste threshold levels in the residue so that disposal at a Class I facility may not be necessary. We will be able to estimate the lead and chromium levels when data (length of yellow stripes and volume of asphalt/concrete to be removed) becomes available to calculate concentrations and determine whether the residue can be relinquished to the contractor for possible recycling or needs to be disposed of at a California permitted Class I disposal facility.

Residues from removing white traffic strip can be classified as non-hazardous waste and disposed of at a permitted non-hazardous waste disposal facility. However, the contractor is required to develop a project-specific LCP and training program to ensure proper health and safety measures are implemented and complied prior to start of the removal operation.

Please allocate appropriate funds for preparation of LCP. For the engineer's cost estimate for Lead Compliance Plan, please refer to the latest Contract Cost Database http://sv08web/design/contractcost.

Treated Wood Waste from Existing MBGR Wood Posts and Roadside Sign Removal

The project involves the removal of wooden posts. The wood used for the posts are treated with chemical preservatives. Arsenic, chromium, copper, and pentachloro-phenol are among the chemicals added to preserve wood. Once these wood poles are removed and become waste, they are considered as treated wood waste (TWW). TWW is non-RCRA California hazardous waste and the handling, storage, transportation, and disposal are subject to California hazardous waste regulations. A Special Provisions for handling, storing, transporting, and disposing of TWW, shall be included PS&E package. Please refer to the latest Contract Cost Database (http://sv08web/design/contractcost/) and allocate appropriate funds for disposal of TWW and the Board of Equalization (BOE) fee.

Asbestos containing material (ACM) in Shim between metal railing and wood post in MBGR

Asbestos containing material (ACM) may be encountered during removal of existing metal beam guard railing. The shim between the metal railing and wood block have been found to contain asbestos. An asbestos survey is required to identify ACM. During PS&E phase, OEE will conduct

the ACM survey. If asbestos survey detects asbestos, an appropriate Special Provision will be provided.

Westbound Main Line at Forest Lawn Drive UC

If work involves pavement replacement, there is an asbestos concern in the concrete. An asbestos survey need to be performed during PS&E phase.

Replace approach/departure slab- Joint Seal

We have been informed that joint seal will be replaced for each approach/departure slabs. Removal and replacement of bridge joint seals should not present a potential hazard of exposure to Asbestos Containing Material (ACM), because the use of asbestos in joint seals has been banned or phased out since 1960. As the life span of joint seals is only 10 years, multiple phases of replacement of joint seals (non-hazardous seal of either Type A or Type B) have occurred after 1960 for any bridges that were constructed prior to 1960. However, in the event that the Contractor encounters materials that are reasonably believed to be asbestos, sampling and analysis of the designated joint seal shall be conducted and Standard Specification 2015 Section 14-11.02, Discovery of Unanticipated Asbestos and Hazardous Substances, shall apply.

Electrical equipment requiring removal and disposal – traffic Signal Light Upgrade (as per cost estimate) –

There is also a potential for generation of hazardous waste, polychlorinated biphenyl (PCB), associated with the existing electrical components requiring removal. Florescent and/or mercury lamps, sensor, switches, timers, ballast and transformer may contain PCB and mercury. Therefore, prior to starting construction, the contractor shall inspect the existing electrical components to determine if any hazardous materials are present. All electrical equipment requiring disposal shall be packaged and transported to an appropriate permitted disposal facility. Appropriate non Standard Special Provision shall be included in PS&E package.

Imported borrow/soil

If backfill with imported soil is required, the imported soil must be tested as clean and accepted by engineer prior to placement. A non-standard Special Provision shall be included in PS&E package.

OEE RESOURCE ESTIMATE FOR PROJECT:

WBS 165.10 = 40 hrs (PAED support, Phase 0)
WBS 235.10 =340 hrs (PS&E support, SI task order, fieldwork, prepare assessment memo and SSPs/NSSPs, etc.)
WBS 255.05 = 40 hrs (PS&E support, final PS&E package Quality Review))
WBS 270.66 = 80 hrs (HSP, LCP review, Construction support)
WBS 280.10 = 40 hrs (Construction support for ECR/CEC project closeout)

This Hazardous Waste Assessment is applicable to the scope of work described above. Any change in the scope of work will require a Hazardous Waste Re-Assessment. If you have any questions or need additional information, please contact me at (213) 897-0670, Penny.Nakashima@dot.ca.gov or contact Upa Patel of my staff at (213) 897-8592, Upa.Patel@dot.ca.gov.

cc: Jinuos Saleh, Environmental Planning
Allen Azali, Environmental Planning

Attachment E

Categorical Exemption (CE)

CATEGORICAL EXEMPTION/CATEGORICAL EXCLUSION DETERMINATION FORM

07-LA-134	0.00/13.34	311700	0715000013/201707014
Dist.-Co.-Rte. (or Local Agency)	P.M./P.M.	E.A/Project No.	Federal-Aid Project No. (Local Project)/Project No.

PROJECT DESCRIPTION: (Briefly describe project including need, purpose, location, limits, right-of-way requirements, and activities involved in this box. *Use Continuation Sheet, if necessary.)*

The purpose of this project is to restore the surface pavement and bring it up to current codes and standards by replacing the cracked slabs and to improve the facility movement quality. Work for this project will consist of replacing in kind stressed concrete slabs on the freeway. Install cold plane and pavement on all existing shoulders and ramp. Upgrade metal beam guard rail. Upgrade ADA ramps. Additional work will include injecting grout, excavate, backfill, and replace pavement structure at the locations with settlement on WB Maine Line at Forest Lawn Drive UC and EB on ramp from Forest Drive UC. All work will remain on the roadway.

CEQA COMPLIANCE *(for State Projects only)*

Based on an examination of this proposal and supporting information, the following statements are true and exceptions do not apply (See 14 CCR 15300 et seq.):

- If this project falls within exempt class 3, 4, 5, 6 or 11, it does not impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law.
- There will not be a significant cumulative effect by this project and successive projects of the same type in the same place, over time.
- There is not a reasonable possibility that the project will have a significant effect on the environment due to unusual circumstances.
- This project does not damage a scenic resource within an officially designated state scenic highway.
- This project is not located on a site included on any list compiled pursuant to Govt. Code § 65962.5 ("Cortese List").
- This project does not cause a substantial adverse change in the significance of a historical resource.

CALTRANS CEQA DETERMINATION (Check one)

☐ **Not Applicable – Caltrans is not the CEQA Lead Agency**

☐ **Not Applicable – Caltrans has prepared an Initial Study or Environmental Impact Report under CEQA**

☐ **Exempt by Statute.** (PRC 21080[b]; 14 CCR 15260 et seq.)
Based on an examination of this proposal, supporting information, and the above statements, the project is:

☒ **Categorically Exempt. Class 1.** (PRC 21084; 14 CCR 15300 et seq.)

☐ **Categorically Exempt. General Rule exemption.** [This project does not fall within an exempt class, but it can be seen with certainty that there is no possibility that the activity may have a significant effect on the environment (CCR 15061[b][3].)

Jinous Saleh		David Miraaney	
Print Name: Senior Environmental Planner or Environmental Branch Chief		Print Name: Project Manager	
Jinous Saleh	7-30-17	David Miraaney	7/31/17
Signature	Date	Signature	Date

NEPA COMPLIANCE

In accordance with 23 CFR 771.117, and based on an examination of this proposal and supporting information, the State has determined that this project:

- does not individually or cumulatively have a significant impact on the environment as defined by NEPA, and is excluded from the requirements to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS), and
- has considered unusual circumstances pursuant to 23 CFR 771.117(b).

CALTRANS NEPA DETERMINATION (Check one)

☒ **23 USC 326:** The State has determined that this project has no significant impacts on the environment as defined by NEPA, and that there are no unusual circumstances as described in 23 CFR 771.117(b). As such, the project is categorically excluded from the requirements to prepare an EA or EIS under the National Environmental Policy Act. The State has been assigned, and hereby certifies that it has carried out the responsibility to make this determination pursuant to Chapter 3 of Title 23, United States Code, Section 326 and a Memorandum of Understanding dated May 31, 2016, executed between the FHWA and the State. The State has determined that the project is a Categorical Exclusion under:

- ☒ 23 CFR 771.117(c): activity (c)(26)
- ☐ 23 CFR 771.117(d): activity (d)(___)
- ☐ Activity ___ listed in Appendix A of the MOU between FHWA and the State

☐ **23 USC 327:** Based on an examination of this proposal and supporting information, the State has determined that the project is a Categorical Exclusion under 23 USC 327.

Jinous Saleh		David Miraaney	
Print Name: Senior Environmental Planner or Environmental Branch Chief		Print Name: Project Manager/DLA Engineer	
Jinous Saleh	7-30-17	David Miraaney	7/31/17
Signature	Date	Signature	Date

Date of Categorical Exclusion Checklist completion: 06/02/17

Date of ECR or equivalent : 06/02/17

Briefly list environmental commitments on continuation sheet. Reference additional information, as appropriate (e.g., CE checklist, additional studies and design conditions).

CATEGORICAL EXEMPTION/CATEGORICAL EXCLUSION DETERMINATION FORM
Continuation Sheet

07-LA-134	0.00/13.34	311700	0715000013/201707014
Dist.-Co.-Rte. (or Local Agency)	P.M./P.M.	E.A/Project No.	Federal-Aid Project No. (Local Project)/Project No.

Continued from page 1:

Cultural Resources (05/17/17)

The undertaking as currently proposed, has no potential to affect historic properties eligible for or listed in the National Register of Historic Places. The work conforms to the following "classes of screened undertakings" listed in the Section 106 PA Attachment 2: Class 1, 11, 13, 19.

Biological Studies (05/30/17)

There will be no clearing or grubbing of vegetation as a result of this project. There will be no impacts to biological resources or federal/state threatened/endangered species within the project area and all work for purposes of equipment maneuvering and traffic control will be limited to the State right-of-way. Indirect impacts from roadway run-off will be minimized through proper implementation of all applicable Storm water and Erosion Best Management Practices (BMPs). Due to the nature of the project, mitigation measures are not required.

No resource agency permits are required as a result of this project, since there will be no impacts to sensitive biological resources or drainages.

Hazardous Waste (05/15/17)

The top 2.0 feet of soil in unpaved areas (within 20-25 feet of edge of pavement) requiring excavation can be considered contaminated with ADL and may require disposal at a Class I Facility.

The contractor is required to develop a project-specific LCP and training program to ensure compliance with health and safety requirements established by Cal/OSHA prior to start of the removal operations.

Once wood poles are removed and become waste, they are considered as treated wood waste (TWW). TWW is non-RCRA California hazardous waste regulations. A Special Provisions for handling, storing, transporting, and disposing of TWW, shall be included in the PS&E package.

An asbestos survey is recommended to identify Asbestos Containing Material (ACM) during PS&E.

If backfill with imported soil is required, the imported soil must be tested as clean and accepted by the engineer prior to placement. A non-standard Special Provision (NSSP) shall be included in the PS&E package.

Attachment F

Environmental Clearance (EC)

ENVIRONMENTAL CERTIFICATION

DIST/CO/RTE/PM: 07/LA/5 PM: 36.5/39.0

EA/Project No: 4P4501

A. Environmental Documentation

- NEPA compliance type: CE ☒ FONSI ☐ Approval Date: 11/22/17
  EIS ☐ Approval Date: _____ ROD Date: _____
- CEQA compliance type: CE ☒ ND/MND ☐ EIR ☐ Approval Date: 11/22/17
- Supplemental or new document needed (NEPA) Yes ☐ No ☒ Date: _____
- Addendum, Supplemental, or Subsequent (CEQA) Yes ☐ No ☒ Date: _____
- NEPA determination checked for validity/Re-evaluation Approval Date(s): 12/14/17
  (The Re-Validation form serves as the required consultation for all NEPA documentation including CEs in accordance with 23 CFR 771.129.)

B. Do Environmental Construction Windows Apply? Yes ☐ No ☒

C. **Each of the following conditions must be true in order to complete this certification:**

- All environmental commitments that belong in this PS&E are included.
- All actions in this PS&E are covered by the approved environmental documentation, which remains valid.
- All environmental permits, licenses, agreements, and certifications (PLACs) are complete. Project PLACs are listed below:

Agency	Type	Issue Date	Expiration Date

D. Environmental Commitment Record has been prepared: Date: 12/14/17

E. Environmental Commitment Record has been updated: Yes ☒ Date: 12/19/17 No

I certify that, for environmental purposes, this project is ready to list, and, as applicable, Caltrans has fully carried out all environmental responsibilities assumed under 23 USC 326 or 23 USC 327 for this project in accordance with NEPA Assignment and applicable federal laws, regulations, and policies.

Environmental Branch Chief (sign name) — Date: 12/19/17

For Jinous Saleh
Environmental Branch Chief (print name)

Changes to this PS&E submittal shall be discussed with the signature authority and may require an updated environmental certification. This project may be advertised for contract award. If the project has not been advertised within twelve months of the date of Environmental Certification, this Environmental Certification expires and a new certification or update is required.

Certification expiration date is 12/19/18.

Attachment G

CEQA/NEPA

NEPA/CEQA RE-VALIDATION FORM

DIST./CO./RTE.	07-LA-134
PM/PM	0.0/13.34
E.A. or Fed-Aid Project No.	31170
Other Project No. (specify)	0715000013
PROJECT TITLE	CAPM Project
ENVIRONMENTAL APPROVAL TYPE	CE/CE (CE No. 201706001)
DATE APPROVED	06/12/17
REASON FOR CONSULTATION (23 CFR 771.129)	*Check reason for consultation:* ☐ *Project proceeding to next major federal approval* ☒ *Change in scope, setting, effects, mitigation measures, requirements* ☐ *3-year timeline (EIS only)* ☐ ***N/A** (Re-Validation for CEQA only)*
DESCRIPTION OF CHANGED CONDITIONS	*New CE issued to reflect change in NEPA delegation. The new CE No. is 201707014. A new CE checklist will also be completed.*

NEPA CONCLUSION - VALIDITY

Based on an examination of the changed conditions and supporting information: *[Check ONE of the three statements below, regarding the validity of the original document/determination (23 CFR 771.129). If document is no longer valid, indicate whether additional public review is warranted and whether the type of environmental document will be elevated.]*

☐ **The original environmental document or CE remains valid. No further documentation will be prepared.**

☐ **The original environmental document or CE is in need of updating; further documentation has been prepared and ☐ is included on the continuation sheet(s) or ☐ is attached. With this additional documentation, the original ED or CE remains valid.**

Additional public review is warranted (23 CFR 771.111(h)(3)) Yes ☐ No ☐

☒ **The original document or CE is no longer valid.**

Additional public review is warranted (23 CFR 771.111(h)(3)) Yes ☐ No ☒

Supplemental environmental document is needed. Yes ☐ No ☒

New environmental document is needed. Yes ☒ No ☐ (If "Yes," specify type: CE)

CONCURRENCE WITH NEPA CONCLUSION

I concur with the NEPA conclusion above.

Signature: Environmental Branch Chief	Date	Signature: Project Manager/DLAE	Date
	7-30-17		7/31/17

CEQA CONCLUSION: *(Only mandated for projects on the State Highway System.)*

Based on an examination of the changed conditions and supporting information, the following conclusion has been reached regarding appropriate CEQA documentation: *(Check ONE of the five statements below, indicating whether any additional documentation will be prepared, and if so, what kind. If additional documentation is prepared, attach a copy of this signed form and any continuation sheets.)*

☐ Original document remains valid. No further documentation is necessary.

☐ Only minor technical changes or additions to the previous document are necessary. An addendum has been or will be ☐ prepared and is ☐ included on the continuation sheets or ☐ will be attached. It need not be circulated for public review. *(CEQA Guidelines, §15164)*

☐ Changes are substantial, but only minor additions or changes are necessary to make the previous document adequate. A Supplemental environmental document will be prepared, and it will be circulated for public review. *(CEQA Guidelines, §15163)*

☐ Changes are substantial, and major revisions to the current document are necessary. A Subsequent environmental document will be prepared, and it will be circulated for public review. *(CEQA Guidelines, §15162)* *(Specify type of subsequent document, e.g., Subsequent FEIR)*

☒ The CE is no longer valid. New CE is needed. Yes ☒ No ☐

CONCURRENCE WITH CEQA CONCLUSION

I concur with the CEQA conclusion above.

Signature: Environmental Branch Chief	Date	Signature: Project Manager/DLAE	Date
	7-30-17		7/31/17

Attachment H

Storm Water Data Report (SWDR)

Dist-County-Route: 07-LA-134
Post Mile Limits: 0.0/R13.34
Project Type: CAPM
Project ID (EA): 0715000013 (311700)
Program Identification: 20.10.201.121

Phase: ☐ PID ☒ PA/ED ☐ PS&E

Regional Water Quality Control Board(s): Region 4- Los Angeles

1.	Does the project disturb 5 or more acres of soil?	Yes ☐	No ☒
2.	Does the project disturb more than 1 acre of soil and not qualify for the Rainfall Erosivity Waiver?	Yes ☐	No ☒
3.	Is the project required to implement Treatment BMPs?	Yes ☐	No ☒
4.	Does the project impact existing Treatment BMPs?	Yes ☐	No ☒

If the answer to any of the preceding questions is "Yes", prepare a Long Form – Stormwater Data Report. Unless otherwise agreed upon by the District/Regional Design Stormwater Coordinator.

Total Disturbed Soil Area: 0.89 Acre
New Impervious Surface: 0.00 Acre
Estimated Const. Start Date: 2/27/2019
Estimated Const. Completion Date: 10/18/2021
Risk Level: RL 1 ☐ RL 2 ☐ RL 3 ☐ Not Applicable ☒

This Short Form – Stormwater Data Report has been prepared under the direction of the following Licensed Person. The Licensed Person attests to the technical information contained herein and the data upon which recommendations, conclusions, and decisions are based. Professional Engineer or Landscape Architect stamp required at PS&E.

12/08/2017
[Yessuf Tegegne], Registered Project Engineer/Landscape Architect — *Date*

I have reviewed the stormwater quality design issues and find this report to be complete, current and accurate:

[Stamp Required at PS&E only]

12/19/2017
[Shirley Tak], District/Regional Design SW Coordinator or Designee — *Date*

1. Project Description

This Capital Preventive Maintenance Project (CAPM) project on Route 134 is located in the City of Los Angeles, Burbank, Glendale, and Pasadena, in Los Angeles County. The purpose of this project is to preserve and extend the life of the existing pavement and improve ride quality.

The project limits on state Route 134 are from Route 170 interchange (PM 0.0) to Route 210 interchange (PM R13.34).

The work mainly involves in concrete slabs replacement, pavement cold plane and overlay for all ramps and mainline shoulders, upgrade MBGR and end treatments, replaces pavement delineators, and upgrade/replace ADA ramps. This project also includes repairs of ground settlements on WB-134 east Forest Lawn drive UC and on the EB-134 on ramp from Forest Lawn Drive.

- Describe how the following values were calculated:
  - Total disturbed soil area (DSA) for this project is estimated 39,075 sqft (0.89 acre). The area was determined by total 41 ADA ramps replacement are 7,175 sqft = 0.16 acre and under MGS it will be paved to protect erosion control, also to prevent weeds and easy to maintain.

    Minor concrete paving under MGS area: A=15,950' x 2.0'=31,900 sqft=0.732 acre

    Upgrading or Replace total 41 ADA ramps area: A=7,175 sqft = 0.16 acre
  - The quantity of disturbed soil area (DSA) is (0.732 acre + 0.16 acre) = 0.89 acre
  - Concrete slaps replacement of disturbed soil area = 0.00 acre
  - New impervious surface (NIS)= 0.00 acre
    - Net New Impervious (NNI)= 0.00 acre
    - Replaced impervious surface (RIS) is 0.00 acre
  - Total existing impervious surface within the project limits is estimated as 236 acres.

Total DSA: 39,075 sqft (0.89 acre) < 1 acre. No additional impervious areas will be constructed in the project.

The total existing impervious surface area within the project limits is estimated to be 236 acres. The impervious surface after the project is completed is estimated to be 236.00 acres. The project lies within several Municipal Separate Storm Sewer Systems (MS4) in Los Angeles County.

Total cost for this project is estimated $ 39,852,000.00.

2. Site Data and Stormwater Quality Design Issues

The Receiving Water Body are;

Aliso Canyon Wash, Hydrologic Sub Area 412.21,

Bell Creek, Hydrologic Sub Area 412.21,

Burbank Western Channel, Hydrologic Sub Area 412.21,

Arroyo Seco Reach 1 (LA River to West Holly Ave)

Arroyo Seco Reach 2 (West Holly Ave to Devils Gate Dam)

Los Angeles River Reach 3 (Figueroa St to Riverside Dr), Hydrologic Sub Area 412.21,

Los Angeles River Reach 4 (Figueroa St to Sepulveda Dam), Hydrologic Sub Area 412.21,

McCoy Canyon Creek, Hydrologic Sub Area 412.21,

Tujunga Wash (LA River to Hansen Dam), Hydrologic Sub Area 412.21,

Verdugo Wash Reach 1 (LA River to Verdugo Rd.), Hydrologic Sub Area 412.21,

Verdugo Wash Reach 2 (Above Verdugo Road), Hydrologic Sub Area 412.21,
Which are all listed on the 2012 California 303(d) list as an impaired receiving water body.
The project limits are in the Los Angeles River Watershed. The Total Maximum Daily Loads (TMDLs) are as follows:

Los Angeles River

Established TMDLs

Los Angeles River Trash TMDL

The Los Angeles River Trash TMDL became effective August 28, 2002. Caltrans is proceeding with Trash TMDL Implementation Projects, which are to retrofit Gross Solid Removal Devices (GSRDs) at the existing drainage outfalls in the rights-of-way. Table A lists those Trash TMDL Implementation. Projects that are either in construction or completed. Any projects that overlap within the limits of freeway corridors listed in Table A are not required to considered GSRDs for those overlapping limits.

Table A

		PM		
EA	Route	From	To	Status
226611	405	30.31	36.15	completed
226711	60	2.7	6.6	completed
	710	22.5	23.8	
2266A1	5	27.62	28.15	completed
	10	9.02	13.82	
	90	1.84	2.70	
2267A1	10	5.59	8.80	completed
	91	10.25	13.88	
	105	8.25	13.15	
	110	21.65	23.61	
231311	2	15.40	21.46	completed
	101	7.21	7.21	
	170	14.78	19.92	
	134/710	13.34	13.34	
	210	22.73	23.88	
	405	25.46	29.41	
235901	5	16.35	16.35	completed
	101	12.70	26.50	
	134	0.00	9.86	

Los Angeles River Nitrogen Compounds and Related Effects TMDL

The Los Angeles River Nitrogen Compounds and Related Effects TMDL became effective March 23, 2004. The TMDL requires the Storm Water NPDES Permittees to submit a Monitoring Work Plan by March 23, 2005 to estimate nitrogen loadings associated with runoff from the storm drain systems. County of Los Angeles has submitted the Monitoring Work Plan as required on behalf of Caltrans and other Storm Water NPDES Co-Permittees in the watershed. Targeted pollutants are Total ammonia as nitrogen (NH3-N), Nitrate-nitrogen (NO3-N), nitrite-nitrogen (NO2-N), and Nitrate nitrogen plus nitrite-nitrogen (NO3-N+NO2-N). The Department's

monitoring data depicts Caltrans discharges to be below the TMDL limits, thus no additional measures are needed to be considered for meeting the conditions of the Nitrogen TMDL.

Los Angeles River and Tributaries Metals TMDL

The Los Angeles River and Tributaries Metals TMDL became effective on January 11, 2006.Caltrans will work with 5 groups of Responsible Agencies toward compliance of the TMDL. Targeted Pollutants are total Cu, Pb, Zn, Cd and Se.

Total Maximum Daily Loads for Indicator Bacteria in the Los Angeles River

The Total Maximum Daily Loads for Indicator Bacteria in the Los Angeles River became effective on March 23, 2012. The TMDL requires the Responsible Agencies, including Caltrans, to reduce number of exceedance days of bacteria concentrations in the Los Angeles River and achieve waste load allocations in 25 years. Caltrans will be working with groups of Responsible Agencies to jointly comply with the TMDL.

Dominguez Channel and Greater Los Angeles and Long Beach Habor Waters Toxic Pollutants TMDL

Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pullutants TMDL became effective on March 23, 2012. Targeted pollutants are copper, lead, zinc, PAH, DDT, PCBs, Benzopyrene and Dieldrin for water column in the channel and habors, and sediments in the habors. The TMDL requires the dischargers of the Los Angeles River and San Gabriel River to monitor water quality at the mouth of each River. Caltrans will participate in groups of agencies to jointly comply with TMDL.

There are no high risk areas within the vicinity of the project, and there are no existing permanent storm water treatment BMPs near or within the project limits.

The 401 certification is not required for this project.

There are no local agency requirements or concerns.The climate within the Los Angeles basin is semi-arid with sporadic periods of high rainfall associated with global climatic cycles. The average Annual Rainfall in the hydrological sub area within the project limits average between 15.5 inches and 17 inches per year.

The project does not involve reuse soil containing Aerially Deposited Lead (ADL).

The project will not require right of way acquisition.

There are no seasonal construction restrictions. Rainy season defined as between October 1st through May 1st.

3. Construction Site BMPs

Measures to avoid or reduce potential impacts from contruction area will be specified in the Water Pollution Control Program (WPCP). The WPCP will be developed by the contractor and submitted to Caltrans for acceptance prior to start of contruction. (Because the project disturbs

less than one acre of soil), due to the small DSA, and occurrence of construction during the dry season, sediment control and erosion control best management practices (BMPs) are not anticipated.

Storm drain inlet protection shall be deployed throughout the project.
The short contruction period of six months will reduce the potential for water quality impacts.

The project will be designed to avoid or reduce stormwater impacts wherever feasible. Alternative materials for facilities will be utilized wherever feasible to reduce future maintenance impacts on water quality. Project construction schedules will be phased to minimize construction during the rainy season as much as possible. Ease of maintenance will be considered as well. Dry weather flows generated by Caltrans are not anticipated to be persistent within the project limits.

There are no existing BMPs within the project limits.

The BMP cost for this Project are estimated based on the unit cost method presented in Appendix F.6.2 of the Caltrans Project Planning and Design Guide (PPDG) and included in the supplemental attachments. Quantities are shown below.

Construction Site BMPs estimate are as follows:

Job Site Management is listed as a lump sum item. The followings are the selected Construction Site BMPs appropriate for the scope of this project:

- Spill Prevention and Control
  - Minor Spills
  - Semisignificant Spills
  - Significant and Hazardous Spills
- Material Management
  - Material Storage
- Waste Management
  - Concrete waste
  - Sanitary and Septic Waste
  - Liquid Waste
- Nonstormwater Management
  - Illicit Connection and Illegal Discharge Detection and Reporting
  - Vehicle and Equipment Cleaning
  - Paving, Sealing, Saw Cutting, Grooving, and Grinding Activities
  - Thermoplastic Striping and Pavement Markers
  - Temporary Fiber Rolls
  - Temporary linear sediment control
- Temporary DI protection and Temporary Concrete Washout BMPs are considered as a separate Bid Items.

Additional Water Pollution Control and WPCP Maintenance sharing are included a Supplemental Work.

There will be no potential for increased sediment loading, no Active Treatment System (ATS) is proposed for this project.

The total Construction Site BMPs cost is estimated at $560,000.00 which corresponds to 1% - 2% of total construction cost estimate of $39,852,000.00

On, July 31 2017, Hussein Saad, District 7 Stormwater Coordinator agrees to the Temporary Construction Site BMP strategy (at PA/ED phase) used for the scope of work of this project.

Required Attachments[1]

- Location Map
- Evaluation Documentation Form
- SWDR Summary Spreadsheets

[1] Additional attachments may be required as applicable or directed by the District/Regional Design Storm Water Coordinator (e.g., BMP line item estimate, SW, DPP, and CS Checklists).

DATE: December-07-2017

Project ID (EA): 0715000013 (311700)

No.	Criteria	Yes ✓	No ✓	Supplemental Information for Evaluation
1.	Begin Project evaluation regarding requirement for implementation of Treatment BMPs	✓		See Figure 4-1, Project Evaluation Process for Consideration of Treatment BMPs. Continue to 2.
2.	Is the scope of the Project to Install Treatment BMPs (e.g., Alternative Compliance or TMDL Compliance Units)?		✓	If Yes, go to 8. If No, continue to 3.
3.	Is there a direct or indirect discharge to surface waters?	✓		If Yes, continue to 4. If No, go to 9.
4.	As defined in the WQAR or ED, does the project: a. discharge to areas of Special Biological Significance (ASBS), or b. discharge to a TMDL watershed where Caltrans is named stakeholder, or c. have other pollution control requirements for surface waters within the project limits?	✓	✓	If Yes to any, contact the District/Regional Design Stormwater Coordinator or District/Regional NPDES Coordinator to discuss the Department's obligations, go to 8 or 5. SP CPM 12/8/2017 (Dist./Reg. Coordinator Initials) If No to all, continue to 5.
5.	Are any existing Treatment BMPs partially or completely removed? (ATA condition #1, Section 4.4.1)		✓	If Yes, go to 8 AND continue to 6. If No, continue to 6.
6.	Is this a Routine Maintenance Project?		✓	If Yes, go to 9. If No, continue to 7.
7.	Does the project result in an increase of one acre or more of new impervious surface (NIS)?		✓	If Yes, go to 8. If No, go to 9.
8.	Project is required to implement Treatment BMPs.	Complete Checklist T-1, Part 1.		
9.	Project is not required to implement Treatment BMPs. SP (Dist./Reg. Design SW Coord. Initials) Y.T (Project Engineer Initials) 12/08/17 (Date)	Document for Project Files by completing this form and attaching it to the SWDR.		

Attachment I

Right of Way Data Sheet

State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

Memorandum

Serious Drought!
Help Save Water!

To: Andranik Arzumanian , Design Manager
Office of Design
District 7, Los Angeles Office

From: Dan Murdoch, Office Chief
Right of Way Appraisals, and Planning & Management
District 7, Los Angeles Office

Date: 12/29/2017
EA: 31170
Data Sheet ID NO: ds2884
Project ID # 0715000013

Subject: Current Estimated Right of Way Costs for **Project Report**

We have completed an estimate of the Right of Way costs for the above referenced project based on information received from Yessuf Tegegne PE and the following assumptions and limiting conditions apply:

- The mapping did not provide sufficient detail to determine the limits of the right of way required.
- The transportation facilities have not been sufficiently designed, so our estimator could not determine the damages to any of the remainder parcels affected by the project.
- Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the estimate.

Right of Way Certificate (RWC) lead time will require a minimum of NA after maps to appraisal (MA). Completed Appraisal maps include HMDD, COS, HW Memo, and RE-49. An executed copy of the new freeway agreement if required for the project. When utility relocation is warranted, utility conflict maps will be required. Additionally a minimum of NA will be required after receiving the last revision to the appraisal map. Shorter lead times will require either more right of way resources or an increased number of condemnation suits to be file and present a risk to the RWC project delivery milestone. Due to the passage of Map 21 and the Buy America provision, the Right of Way Certification process will be longer, if Utility Relocation is necessary.

Current Schedule: PRSM

PAED (M 200)	MA (M 224)	RWC (M 410)	RTL (M 460)	CCA (M 600)
1/5/2018	1/18/2018	11/16/2018	2/28/2018	08/10/2021

TO Andranik Arzumanian
ATTN Yessuf Tegegne
SENIOR R/W P&M David Mraaney

ROUTE 134
PM_KM 0.00/R13.34
EA 31170
Project ID #
ALT

R/W DATA SHEET

ID NO ds2884

Date of Data Sheet 12/29/2017

Project Description

This cost estimate is valid for the above scoping report only. This is an estimate only and not an appraisal. It may be based on worse case scenarios.
The estimate is subject to change and revision.
The mapping did not provide sufficient nor adequate detail to determine the limits of thr Right of Way required and effects on the improvements.
The transportation facilities have not been sufficiently designed for our estimator to determine the damages to any of the remainder parcels affected by the project.

This cost estimate is pursuant to the following responses supplied by Andranik Arzumanian to the Data Sheet Request Form.

	YES	NO	Not known at this time
Utilities are depicted on plans	X	X	
Railroads are depicted on plans	X	X	
There are Material and/or Disposal Sites Required			X
Caltrans will do the Right of Way work	X		
There will be a Cooperative Agreement		X	
This is a reimbursable project		X	
There is Hazardous Waste potential			X

RW COST ESTIMATE

	CURRENT VALUE	ESCALATED VALUE
R/ w acq.(incl.contingency G.w-condem.-adm.s'ti.)Permits		
Clearance		
RAP (cont rate.)	No Right of Way	
Escrow costs (cont rate.)		
Utility relocation costs	$606,000	$800,643
Estimate of Reimbursed Appraisal Fee		
Total estimated cost	$606,000	$800,643

Escalation Rate Rw .07
Escalation Rate Utilities .08
Cert.date 11/16/18

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Parcel Count and Py Info

PARCEL TYPES	DUAL APPR.
A	
B	
C	
D	
F	

RIGHTS NEEDED	
FEE	
EASE	
TCE	

TAKES	
FULL	
PART	
TOTAL	

DISPLACEMENT OF UNITS	
SFR	
BUS	
MULTI	

PARCELS WITH RAP

POTENTIAL CLEARANCE PARCELS

POTENTIAL CONDEMNATION PARCELS

POTENTIAL EXCESS PARCELS

UTILITY IMPACTS	
u4-1	
u4-2	
u4-3	
u4-4	15
u5-7	
u5-8	
u5-9	13

Estimate Of Right Of Way Support Hours

Activity Codes	Function	Hours
225 & 245	Appraisals	
225 & 245	Acquisitions	
200	Utilities	6,110
185.20.40	Utility Potholing	1,800
205	Railroads	
225 & 245	Condemnation	
225 & 245	Clearance	
225 & 245	Relocation	
220 & 300	RW Engineering	
	Total	7,910

UTILITY INFORMATION

Please See the Utility Conflict Addendum for Complete Utility Information

Are utility easements required? No

Are Utility agreements required? Yes

Total Current Cost $606,000

Const. Completion Date 08/10/2021

Utility Escalation Rate 8%

Total Escalated Cost $800,643

Data Sheet ID NO: ds2884

ROUTE 134

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ALT

RR INFORMATION

Are RR affected: None

Describe affected RR: none

When Branch Lines Or Spurs Are Affected ,would Acquisition And Or Payment Of Damages To Businesses And Or Industries Served By The Railroad Facility Be More Cost Effective Than Service Contracts ,or Grade Separations Requiring Construction And Maintenance Agreements Involved?

0

Explain Branch lines: NA

Discuss Types Of Agreements And Rights Required From The Railroads. Are Grade Xing Requiring Service Contracts ,or Grade Separations Requiring Construction And Maintenance Agreements Involved.

NA

RAILROAD COST PERTAINING TO CONSTRUCTION ACTIVITY: $0

The cost of flagging related to project construction activity is a Phase 4 cost (construction contract cost). Though noted on the RW data sheet, the estimated flagging cost is not a RW cost, and is not a part of RW Capital.. The estimate is provided so it can be added to the engineer's estimate for construction -- the RR flagging estimate is based on days needed for construction activity.

		DATE
Right of Way Estimate prepared by	Victor Lee	12/29/17
Railroad Estimate prepared by	Steve Johnson	12/28/17
Utilities Estimate prepared by	Tracie Banks	12/26/17

I have personally reviewed this R/W Data Sheet and all supporting information I certify that the probable highest and best use estimated values and assumptions are reasonable and proper subject to the limiting conditions set forth and I find this Data Sheet complete and current.

This Data Sheet is not to be signed by Chief unless accompanied by final scoping report(PR,PSR,PSSR) for review and/or signature.

CHIEF _____ 12/29/17

Utility Estimate
Id- ds2884
EA- 31170

	Description	Quantity	$/Unit	Total Cost
1	1. POTHOLES-- 6" M -SO CAL GAS 16' WE AT WB On from	2	3000	6000
2	1. POTHOLES 8" CL -LA WATER AND POWER AT WB On from	2	3000	6000
3	1. POTHOLES 9" DU PAC BELL APPROX LOC AT WB On from	2	3000	6000
4	2. POTHOLES 2.5 DU DWP 46' N OF CL EB On from	2	3000	6000
5	3. POTHOLES 12" MONO LA WATER &POWER 24' WE WB Off	2	3000	6000
6	3. RELOCATE PULL BOX WB Off ramp to Lankershim Blvd	2	5000	10000
7				
8	3. POTHOLES 6' C.L DWP WATER 27' E OF W WB Off ramp to	2	3000	6000
9	3. POTHOLES 26 D PT & T WB Off ramp to Lankershim Blvd	2	3000	6000
10	4. POTHOLES 8"CL LA WATER & POWER 26' W EB Off ramp to	2	3000	6000
11	4. POTHOLES 8" M SC GAS 13' E OF W EB Off ramp to	2	3000	6000
12	5. RELOCATE PULL BOX WB Off ramp to Cahuenga Blvd	1	5000	5000
13				
14	6. RELOCATE PULL BOX WB Off ramp to Cahuenga Blvd EB On	3	5000	15000
15	7. POTHOLES 8" CL BURB WATER 14' W CL EB Off ramp to N	2	3000	6000
16	7. POTHOLES 1 BU CA PT&T 34' W CL EB Off ramp to N Pass	3	3000	9000
17	7. RELOCATE PULL BOX EB Off ramp to N Pass Ave	1	5000	5000
18	9. POTHOLES 8 DU PT&T N OF S WB On ramp from Hollywood	3	3000	9000
19	11. POTHOLES 6' CL BURB WATER 29' N EB On ramp from	2	3000	6000
20	11. POTHOLES 2" BURB WATER APPROX LOCATION EB On	2	3000	6000
21	11. RELOCATE PULL BOX EB On ramp from Riverside Dr	2	5000	10000
22	13. POTHOLES 8 DU PT&T N OF S WB Off ramp to W Alameda	2	3000	6000
23	13. RELOCATE PULL BOX WB Off ramp to W Alameda AvE	1	5000	5000
24	14. POTHOLES 8" cl burb water 16.5' e of W EB Off ramp to Bob	2	3000	6000
25	24. POTHOLES 1 BU WI PT&T 12' N OF CL WB On from Riverside	2	3000	6000
26	24. POTHOLES 3" M IN 6" CSG SC GAS 22' W OF CL WB On	2	3000	6000
27	29. POTHOLES 1 BU CA PT&T 5' S WB Off ramp to San	2	3000	6000
28	29. POTHOLES 10" H SO CAL GAS 18' NS WB Off ramp to San	2	3000	6000
29	29. RELOCATE PULL BOX WB Off ramp to San Fernando Rd	1	5000	5000
30	31.POTHOLES 6" CL GLEN WATER 27' EW EB Off ramp to San	2	3000	6000
31	31. POTHOLES 20" CONC GLEN WATER 15' NS EB Off ramp to	2	3000	6000
32				
33	39. POTHOLES 8-5 , 2-2 GLEN MUNPOWER 34' W F CL EB Off	3	3000	9000
34				
35	40. POTHOLES 4-6" GLEN MUN POWER 23' W OF CL EB Off	2	3000	6000

Utility Conflicts
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	Description	Quantity	$/Unit	Total Cost
36	40. POTHOLES 4" M IN 8" CSG SCGAS VAR EB Off ramp to	2	3000	6000
37				
38	41. POTHOLES 18-DU PT&T 20' E OF CL EB Off ramp to Central	2	3000	6000
39	41. POTHOLES 6" H IN 10"CSG SCGAS 28' W OF E EB Off ramp	2	3000	6000
40				
41				
42				
43	44. POTHOLES 12" C.L WATER CITY OF GLANDALE 42" E OF	2	3000	6000
44				
45				
46	46. POTHOLES 6"C.L CL GLENDALE MUN WATER 8.5' W OF	2	3000	6000
47				
48				
49				
50	48. RELOCATE PULL BOX EB On ramp from Brand Blvd	2	5000	10000
51	49. POTHOLES 6" C.L WATER CITY OF GLENDALE 15' NS EB	2	3000	6000
52	49. POTHOLES 6-5", 2-2' GLEN MUN POWER 5' NS EB On	3	3000	9000
53	49. RELOCATE PULL BOX EB On ramp from Brand Blvd	1	5000	5000
54				
55	50. POTHOLES 12" C.I -CL GLEN MUN WATER 42' E OF CL EB	3	3000	9000
56				
57	51. RELOCATE FIRE HYD EB On ramp from Brand Blvd	1	30000	30000
58	51. RELOCATE PULL BOX EB On ramp from Brand Blvd	1	5000	5000
59				
60	54. POTHOLES 3" M SO CAL GAS CO.28'F WEST EB Off ramp to	2	3000	6000
61	54. POTHOLES 30" RIV STFFF GLEN MUN WATER EB Off ramp	2	3000	6000
62	54. POTHOLES 11-DU PT&T 25' E OF CL EB Off ramp to N	2	3000	6000
63				
64	58. RELOCATE PULL BOX EB Off to Harvey Dr	5	5000	25000
65				
66				
67	59. RELOCATE PULL BOX WB On from Harvey Dr	7	5000	35000
68				
69	60. POTHOLES 2' M SC GAS 11' WE EB On from Harvey Dr	2	3000	6000
70				

Utility Conflicts
Id- ds2884
EA- 31170

	Description	Quantity	$/Unit	Total Cost
71	61. RELOCATE PULL BOX WB Off to Harvey Dr	3	3000	9000
72				
73	64. POTHOLES 1-BU CA PT&T 38' W OF CL EB Off ramp to N	3	3000	9000
74	64. POTHOLES 3" M SCGAS 19' E OF W EB Off ramp to N	3	3000	9000
75				
76	67. RELOCATE PULL BOX WB Off ramp to N Figueroa St	1	5000	5000
77	68. POTHOLES 3" GSP in 8" ACP WB On ramp from N San	3	3000	9000
78	68. POTHOLES 4MCD 16' W OF CL WB On ramp from N San	3	3000	9000
79	68. RELOCATE PULL BOX WB On ramp from N San Rafael Ave	2	5000	10000
80				
81	69. RELOCATE PULL BOX EB Off ramp to N San Rafael Ave	3	3000	9000
82				
83	70. POTHOLES 6"M SO CAL GAS 25' E CL EB On ramp from N	3	3000	9000
84	70. RELOCATE PULL BOX EB On ramp from N San Rafael Ave	2	5000	10000
85				
86	71. RELOCATE PULL BOX WB Off ramp to N San Rafael Ave	2	5000	10000
87				
88	73. POTHOLES 16' STL WATER 20' WE WB On from Orange	3	3000	9000
89	73. POTHOLES 6" M SO CAL GAS IN 10" CSG 15' EW WB On	3	3000	9000
90	73. POTHOLES 36 MCD PT&T 41' W OF CL WB On from	3	3000	9000
91	73. RELOCATE PULL BOX WB On from Orange Grove	2	5000	10000
92				
93	74. POTHOLES 20' CIP CITY OF PASS WATER EB On from	3	3000	9000
94	74. POTHOLES 8-4" OF CITY OF PASS WATER 2.25' W OF E EB	3	3000	9000
95	74. RELOCATE PULL BOX EB On from Orange Grove Bl (to	1	3000	3000
96				
97				
98	57. POTHOLES--FOR MGS - 6-DU PT&T 16' E OF CL WB OFF	2	3000	6000
99	57. POTHOLES--FOR MGS 6-3 DU GLENDALE MUN POWER	2	3000	6000
100	19. POTHOLES--- FOR MGS 2 BU W1 PT&T APPROX LOC STA	2	3000	6000
101	19. POTHOLES--- FOR MGS 2 1 / 2 GSP WATER STA 1307	2	3000	6000
102	19. POTHOLES--- FOR MGS 1 BU W1 PT&T STA 1307+68.72----	2	3000	6000
103	19. POTHOLES--- FOR MGS 2 1 / 2 GSP WATER STA 1307	2	3000	6000
104	19. POTHOLES--- FOR MGS 1 BU & 2 BU W1 PT&T APPROX	2	3000	6000
105	20. POTHOLES--- FOR MGS . 2 BU W1 PT&T APPROX LOC	2	3000	6000

Utility Conflicts
Id- ds2884
EA- 31170

	Description		Quantity	$/Unit	Total Cost
106	20. POTHOLES--- FOR MGS	1 BU W1 PT&T APPROX LOC	2	3000	6000

Attachment J

Work Plan

Project Manager: MIRAANEY, DAVID H PM Assistant: Project Nickname: Pavement Preservation
Project Description - Long: IN LOS ANGELES COUNTY, IN LOS ANGELES, GLENDALE, BURBANK AND PASADENA, FROM SR-170 TO I-210
Work Description - Long: PAVEMENT PRESERVATION
Subprogram: Pavement Preservation PID Type: CAPM-PR PPNO: 4817 Open for Time: Yes CT Status: APL PROGRAM YR: 2019 Working Days: AADD: Yes
Fund Source ($Ami): 20.XX.201.121($46,523)
Open Phases: 0, 1,

PDT MEMBERS

RW PARCELS: 0
Env Doc: CE (CEQA)
Permit: Req Dte Rcvd Date

Project Phase Summary (k$) <80 % 80%-100 % 100%-120 % >120 %

Phase	BAC$	Prog$	EXP $	ETC $	EAC $	EAC to Prog %	S/C%
0	334	1,380	283	904		86.0%	3.4%
1	3,275	4,744	0	4,742		100.0%	13.8%
2	238	254	0	252		99.2%	0.7%
3	3,252	5,735	0	5,726		99.8%	16.6%
Total:	7,100	12,113	283	11,624		98.3%	34.6%
4	0	34,034	0	0	0	0.0%	
9	0	376	0	0	0	0.0%	
Total:	0	34,410	0	0	0	0.0%	
Total:	7,100	46,523	283	11,624	11,907	25.6%	

Capital Cost Estimates

	Amount $k	EST Date
Roadway	34,034	
Structures	0	
Const Total	34,034	
ROW	376	
Total	34,410	

HQ Categorization
SHOPP MAJOR
SHOPP
AUTHORIZED
x-PAVEMENT PRESE

District Category

MS	MS Description	MS Date
M000	ID NEED	05/23/14 (A)
M010	APPROVE PID	05/30/15 (A)
M015	PROG PROJ	09/08/16 (A)
M020	BEGIN ENVIRO	07/13/17 (T)
M030	NOP	09/10/17 (T)
M035	NOI	09/10/17 (T)
M040	BEGIN PROJ	07/13/17 (T)
M060	CIRC DPR & DED INT	01/04/18 (T)
M100	APPROVE DPR	12/28/17 (T)
M140	PUBLIC HEARING	01/08/18 (T)
M160	APPROVE FED	01/09/18 (T)
M200	PA & ED	12/15/17 (T)
M210	BEGIN DESIGN	12/15/17 (T)
M220	GEO BASE MAP	01/18/18 (T)
M221	RECEIVE COMPLETE BRI	01/17/18 (T)
M222	BEGIN BRIDGE	01/17/18 (T)
M224	R/W REQTS	01/17/18 (T)
M225	REGULAR R/W	01/17/18 (T)
M260	SKELETON LAYOUT	01/19/18 (T)
M265	FINAL R/W REQTS	03/11/24 (T)
M275	GENERAL PLANS	01/17/18 (T)
M300	CIRC PLANS IN DIST	05/23/19 (T)
M310	DESIGN SAFETY REVIEW	05/23/19 (T)
M311	30% CONST REVIEW CO	01/17/18 (T)
M313	60% CONST REVIEW CO	01/19/18 (T)
M315	95% CONST REVIEW CO	05/23/19 (T)
M360	ENV REEVAL	05/23/19 (T)
M377	PS&E TO DOE	05/23/19 (T)
M378	DRAFT STRUC PS&E	05/10/18 (T)
M380	PROJ PS&E	09/06/18 (T)
M390	DCC	09/06/18 (T)
M410	R/W CERT	10/03/18 (T)
M412	R/W CERT - READY TO A	10/31/18 (T)
M420	COMP SPCL PROV	06/20/19 (T)
M430	DCR	09/06/18 (T)
M460	RTL	12/28/18 (T)
M470	FUND ALLOCATION	02/12/19 (T)
M480	HQ ADVERT	03/13/19 (T)
M490	BIDS OPEN	04/25/19 (T)
M495	AWARD	05/09/19 (T)
M500	APPROVE CONTRACT	05/23/19 (T)
M550	FINAL SAFETY REVIEW	08/10/21 (T)

WBS ID	TM	WBS DESCRIPTION	START	FINISH	% COMP	OTE	BAC HRS	ETC HRS	EXP HRS	EAC HRS	ETC $	EXP $	EAC $
K.100.05	D.MIRAANEY	PROJ MGMT PID CMPNT	1/1/15	7/13/17	95(S)	Y	46	4	46	50	707	4,429	5,137
K.150	A.ANDRAOS	DEVELOP PID	1/1/15	7/13/17	95(S)	Y	3,913	54	3,913	3,967	7,387	334,885	342,273
K.P	D.MIRAANEY	PID BUCKET	1/1/15	1/1/15	100(C)	N	8	0	8	8	0	258	258
K Phase Total							3,967	58	3,967	4,025	8,095	339,573	347,667
0.100.10	K.HOSSAIN	PROJ MGMT PA&ED CMPNT	1/1/17	12/15/17	50(S)	Y	351	635	347	982	83,231	56,961	140,192
0.160.05	K.HOSSAIN	UPDD PROJ INFO	1/1/17	12/15/17	50(S)	Y	420	807	24	831	112,974	3,921	116,895
0.160.10	K.HOSSAIN	ENGRG STUDIES	1/1/17	12/15/17	50(S)	Y	850	839	1,035	1,874	126,431	133,761	260,191
0.160.15	K.HOSSAIN	DRAFT PR	7/13/17	12/27/17	0(N)	N	305	1,038	0	1,038	157,240	0	157,240
0.160.20	K.HOSSAIN	ENGRG & LAND NET SRVYS	1/1/17	12/15/17	50(S)	Y	0	1,375	611	1,986	160,766	77,301	238,067
0.165.10	K.HOSSAIN	GENL ENV STUDIES	1/1/17	1/3/18	5(S)	Y	104	195	102	297	27,474	8,817	36,292
0.165.15	K.HOSSAIN	BIOL STUDIES	1/1/17	1/3/18	5(S)	Y	16	378	22	400	36,042	1,455	37,497
0.165.20	K.HOSSAIN	CLTRL RSRC STUDIES	1/1/17	1/3/18	5(S)	Y	16	391	9	400	33,724	896	34,620
0.165.25	K.HOSSAIN	DED	5/1/17	1/3/18	5(S)	Y	16	111	0	111	11,435	0	11,435
0.180.05	K.HOSSAIN	FPR	1/8/18	1/8/18	0(N)	N	273	810	0	810	118,855	0	118,855
0.180.10	K.HOSSAIN	FED	1/8/18	1/8/18	0(N)	N	0	11	0	11	1,618	0	1,618
0.180.15	K.HOSSAIN	CMPLTD ENV DOC/DTRMTN	5/1/17	12/15/17	5(S)	Y	8	350	0	350	34,087	0	34,087
0 Phase Total							2,359	6,940	2,150	9,090	903,878	283,112	1,186,990
1.100.15	K.HOSSAIN	PROJ MGMT PS&E CMPNT	12/15/17	5/22/19	0(N)	Y	792	8,174	0	8,174	1,291,413	0	1,291,413
1.185.05	K.HOSSAIN	UPDD PROJ INFO	12/15/17	1/16/18	0(N)	N	1,040	336	0	336	50,445	0	50,445
1.185.10	K.HOSSAIN	SRVYS & PHTGR MPG FOR I	12/15/17	1/16/18	0(N)	N	2,000	1,560	0	1,560	224,012	0	224,012
1.185.15	K.HOSSAIN	PREL DSN	1/17/18	1/17/18	0(N)	N	2,080	793	0	793	116,473	0	116,473
1.185.20	K.HOSSAIN	ENGRG RPTS	1/18/18	1/18/18	0(N)	N	60	568	0	568	82,439	0	82,439
1.185.25	K.HOSSAIN	R/W RQMTS DTRMTN	12/15/17	1/16/18	0(N)	N	90	236	0	236	31,183	0	31,183
1.185.30	K.HOSSAIN	STRUC SITE PLANS	12/15/17	1/16/18	0(N)	N	0	162	0	162	23,950	0	23,950
1.230	K.HOSSAIN	PREP DRAFT PS&E	1/19/18	5/11/18	0(N)	N	11,793	4,344	0	4,344	643,236	0	643,236
1.235	K.HOSSAIN	MIT ENV IMP'S & CLEAN-UP	12/15/17	5/22/19	0(N)	N	484	4,000	0	4,000	414,368	0	414,368
1.240	K.HOSSAIN	DRAFT STRUCS PS&E	1/17/18	5/9/18	0(N)	N	1,120	2,720	0	2,720	400,460	0	400,460
1.250	K.HOSSAIN	FNL STRUCS PS&E PCKG	5/10/18	2/26/19	0(N)	N	316	2,800	0	2,800	414,512	0	414,512
1.255	K.HOSSAIN	CIRC R/W & PREP FNL DST	5/23/19	6/19/19	0(N)	N	7,221	3,843	0	3,843	539,889	0	539,889
1.260	K.HOSSAIN	CONTR BID DOCS RTL	5/23/19	8/1/19	0(N)	N	83	1,714	0	1,714	209,715	0	209,715
1.265	K.HOSSAIN	AWDD & APVD CONST CON	8/2/19	2/6/20	0(N)	N	425	2,225	0	2,225	299,738	0	299,738
1 Phase Total							27,504	33,475	0	33,475	4,741,835	0	4,741,835
2.100.25	D.MIRAANEY	PROJ MGMT R/W CMPNT	1/17/18	4/4/23	0(N)	N	100	127	0	127	12,372	0	12,372
2.200	D.MIRAANEY	UTIL RELOCN	1/17/18	4/4/23	0(N)	N	2,200	1,945	0	1,945	239,682	0	239,682
2 Phase Total							2,300	2,072	0	2,072	252,053	0	252,053
3.100.20	D.MIRAANEY	PROJ MGMT CONST CMPNT	5/23/19	5/16/23	0(N)	N	200	2,971	0	2,971	464,862	0	464,862
3.270.15	J.EL JAMAL	CONST STAKES	6/21/19	7/12/21	0(N)	N	0	1,215	0	1,215	172,968	0	172,968
3.270.22	J.EL JAMAL	CONTR ADMIN	5/23/19	8/9/21	0(N)	N	13,177	5,949	0	5,949	827,892	0	827,892
3.270.33	J.EL JAMAL	CONST INSPN	5/23/19	8/9/21	0(N)	N	6,000	17,500	0	17,500	2,437,561	0	2,437,561

MS	MS Description	MS Date
A580	OPEN TO TRAF	08/10/21 (T)
A600	CONTRACT ACCEPT	08/10/21 (T)
A650	PROJECT CLOSEOUT INI	08/10/21 (T)
A700	FINAL REPORT	05/19/23 (T)
A800	END PROJ EXP	03/11/24 (T)
A900	FINAL PROJ CLOSEOUT	12/04/25 (T)

Due in 90 Days

WBS ID	TM	WBS DESCRIPTION	START	FINISH	% COMP	OTE	BAC HRS	ETC HRS	EXP HRS	EAC HRS	ETC $	EXP $	EAC $
3.270.44	J.EL JAMAL	CTRL OF MTLS	5/23/19	8/9/21	0(N)	N	200	3,300	0	3,300	364,083	0	364,083
3.270.56	J.EL JAMAL	EMPLOYMENT CMPLI	5/23/19	8/9/21	0(N)	N	0	400	0	400	48,466	0	48,466
3.270.66	J.EL JAMAL	TECH SPT	5/23/19	8/9/21	0(N)	N	533	761	0	761	109,462	0	109,462
3.275	R.HAUCK	CE & GCA OF STRUCS WRK	5/23/19	8/9/21	0(N)	N	937	937	0	937	131,912	0	131,912
3.280	D.MIRAANEY	ADMIN OF PLACS & ENV STI	5/23/19	8/9/21	0(N)	N	152	2,520	0	2,520	274,747	0	274,747
3.285	J.EL JAMAL	CHANGE ORDER ADMIN	5/23/19	8/9/21	0(N)	N	1,187	3,167	0	3,167	452,165	0	452,165
3.290	J.EL JAMAL	RSLV CONTR CLAIMS	5/23/19	5/18/23	0(N)	N	431	2,128	0	2,128	304,717	0	304,717
3.295	J.EL JAMAL	ACPT CONTR/PREP FE & FR	8/10/21	9/28/21	0(N)	N	845	1,200	0	1,200	137,155	0	137,155
3 Phase Total							23,762	42,048	0	42,048	5,725,990	0	5,725,990

Group Publish Comment

SHOPP Project Performance Output

Update Date: 11/15/2017	Source		Program	Fiscal	RTL	Programming Information ($1,000)
District - County - Rte -PM	EA	PPNO	Code	Year	Date	
						Project Manager:
Location:						HQ Program Manager:
Project Discription: Replacing Pedestrian Overcrossing						Project ID: 0715000277

PROGRAM	ACCT. CODE 20.XX.	Quantity of Performance Output: Ten Year Plan	PID: Quantity	PID: Output Cost ($1,000)	PA&ED	RTL: Output Cost ($1,000)	CCA	After Constr uction	PERFORMANCE units
Approval Date									
Construction Cost ($1,000)									
Right of Way Cost ($1,000)									
Support Cost ($1,000)									
EMERGENCY RESPONSE									
Major Damage Restoration	201.130			1235.000	2300.000				Locations
Permanent Restoration	201.131								Locations
COLLISION REDUCTION									
Safety Improvements	201.010								Collision Reduce
Collision Severity Reduction	201.015								Collision Reduce
Metal Beam Guard Rail Upgrade	201.020								Linear Foot
MANDATES									
Relinquishments	201.160								Lane Miles
Noise Attenuation for Schools	201.270								Locations
Railroad	201.325								Locations
Hazardous Waste Mitigation	201.330			193.000	193.000				Locations
Storm Water	201.335			$560	560.000				Acres Treated
ADA Compliance	201.361			$215	1034.000				Curb Ramps
SHOPP TEA	201.736								Locations
BRIDGE PRESERVATION									
Bridge Rehabilitation	201.110								Bridge
Bridge Scour Mitigation	201.111								Bridges
Bridge Rail Replacement/Upgrade	201.112								Linear Foot
Bridge Seismic Restoration	201.113								Bridges
Bridge Widening	201.114								Bridges
Trans Permit Requirements for Bridges	201.322								Bridges
ROADWAY PRESERVATION									
Roadway Rehabilitation (3R)	201.120								Lane Miles
Pavement Preservation (CAPM)	201.121			$19,789	25653.606				Lane Miles
Pavement Rehabilitation (2R)	201.122								Lane Miles
Long-Life Pavement Corridors (4R)	201.125								Lane Miles
Roadway Protective Betterment	201.150								Locations
Drainage System Restoration	201.151								Concrete Channel
Signs and Lighting Rehabilitation	201.170								Signs
				15.000	15.000				Light Fixtures
MOBILITY									
Operational Improvements	201.310								Daily Vehicle Hours of delay
Transportation Management Systems	201.315								Field Elements
									Miles of fiber
Truck Inspection & WIM Facilities	201.321								Locations
ROADSIDE PRESERVATION									
Highway Planting Restoration	201.210								Acres
Freeway Maintenance Access	201.230								Locations
Roadside Safety Improvements	201.235								Locations
Roadside Enhancement	201.240								Locations
Beautification and Modernization	201.245								Centerline Miles
Safety Roadside Rest Area Restoration	201.250								Locations
New Safety Roadside Rest Areas	201.260								Locations
FACILITIES									
Equipment Facilities	201.351								Locations
Maintenance Facilities	201.352								Locations
Office Buildings	201.353								Locations
Materials Lab	201.354								Locations
Additional Performance Units									
Paved shoulders									
Traffic Signal Light Uprade				$5,400	4149.370				
Upgrade MGR				$593	597.624				
Approach/departure slab					578.000				
Aggregate (approach slab)					19.400				

Attachment K

SHOPP Project Performance Indicator

Date of Estimate: | 5 Digit EA: 31170 | Phase: K | Project Title: IN LA FR RTE 170/ RTE 210 | Dist: 07 | Co: LA | Rte: 134 | PM: 0/13.3
Project Phase (PID, PAED, PSE): All | Proj ID: 0715000013 | PAED date 10/05/17 | PS&E date 08/27/18 | RTL Date 11/15/18 | CCA Date 08/10/21 | Estimated # of Layout Sheets:
Project Manager: Mirna Dagher

WBS Task Activity		Exec Mgmt		Roadway Unit		Design A				A-->B : B-->C : C-->A		Engineering Services						Storm Water						Surveys												DIVISION TOTALS	Risks/Assumptions and Parameters used for estimating/Remarks / Disclaimers
		Division	Program	Office	Roadway	Office	Utilities Senior		CADD - WPC - QMS	Office	QA/QC	Office	Design	Landscape		Materials	Delineation	Office	Hydraulics Senior		SWQR	SMP	NRDC	Office	Mapping	Desing	Record	Geospatial	Survyes	Photogrammetry	Field Offices						
		Chief	Advisor	Chief	Senior	Chief	O/S & A	Non O/S & Others	Support	Chief	Review Unit	Chief	Liaison	South	North	Senior	Supvr	Chief	East	West	Senior	Senior	Senior	Chief	Unit	Surveys	Center	Unit	PPMI	DES-59	North	West	East	South	A&E		
WBS	Task Activity Description	1790	Need PickList	1811-Design C	1821-Design C	1791	1797	1843	1844	1791-Design A	Select Designated QC/QA Unit	1810	1829	1850	1851	1840	1826	1830	1835	1837	1838	1849	1836	2110	2111	2112	2113	2114	2115	3648	2116	2117	2118	2119	Contract Out	DGNTotal	Comments
100	**Perform Project Management**	76.3	0	0	0	0	0	0	70	0	0	24	1	0	9	17	0	0	0	0	0	0	0	46	0	0	0	0	46	0	0	5	0	0	0	194.3	
0.100.10	Project Management PA & ED Component	17.5	0	0	0	0	0	0	35	0	0	6	1	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	67.5	WPC Effort (35 Hr)
1.100.15	Project Management PS&E Component	33.95	0	0	0	0	0	0	35	0	0	6	0	0	3	5	0	0	0	0	0	0	0	23	0	0	0	0	23	0	0	2	0	0	0	130.95	WPC Effort (35 Hr)
3.100.20	Project Management Construction Componer	22.75	0	0	0	0	0	0	0	0	0	6	0	0	3	8	0	0	0	0	0	0	0	23	0	0	0	0	23	0	0	2	0	0	0	87.75	
2.100.25	Project Management – R/W Component	2.1	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.1	
0.160	**Perform Preliminary Engineering Studies**	606.9	0	0	900	0	0	310	40	30	0	0	24	0	32	0	0	0	40	0	50	40	0	0	220	0	0	0	0	0	0	0	0	0	0	2340.9	
0.160.05	Updated Project Information	51.1	0	0	0	0	0	50	0	0	0	0	0	0	6	0	0	0	0	0	50	40	0	0	0	0	0	0	0	0	0	0	0	0	0	197.1	
0.160.10	Engineering Studies	282.1	0	0	500	0	0	240	0	0	0	0	16	0	10	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1088.1	
0.160.15	Draft Project Report	196.7	0	0	400	0	0	20	40	30	0	0	8	0	16	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	759.7	DPR QR for QMS Coordinator (40 Hr)
0.160.20	Engineering & Land Net Surveys	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	220	0	0	0	0	0	0	0	0	0	0	297	
0.165	**Perform Env Studies & Prepare Draft En**	11.2	0	0	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43.2	
0.165.10	General Env Studies	8.4	0	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32.4	
0.165.25	Draft Env Document	2.8	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10.8	
0.180	**Prepare & Approve Project Report & Fin**	193.9	0	0	400	0	0	0	0	0	0	0	0	0	16	48	0	0	0	0	50	40	0	0	0	0	0	0	0	0	0	0	0	0	0	747.9	
0.180.05	Project Report	191.1	0	0	400	0	0	0	0	0	0	0	0	0	8	48	0	0	0	0	50	40	0	0	0	0	0	0	0	0	0	0	0	0	0	737.1	
0.180.10	Final Env Document	2.8	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10.8	
1.185	**BASE MAPS & PLAN SHEETS FOR PS&**	540.1	0	40	920	0	0	150	30	20	0	0	36	0	136	48	0	0	10	0	0	0	0	0	8	0	0	8	0	0	0	1300	0	0	0	3626.1	
1.185.05	Updated Project Information	81.9	0	8	120	0	0	30	30	20	0	0	0	0	16	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	315.9	30 Hrs for CADD-Proj Directory Set-up
1.185.10	Surveys & Photogrammetric Mapping for De	456.4	0	8	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	1200	0	0	0	1760.4	
1.185.15	Preliminary Design	190.4	0	8	300	0	0	0	0	0	0	0	16	0	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	734.4	
1.185.20	Engineering Reports	131.6	0	8	200	0	0	120	0	0	0	0	0	0	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	507.6	
1.185.25	R/W Requirements Determination	37.8	0	8	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	145.8	
1.185.30	Structure Site Plans	42	0	0	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	162	
2.200	**Utility Relocation**	245	0	0	0	0	0	700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	945	
2.200.15	Approved Utility Relocation Plan	105	0	0	0	0	0	300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	405	
2.200.20	Utility Relocation Package	140	0	0	0	0	0	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	540	
1.230	**Prepare Draft PS&E**	2075.25	0	40	4440	0	0	510	75	30	0	0	24	0	480	0	50	0	190	0	50	40	0	0	0	0	0	0	0	0	0	0	0	0	0	8004.15	
1.230.05	Draft Roadway Plans	728	0	16	2000	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	2808	
1.230.10	Draft Highway Planting Plans	280	0	0	400	0	0	0	0	0	0	0	0	0	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1080	
1.230.25	Draft Utility Plans	350	0	0	500	0	0	500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1350	
1.230.30	Draft Drainage Plans	118.3	0	8	200	0	0	0	0	0	0	0	0	0	0	0	0	0	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	456.3	
1.230.35	Draft Specifications	158.9	0	0	400	0	0	10	0	0	0	0	0	0	24	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	612.9	
1.230.40	Draft PS&E Quantities & Estimates	232.05	0	8	500	0	0		75	0	0	0	0	0	40	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	895.05	60% & 90% QR for QMS Coordinator (2x37.5 Hr)
1.230.55	Structures Draft PS&E Incorporation	70	0	0	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	270	
1.230.60	Updated Project Information for PS&E Pack	137.9	0	8	240	0	0	0	0	30	0	0	0	0	16	0	50	0	0	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	531.9	
1.255	**Circulate, Review, & Prepare Final Dist P**	672.7	0	40	1180	0	0	55	0	40	0	0	8	0	184	0	225	0	50	0	50	40	0	0	0	50	0	0	0	0	0	0	0	0	0	2594.7	
1.255.05	Circulated & Reviewed Draft Dist PS&E Pa	128.8	0	16	120	0	0	40	0	40	0	0	8	0	24	0	0	0	30	0	50	40	0	0	0	0	0	0	0	0	0	0	0	0	0	496.8	
1.255.10	Updated PS&E Package	209.3	0	8	400	0	0	10	0	0	0	0	0	0	160	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	807.3	
1.255.15	Env Re-evaluation	16.8	0	8	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64.8	
1.255.20	Final Dist PS&E Package	221.55	0	8	400	0	0	0	0	0	0	0	0	0	0	0	225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	854.55	
1.255.30	Materials Information Handout	7	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	
1.255.35	Construction Staking Package & Control	45.5	0	0	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	0	0	0	0	0	0	0	0	0	175.5	
1.255.40	Resident Engineer's Pending File	29.75	0	0	80	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	114.75	
1.255.70	R/W Engineering Products	14	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	
1.260	**Contract Bid Documents Ready to List**	23.45	0	0	0	0	0	0	55	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90.45	
1.260.50	Project Submittal Ready to Process (PS&E)	19.25	0	0	0	0	0	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74.25	
1.260.70	Draft Contract Comment Response (DR)	4.2	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.2	
1.265	**Awarded & Approved Construction Contr**	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	
1.265.55	Advertised Contract	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	
3.270	**Construction Engineering & General Con**	451.5	0	0	0	0	0	0	0	0	0	0	0	0	30	220	0	0	10	0	60	10	0	0	0	0	0	0	0	0	0	900	0	0	0	1741.5	
3.270.15	Construction Stakes	315	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	900	0	0	0	1215	
3.270.66	Technical Support	136.5	0	0	0	0	0	60	0	0	0	0	0	0	30	220	0	0	10	0	60	10	0	0	0	0	0	0	0	0	0	0	0	0	0	526.5	
3.285	**Contract Change Order Adm**	505.4	0	40	800	0	0	10	0	0	0	0	4	0	30	110	0	0	50	0	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1949.4	
3.285.05	Change Order Process	119	0	40	300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	459	
3.285.10	Functional Support	386.4	0	0	500	0	0	10	0	0	0	0	4	0	30	110	0	0	50	0	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1490.4	
3.290	**Resolve Contract Claims**	39.9	0	0	0	0	0	0	0	0	0	0	0	0	4	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	153.9	
3.290.35	Technical Support	39.9	0	0	0	0	0		0	0	0	0	0	0	4	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	153.9	
3.295	**ACCEPT CONTRACT PREPARE FINAL**	112	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	280	0	0	0	0	0	0	0	0	0	432	
3.295.15	As-Built Plans	112	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	280	0	0	0	0	0	0	0	0	0	432	
Unit Total:	Unit Total:	5960.5	0	200	8640	0	0	1765	270	120	0	24	77	0	965	577	295	0	350	0	660	170	0	46	228	330	0	8	46	0	0	2205	0	0	0	23990.5	

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

RISK REGISTER CERTIFICATION (ACCOUNTABILITY CHECKPOINTS) FORM

PPM-0001 (REV 07/2013)

The risk register is to be approved and signed-off by the District Deputies* listed below for all scalability levels. By signing this form, you are certifying that you have reviewed the risks documented in the register and agree that they have been managed to the extent possible by the PDT.

Project Information ☐ Capital Project ☐ Major Maintenance Project (Check One) Total Estimated Cost: $35,804,000.00

Project ID/District-EA	0715000013 / 0731170
Project Description	PAVEMENT PRESERVATION , LA-134-0/13.3
Project Manager (PM)	David H Miraancy
Project Risk Manager (For Risk Level 3 Projects)	Sharas Bangalore

☐ No Risk Register Certification Required - - Check box if project is less than $1 million in total cost and risk register not prepared. Sign below and submit this form with PID, PA&ED, PS&E submittal, and RE Handoff File (as applicable).

Project Manager Signature _____ Date: 01/11/2018

PID (Recommended for Capital Projects Only excluding Minor Projects)

Project Manager	_____	Date: _____
Deputy District Director, Planning	_____	Date: _____
Deputy District Director*, Design**	_____	Date: _____
Deputy District Director, Project Management	_____	Date: _____

PA&ED (Required for Capital Projects Only)

Project Manager	David H Miraancy	Date: 12/29/17
Deputy District Director*, Environmental	for	Date: 12-29-17
Deputy District Director*, Design**		Date: 12-29-17
Deputy District Director, Project Management		Date: 12/29/17

Prior to PS&E (Required for Capital Projects and Major Maintenance Projects)

Project Manager	_____	Date: _____
Deputy District Director*, Design**	_____	Date: _____
Deputy District Director*, Construction	_____	Date: _____
Deputy District Director*, Right of Way	_____	Date: _____
Deputy District Director*, Environmental	_____	Date: _____
Deputy District Director, Project Management**	_____	Date: _____

RE File Hand-off (Recommended for Capital Projects and Major Maintenance Projects)

Project Manager	_____	Date: _____
Deputy District Director*, Design**	_____	Date: _____
Deputy District Director*, Construction	_____	Date: _____
Deputy District Director, Project Management**	_____	Date: _____

*or the respective Project Delivery Division Chief signatures in the North Region or Central Region

**or Deputy District Director, Maintenance signature for HM Projects designed by the District Maintenance Division

LEVEL 3 - RISK REGISTER						Project Name:	PAVEMENT PRESERVATION: LA 134-0/13.3			Project Manager	David H. Mraanoy			Risk Manager	Sharas Bangalore	District-EA	07-31170	Escalated cost	$35,804,000
									Risk Assessment										
Risk Identification									Probability	Cost Impact Before Mitigation (70th)				$4,075,000		Risk Response			
Risk No.	Status	Risk ID.	Task	Type	Category	Title	Risk Statement	Current status/Assumptions	Probability of Occurrence	Low	Most likely	High	Frequency	Impact	Risk Before	Rationale	Strategy	Response Actions	Risk Owner	Updated
1	Active	180.Dgn	180	Threat	Dgn	Local Agencies	Due to need to detour traffic on frontage road in front of Forest Lawn, City of Los A ngeles may have some requirements to alleviate congestion on their facility that may delay project schedule and add cost.	Detouring traffic on local street in front of Forest Lawn will require coordination with City of Los Angeles. This may impose limits on duration of the detour and frequency. This may cause delay in project schedule.	20%	$50,000	$100,000	$150,000	0	$100,000	$0	Designer estimate	Mitigate	Coordinate with City of Los Angeles as early as possible during Design phase and continue coordination during construction.	Design	12/29/2017
2	Active	180.Dgn	180	Threat	Dgn	Contaminated soil	As a result of unanticipated hazardous waste materials, which may be encountered during testing in design phase, additional hazardous mitigation planning may be required. This may lead to cost and schedule impacts during design phase	Complete information is not available during this phase regarding hazardous waste contamination	30%	$150,000	$200,000	$300,000	0	$200,333	$0	Designer estimate	Mitigate	Hazardous waste investigation need to be performed early on during design phase.	Design	12/29/2017
3	Active	180.Dgn	180	Threat	Dgn	Unknown Utilities	Estimate includes the cost of anticipated pot holing. Unknown utilities/buried objects may be present, which would lead to cost increase.	Upgrade nonstandard MBGR to current standard. Detailed utility information is not available at this phase.	30%	$1,000,000	$1,500,000	$2,000,000	0	$1,500,000	$0	Designer estimate	Mitigate	Potholing will be performed during desgin phase to identify all existing utilities that will be impacted by excavation.	R/W Engineering	12/29/2017
4	Active	180.Dgn	180	Threat	Dgn	Fiber Optic Cables	Estimate includes the cost of anticipated pot holing. Unknown Fiber Optic Cables may be present, which would lead to cost increase.	Upgrade nonstandard MBGR to current standard. Detailed utility information is not available at this phase.	30%	$1,000,000	$1,500,000	$2,000,000	0	$1,500,000	$0	Designer estimate	Mitigate	Potholing will be performed during desgin phase to identify all existing Fiber Optic cables that will be impacted by excavation.	ITS	12/29/2017
5	Active	180.Dgn	180	Threat	Dgn	Sub-surface conditions	Limited information about the sub-surface conditions is available at this time. Field conditions may be different than currently known. This may lead todesign modifications leading to increased cost and duration for the project	Estimate is based on available information at this phase regarding repairs of settlement on WB134 east of Forest Lawn Drive UC and on EB 134 on ramp from Forest Lawn Drive.	10%	$200,000	$300,000	$500,000	0	$316,667	$0	Designer estimate	Mitigate	Perform field testing during design phase to evaluate slab conditions	Design	12/29/2017
6	Active	180.Dgn	180	Threat	Dgn	Public awareness campaign	Construction inconvenience during construction phase due to noise, sound, vibration, dust and traffic delays may add additional cost to the project.	Design is based on current conditions	20%	$25,000	$50,000	$75,000	0	$50,000	$0	Designer estimate	Mitigate	Involve Public Affairs unit during the design phase and solicit suggestions on how issues can be resolved during construction to avoid delays.	Design	12/29/2017
7	Active	180.Dgn	180	Threat	Dgn	Increase in number of individual distressed slab to be replaced.	During design phase field investigations, additional individual distressed slabs may be identified to be removed and replaced. This may increase the cost of the project.	Number of slabs to be removed and replaced are based on information available at this time.	30%	$147,000	$175,000	$350,000	0	$199,500	$0	Designer estimate	Mitigate	Project Engineer to make sure field investigation is performed to evaluate slab conditions during Design phase to identify if any additional slabs need to be replaced.	Design	12/29/2017
8	Active	180.Dgn	180	Threat	Dgn	ADA curb ramps	Additional R/W may be required in order to comply with ADA requirements. This may increase the cost of the project and delay the schedule.	ADA ramp design is assumed to be with in State R/W.	30%	$500,000	$1,000,000	$1,500,000	0	$1,000,000	$0	Designer estimate	Mitigate	Evaluate all curb locations and their R/W needs in Design phase to minimize this impact.	Design	12/29/2017
9	Active	180.Dgn	180	Threat	Dgn	MBGR removal	There is a possibility of asbestos in the shim between the wood post and the metal rail. Due to removal of MBGR, special handling and disposal of this shims might be required. This may increase project cost.	Asbestos in the shim of existing MBGR.	50%	$50,000	$75,000	$100,000	1	$75,000	$75,000	Designer estimate	Mitigate	Asbestos survey is recommended.	Design	12/29/2017
10	Active	180.Dgn	180	Threat	Dgn	ADA curb ramps	There are ADA curb ramps in the Cities of Los Angeles, Pasadena, Burbank and Glendale. Permits may be required for work to be done in those Cities.	Permits may be required in the Cities of Los Angeles, Pasadena, Burbank and Glendale									Mitigate	Coordinate with the Cities as early as possible during Design phase and continue coordination during construction.	PPM	12/29/2017

Attachment L

Risk Management

Attachment M

Geotechnical Report
(Pavement Distress Repair)

State of California — Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: MR. BOYD MITCHELL
District 07 Maintenance Superintendent

Date: November 4, 2008
File: 07-LA-134-PM 3.84
EA 07-2P7301

Roadway Distress east of
Forest Lawn Drive

Attention: Debbie Wong
Senior Transportation Engineer
District 07 Office of Maintenance Engineering

From: **DEPARTMENT OF TRANSPORTATION**
DIVISION OF ENGINEERING SERVICES
Geotechnical Services
Office of Geotechnical Design - South 1
Branch D

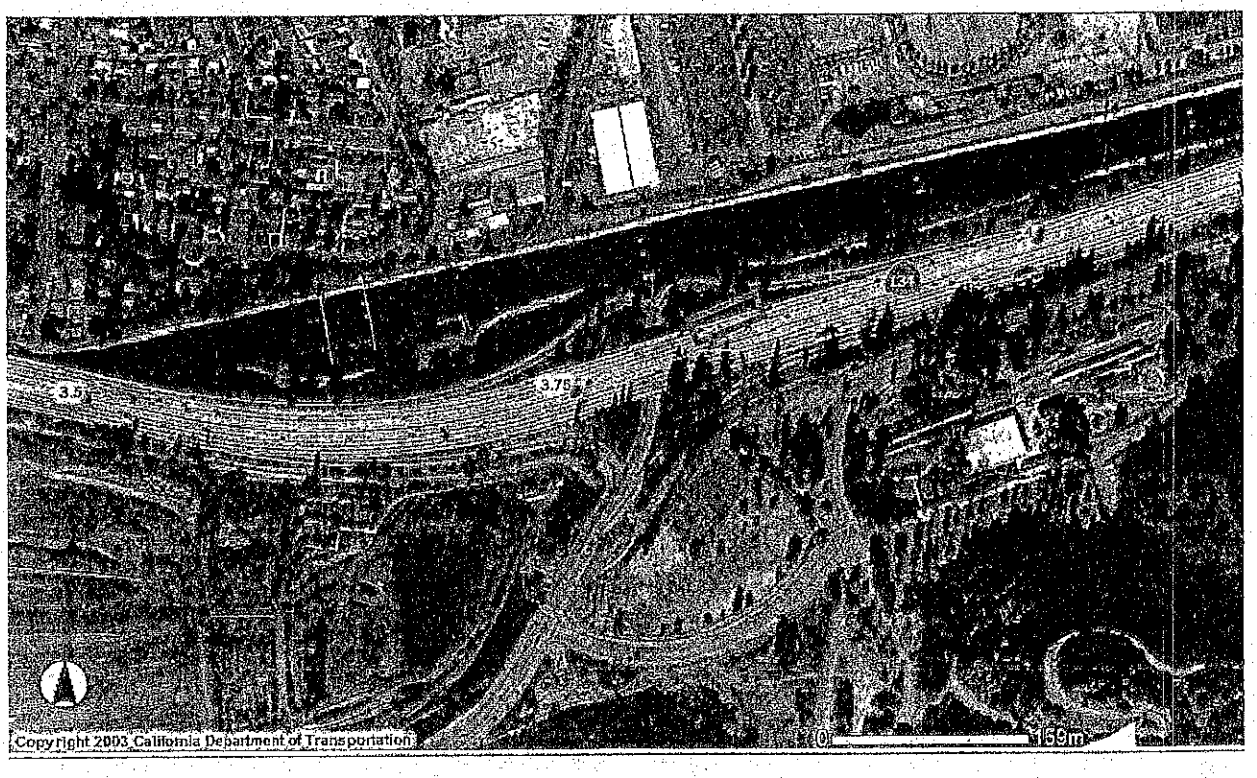
Subject: Geotechnical Recommendations for road repair near Forest Lawn Drive Undercrossing, (Br.No.53-1286) on State Route 134 (SR-134) and Eastbound On-Ramp

As requested by your office on May 22, 2008, the Office of Geotechnical Design South 1 (OGDS1), Branch D has conducted an investigation for repairing the roadway distress near Forest Lawn Drive Undercrossing (UC) on SR-134 in the City of Los Angeles, Los Angeles County. The purpose of OGDS1's geotechnical investigation is to evaluate site subsurface conditions and to provide recommendations for distressed roadway rehabilitation. Conclusions and recommendations presented in this report are based on site reconnaissance, geotechnical investigation with lab testing of soils, and a review of information from current and previous explorations.

SITE DESCRIPTION AND PROPOSED DEVELOPMENT

The distressed roadway site is near the east side of the Forest Lawn Dr. Undercrossing (Bridge No. 53-1286) on Route 134. The project site includes two studied locations, with site location No. 1 on westbound Rte 134 lane Nos. 3, 4, and a portion of the paved shoulder, and site location No. 2 on the eastbound Rte 134 on-ramp. Site location No. 1 is approximately 103.3 ft long and 30 ft wide. Site location No. 2 is approximately 92 ft long and 21.3 ft wide.

District 07 Maintenance performed shallow roadway repairs including patching or mud jacking at these two distressed locations in the past. OGDS1 could not locate records regarding the repair dates or what materials were used for patching at the eastbound on-ramp. Evidence of patching is visible on the eastbound on-ramp while a past mud jacking operation is visible on the westbound 134 mainline.



Approximate location of investigated area, PM 3.84 on State Route 134 in LA County: Site No.1 is shown as a green rectangle, with zero survey point in the southeast corner, and Site No.2 is shown as a red rectangle, with zero survey point in the northwest corner of the rectangles.

GEOTECHNICAL INVESTIGATION

Our field exploration program included 1) drilling four (4) exploratory auger sample borings, 2) taking seven (7) Cone Penetration Test (CPT) soundings, and 3) performing nondestructive geophysical Ground Penetration Radar (GPR) surveys for two distressed and depressed site locations.

GPR can be used to detect shallow subsurface anomalies often indicative of voids without damage to the pavement or utilities. The GPR surveys for the depressed roadway at site location Nos. 1 and 2 were conducted on November 15 and 16, 2006, and on July 22 and 23, 2008 respectively. The GPR survey reports, prepared by Geophysics and Geotechnical Support Branch, provide summarized results and interpretation of the acquired data.

At site location No. 1 (Fig. 2, WB 134 mainline, refer to cross section in Appendix A, view looking south) the GPR report identified four main anomalous areas measured and described from east to west parallel to the length of the freeway. Area A, without rebar or dowels, Area B, with rebar or dowels, and Area C, which is over 4-meters in length is interpreted as a depression. Area D (Appendix A, Fig. 3, showing depth slices) is interpreted as delamination and possibly one of the causes for some of the depression in lanes 3 and 4 and the WB shoulder. There is a strong reflection at a depth of approximately 0.7 ft (0.2 m) estimated to correspond to the PCC pavement/subgrade contact. This reflection implies a delamination between pavement/slab and subgrade. Such strong reflections at interfaces are usually suggestive of voids.

At site location No. 2 (EB Forest Lawn On-Ramp) the GPR survey was conducted with two antennas, 250 and 500 Mhz. Under favorable conditions, the 500 Mhz antenna can be used to investigate to depths of about 16.4 ft and the 250 Mhz even deeper. However, in the presence of clay, concrete, and other conductive materials, depth of penetration can be significantly reduced, as seen in this investigation. The report refers to the 500 Mhz data, which has higher resolution. This survey identified an anomaly observed within the depressed zone just below the surface. The survey records lack sufficient material information, which may suggest electronically-conductive (or clay-bearing) material within the upper 3 feet. Subsidence of such an interpreted clay-bearing zone could provide a possible explanation for the source of the pavement distress. However, due to the limited depth of penetration, the GPR report couldn't conclusively pinpoint the cause of the pavement distress. No underground utilities were detected within the extent of the GPR investigation at site No. 2. OGDS1 is aware that a repair was completed by D07 Maintenance and the replacement material might consist of Durapak beneath the AC pavement.

The two GPR survey reports for site location No. 1 and site location No. 2 are attached to this report in Appendix A.

The Cone Penetration Test (CPT) soundings were conducted on July 29 thru July 31, 2008, and auger borings were performed on August 11 thru 13, 2008. Sampling and testing of subsurface material was completed. Placement of OGDS1's exploratory borings for the depressed roadway was constrained to the Nos. 3 and 4 westbound Rte 134 lanes and shoulder, and eastbound on-ramp as underground utility lines (power, communications, and drainage) may conflict with the eastbound lanes or shoulder and westbound Nos. 1 and 2 lanes east of Forest Lawn Drive on Rte 134. Borings A-08-101 and A-08-102 were drilled on the shoulder of WB Rte 134 (site location No. 1) and borings A-08-103 and A-08-104 were drilled at the on-ramp to EB Rte 134 (site location No. 2). Refer to the included plan for boring and CPT locations.

The auger sample borings were drilled to approximate depths ranging from 41.5 feet to 61.5 feet below grade. CPT sounding Nos. 4, 5, 6 and 7 were conducted at site location No.1, and CPT Nos. 1, 2 and 3 were conducted at site location No. 2. The CPT soundings were advanced to depths ranging from 20.1 feet to 42.3 feet below the existing roadway surface. The field boring logs, CPT records, and the boring/CPT location plan are attached to this report in Appendix C.

The subsurface conditions at the project site are interpreted from the sampling and lab test results obtained from the current field investigation. Based on the available boring and CPT data, the interpreted subsurface materials beneath the site generally consist of fill to an approximate depth ranging from 16 to 23.5 ft at site location No. 2, and about 15 to 28 ft at site location No. 1, overlying native alluvium. The native alluvium generally consists of interlayered medium dense to dense silty sand/sandy silt, fine to medium sand, and sand with gravel. The upper alluvium can be sporadically loose just below the fill. The bridge approach fill consists generally of medium dense silty sand at the site location No. 1 (WB Rte 134), and of loose silty sand at the site location No. 2 (EB Rte 134 On-Ramp) with loose to very loose material near the base of the fill.

Table 1 – Summary of Borings / CPT's for site location No.1 and No.2 on Rte 134 East of Forest Lawn Drive

Boring / CPT No.	SR-134 Centerline Station	Offset from Centerline	Top of Boring Elevation (ft)	Boring/ CPT Depth / Caving Depth (ft)	Estimated Depth to Base of Fill (ft)	Depth Range of Loose / Very Loose Material (ft)	Distress
WB Rte 134 Mainline (Site Location No. 1)							
CPT-5	**343+33**	**51.5 ft Lt.**	**+503.3**	**41.0 / 20.1**	**NA**	**NA**	**Yes**
CPT-7*	**343+33**	**63.5 ft Lt.**	**+503.1**	**34.6 / 24.1**	**NA**	**NA**	**Yes**
A-08-102	**343+37**	**62.5 ft Lt.**	**+503.1**	**61.5 / NM**	**28'**	**15' - 24' 24' - 28'**	**Yes**
A-08-101	343+75	63.0 ft Lt.	+503.0	61.5 / NM	15'	15' - 29' 40' - 42'	No
CPT-4	343+80	49.5 ft Lt.	+502.9	35.0 / 37.3	NA	NA	No
CPT-6*	343+82	62.5 ft Lt.	+503.0	41.5 / 42.3	NA	NA	No
EB Rte 134 On-Ramp (Site Location No. 2)							
A-08-104	343+06	117 ft Rt.	+496.0	41.5 / NM	16'	5' - 24'	No
CPT-3	343+08	115 ft Rt.	+496.1	31.0 / 32.1	NA	NA	No
CPT-1	**343+31**	**119 ft Rt.**	**+495.4**	**25.0 / 24.6**	**NA**	**NA**	**Yes**
CPT-2*	**343+40**	**107.5 ft Rt.**	**+496.5**	**26.0 / 25.5**	**NA**	**NA**	**Yes**
A-08-103	**343+42**	**106 ft Rt.**	**+496.6**	**41.5 / NM**	**23.5'**	**5' - 9' 9' – 23.5'**	**Yes**

Note:
1. The boring / CPT surface elevations are based on the survey results provided by OGDS1, Branch D. Survey benchmarks were provided by D07 Surveys based on NAVD88 datum.
2. Boring locations and offsets measured from culture using previous contract plan sheet, number 10 of 171.
3. *CPT conducted with piezocone.
4. NM - caving depth not measured.

LOCAL GEOLOGY

The area is underlain by artificial fill placed during the construction of the freeway. This artificial fill overlies alluvial deposits, typically consisting of silty sands to sandy silts, sands and gravels.

GROUND WATER

No groundwater was encountered in the borings drilled to the maximum depth of 41.5 ft (average elevation of +454.8 ft) for borings A-08-103 and A-08-104, site location No. 2, and maximum depth of +61.5 ft (average elevation of +441.5 ft) for borings A-08-101 and A-08-102, site location No. 1, during our investigation. Perched water was also not apparent within any of the borings or CPT's, and no soils appeared saturated (wet) during the drilling operation.

In situ moisture content (refer to Appendix B for summarized soil moisture contents) generally increases within fill at the distressed areas vs. the nondistressed areas. OGDS1 interprets this increase in moisture from past repair activities (mudjacking and Durapak replacement) and possibly from water added to facilitate compaction of fill. Nearby natural drainage may have contributed to higher moisture contents in the ravine area. OGDS1 did not find irrefutable evidence of utility drainage leakage in the area.

All elevations in this report are based on NAVD88 datum.

LABORATORY TEST RESULTS

Representative soil samples were obtained from borings drilled at the subject site and submitted to the laboratory for testing. Tests performed include sieve analysis, moisture content, compaction, and corrosivity tests. The test results are presented in Table Nos. 2 and 3 below. The results of sieve analysis (CTM 203) and compaction tests are attached to this report in Appendix B.

Table No. 2
Compaction Test Results (ASTM D 1557)

Boring No.	Sample Depth (ft)	Maximum Dry Density (pcf)	Optimum Moisture Content (%)	Average In Situ Moisture Content (%)
R-08-101	0 - 15	125.5	9.5	6
R-08-102	0 - 10	125.5	9.5	8.15
R-08-103	0 - 10	122.0	11.5	9.45
R-08-104	0 - 20	122.0	11.5	3.2

Table No. 3
Corrosion Test Results (CTM 532, 643, 417, 422)

Boring No.	Sample Depth (ft)	PH*	Minimum Resistivity (ohm-cm)	Sulfate* Content (PPM)	Chloride* Content (PPM)
R-08-101	6.5 – 10.0	7.7	1,600	N/A	N/A
R-08-101	21.5 – 25.0	8.07	3,100	N/A	N/A
R-08-101	26.5 – 30.0	7.86	1,600	N/A	N/A
R-08-101	31.5 – 35.0	9.11	2,000	N/A	N/A
R-08-101	51.5 – 55.0	9.30	3,200	N/A	N/A
R-08-102	11.5 15.0	9.16	1,500	N/A	N/A
R-08-102	23.2 – 23.5	9.59	730	710	43
R-08-102	27.5 – 27.9	10.49	3,600	N/A	N/A
R-08-102	27.5 – 27.9	10.4	3,600	70	10
R-08-102	31.5 – 35.0	9.80	1,800	N/A	N/A
R-08-102	45.0 – 46.5	9.18	4,000	N/A	N/A
R-08-103	12.5 12.8	9.44	3,300	N/A	N/A
R-08-103	17.2 – 17.5	10.08	8,500	N/A	N/A
R-08-103	26.5 – 30.0	9.63	2,500	N/A	N/A
R-08-104	31.5 – 35.0	10.28	2,500	72	51

*Caltrans considers a site to be corrosive if soil and/or water samples contain more than 500 ppm of chlorides, or more than 2000 ppm of sulfates, or has a pH of 5.5 or less.

The Corrosion Test Summary Report for Forest Lawn Drive UC project states: "This site is not corrosive to foundation elements." Years to life of an 18 gauge CMP culvert is estimated to range from 29 to 60 years.

GEOTECHNICAL OBSERVATION AND EVALUATION

Based on the results of this investigation, it is our opinion that a combination of factors contributed to the roadway distress at the subject site.

1. Deposited debris in an interpreted generally linear ravine area just below the compacted fill appears to be the main cause for roadway depression. The debris found within the interpreted ravine should have been removed and replaced with the appropriate compacted back fill prior to or during freeway construction. At site No. 1 the modified California sampler was pushed with low to moderate pressure in the upper 24 ft to 28 ft at the distressed area. In these relatively undisturbed soil samples various debris such as wood limbs or lumber, glass fragments, rusted metal can debris, roots, and abundant pine needles were observed.

2. Poorly compacted fill and debris below the roadway is apparently one of the causes for roadway distress. The sandy silt to silty sand soil, encountered at 15 to 28 or 29 ft depth at site location No. 1 (A-08-101 & A-08-102), and at 5 ft to 24 ft depth at site location No. 2 (A-08-103 & A-08-104) appeared to be loosely compacted. Based on OGDS-1's observation in the field, the existing soil compaction is less than the required 95% relative compaction within 150 ft distance from the bridge for Backfill shown in the Caltrans Standard Specifications (2006).

   The apparent loosening of what should be compacted fill soils may have been caused by downfiltering of overlying fill into underlying voids in the basal debris.

3. Poor quality concrete-treated base or small void areas below the roadway might have contributed to the roadway distress. At the contact between the PCC slabs and subbase, delamination or small voids are interpreted to have been created. Gaps are not currently sealed between PCC slabs with results that during rains, trucks were observed to cause a water pumping action between the slabs.

In order to provide a uniform bearing material beneath the roadway and to avoid additional settlements at the subject locations, we recommend the following remedial measures:

1. Utilizing a grouting program using compaction grouting technique. The technique involves injecting pipes into compressible soil and monitoring the rate of advancement of the pipe into soil until refusal or until incompressible soil is encountered. At the subject site based on CPT and field boring logs the advancement of pipes will be limited to approximately 30 to 40 ft depth below ground surface.

Grout will then be injected thru the pipes into the loose to very loose soils or voids until the required high pressure is reached or uplift of soil shows at the surface. Grouting points are proposed to be spaced from 5 ft to 10 ft apart in plan view. First the grouting points at the circumference of the specified area would be completed and then grouting would be completed using a triangular pattern to fill in the inside area. OGDS1's estimate is that the location of the fairly deep subsurface loose material is present within a ravine deeper at site location No. 1 (affecting a wider area) and shallower toward site location No. 2 (affecting a more narrow area). Injecting grout may start at the westbound Rte 134 shoulder, near Forest Lawn Drive UC (site location No. 1), at roughly estimated 50± ft width, then progress across the freeway and end at eastbound Rte 134 Forest Lawn Drive On-Ramp (site location No. 2). Existing utilities would have to be located and avoided. D07 Maintenance might elect to eliminate grouting the freeway slope just north of the EB On-Ramp.

Up to ten grouting points could be completed during one shift.

2. After completion of a proposed deep grouting program, overexcavation (removal and backfilling) of approximately 4 feet of material beneath the distressed roadway areas at site location Nos. 1 and 2, is recommended to improve the existing roadway surface. This should effectively remove voids and create a level compacted surface for the roadway. New sealed off PCC slabs and new AC pavement would create a good roadway surface. Backfilling shall conform to Section 19 of the Standard Specification (no less than 95% relative compaction).

OGDS1 recommends that a geotechnical engineer or certified engineering geologist be present during the roadway repairs, to observe the soil conditions encountered and to evaluate the applicability of the recommendations presented in this report. District 07 Materials Unit should be contacted for the AC/PCC pavement structural section design.

If you have any questions or comments, please call Tatjana Halda at (213) 620-2347 or Shiva Karimi at (213) 620-2146.

Prepared by: HALDA Date: 11/05/08

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Exp. 9/30/09
CIVIL
STATE OF CALIFORNIA

Tatjana Halda, P.E.
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References: Phone conversation with Mr. Steven Chandler, on October 29, 2008, The Pressure Grout Co.

Attachments: GPR Survey Reports (Appendix A)
Lab Test Result (Appendix B)
Caltrans Boring and CPT Records (Appendix C)

CC: RE Pending File
District 07 Maintenance Design – Debbie Wong
Specs & Estimates (D07)
Specs Div. (D07)
District 07 Proj. Mgmt
District 07 Materials – Kirsten Stahl
OGDS1- Sac. File
GS- Corporate
OGDS1- LA File

Attachment N

Design Resource Worksheet

Attachment O

Pavement Condition Survey

PaveM Scenario Used: #2233
APCS Data Year: 2015

Caltrans Pavement Program
Pavement Condition Summary Report (PaveM) By Direction
WESTBOUND; ALL LANES

District: 7; County: Los Angeles (LA); Route: 134

From PM: 0.000 To PM: R13.341
L-Length: 13.087, R-Length: 0.000
L-Lane Miles: 59.238, R-Lane Miles: 0.000 (Unknown lane miles: 0.000)

Year/ Condition Lane Miles	Pavement Type	Traditional Condition (lane miles)					Assumed MAP-21 Condition (lane miles)			Total Lane Miles	Effectiveness (%)	
		Green	Yellow	Blue	Orange	Red	Good	Fair	Poor		SHOPP Effectiveness ((Red + Orange) /Total Lane Miles) %	Rehab Effectiveness (Red/Total Lane Miles) %
2015	Flexible	0.000	0.793	0.000	0.000	0.000	0.000	0.793	0.000	0.793	0.000	0.000
	Rigid	5.213	31.082	0.373	2.861	17.916	5.660	50.300	1.485	57.445	36.169	31.168
2016	Flexible	0.000	0.793	0.000	0.000	0.000	0.000	0.793	0.000	0.793	0.000	0.000
	Rigid	4.251	30.169	0.775	2.861	19.395	4.272	51.315	1.858	57.445	38.743	33.763
2017	Flexible	0.000	0.793	0.000	0.000	0.000	0.000	0.793	0.000	0.793	0.000	0.000
	Rigid	3.970	30.236	0.558	2.522	20.159	2.428	52.368	2.629	57.445	39.483	35.093
2018	Flexible	0.000	0.793	0.000	0.000	0.000	0.000	0.793	0.000	0.793	0.000	0.000
	Rigid	0.242	31.153	0.906	2.862	22.282	2.025	52.452	2.968	57.445	43.771	38.788
2019	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	1.035	26.924	0.361	6.040	23.878	2.025	52.764	3.449	58.238	51.372	41.001
2020	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.078	0.000	0.000	0.032	0.128	57.690	0.420	0.128	58.238	0.275	0.220
2021	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.078	0.000	0.000	0.032	0.128	57.690	0.420	0.128	58.238	0.275	0.220
2022	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.078	0.000	0.000	0.032	0.128	57.145	0.965	0.128	58.238	0.275	0.220
2023	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.065	0.000	0.013	0.032	0.128	56.623	1.487	0.128	58.238	0.275	0.220
2024	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.065	0.000	0.013	0.032	0.128	56.610	1.500	0.128	58.238	0.275	0.220
2025	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.065	0.000	0.013	0.032	0.128	56.610	1.500	0.128	58.238	0.275	0.220
2026	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.065	0.000	0.013	0.032	0.128	55.781	2.329	0.128	58.238	0.275	0.220
2027	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.063	0.000	0.015	0.032	0.128	55.781	2.329	0.128	58.238	0.275	0.220
2028	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.063	0.000	0.015	0.032	0.128	55.781	2.297	0.160	58.238	0.275	0.220
2029	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.063	0.000	0.015	0.032	0.128	40.200	17.878	0.160	58.238	0.275	0.220

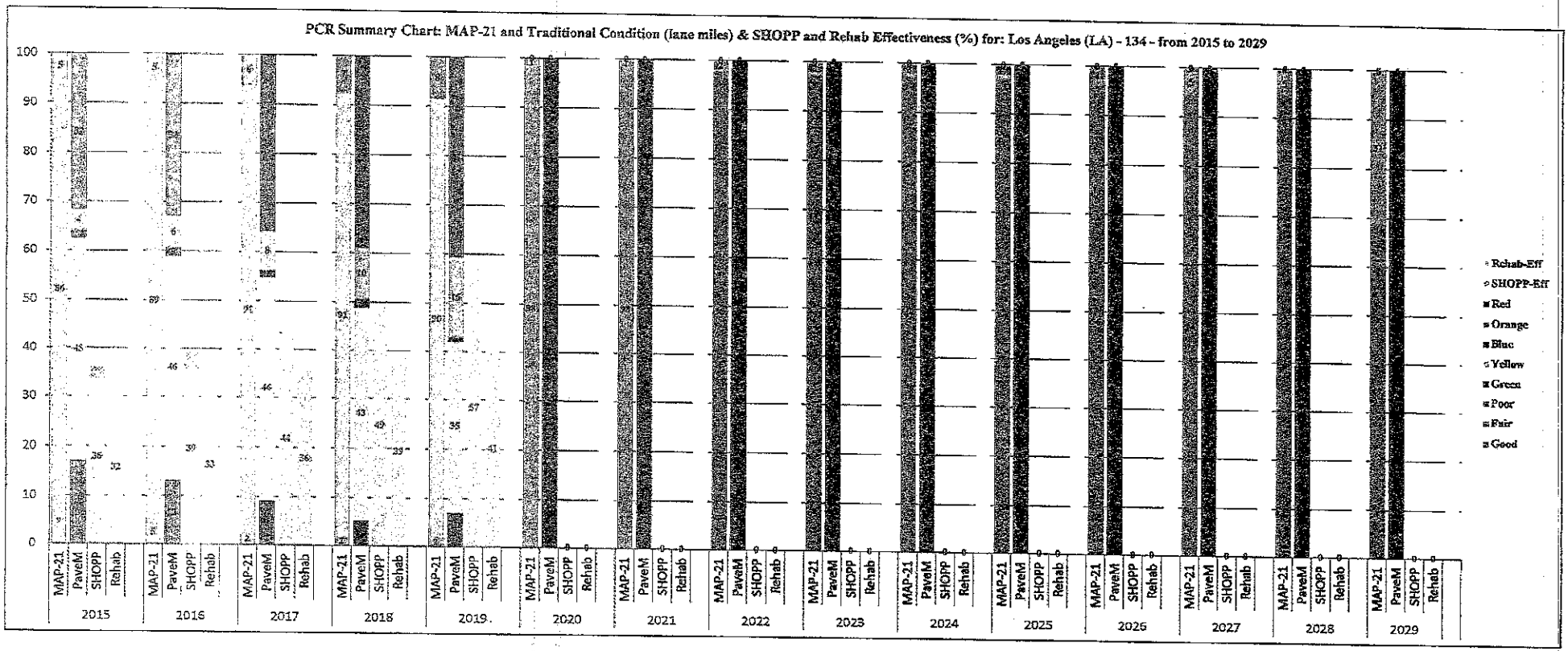
PaveM Scenario Used: #2233
APCS Data Year: 2015

Caltrans Pavement Program
Pavement Condition Summary Report (PaveM) By Direction
EASTBOUND; ALL LANES

District: 7; County: Los Angeles (LA); Route: 134

From PM: 0.000 To PM: R13.341
L-Length: 0.000, R-Length: 13.184
L-Lane Miles: 0.000, R-Lane Miles: 59.700 (Unknown lane miles: 0.000)

Year/ Condition Lane Miles	Pavement Type	Traditional Condition (lane miles)					Assumed MAP-21 Condition (lane miles)			Total Lane Miles	Effectiveness (%)	
		Green	Yellow	Blue	Orange	Red	Good	Fair	Poor		SHOPP Effectiveness ((Red + Orange) /Total Lane Miles) %	Rehab Effectiveness (Red/Total Lane Miles) %
2015	Flexible	0.982	0.349	0.000	0.000	0.000	0.000	1.331	0.000	1.331	0.000	0.000
	Rigid	13.940	20.768	1.410	2.232	19.019	5.320	47.579	4.470	57.369	37.043	33.152
2016	Flexible	0.309	1.022	0.000	0.000	0.000	0.000	1.331	0.000	1.331	0.000	0.000
	Rigid	10.982	21.525	1.115	4.730	19.019	1.940	50.959	4.470	57.369	41.397	33.152
2017	Flexible	0.000	1.331	0.000	0.000	0.000	0.000	1.331	0.000	1.331	0.000	0.000
	Rigid	6.870	20.963	1.115	6.757	21.664	0.455	52.444	4.470	57.369	49.541	37.765
2018	Flexible	0.000	1.331	0.000	0.000	0.000	0.000	1.331	0.000	1.331	0.000	0.000
	Rigid	6.016	17.572	1.308	9.232	23.241	0.274	51.310	5.585	57.369	56.604	40.511
2019	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	7.347	13.947	0.763	15.107	25.536	0.274	52.110	6.316	58.700	62.424	40.095
2020	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.545	0.000	0.031	0.062	0.062	57.353	1.285	0.062	58.700	0.211	0.106
2021	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.545	0.000	0.031	0.062	0.062	57.353	1.285	0.062	58.700	0.211	0.106
2022	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.545	0.000	0.031	0.062	0.062	57.353	1.285	0.062	58.700	0.211	0.106
2023	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.545	0.000	0.031	0.062	0.062	57.353	1.285	0.062	58.700	0.211	0.106
2024	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.545	0.000	0.031	0.062	0.062	57.205	1.433	0.062	58.700	0.211	0.106
2025	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.545	0.000	0.000	0.062	0.093	57.205	1.433	0.062	58.700	0.264	0.158
2026	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.545	0.000	0.000	0.062	0.093	56.737	1.870	0.093	58.700	0.264	0.158
2027	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.545	0.000	0.000	0.031	0.124	54.707	3.869	0.124	58.700	0.264	0.211
2028	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.545	0.000	0.000	0.031	0.124	54.707	3.869	0.124	58.700	0.264	0.211
2029	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	58.000	0.000	0.545	0.000	0.155	40.291	18.254	0.155	58.700	0.264	0.264


PCR Summary Chart: MAP-21 and Traditional Condition (lane miles) & SHOPP and Rehab Effectiveness (%) for: Los Angeles (LA) - 134 - from 2015 to 2029
100
90
80
70
60
50
40
30
20
10
0
MAP-21
PaveM
SHOPP
Rehab
2015
2016
2017
2018
2019.
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
Rehab-Eff
SHOPP-Eff
Red
Orange
Blue
Yellow
Green
Poor
Fair
Good

PaveM Scenario Used: #2233
APCS Data Year: 2015

Caltrans Pavement Program
Pavement Condition Detailed Report (PaveM)

District: 7; County: Los Angeles (LA); Route: 134
From PM: 0.000 To PM: R13.341

Year: 2015 (Current)
R-Length: 13.104, L-Length: 13.087
R-Lane Miles: 58.700, L-Lane Miles: 58.238 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	Assumed MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator A%	Alligator B%	Rut (in)					
Post Mile: 0.000 to 0.257 Length: 0.257 Estimated Lane Mileage: 1.022	L1	JPC		14.70	4.00				193	Poor	Red	1	0.215
	L2	JPC		32.60	11.58				160	Fair	Red	1	0.215
	R1	JPC		4.20	9.86				135	Fair	Yellow	1	0.148
	R2	JPC		11.60	5.80				119	Fair	Red	1	0.148
	R3	JPC		1.40	6.94				109	Fair	Green	1	0.148
	R4	JPC		0.00	23.68				160	Fair	Green	1	0.148
Post Mile: 0.257 to 0.687 Length: 0.430 Estimated Lane Mileage: 1.440	L1	JPC		14.00	2.80				132	Fair	Red	1	0.360
	L2	JPC		41.00	4.10				124	Fair	Red	1	0.360
	L3	JPC		27.90	25.00				185	Poor	Red	1	0.360
	L4	JPC		9.90	6.11				174	Fair	Blue	1	0.360
Post Mile: 0.257 to 1.359 Length: 1.102 Estimated Lane Mileage: 4.900	R1	JPC		16.20	5.86				126	Fair	Red	1	0.980
	R2	JPC		4.20	6.39				133	Fair	Yellow	1	0.980
	R3	JPC		12.30	9.46				114	Fair	Red	1	0.980
	R4	JPC		2.50	11.83				105	Fair	Green	1	0.980
	R5	JPC		0.90	4.88				102	Fair	Green	1	0.980
Post Mile: 0.392 to 0.687 Length: 0.295 Estimated Lane Mileage: 0.247	L5	JPC		2.40	4.76				105	Fair	Green	1	0.247
Post Mile: 0.687 to 1.551 Length: 0.864 Estimated Lane Mileage: 3.915	L1	JPC		14.80	3.28				130	Fair	Red	1	0.783
	L2	JPC		13.30	4.78				102	Fair	Red	1	0.783
	L3	JPC		26.10	32.03				128	Fair	Red	1	0.783
	L4	JPC		5.50	10.96				103	Fair	Yellow	1	0.783
	L5	JPC		4.20	3.13				90	Good	Yellow	1	0.783
Post Mile: 1.359 to 2.944 Length: 1.585 Estimated Lane Mileage: 7.425	R1	JPC		18.00	8.22				120	Fair	Red	1	1.485
	R2	JPC		16.10	9.73				199	Poor	Red	1	1.485
	R3	JPC		17.30	10.79				100	Fair	Red	1	1.485
	R4	JPC		2.50	17.84				90	Good	Green	1	1.485
	R5	JPC		0.60	4.41				87	Good	Green	1	1.485
Post Mile: 1.551 to 3.466 Length: 1.915 Estimated Lane Mileage: 9.220	L1	JPC		7.10	5.52				119	Fair	Yellow	1	1.844
	L2	JPC		3.10	4.18				82	Good	Yellow	1	1.844
	L3	JPC		8.00	6.90				85	Fair	Yellow	1	1.844
	L4	JPC		7.90	25.86				112	Fair	Orange	1	1.844
	L5	JPC		2.10	7.70				89	Good	Green	1	1.844
Post Mile: 2.944 to 4.924 Length: 1.980 Estimated Lane Mileage: 9.475	R1	JPC		9.20	13.55				153	Fair	Yellow	1	1.895
	R2	JPC		22.90	12.37				180	Poor	Red	1	1.895
	R3	JPC		18.40	16.91				135	Fair	Red	1	1.895
	R4	JPC		7.10	10.47				93	Fair	Yellow	1	1.895
	R5	JPC		1.20	1.98				94	Good	Green	1	1.895
Post Mile: 3.466 to 4.890 Length: 1.424 Estimated Lane Mileage: 6.695	L1	JPC		7.30	4.93				144	Fair	Yellow	1	1.339
	L2	JPC		2.00	5.86				95	Fair	Green	1	1.339
	L3	JPC		5.90	11.57				104	Fair	Yellow	1	1.339
	L4	JPC		10.30	16.12				111	Fair	Red	1	1.339
	L5	JPC		3.60	12.74				103	Fair	Yellow	1	1.339
Post Mile: 4.890 to 4.924 Length: 0.034 Estimated Lane Mileage: 0.136	L1	JPC		2.60	2.56				117	Fair	Green	1	0.034
	L2	JPC		7.90	18.42				150	Fair	Yellow	1	0.034
	L3	JPC		7.70	15.38				87	Fair	Yellow	1	0.034
	L4	JPC		0.00	0.00				60	Good	Green	1	0.034
Post Mile: 4.924 to R5.469	L1	JPC		4.00	12.99				138	Fair	Yellow	1	0.545

Post Mile: 4.924L to R5.496L Length: 0.545 Estimated Lane Mileage: 2.180	L2	JPC		5.90	12.37				149	Fair	Yellow	1	0.545
	L3	JPC		2.20	8.79				166	Fair	Green	1	0.545
	L4	JPC		1.90	8.17				128	Fair	Green	1	0.545
Post Mile: 4.924R to R5.496R Length: 0.572 Estimated Lane Mileage: 2.725	R1	JPC		29.00	12.35				259	Poor	Red	1	0.545
	R2	JPC		32.10	19.90				194	Poor	Red	1	0.545
	R3	JPC		27.10	14.57				165	Fair	Red	1	0.545
	R4	JPC		7.60	12.76				150	Fair	Yellow	1	0.545
	R5	JPC		7.80	17.05				183	Fair	Blue	1	0.545
Post Mile: R5.469L to R5.650L Length: 0.181 Estimated Lane Mileage: 0.543	L1	JPC		2.90	2.90				81	Good	Green	1	0.181
	L2	JPC		6.10	3.03				84	Fair	Yellow	1	0.181
	L3	JPC		4.60	4.55				100	Fair	Yellow	1	0.181
Post Mile: R5.496R to R5.667R Length: 0.171 Estimated Lane Mileage: 0.564	R1	JPC		20.00	17.78				138	Fair	Red	1	0.141
	R2	JPC		10.00	25.00				132	Fair	Red	1	0.141
	R3	JPC		16.70	26.19				144	Fair	Red	1	0.141
	R4	JPC		2.60	7.69				127	Fair	Green	1	0.141
Post Mile: R5.904 to R5.967 Length: 0.063 Estimated Lane Mileage: 0.039	L1	JPC		10.00	10.00				241	Fair	Red	1	0.013
	L2	JPC		16.70	33.33				198	Poor	Red	1	0.013
	L3	JPC		0.00	14.29				226	Fair	Blue	1	0.013
Post Mile: R5.904 to R6.174 Length: 0.270 Estimated Lane Mileage: 1.100	R1	JPC		2.70	5.48				136	Fair	Green	1	0.220
	R2	JPC		11.00	2.74				73	Fair	Red	1	0.220
	R3	JPC		6.70	13.33				115	Fair	Yellow	1	0.220
	R4	JPC		1.40	20.83				108	Fair	Green	1	0.220
	R5	JPC		2.70	2.70				108	Fair	Green	1	0.220
Post Mile: R5.957 to R5.967 Length: 0.010 Estimated Lane Mileage: 0.002	L4	JPC		20.00	40.00				194	Poor	Red	1	0.002
Post Mile: R5.967 to R6.477 Length: 0.510 Estimated Lane Mileage: 2.886	L1	JPC		4.00	2.03				138	Fair	Yellow	1	0.481
	L2	JPC		5.80	1.92				76	Fair	Yellow	1	0.481
	L3	JPC		7.80	11.04				91	Fair	Yellow	1	0.481
	L4	JPC		15.10	17.76				100	Fair	Red	1	0.481
	L5	JPC		12.30	26.09				144	Fair	Red	1	0.481
	L6	JPC		6.70	6.72				125	Fair	Yellow	1	0.481
Post Mile: R6.174 to R6.477 Length: 0.303 Estimated Lane Mileage: 1.644	R1	JPC		1.00	2.08				118	Fair	Green	1	0.274
	R2	JPC		15.50	5.15				86	Fair	Red	1	0.274
	R3	JPC		1.00	8.91				84	Good	Green	1	0.274
	R4	JPC		2.90	21.57				96	Fair	Green	1	0.274
	R5	JPC		2.00	5.05				100	Fair	Green	1	0.274
	R6	Flexible				3.00	0.00	0.05	124	Fair	Green	1	0.274
Post Mile: R6.477 to R7.255 Length: 0.778 Estimated Lane Mileage: 7.500	L1	JPC		5.20	0.40				136	Fair	Yellow	1	0.750
	L2	JPC		13.50	6.98				94	Fair	Red	1	0.750
	L3	JPC		7.40	8.84				88	Fair	Yellow	1	0.750
	L4	JPC		13.90	9.52				81	Fair	Red	1	0.750
	L5	JPC		9.80	11.79				91	Fair	Yellow	1	0.750
	R1	JPC		5.40	1.23				119	Fair	Yellow	1	0.750
	R2	JPC		13.20	5.22				102	Fair	Red	1	0.750
	R3	JPC		10.00	11.20				105	Fair	Red	1	0.750
	R4	JPC		9.30	30.08				103	Fair	Orange	1	0.750
	R5	JPC		2.50	8.79				106	Fair	Green	1	0.750
Post Mile: R7.255 to R7.624 Length: 0.369 Estimated Lane Mileage: 2.214	L1	JPC		6.80	1.14				127	Fair	Yellow	1	0.369
	L2	JPC		10.40	5.60				94	Fair	Red	1	0.369
	L3	JPC		3.90	2.36				78	Good	Yellow	1	0.369
	L4	JPC		9.60	11.70				72	Fair	Yellow	1	0.369
	L5	JPC		4.40	5.49				90	Good	Yellow	1	0.369
	L6	Flexible				4.90	2.70	0.07	133	Fair	Yellow	1	0.369
Post Mile: R7.255 to R7.679 Length: 0.424 Estimated Lane Mileage: 2.120	R1	JPC		0.80	1.53				122	Fair	Green	1	0.424
	R2	JPC		16.30	14.07				110	Fair	Red	1	0.424
	R3	JPC		2.90	13.24				95	Fair	Green	1	0.424
	R4	JPC		6.70	11.94				88	Fair	Yellow	1	0.424
	R5	JPC		1.50	27.61				139	Fair	Orange	1	0.424
Post Mile: R7.370 to R7.679 Length: 0.309 Estimated Lane Mileage: 0.309	R6	Flexible				1.90	0.60	0.03	123	Fair	Green	1	0.309
Post Mile: R7.624 to R7.860	L1	JPC		2.90	0.00				127	Fair	Green	1	0.236
	L2	JPC		10.60	10.61				101	Fair	Red	1	0.236

Length: 0.236 Estimated Lane Mileage: 1.180	L3	JPC		4.70	17.19				98	Fair	Yellow	1	0.236
	L4	JPC		8.40	11.58				90	Fair	Yellow	1	0.236
	L5	JPC		3.00	7.07				91	Good	Yellow	1	0.236
Post Mile: R7.679 to R7.860 Length: 0.181 Estimated Lane Mileage: 0.905	R1	JPC		3.20	3.17				125	Fair	Yellow	1	0.181
	R2	JPC		11.90	16.42				94	Fair	Red	1	0.181
	R3	JPC		1.50	21.54				110	Fair	Green	1	0.181
	R4	JPC		3.10	6.15				76	Good	Yellow	1	0.181
	R5	JPC		3.00	24.24				136	Fair	Yellow	1	0.181
Post Mile: R7.860 to R8.387 Length: 0.527 Estimated Lane Mileage: 2.544	L1	JPC		4.10	2.76				139	Fair	Yellow	1	0.424
	L2	JPC		8.90	4.11				105	Fair	Yellow	1	0.424
	L3	JPC		3.50	6.29				100	Fair	Yellow	1	0.424
	L4	JPC		6.00	18.97				102	Fair	Yellow	1	0.424
	L5	JPC		3.40	15.97				105	Fair	Yellow	1	0.424
	L6	Flexible				1.10	4.30	0.06	130	Fair	Yellow	1	0.424
Post Mile: R7.860 to R8.277 Length: 0.417 Estimated Lane Mileage: 0.349	R6	Flexible				3.00	3.70	0.10	148	Fair	Yellow	1	0.349
Post Mile: R7.860 to R8.500 Length: 0.640 Estimated Lane Mileage: 2.680	R1	JPC		4.30	1.23				145	Fair	Yellow	1	0.536
	R2	JPC		11.20	10.61				97	Fair	Red	1	0.536
	R3	JPC		1.10	8.94				102	Fair	Green	1	0.536
	R4	JPC		4.00	23.56				112	Fair	Yellow	1	0.536
	R5	JPC		2.50	18.63				132	Fair	Green	1	0.536
Post Mile: R8.387 to R8.963 Length: 0.576 Estimated Lane Mileage: 2.555	L1	JPC		4.80	2.04				131	Fair	Yellow	1	0.511
	L2	JPC		16.70	0.79				87	Fair	Red	1	0.511
	L3	JPC		7.60	1.53				89	Fair	Yellow	1	0.511
	L4	JPC		10.70	13.93				102	Fair	Red	1	0.511
	L5	JPC		6.50	12.20				100	Fair	Yellow	1	0.511
Post Mile: R8.500 to R8.963 Length: 0.463 Estimated Lane Mileage: 1.995	R1	JPC		2.90	3.85				163	Fair	Green	1	0.399
	R2	JPC		10.20	4.55				102	Fair	Red	1	0.399
	R3	JPC		2.10	7.37				95	Fair	Green	1	0.399
	R4	JPC		3.20	21.51				114	Fair	Yellow	1	0.399
	R5	Flexible				4.60	0.20	0.10	107	Fair	Green	1	0.399
Post Mile: R8.963 to R9.396 Length: 0.433 Estimated Lane Mileage: 1.805	L1	JPC		8.00	4.00				166	Fair	Yellow	1	0.361
	L2	JPC		12.70	16.36				101	Fair	Red	1	0.361
	L3	JPC		10.00	14.29				102	Fair	Red	1	0.361
	L4	JPC		17.60	11.76				84	Fair	Red	1	0.361
	L5	JPC		12.20	6.12				91	Fair	Red	1	0.361
Post Mile: R8.963 to R9.503 Length: 0.540 Estimated Lane Mileage: 2.340	R1	JPC		4.90	11.27				184	Fair	Blue	1	0.468
	R2	JPC		13.00	6.96				114	Fair	Red	1	0.468
	R3	JPC		14.00	24.30				117	Fair	Red	1	0.468
	R4	JPC		18.50	40.34				151	Fair	Red	1	0.468
	R5	JPC		3.10	29.46				143	Fair	Orange	1	0.468
Post Mile: R9.396 to R9.613 Length: 0.217 Estimated Lane Mileage: 1.302	L1	JPC		9.40	0.00				169	Fair	Yellow	1	0.217
	L2	JPC		17.50	5.00				90	Fair	Red	1	0.217
	L3	JPC		15.40	3.85				81	Fair	Red	1	0.217
	L4	JPC		7.10	14.29				61	Fair	Yellow	1	0.217
	L5	JPC		7.70	7.69				84	Fair	Yellow	1	0.217
	L6	JPC		10.30	10.29				189	Poor	Red	1	0.217
Post Mile: R9.503 to R10.978 Length: 1.475 Estimated Lane Mileage: 7.375	R1	JPC		8.90	5.41				142	Fair	Yellow	1	1.475
	R2	JPC		5.50	7.68				82	Fair	Yellow	1	1.475
	R3	JPC		4.80	10.67				106	Fair	Yellow	1	1.475
	R4	JPC		5.90	22.51				109	Fair	Yellow	1	1.475
	R5	JPC		4.00	24.27				121	Fair	Yellow	1	1.475
Post Mile: R9.613 to R10.973 Length: 1.360 Estimated Lane Mileage: 6.800	L1	JPC		8.60	8.39				160	Fair	Yellow	1	1.360
	L2	JPC		4.90	10.27				102	Fair	Yellow	1	1.360
	L3	JPC		6.30	9.09				106	Fair	Yellow	1	1.360
	L4	JPC		8.50	11.94				98	Fair	Yellow	1	1.360
	L5	JPC		7.80	14.88				108	Fair	Yellow	1	1.360
Post Mile: R10.973 to R11.199 Length: 0.226 Estimated Lane Mileage: 0.000	L1	JPC		0.00	0.00				60	Good	Green	1	0.000
	L2	JPC		0.00	50.00				205	Fair	Orange	1	0.000
	L3	JPC		0.00	0.00				60	Good	Green	1	0.000
	L4	JPC		9.10	27.27				195	Fair	Orange	1	0.000
	L5	JPC		0.00	0.00				60	Good	Green	1	0.000
	R1	JPC		0.00	0.00				60	Good	Green	1	0.000

Post Mile: R10.978 to R11.200 Length: 0.222 Estimated Lane Mileage: 0.000	R2	JPC		0.00	0.00				60	Good	Green	1	0.000
	R3	JPC		0.00	0.00				60	Good	Green	1	0.000
	R4	JPC		0.00	0.00				60	Good	Green	1	0.000
	R5	JPC		0.00	0.00				60	Good	Green	1	0.000
Post Mile: R11.199 to R12.360 Length: 1.161 Estimated Lane Mileage: 5.620	L1	JPC		10.90	5.94				126	Fair	Red	1	1.124
	L2	JPC		13.70	17.20				138	Fair	Red	1	1.124
	L3	JPC		11.30	34.48				151	Fair	Red	1	1.124
	L4	JPC		13.50	13.49				103	Fair	Red	1	1.124
	L5	JPC		16.00	15.36				125	Fair	Red	1	1.124
Post Mile: R11.200 to R12.510 Length: 1.310 Estimated Lane Mileage: 6.365	R1	JPC		7.90	11.03				151	Fair	Yellow	1	1.273
	R2	JPC		10.00	8.97				100	Fair	Red	1	1.273
	R3	JPC		7.60	10.04				111	Fair	Yellow	1	1.273
	R4	JPC		2.70	15.91				105	Fair	Green	1	1.273
	R5	JPC		4.00	16.67				124	Fair	Yellow	1	1.273
Post Mile: R12.360 to R12.568 Length: 0.208 Estimated Lane Mileage: 1.040	L1	JPC		8.10	3.23				150	Fair	Yellow	1	0.208
	L2	JPC		1.50	6.15				126	Fair	Green	1	0.208
	L3	JPC		9.40	20.31				130	Fair	Yellow	1	0.208
	L4	JPC		7.70	21.54				124	Fair	Yellow	1	0.208
	L5	JPC		14.10	15.63				118	Fair	Red	1	0.208
Post Mile: R12.510 to R12.946 Length: 0.436 Estimated Lane Mileage: 0.612	R1	JPC		12.80	8.26				147	Fair	Red	1	0.102
	R2	JPC		5.30	7.37				120	Fair	Yellow	1	0.102
	R3	JPC		4.00	9.00				120	Fair	Yellow	1	0.102
	R4	JPC		6.40	13.83				107	Fair	Yellow	1	0.102
	R5	JPC		6.40	9.57				108	Fair	Yellow	1	0.102
	R6	JPC		8.70	8.70				206	Fair	Blue	1	0.102
Post Mile: R12.568 to R12.902 Length: 0.334 Estimated Lane Mileage: 0.000	L1	JPC		7.20	1.45				122	Fair	Yellow	1	0.000
	L2	JPC		12.70	28.57				151	Fair	Red	1	0.000
	L3	JPC		7.80	29.69				137	Fair	Orange	1	0.000
	L4	JPC		6.60	14.75				130	Fair	Yellow	1	0.000
	L5	JPC		10.70	16.07				123	Fair	Red	1	0.000
Post Mile: R12.902 to R13.300 Length: 0.398 Estimated Lane Mileage: 1.535	L1	JPC		11.30	10.53				200	Poor	Red	1	0.307
	L2	JPC		9.30	37.14				189	Fair	Orange	1	0.307
	L3	JPC		2.10	39.58				209	Fair	Orange	1	0.307
	L4	JPC		17.30	33.83				194	Poor	Red	1	0.307
	L5	JPC		8.70	28.99				189	Fair	Orange	1	0.307
Post Mile: R12.946 to R13.300 Length: 0.354 Estimated Lane Mileage: 1.320	R1	JPC		5.70	2.83				166	Fair	Yellow	1	0.264
	R2	JPC		4.40	26.96				167	Fair	Orange	1	0.264
	R3	JPC		10.90	10.87				164	Fair	Red	1	0.264
	R4	JPC		5.00	31.40				163	Fair	Orange	1	0.264
	R5	JPC		8.50	24.58				186	Fair	Blue	1	0.264
Post Mile: R13.300 to R13.341 Length: 0.041 Estimated Lane Mileage: 0.315	L1	JPC		11.30	10.53				200	Poor	Red	1	0.032
	L2	JPC		9.30	37.14				189	Fair	Orange	1	0.032
	L3	JPC		2.10	39.58				209	Fair	Orange	1	0.032
	L4	JPC		17.30	33.83				194	Poor	Red	1	0.032
	L5	JPC		8.70	28.99				189	Fair	Orange	1	0.032
	R1	JPC		5.70	2.83				166	Fair	Yellow	1	0.031
	R2	JPC		4.40	26.96				167	Fair	Orange	1	0.031
	R3	JPC		10.90	10.87				164	Fair	Red	1	0.031
	R4	JPC		5.00	31.40				163	Fair	Orange	1	0.031
	R5	JPC		8.50	24.58				186	Fair	Blue	1	0.031
				8.48	**11.38**	**0.06**	**0.04**	**0.00**	**119**				**116.938**
				Lane Weighted Average									Total

PaveM Scenario Used: #2233
APCS Data Year: 2015

Caltrans Pavement Program
Pavement Condition Detailed Report (PaveM)

District: 7; County: Los Angeles (LA); Route: 134
From PM: 0.000 To PM: R13.341

Year: 2016 (Predicted)
R-Length: 13.104, L-Length: 13.087
R-Lane Miles: 58.700, L-Lane Miles: 58.238 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	Assumed MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator A%	Alligator B%	Rut (in)					
Post Mile: 0.000 to 0.257 Length: 0.257 Estimated Lane Mileage: 1.022	L1	JPC		15.20	5.29				196	Poor	Red	1	0.215
	L2	JPC		33.10	15.98				169	Fair	Red	1	0.215
	R1	JPC		4.60	10.87				137	Fair	Yellow	1	0.148
	R2	JPC		12.10	7.10				121	Fair	Red	1	0.148
	R3	JPC		1.70	11.79				116	Fair	Green	1	0.148
	R4	JPC		0.10	27.20				168	Fair	Orange	1	0.148
Post Mile: 0.257 to 0.687 Length: 0.430 Estimated Lane Mileage: 1.440	L1	JPC		14.50	3.60				134	Fair	Red	1	0.360
	L2	JPC		41.50	4.96				126	Fair	Red	1	0.360
	L3	JPC		28.50	26.15				187	Poor	Red	1	0.360
	L4	JPC		10.40	11.06				183	Poor	Red	1	0.360
Post Mile: 0.257 to 1.359 Length: 1.102 Estimated Lane Mileage: 4.900	R1	JPC		16.70	6.79				127	Fair	Red	1	0.980
	R2	JPC		4.50	7.33				135	Fair	Yellow	1	0.980
	R3	JPC		12.80	10.75				116	Fair	Red	1	0.980
	R4	JPC		2.90	16.21				111	Fair	Green	1	0.980
	R5	JPC		1.20	9.98				108	Fair	Green	1	0.980
Post Mile: 0.392 to 0.687 Length: 0.295 Estimated Lane Mileage: 0.247	L5	JPC		2.80	9.88				112	Fair	Green	1	0.247
Post Mile: 0.687 to 1.551 Length: 0.864 Estimated Lane Mileage: 3.915	L1	JPC		15.20	4.11				132	Fair	Red	1	0.783
	L2	JPC		13.80	5.67				103	Fair	Red	1	0.783
	L3	JPC		26.70	33.09				130	Fair	Red	1	0.783
	L4	JPC		5.90	15.42				110	Fair	Yellow	1	0.783
	L5	JPC		4.60	8.48				95	Fair	Yellow	1	0.783
Post Mile: 1.359 to 2.944 Length: 1.585 Estimated Lane Mileage: 7.425	R1	JPC		18.60	9.20				122	Fair	Red	1	1.485
	R2	JPC		16.60	10.74				201	Poor	Red	1	1.485
	R3	JPC		17.90	12.07				101	Fair	Red	1	1.485
	R4	JPC		2.80	21.75				96	Fair	Green	1	1.485
	R5	JPC		0.80	9.57				92	Good	Green	1	1.485
Post Mile: 1.551 to 3.466 Length: 1.915 Estimated Lane Mileage: 9.220	L1	JPC		7.60	6.44				121	Fair	Yellow	1	1.844
	L2	JPC		3.40	5.05				83	Good	Yellow	1	1.844
	L3	JPC		8.40	8.20				87	Fair	Yellow	1	1.844
	L4	JPC		8.40	29.24				118	Fair	Orange	1	1.844
	L5	JPC		2.50	12.47				95	Good	Green	1	1.844
Post Mile: 2.944 to 4.924 Length: 1.980 Estimated Lane Mileage: 9.475	R1	JPC		9.60	14.60				155	Fair	Yellow	1	1.895
	R2	JPC		23.40	13.41				181	Poor	Red	1	1.895
	R3	JPC		18.90	18.14				137	Fair	Red	1	1.895
	R4	JPC		7.60	14.97				99	Fair	Yellow	1	1.895
	R5	JPC		1.50	7.54				100	Fair	Green	1	1.895
Post Mile: 3.466 to 4.890 Length: 1.424 Estimated Lane Mileage: 6.695	L1	JPC		7.70	5.83				146	Fair	Yellow	1	1.339
	L2	JPC		2.30	6.79				96	Fair	Green	1	1.339
	L3	JPC		6.30	12.85				106	Fair	Yellow	1	1.339
	L4	JPC		10.80	20.16				118	Fair	Red	1	1.339
	L5	JPC		4.00	17.04				109	Fair	Yellow	1	1.339
Post Mile: 4.890 to 4.924 Length: 0.034 Estimated Lane Mileage: 0.136	L1	JPC		2.90	3.34				118	Fair	Green	1	0.034
	L2	JPC		8.40	19.64				152	Fair	Yellow	1	0.034
	L3	JPC		8.20	19.47				92	Fair	Yellow	1	0.034
	L4	JPC		0.10	6.09				61	Good	Green	1	0.034
Post Mile: 4.924 to R5.460	L1	JPC		4.30	14.04				139	Fair	Yellow	1	0.545

Post Mile: 4.924L to R5.469L Length: 0.545 Estimated Lane Mileage: 2.180	L2	JPC		6.30	13.64				151	Fair	Yellow	1	0.545
	L3	JPC		2.60	13.45				175	Fair	Blue	1	0.545
	L4	JPC		2.30	12.89				135	Fair	Green	1	0.545
Post Mile: 4.924R to R5.496R Length: 0.572 Estimated Lane Mileage: 2.725	R1	JPC		29.50	13.39				259	Poor	Red	1	0.545
	R2	JPC		32.70	20.98				196	Poor	Red	1	0.545
	R3	JPC		27.70	15.82				167	Fair	Red	1	0.545
	R4	JPC		8.10	17.06				158	Fair	Yellow	1	0.545
	R5	JPC		8.30	21.02				192	Fair	Blue	1	0.545
Post Mile: R5.469L to R5.650L Length: 0.181 Estimated Lane Mileage: 0.543	L1	JPC		3.20	3.71				82	Good	Yellow	1	0.181
	L2	JPC		6.50	8.40				90	Fair	Yellow	1	0.181
	L3	JPC		5.00	9.70				106	Fair	Yellow	1	0.181
Post Mile: R5.496R to R5.667R Length: 0.171 Estimated Lane Mileage: 0.564	R1	JPC		20.50	18.86				140	Fair	Red	1	0.141
	R2	JPC		10.50	26.15				135	Fair	Red	1	0.141
	R3	JPC		17.20	29.55				151	Fair	Red	1	0.141
	R4	JPC		2.90	12.46				134	Fair	Green	1	0.141
Post Mile: R5.904 to R5.967 Length: 0.063 Estimated Lane Mileage: 0.039	L1	JPC		10.50	11.01				241	Poor	Red	1	0.013
	L2	JPC		17.20	34.37				200	Poor	Red	1	0.013
	L3	JPC		0.10	18.47				235	Fair	Blue	1	0.013
Post Mile: R5.904 to R6.174 Length: 0.270 Estimated Lane Mileage: 1.100	R1	JPC		3.10	6.39				138	Fair	Yellow	1	0.220
	R2	JPC		11.40	3.54				75	Fair	Red	1	0.220
	R3	JPC		7.10	14.38				117	Fair	Yellow	1	0.220
	R4	JPC		1.70	24.53				115	Fair	Green	1	0.220
	R5	JPC		3.10	8.13				115	Fair	Yellow	1	0.220
Post Mile: R5.957 to R5.967 Length: 0.010 Estimated Lane Mileage: 0.002	L4	JPC		20.50	42.59				203	Poor	Red	1	0.002
Post Mile: R5.967 to R6.477 Length: 0.510 Estimated Lane Mileage: 2.886	L1	JPC		4.40	2.78				140	Fair	Yellow	1	0.481
	L2	JPC		6.20	2.66				77	Fair	Yellow	1	0.481
	L3	JPC		8.20	12.07				92	Fair	Yellow	1	0.481
	L4	JPC		15.60	18.98				102	Fair	Red	1	0.481
	L5	JPC		12.80	29.46				151	Fair	Red	1	0.481
	L6	JPC		7.20	11.60				132	Fair	Yellow	1	0.481
Post Mile: R6.174 to R6.477 Length: 0.303 Estimated Lane Mileage: 1.644	R1	JPC		1.30	2.83				120	Fair	Green	1	0.274
	R2	JPC		16.00	6.05				87	Fair	Red	1	0.274
	R3	JPC		1.20	9.91				85	Good	Green	1	0.274
	R4	JPC		3.30	22.75				98	Fair	Yellow	1	0.274
	R5	JPC		2.40	10.13				106	Fair	Green	1	0.274
	R6	Flexible				5.10	0.20	0.05	127	Fair	Yellow	1	0.274
Post Mile: R6.477 to R7.255 Length: 0.778 Estimated Lane Mileage: 7.500	L1	JPC		5.60	0.94				138	Fair	Yellow	1	0.750
	L2	JPC		14.00	7.94				96	Fair	Red	1	0.750
	L3	JPC		7.90	10.13				90	Fair	Yellow	1	0.750
	L4	JPC		14.40	14.11				86	Fair	Red	1	0.750
	L5	JPC		10.20	16.17				97	Fair	Red	1	0.750
	R1	JPC		5.80	1.90				121	Fair	Yellow	1	0.750
	R2	JPC		13.70	6.13				104	Fair	Red	1	0.750
	R3	JPC		10.50	12.48				107	Fair	Red	1	0.750
	R4	JPC		9.80	33.21				109	Fair	Orange	1	0.750
	R5	JPC		2.90	13.45				112	Fair	Green	1	0.750
Post Mile: R7.255 to R7.624 Length: 0.369 Estimated Lane Mileage: 2.214	L1	JPC		7.20	1.80				129	Fair	Yellow	1	0.369
	L2	JPC		10.90	6.52				95	Fair	Red	1	0.369
	L3	JPC		4.30	3.13				79	Good	Yellow	1	0.369
	L4	JPC		10.00	12.97				73	Fair	Red	1	0.369
	L5	JPC		4.80	10.51				95	Fair	Yellow	1	0.369
	L6	Flexible				6.80	3.90	0.07	136	Fair	Yellow	1	0.369
Post Mile: R7.255 to R7.679 Length: 0.424 Estimated Lane Mileage: 2.120	R1	JPC		1.00	2.24				124	Fair	Green	1	0.424
	R2	JPC		16.80	15.13				112	Fair	Red	1	0.424
	R3	JPC		3.30	14.29				96	Fair	Yellow	1	0.424
	R4	JPC		7.20	13.21				90	Fair	Yellow	1	0.424
	R5	JPC		1.80	30.88				147	Fair	Orange	1	0.424
Post Mile: R7.370 to R7.679 Length: 0.309 Estimated Lane Mileage: 0.309	R6	Flexible				3.30	1.30	0.03	125	Fair	Green	1	0.309
Post Mile: R7.624 to R7.860	L1	JPC		3.20	0.35				129	Fair	Yellow	1	0.236
	L2	JPC		11.10	11.63				102	Fair	Red	1	0.236

Length: 0.236 Estimated Lane Mileage: 1.180	L3	JPC		5.10	18.42				100	Fair	Yellow	1	0.236
	L4	JPC		8.90	15.98				96	Fair	Yellow	1	0.236
	L5	JPC		3.40	11.91				97	Fair	Yellow	1	0.236
Post Mile: R7.679 to R7.860 Length: 0.181 Estimated Lane Mileage: 0.905	R1	JPC		3.50	3.99				127	Fair	Yellow	1	0.181
	R2	JPC		12.40	17.49				95	Fair	Red	1	0.181
	R3	JPC		1.80	22.72				112	Fair	Green	1	0.181
	R4	JPC		3.50	11.09				80	Good	Yellow	1	0.181
	R5	JPC		3.40	27.72				143	Fair	Orange	1	0.181
Post Mile: R7.860 to R8.387 Length: 0.527 Estimated Lane Mileage: 2.544	L1	JPC		4.50	3.56				141	Fair	Yellow	1	0.424
	L2	JPC		9.40	4.97				106	Fair	Yellow	1	0.424
	L3	JPC		3.80	7.23				102	Fair	Yellow	1	0.424
	L4	JPC		6.50	20.18				104	Fair	Yellow	1	0.424
	L5	JPC		3.80	20.02				111	Fair	Yellow	1	0.424
	L6	Flexible				2.40	5.80	0.06	133	Fair	Yellow	1	0.424
Post Mile: R7.860 to R8.277 Length: 0.417 Estimated Lane Mileage: 0.349	R6	Flexible				4.60	5.10	0.10	151	Fair	Yellow	1	0.349
Post Mile: R7.860 to R8.500 Length: 0.640 Estimated Lane Mileage: 2.680	R1	JPC		4.70	1.90				147	Fair	Yellow	1	0.536
	R2	JPC		11.60	11.63				98	Fair	Red	1	0.536
	R3	JPC		1.40	9.94				104	Fair	Green	1	0.536
	R4	JPC		4.40	24.72				115	Fair	Yellow	1	0.536
	R5	JPC		2.80	22.48				140	Fair	Green	1	0.536
Post Mile: R8.387 to R8.963 Length: 0.576 Estimated Lane Mileage: 2.555	L1	JPC		5.20	2.79				133	Fair	Yellow	1	0.511
	L2	JPC		17.20	1.41				88	Fair	Red	1	0.511
	L3	JPC		8.10	2.78				91	Fair	Yellow	1	0.511
	L4	JPC		11.20	18.14				108	Fair	Red	1	0.511
	L5	JPC		7.00	16.55				107	Fair	Yellow	1	0.511
Post Mile: R8.500 to R8.963 Length: 0.463 Estimated Lane Mileage: 1.995	R1	JPC		3.20	4.70				165	Fair	Yellow	1	0.399
	R2	JPC		10.70	5.43				103	Fair	Red	1	0.399
	R3	JPC		2.40	8.66				97	Fair	Green	1	0.399
	R4	JPC		3.60	25.17				121	Fair	Orange	1	0.399
	R5	Flexible				6.70	0.80	0.10	110	Fair	Yellow	1	0.399
Post Mile: R8.963 to R9.396 Length: 0.433 Estimated Lane Mileage: 1.805	L1	JPC		8.40	4.86				168	Fair	Yellow	1	0.361
	L2	JPC		13.20	17.43				102	Fair	Red	1	0.361
	L3	JPC		10.50	15.35				103	Fair	Red	1	0.361
	L4	JPC		18.20	16.15				90	Fair	Red	1	0.361
	L5	JPC		12.70	7.42				93	Fair	Red	1	0.361
Post Mile: R8.963 to R9.503 Length: 0.540 Estimated Lane Mileage: 2.340	R1	JPC		5.30	12.30				186	Fair	Blue	1	0.468
	R2	JPC		13.50	7.91				115	Fair	Red	1	0.468
	R3	JPC		14.50	25.38				119	Fair	Red	1	0.468
	R4	JPC		19.00	42.91				160	Fair	Red	1	0.468
	R5	JPC		3.50	30.55				145	Fair	Orange	1	0.468
Post Mile: R9.396 to R9.613 Length: 0.217 Estimated Lane Mileage: 1.302	L1	JPC		9.90	0.35				171	Fair	Blue	1	0.217
	L2	JPC		18.00	5.90				91	Fair	Red	1	0.217
	L3	JPC		15.90	4.70				82	Fair	Red	1	0.217
	L4	JPC		7.60	15.54				62	Fair	Yellow	1	0.217
	L5	JPC		8.10	8.98				86	Fair	Yellow	1	0.217
	L6	JPC		10.80	11.57				191	Poor	Red	1	0.217
Post Mile: R9.503 to R10.978 Length: 1.475 Estimated Lane Mileage: 7.375	R1	JPC		9.30	6.32				143	Fair	Yellow	1	1.475
	R2	JPC		5.90	8.65				83	Fair	Yellow	1	1.475
	R3	JPC		5.20	11.69				107	Fair	Yellow	1	1.475
	R4	JPC		6.40	23.68				112	Fair	Yellow	1	1.475
	R5	JPC		4.40	25.42				124	Fair	Orange	1	1.475
Post Mile: R9.613 to R10.973 Length: 1.360 Estimated Lane Mileage: 6.800	L1	JPC		9.10	9.38				162	Fair	Yellow	1	1.360
	L2	JPC		5.30	11.29				103	Fair	Yellow	1	1.360
	L3	JPC		6.70	10.09				108	Fair	Yellow	1	1.360
	L4	JPC		9.00	13.21				100	Fair	Yellow	1	1.360
	L5	JPC		8.30	16.13				110	Fair	Yellow	1	1.360
Post Mile: R10.973 to R11.199 Length: 0.226 Estimated Lane Mileage: 0.000	L1	JPC		0.10	0.35				61	Good	Green	1	0.000
	L2	JPC		0.10	50.90				207	Fair	Orange	1	0.000
	L3	JPC		0.10	0.35				61	Good	Green	1	0.000
	L4	JPC		9.60	28.39				197	Fair	Orange	1	0.000
	L5	JPC		0.10	1.13				61	Good	Green	1	0.000
	R1	JPC		0.10	0.35				61	Good	Green	1	0.000

Post Mile: R10.978 to R11.200 Length: 0.222 Estimated Lane Mileage: 0.000	R2	JPC		0.10	0.35				61	Good	Green	1	0.000
	R3	JPC		0.10	0.35				61	Good	Green	1	0.000
	R4	JPC		0.10	1.13				61	Good	Green	1	0.000
	R5	JPC		0.10	1.13				61	Good	Green	1	0.000
Post Mile: R11.199 to R12.360 Length: 1.161 Estimated Lane Mileage: 5.620	L1	JPC		11.40	6.87				128	Fair	Red	1	1.124
	L2	JPC		14.20	18.28				140	Fair	Red	1	1.124
	L3	JPC		11.80	35.52				153	Fair	Red	1	1.124
	L4	JPC		14.00	14.75				105	Fair	Red	1	1.124
	L5	JPC		16.50	16.61				127	Fair	Red	1	1.124
Post Mile: R11.200 to R12.510 Length: 1.310 Estimated Lane Mileage: 6.365	R1	JPC		8.40	12.06				153	Fair	Yellow	1	1.273
	R2	JPC		10.40	9.36				102	Fair	Red	1	1.273
	R3	JPC		8.00	11.05				112	Fair	Yellow	1	1.273
	R4	JPC		3.10	17.15				106	Fair	Yellow	1	1.273
	R5	JPC		4.40	17.90				127	Fair	Yellow	1	1.273
Post Mile: R12.360 to R12.568 Length: 0.208 Estimated Lane Mileage: 1.040	L1	JPC		8.50	4.05				151	Fair	Yellow	1	0.208
	L2	JPC		1.80	7.08				127	Fair	Green	1	0.208
	L3	JPC		9.80	21.39				132	Fair	Yellow	1	0.208
	L4	JPC		8.10	22.72				126	Fair	Yellow	1	0.208
	L5	JPC		14.60	16.87				120	Fair	Red	1	0.208
Post Mile: R12.510 to R12.946 Length: 0.436 Estimated Lane Mileage: 0.612	R1	JPC		13.30	9.24				149	Fair	Red	1	0.102
	R2	JPC		5.70	8.33				121	Fair	Yellow	1	0.102
	R3	JPC		4.40	10.00				121	Fair	Yellow	1	0.102
	R4	JPC		6.80	15.09				109	Fair	Yellow	1	0.102
	R5	JPC		6.80	10.86				110	Fair	Yellow	1	0.102
	R6	JPC		9.20	9.99				208	Fair	Blue	1	0.102
Post Mile: R12.568 to R12.902 Length: 0.334 Estimated Lane Mileage: 0.000	L1	JPC		7.70	2.15				124	Fair	Yellow	1	0.000
	L2	JPC		13.20	29.64				153	Fair	Red	1	0.000
	L3	JPC		8.20	30.76				139	Fair	Orange	1	0.000
	L4	JPC		7.00	16.00				132	Fair	Yellow	1	0.000
	L5	JPC		11.20	17.31				125	Fair	Red	1	0.000
Post Mile: R12.902 to R13.300 Length: 0.398 Estimated Lane Mileage: 1.535	L1	JPC		11.80	11.55				202	Poor	Red	1	0.307
	L2	JPC		9.70	38.16				190	Fair	Orange	1	0.307
	L3	JPC		2.40	40.58				211	Fair	Orange	1	0.307
	L4	JPC		17.80	34.87				196	Poor	Red	1	0.307
	L5	JPC		9.20	30.09				191	Fair	Orange	1	0.307
Post Mile: R12.946 to R13.300 Length: 0.354 Estimated Lane Mileage: 1.820	R1	JPC		6.10	3.63				168	Fair	Yellow	1	0.264
	R2	JPC		4.70	28.04				169	Fair	Orange	1	0.264
	R3	JPC		11.30	11.90				166	Fair	Red	1	0.264
	R4	JPC		5.40	32.47				165	Fair	Orange	1	0.264
	R5	JPC		8.90	25.73				188	Fair	Orange	1	0.264
Post Mile: R13.300 to R13.341 Length: 0.041 Estimated Lane Mileage: 0.315	L1	JPC		11.80	11.55				202	Poor	Red	1	0.032
	L2	JPC		9.70	38.16				190	Fair	Orange	1	0.032
	L3	JPC		2.40	40.58				211	Fair	Orange	1	0.032
	L4	JPC		17.80	34.87				196	Poor	Red	1	0.032
	L5	JPC		9.20	30.09				191	Fair	Orange	1	0.032
	R1	JPC		6.10	3.63				168	Fair	Yellow	1	0.031
	R2	JPC		4.70	28.04				169	Fair	Orange	1	0.031
	R3	JPC		11.30	11.90				166	Fair	Red	1	0.031
	R4	JPC		5.40	32.47				165	Fair	Orange	1	0.031
	R5	JPC		8.90	25.73				188	Fair	Orange	1	0.031
				8.91	**13.28**	**0.09**	**0.06**	**0.00**	**122**				**116.938**
				Lane Weighted Average									Total

PaveM Scenario Used: #2233
APCS Data Year: 2015

Caltrans Pavement Program
Pavement Condition Detailed Report (PaveM)

District: 7; County: Los Angeles (LA); Route: 134
From PM: 0.000 To PM: R13.341

Year: 2017 (Predicted)
R-Length: 13.104. L-Length: 13.087
R-Lane Miles: 58.700. L-Lane Miles: 58.238 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	Assumed MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator A%	Alligator B%	Rut (in)					
Post Mile: 0.000 to 0.257 Length: 0.257 Estimated Lane Mileage: 1.022	L1	JPC		15.70	6.59				198	Poor	Red	1	0.215
	L2	JPC		33.60	20.03				178	Poor	Red	1	0.215
	R1	JPC		5.00	11.90				138	Fair	Yellow	1	0.148
	R2	JPC		12.60	8.40				123	Fair	Red	1	0.148
	R3	JPC		2.00	16.17				123	Fair	Green	1	0.148
	R4	JPC		0.30	30.50				177	Fair	Orange	1	0.148
Post Mile: 0.257 to 0.687 Length: 0.430 Estimated Lane Mileage: 1.440	L1	JPC		15.00	4.44				136	Fair	Red	1	0.360
	L2	JPC		42.00	5.86				128	Fair	Red	1	0.360
	L3	JPC		29.00	27.28				190	Poor	Red	1	0.360
	L4	JPC		10.90	15.51				192	Poor	Red	1	0.360
Post Mile: 0.257 to 1.359 Length: 1.102 Estimated Lane Mileage: 4.900	R1	JPC		17.20	7.74				129	Fair	Red	1	0.980
	R2	JPC		4.90	8.29				136	Fair	Yellow	1	0.980
	R3	JPC		13.30	12.03				118	Fair	Red	1	0.980
	R4	JPC		3.30	20.24				118	Fair	Yellow	1	0.980
	R5	JPC		1.50	14.53				115	Fair	Green	1	0.980
Post Mile: 0.392 to 0.687 Length: 0.295 Estimated Lane Mileage: 0.247	L5	JPC		3.10	14.43				118	Fair	Yellow	1	0.247
Post Mile: 0.687 to 1.551 Length: 0.864 Estimated Lane Mileage: 3.915	L1	JPC		15.80	4.97				133	Fair	Red	1	0.783
	L2	JPC		14.30	6.59				105	Fair	Red	1	0.783
	L3	JPC		27.20	34.14				132	Fair	Red	1	0.783
	L4	JPC		6.40	19.51				117	Fair	Yellow	1	0.783
	L5	JPC		5.00	13.17				101	Fair	Yellow	1	0.783
Post Mile: 1.359 to 2.944 Length: 1.585 Estimated Lane Mileage: 7.425	R1	JPC		19.10	10.20				123	Fair	Red	1	1.485
	R2	JPC		17.10	11.76				203	Poor	Red	1	1.485
	R3	JPC		18.40	13.34				103	Fair	Red	1	1.485
	R4	JPC		3.20	25.39				102	Fair	Orange	1	1.485
	R5	JPC		1.10	14.15				98	Fair	Green	1	1.485
Post Mile: 1.551 to 3.466 Length: 1.915 Estimated Lane Mileage: 9.220	L1	JPC		8.00	7.38				122	Fair	Yellow	1	1.844
	L2	JPC		3.80	5.95				85	Good	Yellow	1	1.844
	L3	JPC		8.90	9.49				89	Fair	Yellow	1	1.844
	L4	JPC		8.90	32.42				125	Fair	Orange	1	1.844
	L5	JPC		2.80	16.79				101	Fair	Green	1	1.844
Post Mile: 2.944 to 4.924 Length: 1.980 Estimated Lane Mileage: 9.475	R1	JPC		10.10	15.66				156	Fair	Red	1	1.895
	R2	JPC		24.00	14.46				183	Poor	Red	1	1.895
	R3	JPC		19.40	19.36				139	Fair	Red	1	1.895
	R4	JPC		8.00	19.09				105	Fair	Yellow	1	1.895
	R5	JPC		1.90	12.33				106	Fair	Green	1	1.895
Post Mile: 3.466 to 4.890 Length: 1.424 Estimated Lane Mileage: 6.695	L1	JPC		8.10	6.75				147	Fair	Yellow	1	1.339
	L2	JPC		2.60	7.74				98	Fair	Green	1	1.339
	L3	JPC		6.80	14.12				108	Fair	Yellow	1	1.339
	L4	JPC		11.30	23.91				125	Fair	Red	1	1.339
	L5	JPC		4.40	21.01				116	Fair	Yellow	1	1.339
Post Mile: 4.890 to 4.924 Length: 0.034 Estimated Lane Mileage: 0.136	L1	JPC		3.20	4.17				120	Fair	Yellow	1	0.034
	L2	JPC		8.80	20.84				154	Fair	Yellow	1	0.034
	L3	JPC		8.60	23.27				98	Fair	Yellow	1	0.034
	L4	JPC		0.30	11.04				64	Good	Green	1	0.034
Post Mile: 4.924 to R5.469	L1	JPC		4.70	15.10				141	Fair	Yellow	1	0.545

Post Mile: 4.924L to R5.496L Length: 0.545 Estimated Lane Mileage: 2.180	L2	JPC		6.80	14.90				153	Fair	Yellow	1	0.545
	L3	JPC		2.90	17.69				183	Fair	Blue	1	0.545
	L4	JPC		2.60	17.18				143	Fair	Green	1	0.545
Post Mile: 4.924R to R5.496R Length: 0.572 Estimated Lane Mileage: 2.725	R1	JPC		30.10	14.44				259	Poor	Red	1	0.545
	R2	JPC		33.20	22.07				197	Poor	Red	1	0.545
	R3	JPC		28.20	17.06				169	Fair	Red	1	0.545
	R4	JPC		8.60	21.03				166	Fair	Yellow	1	0.545
	R5	JPC		8.80	24.71				201	Fair	Blue	1	0.545
Post Mile: R5.469L to R5.650L Length: 0.181 Estimated Lane Mileage: 0.543	L1	JPC		3.60	4.56				84	Good	Yellow	1	0.181
	L2	JPC		7.00	13.10				96	Fair	Yellow	1	0.181
	L3	JPC		5.40	14.27				112	Fair	Yellow	1	0.181
Post Mile: R5.496R to R5.667R Length: 0.171 Estimated Lane Mileage: 0.564	R1	JPC		21.00	19.94				141	Fair	Red	1	0.141
	R2	JPC		11.00	27.28				137	Fair	Red	1	0.141
	R3	JPC		17.70	32.71				160	Fair	Red	1	0.141
	R4	JPC		3.30	16.79				142	Fair	Yellow	1	0.141
Post Mile: R5.904 to R5.967 Length: 0.063 Estimated Lane Mileage: 0.039	L1	JPC		10.90	12.04				241	Poor	Red	1	0.013
	L2	JPC		17.70	35.40				203	Poor	Red	1	0.013
	L3	JPC		0.30	22.34				246	Fair	Blue	1	0.013
Post Mile: R5.904 to R6.174 Length: 0.270 Estimated Lane Mileage: 1.100	R1	JPC		3.40	7.33				140	Fair	Yellow	1	0.220
	R2	JPC		11.90	4.38				76	Fair	Red	1	0.220
	R3	JPC		7.50	15.44				119	Fair	Yellow	1	0.220
	R4	JPC		2.00	27.99				122	Fair	Orange	1	0.220
	R5	JPC		3.50	12.86				122	Fair	Yellow	1	0.220
Post Mile: R5.957 to R5.967 Length: 0.010 Estimated Lane Mileage: 0.002	L4	JPC		21.00	45.04				213	Poor	Red	1	0.002
Post Mile: R5.967 to R6.477 Length: 0.510 Estimated Lane Mileage: 2.886	L1	JPC		4.80	3.58				141	Fair	Yellow	1	0.481
	L2	JPC		6.60	3.45				79	Fair	Yellow	1	0.481
	L3	JPC		8.70	13.11				94	Fair	Yellow	1	0.481
	L4	JPC		16.20	20.19				104	Fair	Red	1	0.481
	L5	JPC		13.90	32.63				160	Fair	Red	1	0.481
	L6	JPC		7.60	16.00				140	Fair	Yellow	1	0.481
Post Mile: R6.174 to R6.477 Length: 0.303 Estimated Lane Mileage: 1.644	R1	JPC		1.60	3.63				121	Fair	Green	1	0.274
	R2	JPC		16.50	6.98				89	Fair	Red	1	0.274
	R3	JPC		1.50	10.92				87	Good	Green	1	0.274
	R4	JPC		3.70	23.92				100	Fair	Yellow	1	0.274
	R5	JPC		2.70	14.66				113	Fair	Green	1	0.274
	R6	Flexible				7.30	0.70	0.05	129	Fair	Yellow	1	0.274
Post Mile: R6.477 to R7.255 Length: 0.778 Estimated Lane Mileage: 7.500	L1	JPC		6.00	1.58				140	Fair	Yellow	1	0.750
	L2	JPC		14.50	8.92				97	Fair	Red	1	0.750
	L3	JPC		8.30	11.41				92	Fair	Yellow	1	0.750
	L4	JPC		14.90	18.30				91	Fair	Red	1	0.750
	L5	JPC		10.70	20.20				103	Fair	Red	1	0.750
	R1	JPC		6.20	2.64				122	Fair	Yellow	1	0.750
	R2	JPC		14.20	7.06				105	Fair	Red	1	0.750
	R3	JPC		11.00	13.75				109	Fair	Red	1	0.750
	R4	JPC		10.30	36.16				116	Fair	Red	1	0.750
	R5	JPC		3.30	17.69				119	Fair	Yellow	1	0.750
Post Mile: R7.255 to R7.624 Length: 0.369 Estimated Lane Mileage: 2.214	L1	JPC		7.70	2.53				131	Fair	Yellow	1	0.369
	L2	JPC		11.30	7.46				96	Fair	Red	1	0.369
	L3	JPC		4.70	3.95				81	Good	Yellow	1	0.369
	L4	JPC		10.50	14.24				75	Fair	Red	1	0.369
	L5	JPC		5.20	15.01				101	Fair	Yellow	1	0.369
	L6	Flexible				8.80	5.40	0.07	139	Fair	Yellow	1	0.369
Post Mile: R7.255 to R7.679 Length: 0.424 Estimated Lane Mileage: 2.120	R1	JPC		1.20	3.00				125	Fair	Green	1	0.424
	R2	JPC		17.30	16.20				113	Fair	Red	1	0.424
	R3	JPC		3.60	15.35				98	Fair	Yellow	1	0.424
	R4	JPC		7.60	14.47				92	Fair	Yellow	1	0.424
	R5	JPC		2.20	33.96				155	Fair	Orange	1	0.424
Post Mile: R7.370 to R7.679 Length: 0.309 Estimated Lane Mileage: 0.309	R6	Flexible				4.90	2.30	0.03	128	Fair	Yellow	1	0.309
Post Mile: R7.624 to R7.860	L1	JPC		3.60	0.88				131	Fair	Yellow	1	0.236
	L2	JPC		11.60	12.66				104	Fair	Red	1	0.236

Length: 0.236 Estimated Lane Mileage: 1.180	L3	JPC		5.50	19.64				102	Fair	Yellow	1	0.236
	L4	JPC		9.40	20.03				102	Fair	Yellow	1	0.236
	L5	JPC		3.80	16.28				103	Fair	Yellow	1	0.236
Post Mile: R7.679 to R7.860 Length: 0.181 Estimated Lane Mileage: 0.905	R1	JPC		3.90	4.85				128	Fair	Yellow	1	0.181
	R2	JPC		12.90	18.57				97	Fair	Red	1	0.181
	R3	JPC		2.20	23.89				114	Fair	Green	1	0.181
	R4	JPC		3.90	15.53				85	Good	Yellow	1	0.181
	R5	JPC		3.80	30.99				151	Fair	Orange	1	0.181
Post Mile: R7.860 to R8.387 Length: 0.527 Estimated Lane Mileage: 2.544	L1	JPC		4.90	4.40				142	Fair	Yellow	1	0.424
	L2	JPC		9.80	5.87				108	Fair	Yellow	1	0.424
	L3	JPC		4.20	8.19				103	Fair	Yellow	1	0.424
	L4	JPC		6.90	21.38				106	Fair	Yellow	1	0.424
	L5	JPC		4.20	23.78				118	Fair	Yellow	1	0.424
	L6	Flexible				4.00	7.40	0.06	136	Fair	Yellow	1	0.424
Post Mile: R7.860 to R8.277 Length: 0.417 Estimated Lane Mileage: 0.349	R6	Flexible				6.40	6.60	0.10	153	Fair	Yellow	1	0.349
Post Mile: R7.860 to R8.500 Length: 0.640 Estimated Lane Mileage: 2.680	R1	JPC		5.00	2.64				149	Fair	Yellow	1	0.536
	R2	JPC		12.10	12.66				100	Fair	Red	1	0.536
	R3	JPC		1.60	10.95				105	Fair	Green	1	0.536
	R4	JPC		4.80	25.87				117	Fair	Orange	1	0.536
	R5	JPC		3.20	26.07				147	Fair	Orange	1	0.536
Post Mile: R8.387 to R8.963 Length: 0.576 Estimated Lane Mileage: 2.555	L1	JPC		5.50	3.59				134	Fair	Yellow	1	0.511
	L2	JPC		17.70	2.10				90	Fair	Red	1	0.511
	L3	JPC		8.50	4.06				93	Fair	Yellow	1	0.511
	L4	JPC		11.60	22.03				115	Fair	Red	1	0.511
	L5	JPC		7.40	20.55				113	Fair	Yellow	1	0.511
Post Mile: R8.500 to R8.963 Length: 0.463 Estimated Lane Mileage: 1.995	R1	JPC		3.60	5.59				167	Fair	Yellow	1	0.399
	R2	JPC		11.20	6.34				104	Fair	Red	1	0.399
	R3	JPC		2.80	9.95				99	Fair	Green	1	0.399
	R4	JPC		4.00	28.59				129	Fair	Orange	1	0.399
	R5	Flexible				9.00	1.60	0.10	112	Fair	Yellow	1	0.399
Post Mile: R8.963 to R9.396 Length: 0.433 Estimated Lane Mileage: 1.805	L1	JPC		8.90	5.75				169	Fair	Yellow	1	0.361
	L2	JPC		13.70	18.51				104	Fair	Red	1	0.361
	L3	JPC		10.90	16.42				104	Fair	Red	1	0.361
	L4	JPC		18.70	20.18				96	Fair	Red	1	0.361
	L5	JPC		13.20	8.71				95	Fair	Red	1	0.361
Post Mile: R8.963 to R9.503 Length: 0.540 Estimated Lane Mileage: 2.340	R1	JPC		5.70	13.34				187	Fair	Blue	1	0.468
	R2	JPC		14.00	8.89				117	Fair	Red	1	0.468
	R3	JPC		15.00	26.46				120	Fair	Red	1	0.468
	R4	JPC		19.50	45.35				168	Fair	Red	1	0.468
	R5	JPC		3.80	31.63				147	Fair	Orange	1	0.468
Post Mile: R9.396 to R9.613 Length: 0.217 Estimated Lane Mileage: 1.302	L1	JPC		10.40	0.88				172	Poor	Red	1	0.217
	L2	JPC		18.50	6.83				93	Fair	Red	1	0.217
	L3	JPC		16.40	5.59				84	Fair	Red	1	0.217
	L4	JPC		8.00	16.78				63	Fair	Yellow	1	0.217
	L5	JPC		8.60	10.27				88	Fair	Yellow	1	0.217
	L6	JPC		11.20	12.85				193	Poor	Red	1	0.217
Post Mile: R9.503 to R10.978 Length: 1.475 Estimated Lane Mileage: 7.375	R1	JPC		9.80	7.26				145	Fair	Yellow	1	1.475
	R2	JPC		6.40	9.64				84	Fair	Yellow	1	1.475
	R3	JPC		5.60	12.73				108	Fair	Yellow	1	1.475
	R4	JPC		6.80	24.84				114	Fair	Yellow	1	1.475
	R5	JPC		4.80	26.56				126	Fair	Orange	1	1.475
Post Mile: R9.613 to R10.973 Length: 1.360 Estimated Lane Mileage: 6.800	L1	JPC		9.50	10.38				163	Fair	Yellow	1	1.360
	L2	JPC		5.70	12.32				104	Fair	Yellow	1	1.360
	L3	JPC		7.20	11.10				109	Fair	Yellow	1	1.360
	L4	JPC		9.40	14.47				102	Fair	Yellow	1	1.360
	L5	JPC		8.70	17.37				112	Fair	Yellow	1	1.360
Post Mile: R10.973 to R11.199 Length: 0.226 Estimated Lane Mileage: 0.000	L1	JPC		0.20	0.88				62	Good	Green	1	0.000
	L2	JPC		0.20	51.79				208	Fair	Orange	1	0.000
	L3	JPC		0.20	0.88				62	Good	Green	1	0.000
	L4	JPC		10.00	29.49				200	Poor	Red	1	0.000
	L5	JPC		0.30	2.37				62	Good	Green	1	0.000
	R1	JPC		0.20	0.88				62	Good	Green	1	0.000

Post Mile: R10.978 to R11.200 Length: 0.222 Estimated Lane Mileage: 0.000	R2	JPC		0.20	0.88				62	Good	Green	1	0.000
	R3	JPC		0.20	0.88				62	Good	Green	1	0.000
	R4	JPC		0.30	2.37				62	Good	Green	1	0.000
	R5	JPC		0.30	2.37				62	Good	Green	1	0.000
Post Mile: R11.199 to R12.360 Length: 1.161 Estimated Lane Mileage: 5.620	L1	JPC		11.90	7.82				129	Fair	Red	1	1.124
	L2	JPC		14.70	19.36				141	Fair	Red	1	1.124
	L3	JPC		12.20	36.56				154	Fair	Red	1	1.124
	L4	JPC		14.50	16.00				107	Fair	Red	1	1.124
	L5	JPC		17.00	17.84				129	Fair	Red	1	1.124
Post Mile: R11.200 to R12.510 Length: 1.310 Estimated Lane Mileage: 6.365	R1	JPC		8.80	13.10				154	Fair	Yellow	1	1.273
	R2	JPC		10.90	10.36				103	Fair	Red	1	1.273
	R3	JPC		8.50	12.08				114	Fair	Yellow	1	1.273
	R4	JPC		3.40	18.38				108	Fair	Yellow	1	1.273
	R5	JPC		4.80	19.12				129	Fair	Yellow	1	1.273
Post Mile: R12.360 to R12.568 Length: 0.208 Estimated Lane Mileage: 1.040	L1	JPC		9.00	4.91				153	Fair	Yellow	1	0.208
	L2	JPC		2.10	8.04				129	Fair	Green	1	0.208
	L3	JPC		10.30	22.48				134	Fair	Red	1	0.208
	L4	JPC		8.60	23.89				128	Fair	Yellow	1	0.208
	L5	JPC		15.10	18.10				122	Fair	Red	1	0.208
Post Mile: R12.510 to R12.946 Length: 0.436 Estimated Lane Mileage: 0.612	R1	JPC		13.80	10.24				150	Fair	Red	1	0.102
	R2	JPC		6.10	9.31				123	Fair	Yellow	1	0.102
	R3	JPC		4.70	11.01				123	Fair	Yellow	1	0.102
	R4	JPC		7.30	16.34				111	Fair	Yellow	1	0.102
	R5	JPC		7.30	12.14				112	Fair	Yellow	1	0.102
	R6	JPC		9.60	11.27				211	Fair	Blue	1	0.102
Post Mile: R12.568 to R12.902 Length: 0.334 Estimated Lane Mileage: 0.000	L1	JPC		8.10	2.91				125	Fair	Yellow	1	0.000
	L2	JPC		13.70	30.71				155	Fair	Red	1	0.000
	L3	JPC		8.70	31.82				140	Fair	Orange	1	0.000
	L4	JPC		7.40	17.24				134	Fair	Yellow	1	0.000
	L5	JPC		11.70	18.54				127	Fair	Red	1	0.000
Post Mile: R12.902 to R13.300 Length: 0.398 Estimated Lane Mileage: 1.535	L1	JPC		12.20	12.58				203	Poor	Red	1	0.307
	L2	JPC		10.20	39.18				192	Poor	Red	1	0.307
	L3	JPC		2.70	41.58				211	Fair	Orange	1	0.307
	L4	JPC		18.30	35.89				199	Poor	Red	1	0.307
	L5	JPC		9.60	31.17				194	Fair	Orange	1	0.307
Post Mile: R12.946 to R13.300 Length: 0.354 Estimated Lane Mileage: 1.320	R1	JPC		6.50	4.47				169	Fair	Yellow	1	0.264
	R2	JPC		5.10	29.11				170	Fair	Orange	1	0.264
	R3	JPC		11.80	12.94				167	Fair	Red	1	0.264
	R4	JPC		5.80	33.52				168	Fair	Orange	1	0.264
	R5	JPC		9.40	26.87				190	Fair	Orange	1	0.264
Post Mile: R13.300 to R13.341 Length: 0.041 Estimated Lane Mileage: 0.315	L1	JPC		12.20	12.58				203	Poor	Red	1	0.032
	L2	JPC		10.20	39.18				192	Poor	Red	1	0.032
	L3	JPC		2.70	41.58				211	Fair	Orange	1	0.032
	L4	JPC		18.30	35.89				199	Poor	Red	1	0.032
	L5	JPC		9.60	31.17				194	Fair	Orange	1	0.032
	R1	JPC		6.50	4.47				169	Fair	Yellow	1	0.031
	R2	JPC		5.10	29.11				170	Fair	Orange	1	0.031
	R3	JPC		11.80	12.94				167	Fair	Red	1	0.031
	R4	JPC		5.80	33.52				168	Fair	Orange	1	0.031
	R5	JPC		9.40	26.87				190	Fair	Orange	1	0.031
				9.34	15.07	0.12	0.08	0.00	125				116.938
				Lane Weighted Average									Total

PaveM Scenario Used: #2233
APCS Data Year: 2015

Caltrans Pavement Program
Pavement Condition Detailed Report (PaveM)

District: 7; County: Los Angeles (LA); Route: 134
From PM: 0.000 To PM: R13.341

Year: 2018 (Predicted)
R-Length: 13.104. L-Length: 13.087
R-Lane Miles: 58.700. L-Lane Miles: 58.238 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	Assumed MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator A%	Alligator B%	Rut (in)					
Post Mile: 0.000 to 0.257 Length: 0.257 Estimated Lane Mileage: 1.022	L1	JPC		16.20	7.89				201	Poor	Red	1	0.215
	L2	JPC		34.20	23.79				186	Poor	Red	1	0.215
	R1	JPC		5.40	12.94				140	Fair	Yellow	1	0.148
	R2	JPC		13.10	9.69				125	Fair	Red	1	0.148
	R3	JPC		2.40	20.20				130	Fair	Green	1	0.148
	R4	JPC		0.60	33.60				186	Fair	Orange	1	0.148
Post Mile: 0.257 to 0.687 Length: 0.430 Estimated Lane Mileage: 1.440	L1	JPC		15.50	5.32				137	Fair	Red	1	0.360
	L2	JPC		42.50	6.79				129	Fair	Red	1	0.360
	L3	JPC		29.50	28.40				192	Poor	Red	1	0.360
	L4	JPC		11.40	19.59				201	Poor	Red	1	0.360
Post Mile: 0.257 to 1.359 Length: 1.102 Estimated Lane Mileage: 4.900	R1	JPC		17.70	8.71				130	Fair	Red	1	0.980
	R2	JPC		5.30	9.27				138	Fair	Yellow	1	0.980
	R3	JPC		13.80	13.30				120	Fair	Red	1	0.980
	R4	JPC		3.70	23.98				125	Fair	Yellow	1	0.980
	R5	JPC		1.80	18.69				122	Fair	Green	1	0.980
Post Mile: 0.392 to 0.687 Length: 0.296 Estimated Lane Mileage: 0.247	L5	JPC		3.50	18.60				125	Fair	Yellow	1	0.247
Post Mile: 0.687 to 1.551 Length: 0.864 Estimated Lane Mileage: 3.915	L1	JPC		16.30	5.87				135	Fair	Red	1	0.783
	L2	JPC		14.80	7.54				106	Fair	Red	1	0.783
	L3	JPC		27.70	35.17				134	Fair	Red	1	0.783
	L4	JPC		6.80	23.30				124	Fair	Yellow	1	0.783
	L5	JPC		5.40	17.44				108	Fair	Yellow	1	0.783
Post Mile: 1.359 to 2.944 Length: 1.585 Estimated Lane Mileage: 7.425	R1	JPC		19.60	11.22				125	Fair	Red	1	1.485
	R2	JPC		17.60	12.80				204	Poor	Red	1	1.485
	R3	JPC		18.90	14.60				105	Fair	Red	1	1.485
	R4	JPC		3.60	28.80				109	Fair	Orange	1	1.485
	R5	JPC		1.40	18.34				104	Fair	Green	1	1.485
Post Mile: 1.551 to 3.466 Length: 1.915 Estimated Lane Mileage: 9.220	L1	JPC		8.40	8.34				124	Fair	Yellow	1	1.844
	L2	JPC		4.20	6.88				86	Good	Yellow	1	1.844
	L3	JPC		9.40	10.78				90	Fair	Yellow	1	1.844
	L4	JPC		9.30	35.42				133	Fair	Orange	1	1.844
	L5	JPC		3.20	20.78				107	Fair	Yellow	1	1.844
Post Mile: 2.944 to 4.924 Length: 1.980 Estimated Lane Mileage: 9.475	R1	JPC		10.60	16.73				158	Fair	Red	1	1.895
	R2	JPC		24.50	15.52				184	Poor	Red	1	1.895
	R3	JPC		19.90	20.57				141	Fair	Red	1	1.895
	R4	JPC		8.50	22.91				112	Fair	Yellow	1	1.895
	R5	JPC		2.20	16.67				113	Fair	Green	1	1.895
Post Mile: 3.466 to 4.890 Length: 1.424 Estimated Lane Mileage: 6.695	L1	JPC		8.60	7.70				149	Fair	Yellow	1	1.339
	L2	JPC		3.00	8.71				99	Fair	Yellow	1	1.339
	L3	JPC		7.20	15.38				110	Fair	Yellow	1	1.339
	L4	JPC		11.80	27.41				132	Fair	Red	1	1.339
	L5	JPC		4.80	24.70				123	Fair	Yellow	1	1.339
Post Mile: 4.890 to 4.924 Length: 0.034 Estimated Lane Mileage: 0.136	L1	JPC		3.60	5.04				121	Fair	Yellow	1	0.034
	L2	JPC		9.30	22.03				156	Fair	Yellow	1	0.034
	L3	JPC		9.10	26.81				104	Fair	Orange	1	0.034
	L4	JPC		0.60	15.49				67	Fair	Green	1	0.034
Post Mile: 4.924 to 85.469	L1	JPC		5.10	16.17				142	Fair	Yellow	1	0.545

Post Mile: 4.924L to R5.496L Length: 0.545 Estimated Lane Mileage: 2.180	L2	JPC		7.20	16.15				156	Fair	Yellow	1	0.545
	L3	JPC		3.30	21.61				192	Fair	Blue	1	0.545
	L4	JPC		3.00	21.14				151	Fair	Yellow	1	0.545
Post Mile: 4.924R to R5.496R Length: 0.572 Estimated Lane Mileage: 2.725	R1	JPC		30.60	15.50				259	Poor	Red	1	0.545
	R2	JPC		33.70	23.16				199	Poor	Red	1	0.545
	R3	JPC		28.70	18.29				171	Poor	Red	1	0.545
	R4	JPC		9.10	24.72				175	Fair	Blue	1	0.545
	R5	JPC		9.20	28.16				211	Fair	Orange	1	0.545
Post Mile: R5.469L to R5.650L Length: 0.181 Estimated Lane Mileage: 0.543	L1	JPC		3.90	5.44				85	Good	Yellow	1	0.181
	L2	JPC		7.40	17.37				102	Fair	Yellow	1	0.181
	L3	JPC		5.80	18.45				119	Fair	Yellow	1	0.181
Post Mile: R5.496R to R5.667R Length: 0.171 Estimated Lane Mileage: 0.564	R1	JPC		21.60	21.02				143	Fair	Red	1	0.141
	R2	JPC		11.40	28.40				139	Fair	Red	1	0.141
	R3	JPC		18.20	35.69				168	Fair	Red	1	0.141
	R4	JPC		3.70	20.78				150	Fair	Yellow	1	0.141
Post Mile: R5.904 to R5.967 Length: 0.063 Estimated Lane Mileage: 0.039	L1	JPC		11.40	13.08				241	Poor	Red	1	0.013
	L2	JPC		18.20	36.42				205	Poor	Red	1	0.013
	L3	JPC		0.60	25.94				256	Fair	Orange	1	0.013
Post Mile: R5.904 to R6.174 Length: 0.270 Estimated Lane Mileage: 1.100	R1	JPC		3.80	8.29				141	Fair	Yellow	1	0.220
	R2	JPC		12.40	5.26				78	Fair	Red	1	0.220
	R3	JPC		7.90	16.51				120	Fair	Yellow	1	0.220
	R4	JPC		2.40	31.24				129	Fair	Orange	1	0.220
	R5	JPC		3.90	17.15				129	Fair	Yellow	1	0.220
Post Mile: R5.957 to R5.967 Length: 0.010 Estimated Lane Mileage: 0.002	L4	JPC		21.60	47.37				222	Poor	Red	1	0.002
Post Mile: R5.967 to R6.477 Length: 0.510 Estimated Lane Mileage: 2.886	L1	JPC		5.20	4.42				143	Fair	Yellow	1	0.481
	L2	JPC		7.00	4.28				80	Fair	Yellow	1	0.481
	L3	JPC		9.10	14.16				95	Fair	Yellow	1	0.481
	L4	JPC		16.70	21.39				106	Fair	Red	1	0.481
	L5	JPC		13.80	35.61				168	Fair	Red	1	0.481
	L6	JPC		8.10	20.04				148	Fair	Yellow	1	0.481
Post Mile: R6.174 to R6.477 Length: 0.303 Estimated Lane Mileage: 1.644	R1	JPC		1.80	4.47				123	Fair	Green	1	0.274
	R2	JPC		17.00	7.94				90	Fair	Red	1	0.274
	R3	JPC		1.80	11.95				88	Good	Green	1	0.274
	R4	JPC		4.10	25.08				102	Fair	Orange	1	0.274
	R5	JPC		3.10	18.81				120	Fair	Yellow	1	0.274
	R6	Flexible				9.70	1.50	0.05	132	Fair	Yellow	1	0.274
Post Mile: R6.477 to R7.255 Length: 0.778 Estimated Lane Mileage: 7.500	L1	JPC		6.40	2.29				141	Fair	Yellow	1	0.750
	L2	JPC		15.00	9.92				99	Fair	Red	1	0.750
	L3	JPC		8.80	12.69				94	Fair	Yellow	1	0.750
	L4	JPC		15.40	22.18				97	Fair	Red	1	0.750
	L5	JPC		11.20	23.95				110	Fair	Red	1	0.750
	R1	JPC		6.60	3.43				124	Fair	Yellow	1	0.750
	R2	JPC		14.70	8.02				107	Fair	Red	1	0.750
	R3	JPC		11.50	15.01				111	Fair	Red	1	0.750
	R4	JPC		10.80	38.95				123	Fair	Red	1	0.750
	R5	JPC		3.60	21.61				126	Fair	Yellow	1	0.750
Post Mile: R7.255 to R7.624 Length: 0.369 Estimated Lane Mileage: 2.214	L1	JPC		8.10	3.31				132	Fair	Yellow	1	0.369
	L2	JPC		11.80	8.43				98	Fair	Red	1	0.369
	L3	JPC		5.10	4.81				82	Fair	Yellow	1	0.369
	L4	JPC		11.00	15.50				76	Fair	Red	1	0.369
	L5	JPC		5.70	19.13				108	Fair	Yellow	1	0.369
	L6	Flexible				11.00	7.00	0.07	141	Fair	Yellow	1	0.369
Post Mile: R7.255 to R7.679 Length: 0.424 Estimated Lane Mileage: 2.120	R1	JPC		1.50	3.81				127	Fair	Green	1	0.424
	R2	JPC		17.80	17.27				115	Fair	Red	1	0.424
	R3	JPC		4.00	16.42				99	Fair	Yellow	1	0.424
	R4	JPC		8.00	15.72				94	Fair	Yellow	1	0.424
	R5	JPC		2.50	36.87				163	Fair	Orange	1	0.424
Post Mile: R7.370 to R7.679 Length: 0.309 Estimated Lane Mileage: 0.309	R6	Flexible				6.80	3.50	0.03	130	Fair	Yellow	1	0.309
Post Mile: R7.624 to R7.860	L1	JPC		3.90	1.51				132	Fair	Yellow	1	0.236
	L2	JPC		12.00	13.71				105	Fair	Red	1	0.236

Length: 0.236 Estimated Lane Mileage: 1.180	L3	JPC		5.90	20.84				104	Fair	Yellow	1	0.236
	L4	JPC		9.80	23.79				108	Fair	Yellow	1	0.236
	L5	JPC		4.20	20.30				109	Fair	Yellow	1	0.236
Post Mile: R7.679 to R7.860 Length: 0.181 Estimated Lane Mileage: 0.905	R1	JPC		4.20	5.74				130	Fair	Yellow	1	0.181
	R2	JPC		13.40	19.65				98	Fair	Red	1	0.181
	R3	JPC		2.50	25.05				116	Fair	Orange	1	0.181
	R4	JPC		4.30	19.61				91	Fair	Yellow	1	0.181
	R5	JPC		4.20	34.07				159	Fair	Orange	1	0.181
Post Mile: R7.860 to R8.387 Length: 0.527 Estimated Lane Mileage: 2.544	L1	JPC		5.30	5.28				144	Fair	Yellow	1	0.424
	L2	JPC		10.30	6.80				109	Fair	Red	1	0.424
	L3	JPC		4.60	9.17				105	Fair	Yellow	1	0.424
	L4	JPC		7.30	22.57				108	Fair	Yellow	1	0.424
	L5	JPC		4.60	27.29				125	Fair	Orange	1	0.424
	L6	Flexible				5.70	9.20	0.06	138	Fair	Yellow	1	0.424
Post Mile: R7.860 to R8.277 Length: 0.417 Estimated Lane Mileage: 0.349	R6	Flexible				8.30	8.40	0.10	156	Fair	Yellow	1	0.349
Post Mile: R7.860 to R8.500 Length: 0.640 Estimated Lane Mileage: 2.680	R1	JPC		5.40	3.43				150	Fair	Yellow	1	0.536
	R2	JPC		12.60	13.71				101	Fair	Red	1	0.536
	R3	JPC		1.90	11.98				107	Fair	Green	1	0.536
	R4	JPC		5.20	27.01				119	Fair	Orange	1	0.536
	R5	JPC		3.60	29.44				155	Fair	Orange	1	0.536
Post Mile: R8.387 to R8.963 Length: 0.576 Estimated Lane Mileage: 2.555	L1	JPC		5.90	4.43				136	Fair	Yellow	1	0.511
	L2	JPC		18.20	2.85				91	Fair	Red	1	0.511
	L3	JPC		9.00	5.35				95	Fair	Yellow	1	0.511
	L4	JPC		12.10	25.65				122	Fair	Red	1	0.511
	L5	JPC		7.90	24.27				120	Fair	Yellow	1	0.511
Post Mile: R8.500 to R8.963 Length: 0.463 Estimated Lane Mileage: 1.995	R1	JPC		3.90	6.51				168	Fair	Yellow	1	0.399
	R2	JPC		11.60	7.28				106	Fair	Red	1	0.399
	R3	JPC		3.10	11.23				101	Fair	Yellow	1	0.399
	R4	JPC		4.40	31.81				136	Fair	Orange	1	0.399
	R5	Flexible				11.40	2.60	0.10	115	Fair	Yellow	1	0.399
Post Mile: R8.963 to R9.396 Length: 0.433 Estimated Lane Mileage: 1.805	L1	JPC		9.30	6.67				171	Fair	Blue	1	0.361
	L2	JPC		14.20	19.59				105	Fair	Red	1	0.361
	L3	JPC		11.40	17.49				106	Fair	Red	1	0.361
	L4	JPC		19.20	23.93				102	Fair	Red	1	0.361
	L5	JPC		13.70	10.00				97	Fair	Red	1	0.361
Post Mile: R8.963 to R9.503 Length: 0.540 Estimated Lane Mileage: 2.340	R1	JPC		6.10	14.39				189	Fair	Blue	1	0.468
	R2	JPC		14.50	9.89				118	Fair	Red	1	0.468
	R3	JPC		15.50	27.54				122	Fair	Red	1	0.468
	R4	JPC		20.00	47.66				177	Poor	Red	1	0.468
	R5	JPC		4.20	32.69				150	Fair	Orange	1	0.468
Post Mile: R9.396 to R9.613 Length: 0.217 Estimated Lane Mileage: 1.302	L1	JPC		10.80	1.51				174	Poor	Red	1	0.217
	L2	JPC		19.00	7.78				94	Fair	Red	1	0.217
	L3	JPC		16.90	6.51				85	Fair	Red	1	0.217
	L4	JPC		8.50	18.01				65	Fair	Yellow	1	0.217
	L5	JPC		9.10	11.55				89	Fair	Yellow	1	0.217
	L6	JPC		11.70	14.12				196	Poor	Red	1	0.217
Post Mile: R9.503 to R10.978 Length: 1.475 Estimated Lane Mileage: 7.375	R1	JPC		10.20	8.22				146	Fair	Red	1	1.475
	R2	JPC		6.80	10.65				86	Fair	Yellow	1	1.475
	R3	JPC		6.00	13.78				110	Fair	Yellow	1	1.475
	R4	JPC		7.20	25.99				116	Fair	Orange	1	1.475
	R5	JPC		5.20	27.69				128	Fair	Orange	1	1.475
Post Mile: R9.613 to R10.973 Length: 1.360 Estimated Lane Mileage: 6.800	L1	JPC		10.00	11.40				165	Fair	Red	1	1.360
	L2	JPC		6.10	13.36				106	Fair	Yellow	1	1.360
	L3	JPC		7.60	12.13				111	Fair	Yellow	1	1.360
	L4	JPC		9.90	15.72				104	Fair	Yellow	1	1.360
	L5	JPC		9.20	18.60				114	Fair	Yellow	1	1.360
Post Mile: R10.973 to R11.199 Length: 0.226 Estimated Lane Mileage: 0.000	L1	JPC		0.30	1.51				63	Good	Green	1	0.000
	L2	JPC		0.30	52.67				210	Fair	Orange	1	0.000
	L3	JPC		0.30	1.51				63	Good	Green	1	0.000
	L4	JPC		10.50	30.58				202	Poor	Red	1	0.000
	L5	JPC		0.50	3.64				63	Good	Green	1	0.000
	R1	JPC		0.30	1.51				63	Good	Green	1	0.000

Post Mile: R10.978 to R11.200 Length: 0.222 Estimated Lane Mileage: 0.000	R2	JPC		0.30	1.51				63	Good	Green	1	0.000
	R3	JPC		0.30	1.51				63	Good	Green	1	0.000
	R4	JPC		0.50	3.64				63	Good	Green	1	0.000
	R5	JPC		0.50	3.64				63	Good	Green	1	0.000
Post Mile: R11.199 to R12.360 Length: 1.161 Estimated Lane Mileage: 5.620	L1	JPC		12.40	8.79				131	Fair	Red	1	1.124
	L2	JPC		15.20	20.44				143	Fair	Red	1	1.124
	L3	JPC		12.70	37.59				156	Fair	Red	1	1.124
	L4	JPC		15.00	17.24				109	Fair	Red	1	1.124
	L5	JPC		17.50	19.06				131	Fair	Red	1	1.124
Post Mile: R11.200 to R12.510 Length: 1.310 Estimated Lane Mileage: 6.365	R1	JPC		9.20	14.15				156	Fair	Yellow	1	1.273
	R2	JPC		11.40	11.38				105	Fair	Red	1	1.273
	R3	JPC		8.90	13.12				115	Fair	Yellow	1	1.273
	R4	JPC		3.80	19.60				110	Fair	Yellow	1	1.273
	R5	JPC		5.20	20.33				131	Fair	Yellow	1	1.273
Post Mile: R12.360 to R12.568 Length: 0.208 Estimated Lane Mileage: 1.040	L1	JPC		9.40	5.80				154	Fair	Yellow	1	0.208
	L2	JPC		2.40	9.02				130	Fair	Green	1	0.208
	L3	JPC		10.80	23.57				135	Fair	Red	1	0.208
	L4	JPC		9.10	25.05				130	Fair	Orange	1	0.208
	L5	JPC		15.60	19.32				124	Fair	Red	1	0.208
Post Mile: R12.510 to R12.946 Length: 0.436 Estimated Lane Mileage: 0.612	R1	JPC		14.30	11.26				152	Fair	Red	1	0.102
	R2	JPC		6.50	10.31				124	Fair	Yellow	1	0.102
	R3	JPC		5.10	12.04				124	Fair	Yellow	1	0.102
	R4	JPC		7.70	17.58				113	Fair	Yellow	1	0.102
	R5	JPC		7.70	13.41				114	Fair	Yellow	1	0.102
	R6	JPC		10.10	12.55				213	Poor	Red	1	0.102
Post Mile: R12.568 to R12.902 Length: 0.334 Estimated Lane Mileage: 0.000	L1	JPC		8.60	3.72				127	Fair	Yellow	1	0.000
	L2	JPC		14.20	31.77				156	Fair	Red	1	0.000
	L3	JPC		9.10	32.88				142	Fair	Orange	1	0.000
	L4	JPC		7.90	18.47				136	Fair	Yellow	1	0.000
	L5	JPC		12.20	19.76				129	Fair	Red	1	0.000
Post Mile: R12.902 to R13.300 Length: 0.398 Estimated Lane Mileage: 1.535	L1	JPC		12.70	13.63				205	Poor	Red	1	0.307
	L2	JPC		10.70	40.19				193	Poor	Red	1	0.307
	L3	JPC		3.00	42.57				211	Fair	Orange	1	0.307
	L4	JPC		18.80	36.90				201	Poor	Red	1	0.307
	L5	JPC		10.10	32.24				196	Poor	Red	1	0.307
Post Mile: R12.946 to R13.300 Length: 0.354 Estimated Lane Mileage: 1.320	R1	JPC		6.90	5.35				171	Fair	Blue	1	0.264
	R2	JPC		5.50	30.18				172	Fair	Orange	1	0.264
	R3	JPC		12.30	13.99				169	Fair	Red	1	0.264
	R4	JPC		6.20	34.56				170	Fair	Orange	1	0.264
	R5	JPC		9.90	27.99				193	Fair	Orange	1	0.264
Post Mile: R13.300 to R13.341 Length: 0.041 Estimated Lane Mileage: 0.315	L1	JPC		12.70	13.63				205	Poor	Red	1	0.032
	L2	JPC		10.70	40.19				193	Poor	Red	1	0.032
	L3	JPC		3.00	42.57				211	Fair	Orange	1	0.032
	L4	JPC		18.80	36.90				201	Poor	Red	1	0.032
	L5	JPC		10.10	32.24				196	Poor	Red	1	0.032
	R1	JPC		6.90	5.35				171	Fair	Blue	1	0.031
	R2	JPC		5.50	30.18				172	Fair	Orange	1	0.031
	R3	JPC		12.30	13.99				169	Fair	Red	1	0.031
	R4	JPC		6.20	34.56				170	Fair	Orange	1	0.031
	R5	JPC		9.90	27.99				193	Fair	Orange	1	0.031
				9.77	**16.80**	**0.16**	**0.10**	**0.00**	**128**				**116.938**
				Lane Weighted Average									Total

PaveM Scenario Used: #2233
APCS Data Year: 2015

Caltrans Pavement Program
Pavement Condition Detailed Report (PaveM)

District: 7; County: Los Angeles (LA); Route: 134
From PM: 0.000 To PM: R13.341

Year: 2019 (Predicted)
R-Length: 13.104, L-Length: 13.087
R-Lane Miles: 58.700, L-Lane Miles: 58.238 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	Assumed MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator A%	Alligator B%	Rut (in)					
Post Mile: 0.000 to 0.257 Length: 0.257 Estimated Lane Mileage: 1.022	L1	JPC		0.00	0.00				83	Poor	Red	1	0.215
	L2	JPC		0.00	0.00				75	Poor	Red	1	0.215
	R1	JPC		0.00	0.00				60	Fair	Yellow	1	0.148
	R2	JPC		0.00	0.00				60	Fair	Red	1	0.148
	R3	JPC		0.00	0.00				60	Fair	Green	1	0.148
	R4	JPC		0.00	0.00				75	Fair	Orange	1	0.148
Post Mile: 0.257 to 0.687 Length: 0.430 Estimated Lane Mileage: 1.440	L1	JPC		0.00	0.00				60	Fair	Red	1	0.360
	L2	JPC		0.00	0.00				60	Fair	Red	1	0.360
	L3	JPC		0.00	0.00				74	Poor	Red	1	0.360
	L4	JPC		0.00	0.00				91	Poor	Red	1	0.360
Post Mile: 0.257 to 1.359 Length: 1.102 Estimated Lane Mileage: 4.900	R1	JPC		0.00	0.00				60	Fair	Red	1	0.980
	R2	JPC		0.00	0.00				60	Fair	Yellow	1	0.980
	R3	JPC		0.00	0.00				60	Fair	Red	1	0.980
	R4	JPC		0.00	0.00				60	Fair	Orange	1	0.980
	R5	JPC		0.00	0.00				60	Fair	Green	1	0.980
Post Mile: 0.392 to 0.687 Length: 0.295 Estimated Lane Mileage: 0.247	L5	JPC		0.00	0.00				60	Fair	Yellow	1	0.247
Post Mile: 0.687 to 1.551 Length: 0.864 Estimated Lane Mileage: 3.915	L1	JPC		0.00	0.00				60	Fair	Red	1	0.783
	L2	JPC		0.00	0.00				60	Fair	Red	1	0.783
	L3	JPC		0.00	0.00				60	Fair	Red	1	0.783
	L4	JPC		0.00	0.00				60	Fair	Orange	1	0.783
	L5	JPC		0.00	0.00				60	Fair	Yellow	1	0.783
Post Mile: 1.359 to 2.944 Length: 1.585 Estimated Lane Mileage: 7.425	R1	JPC		0.00	0.00				60	Fair	Red	1	1.485
	R2	JPC		0.00	0.00				86	Poor	Red	1	1.485
	R3	JPC		0.00	0.00				60	Fair	Red	1	1.485
	R4	JPC		0.00	0.00				60	Fair	Orange	1	1.485
	R5	JPC		0.00	0.00				60	Fair	Green	1	1.485
Post Mile: 1.551 to 3.466 Length: 1.915 Estimated Lane Mileage: 9.220	L1	JPC		0.00	0.00				60	Fair	Yellow	1	1.844
	L2	JPC		0.00	0.00				60	Good	Yellow	1	1.844
	L3	JPC		0.00	0.00				60	Fair	Yellow	1	1.844
	L4	JPC		0.00	0.00				60	Fair	Orange	1	1.844
	L5	JPC		0.00	0.00				60	Fair	Yellow	1	1.844
Post Mile: 2.944 to 4.924 Length: 1.980 Estimated Lane Mileage: 9.475	R1	JPC		0.00	0.00				60	Fair	Red	1	1.895
	R2	JPC		0.00	0.00				66	Poor	Red	1	1.895
	R3	JPC		0.00	0.00				60	Fair	Red	1	1.895
	R4	JPC		0.00	0.00				60	Fair	Orange	1	1.895
	R5	JPC		0.00	0.00				60	Fair	Green	1	1.895
Post Mile: 3.466 to 4.890 Length: 1.424 Estimated Lane Mileage: 6.695	L1	JPC		0.00	0.00				60	Fair	Yellow	1	1.339
	L2	JPC		0.00	0.00				60	Fair	Yellow	1	1.339
	L3	JPC		0.00	0.00				60	Fair	Yellow	1	1.339
	L4	JPC		0.00	0.00				60	Fair	Red	1	1.339
	L5	JPC		0.00	0.00				60	Fair	Orange	1	1.339
Post Mile: 4.890 to 4.924 Length: 0.034 Estimated Lane Mileage: 0.136	L1	JPC		0.00	0.00				60	Fair	Yellow	1	0.034
	L2	JPC		0.00	0.00				60	Fair	Yellow	1	0.034
	L3	JPC		0.00	0.00				60	Fair	Orange	1	0.034
	L4	JPC		0.00	0.00				60	Fair	Green	1	0.034
Post Mile: 4.924 to R5.469	L1	JPC		0.00	0.00				60	Fair	Yellow	1	0.545

[illegible] Length: 0.545 Estimated Lane Mileage: 2.180	L2	JPC		0.00	0.00				60	Fair	Yellow	1	0.545
	L3	JPC		0.00	0.00				82	Fair	Orange	1	0.545
	L4	JPC		0.00	0.00				60	Fair	Yellow	1	0.545
Post Mile: 4.924R to R5.496R Length: 0.572 Estimated Lane Mileage: 2.725	R1	JPC		0.00	0.00				139	Poor	Red	1	0.545
	R2	JPC		0.00	0.00				81	Poor	Red	1	0.545
	R3	JPC		0.00	0.00				60	Poor	Red	1	0.545
	R4	JPC		0.00	0.00				64	Fair	Orange	1	0.545
	R5	JPC		0.00	0.00				100	Fair	Orange	1	0.545
Post Mile: R5.469L to R5.650L Length: 0.181 Estimated Lane Mileage: 0.543	L1	JPC		0.00	0.00				60	Good	Yellow	1	0.181
	L2	JPC		0.00	0.00				60	Fair	Yellow	1	0.181
	L3	JPC		0.00	0.00				60	Fair	Yellow	1	0.181
Post Mile: R5.496R to R5.667R Length: 0.171 Estimated Lane Mileage: 0.564	R1	JPC		0.00	0.00				60	Fair	Red	1	0.141
	R2	JPC		0.00	0.00				60	Fair	Red	1	0.141
	R3	JPC		0.00	0.00				60	Poor	Red	1	0.141
	R4	JPC		0.00	0.00				60	Fair	Yellow	1	0.141
Post Mile: R5.904 to R5.967 Length: 0.063 Estimated Lane Mileage: 0.039	L1	JPC		0.00	0.00				121	Poor	Red	1	0.013
	L2	JPC		0.00	0.00				88	Poor	Red	1	0.013
	L3	JPC		0.00	0.00				146	Fair	Orange	1	0.013
Post Mile: R5.904 to R6.174 Length: 0.270 Estimated Lane Mileage: 1.100	R1	JPC		0.00	0.00				60	Fair	Yellow	1	0.220
	R2	JPC		0.00	0.00				60	Fair	Red	1	0.220
	R3	JPC		0.00	0.00				60	Fair	Yellow	1	0.220
	R4	JPC		0.00	0.00				60	Fair	Orange	1	0.220
	R5	JPC		0.00	0.00				60	Fair	Yellow	1	0.220
Post Mile: R5.957 to R5.967 Length: 0.010 Estimated Lane Mileage: 0.002	L4	JPC		0.00	0.00				112	Poor	Red	1	0.002
Post Mile: R5.967 to R6.477 Length: 0.510 Estimated Lane Mileage: 2.886	L1	JPC		0.00	0.00				60	Fair	Yellow	1	0.481
	L2	JPC		0.00	0.00				60	Fair	Yellow	1	0.481
	L3	JPC		0.00	0.00				60	Fair	Yellow	1	0.481
	L4	JPC		0.00	0.00				60	Fair	Red	1	0.481
	L5	JPC		0.00	0.00				60	Poor	Red	1	0.481
	L6	JPC		0.00	0.00				60	Fair	Yellow	1	0.481
Post Mile: R6.174 to R6.477 Length: 0.303 Estimated Lane Mileage: 1.644	R1	JPC		0.00	0.00				60	Fair	Green	1	0.274
	R2	JPC		0.00	0.00				60	Fair	Red	1	0.274
	R3	JPC		0.00	0.00				60	Good	Green	1	0.274
	R4	JPC		0.00	0.00				60	Fair	Orange	1	0.274
	R5	JPC		0.00	0.00				60	Fair	Yellow	1	0.274
	R6	JPC		0.00	0.00				60	Fair	Green	1	0.274
Post Mile: R6.477 to R7.255 Length: 0.778 Estimated Lane Mileage: 7.500	L1	JPC		0.00	0.00				60	Fair	Yellow	1	0.750
	L2	JPC		0.00	0.00				60	Fair	Red	1	0.750
	L3	JPC		0.00	0.00				60	Fair	Yellow	1	0.750
	L4	JPC		0.00	0.00				60	Fair	Red	1	0.750
	L5	JPC		0.00	0.00				60	Fair	Red	1	0.750
	R1	JPC		0.00	0.00				60	Fair	Yellow	1	0.750
	R2	JPC		0.00	0.00				60	Fair	Red	1	0.750
	R3	JPC		0.00	0.00				60	Fair	Red	1	0.750
	R4	JPC		0.00	0.00				60	Fair	Red	1	0.750
	R5	JPC		0.00	0.00				60	Fair	Orange	1	0.750
Post Mile: R7.255 to R7.624 Length: 0.369 Estimated Lane Mileage: 2.214	L1	JPC		0.00	0.00				60	Fair	Yellow	1	0.369
	L2	JPC		0.00	0.00				60	Fair	Red	1	0.369
	L3	JPC		0.00	0.00				60	Fair	Yellow	1	0.369
	L4	JPC		0.00	0.00				60	Fair	Red	1	0.369
	L5	JPC		0.00	0.00				60	Fair	Yellow	1	0.369
	L6	JPC		0.00	0.00				60	Fair	Green	1	0.369
Post Mile: R7.255 to R7.679 Length: 0.424 Estimated Lane Mileage: 2.120	R1	JPC		0.00	0.00				60	Fair	Green	1	0.424
	R2	JPC		0.00	0.00				60	Fair	Red	1	0.424
	R3	JPC		0.00	0.00				60	Fair	Yellow	1	0.424
	R4	JPC		0.00	0.00				60	Fair	Yellow	1	0.424
	R5	JPC		0.00	0.00				60	Fair	Orange	1	0.424
Post Mile: R7.370 to R7.679 Length: 0.309 Estimated Lane Mileage: 0.309	R6	JPC		0.00	0.00				60	Fair	Green	1	0.309
Post Mile: R7.624 to R7.860	L1	JPC		0.00	0.00				60	Fair	Yellow	1	0.236
	L2	JPC		0.00	0.00				60	Fair	Red	1	0.236

Length: 0.236 Estimated Lane Mileage: 1.180	L3	JPC		0.00	0.00				60	Fair	Yellow	1	0.236
	L4	JPC		0.00	0.00				60	Fair	Red	1	0.236
	L5	JPC		0.00	0.00				60	Fair	Yellow	1	0.236
Post Mile: R7.679 to R7.860 Length: 0.181 Estimated Lane Mileage: 0.905	R1	JPC		0.00	0.00				60	Fair	Yellow	1	0.181
	R2	JPC		0.00	0.00				60	Fair	Red	1	0.181
	R3	JPC		0.00	0.00				60	Fair	Orange	1	0.181
	R4	JPC		0.00	0.00				60	Fair	Yellow	1	0.181
	R5	JPC		0.00	0.00				60	Fair	Orange	1	0.181
Post Mile: R7.860 to R8.387 Length: 0.527 Estimated Lane Mileage: 2.544	L1	JPC		0.00	0.00				60	Fair	Yellow	1	0.424
	L2	JPC		0.00	0.00				60	Fair	Red	1	0.424
	L3	JPC		0.00	0.00				60	Fair	Yellow	1	0.424
	L4	JPC		0.00	0.00				60	Fair	Yellow	1	0.424
	L5	JPC		0.00	0.00				60	Fair	Orange	1	0.424
	L6	JPC		0.00	0.00				60	Fair	Green	1	0.424
Post Mile: R7.860 to R8.277 Length: 0.417 Estimated Lane Mileage: 0.349	R6	JPC		0.00	0.00				60	Fair	Green	1	0.349
Post Mile: R7.860 to R8.500 Length: 0.640 Estimated Lane Mileage: 2.680	R1	JPC		0.00	0.00				60	Fair	Yellow	1	0.536
	R2	JPC		0.00	0.00				60	Fair	Red	1	0.536
	R3	JPC		0.00	0.00				60	Fair	Green	1	0.536
	R4	JPC		0.00	0.00				60	Fair	Orange	1	0.536
	R5	JPC		0.00	0.00				60	Fair	Orange	1	0.536
Post Mile: R8.387 to R8.963 Length: 0.576 Estimated Lane Mileage: 2.555	L1	JPC		0.00	0.00				60	Fair	Yellow	1	0.511
	L2	JPC		0.00	0.00				60	Fair	Red	1	0.511
	L3	JPC		0.00	0.00				60	Fair	Yellow	1	0.511
	L4	JPC		0.00	0.00				60	Fair	Red	1	0.511
	L5	JPC		0.00	0.00				60	Fair	Orange	1	0.511
Post Mile: R8.500 to R8.963 Length: 0.463 Estimated Lane Mileage: 1.995	R1	JPC		0.00	0.00				60	Fair	Yellow	1	0.399
	R2	JPC		0.00	0.00				60	Fair	Red	1	0.399
	R3	JPC		0.00	0.00				60	Fair	Yellow	1	0.399
	R4	JPC		0.00	0.00				60	Fair	Orange	1	0.399
	R5	JPC		0.00	0.00				60	Fair	Green	1	0.399
Post Mile: R8.963 to R9.396 Length: 0.433 Estimated Lane Mileage: 1.805	L1	JPC		0.00	0.00				60	Fair	Blue	1	0.361
	L2	JPC		0.00	0.00				60	Fair	Red	1	0.361
	L3	JPC		0.00	0.00				60	Fair	Red	1	0.361
	L4	JPC		0.00	0.00				60	Fair	Red	1	0.361
	L5	JPC		0.00	0.00				60	Fair	Red	1	0.361
Post Mile: R8.963 to R9.503 Length: 0.540 Estimated Lane Mileage: 2.340	R1	JPC		0.00	0.00				71	Fair	Blue	1	0.468
	R2	JPC		0.00	0.00				60	Fair	Red	1	0.468
	R3	JPC		0.00	0.00				60	Fair	Red	1	0.468
	R4	JPC		0.00	0.00				66	Poor	Red	1	0.468
	R5	JPC		0.00	0.00				60	Fair	Orange	1	0.468
Post Mile: R9.396 to R9.613 Length: 0.217 Estimated Lane Mileage: 1.302	L1	JPC		0.00	0.00				60	Poor	Red	1	0.217
	L2	JPC		0.00	0.00				60	Fair	Red	1	0.217
	L3	JPC		0.00	0.00				60	Fair	Red	1	0.217
	L4	JPC		0.00	0.00				60	Fair	Yellow	1	0.217
	L5	JPC		0.00	0.00				60	Fair	Yellow	1	0.217
	L6	JPC		0.00	0.00				78	Poor	Red	1	0.217
Post Mile: R9.503 to R10.978 Length: 1.475 Estimated Lane Mileage: 7.375	R1	JPC		0.00	0.00				60	Fair	Red	1	1.475
	R2	JPC		0.00	0.00				60	Fair	Yellow	1	1.475
	R3	JPC		0.00	0.00				60	Fair	Yellow	1	1.475
	R4	JPC		0.00	0.00				60	Fair	Orange	1	1.475
	R5	JPC		0.00	0.00				60	Fair	Orange	1	1.475
Post Mile: R9.613 to R10.973 Length: 1.360 Estimated Lane Mileage: 6.800	L1	JPC		0.00	0.00				60	Fair	Red	1	1.360
	L2	JPC		0.00	0.00				60	Fair	Yellow	1	1.360
	L3	JPC		0.00	0.00				60	Fair	Yellow	1	1.360
	L4	JPC		0.00	0.00				60	Fair	Red	1	1.360
	L5	JPC		0.00	0.00				60	Fair	Yellow	1	1.360
Post Mile: R10.973 to R11.199 Length: 0.226 Estimated Lane Mileage: 0.000	L1	JPC		0.00	0.00				60	Good	Green	1	0.000
	L2	JPC		0.00	0.00				92	Fair	Orange	1	0.000
	L3	JPC		0.00	0.00				60	Good	Green	1	0.000
	L4	JPC		0.00	0.00				85	Poor	Red	1	0.000
	L5	JPC		0.00	0.00				60	Good	Green	1	0.000
	R1	JPC		0.00	0.00				60	Good	Green	1	0.000

Post Mile: R10.978 to R11.200 Length: 0.222 Estimated Lane Mileage: 0.000	R2	JPC		0.00	0.00				60	Good	Green	1	0.000
	R3	JPC		0.00	0.00				60	Good	Green	1	0.000
	R4	JPC		0.00	0.00				60	Good	Green	1	0.000
	R5	JPC		0.00	0.00				60	Good	Green	1	0.000
Post Mile: R11.199 to R12.360 Length: 1.161 Estimated Lane Mileage: 5.620	L1	JPC		0.00	0.00				60	Fair	Red	1	1.124
	L2	JPC		0.00	0.00				60	Fair	Red	1	1.124
	L3	JPC		0.00	0.00				60	Fair	Red	1	1.124
	L4	JPC		0.00	0.00				60	Fair	Red	1	1.124
	L5	JPC		0.00	0.00				60	Fair	Red	1	1.124
Post Mile: R11.200 to R12.510 Length: 1.310 Estimated Lane Mileage: 6.365	R1	JPC		0.00	0.00				60	Fair	Yellow	1	1.273
	R2	JPC		0.00	0.00				60	Fair	Red	1	1.273
	R3	JPC		0.00	0.00				60	Fair	Yellow	1	1.273
	R4	JPC		0.00	0.00				60	Fair	Yellow	1	1.273
	R5	JPC		0.00	0.00				60	Fair	Yellow	1	1.273
Post Mile: R12.360 to R12.568 Length: 0.208 Estimated Lane Mileage: 1.040	L1	JPC		0.00	0.00				60	Fair	Yellow	1	0.208
	L2	JPC		0.00	0.00				60	Fair	Green	1	0.208
	L3	JPC		0.00	0.00				60	Fair	Red	1	0.208
	L4	JPC		0.00	0.00				60	Fair	Orange	1	0.208
	L5	JPC		0.00	0.00				60	Fair	Red	1	0.208
Post Mile: R12.510 to R12.946 Length: 0.436 Estimated Lane Mileage: 0.612	R1	JPC		0.00	0.00				60	Fair	Red	1	0.102
	R2	JPC		0.00	0.00				60	Fair	Yellow	1	0.102
	R3	JPC		0.00	0.00				60	Fair	Yellow	1	0.102
	R4	JPC		0.00	0.00				60	Fair	Yellow	1	0.102
	R5	JPC		0.00	0.00				60	Fair	Yellow	1	0.102
	R6	JPC		0.00	0.00				96	Poor	Red	1	0.102
Post Mile: R12.568 to R12.902 Length: 0.334 Estimated Lane Mileage: 0.000	L1	JPC		0.00	0.00				60	Fair	Yellow	1	0.000
	L2	JPC		0.00	0.00				60	Fair	Red	1	0.000
	L3	JPC		0.00	0.00				60	Fair	Orange	1	0.000
	L4	JPC		0.00	0.00				60	Fair	Yellow	1	0.000
	L5	JPC		0.00	0.00				60	Fair	Red	1	0.000
Post Mile: R12.902 to R13.300 Length: 0.398 Estimated Lane Mileage: 1.535	L1	JPC		0.00	0.00				87	Poor	Red	1	0.307
	L2	JPC		0.00	0.00				75	Poor	Red	1	0.307
	L3	JPC		0.00	0.00				91	Fair	Orange	1	0.307
	L4	JPC		0.00	0.00				84	Poor	Red	1	0.307
	L5	JPC		0.00	0.00				78	Poor	Red	1	0.307
Post Mile: R12.946 to R13.300 Length: 0.354 Estimated Lane Mileage: 1.320	R1	JPC		0.00	0.00				60	Fair	Blue	1	0.264
	R2	JPC		0.00	0.00				60	Fair	Orange	1	0.264
	R3	JPC		0.00	0.00				60	Poor	Red	1	0.264
	R4	JPC		0.00	0.00				60	Fair	Orange	1	0.264
	R5	JPC		0.00	0.00				75	Poor	Red	1	0.264
Post Mile: R13.300 to R13.341 Length: 0.041 Estimated Lane Mileage: 0.315	L1	JPC		13.20	14.68				207	Poor	Red	1	0.032
	L2	JPC		11.10	41.19				195	Poor	Red	1	0.032
	L3	JPC		3.40	43.55				211	Fair	Orange	1	0.032
	L4	JPC		19.40	37.90				204	Poor	Red	1	0.032
	L5	JPC		10.60	33.30				198	Poor	Red	1	0.032
	R1	JPC		7.30	6.26				172	Fair	Blue	1	0.031
	R2	JPC		5.90	31.25				173	Fair	Orange	1	0.031
	R3	JPC		12.80	15.05				170	Poor	Red	1	0.031
	R4	JPC		6.60	35.59				172	Fair	Orange	1	0.031
	R5	JPC		10.30	29.10				195	Poor	Red	1	0.031
				0.03	**0.08**				**62**				**116.938**
				Lane Weighted Average									Total

PaveM Scenario Used: #2233
APCS Data Year: 2015

Caltrans Pavement Program
Pavement Condition Detailed Report (PaveM)

District: 7; County: Los Angeles (LA); Route: 134
From PM: 0.000 To PM: R13.341

Year: 2020 (Predicted)
R-Length: 13.104, L-Length: 13.087
R-Lane Miles: 58.700, L-Lane Miles: 58.238 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	Assumed MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator A%	Alligator B%	Rut (in)					
Post Mile: 0.000 to 0.257 Length: 0.257 Estimated Lane Mileage: 1.022	L1	JPC		0.00	0.14				85	Good	Green	1	0.215
	L2	JPC		0.00	1.28				80	Good	Green	1	0.215
	R1	JPC		0.00	0.03				61	Good	Green	1	0.148
	R2	JPC		0.00	0.14				61	Good	Green	1	0.148
	R3	JPC		0.00	1.28				61	Good	Green	1	0.148
	R4	JPC		0.00	1.28				79	Good	Green	1	0.148
Post Mile: 0.257 to 0.687 Length: 0.430 Estimated Lane Mileage: 1.440	L1	JPC		0.00	0.03				61	Good	Green	1	0.360
	L2	JPC		0.00	0.03				61	Good	Green	1	0.360
	L3	JPC		0.00	0.14				76	Good	Green	1	0.360
	L4	JPC		0.00	1.28				96	Fair	Green	1	0.360
Post Mile: 0.257 to 1.359 Length: 1.102 Estimated Lane Mileage: 4.900	R1	JPC		0.00	0.03				61	Good	Green	1	0.980
	R2	JPC		0.00	0.03				61	Good	Green	1	0.980
	R3	JPC		0.00	0.14				61	Good	Green	1	0.980
	R4	JPC		0.00	1.28				61	Good	Green	1	0.980
	R5	JPC		0.00	1.28				61	Good	Green	1	0.980
Post Mile: 0.392 to 0.687 Length: 0.295 Estimated Lane Mileage: 0.247	L5	JPC		0.00	1.28				61	Good	Green	1	0.247
Post Mile: 0.687 to 1.551 Length: 0.864 Estimated Lane Mileage: 3.915	L1	JPC		0.00	0.03				61	Good	Green	1	0.783
	L2	JPC		0.00	0.03				61	Good	Green	1	0.783
	L3	JPC		0.00	0.14				61	Good	Green	1	0.783
	L4	JPC		0.00	1.28				61	Good	Green	1	0.783
	L5	JPC		0.00	1.28				61	Good	Green	1	0.783
Post Mile: 1.359 to 2.944 Length: 1.585 Estimated Lane Mileage: 7.425	R1	JPC		0.00	0.03				61	Good	Green	1	1.485
	R2	JPC		0.00	0.03				87	Good	Green	1	1.485
	R3	JPC		0.00	0.14				61	Good	Green	1	1.485
	R4	JPC		0.00	1.28				61	Good	Green	1	1.485
	R5	JPC		0.00	1.28				61	Good	Green	1	1.485
Post Mile: 1.551 to 3.466 Length: 1.915 Estimated Lane Mileage: 9.220	L1	JPC		0.00	0.03				61	Good	Green	1	1.844
	L2	JPC		0.00	0.03				61	Good	Green	1	1.844
	L3	JPC		0.00	0.14				61	Good	Green	1	1.844
	L4	JPC		0.00	1.28				61	Good	Green	1	1.844
	L5	JPC		0.00	1.28				61	Good	Green	1	1.844
Post Mile: 2.944 to 4.924 Length: 1.980 Estimated Lane Mileage: 9.475	R1	JPC		0.00	0.03				61	Good	Green	1	1.895
	R2	JPC		0.00	0.03				67	Good	Green	1	1.895
	R3	JPC		0.00	0.14				61	Good	Green	1	1.895
	R4	JPC		0.00	1.28				61	Good	Green	1	1.895
	R5	JPC		0.00	1.28				61	Good	Green	1	1.895
Post Mile: 3.466 to 4.890 Length: 1.424 Estimated Lane Mileage: 6.695	L1	JPC		0.00	0.03				61	Good	Green	1	1.339
	L2	JPC		0.00	0.03				61	Good	Green	1	1.339
	L3	JPC		0.00	0.14				61	Good	Green	1	1.339
	L4	JPC		0.00	1.28				61	Good	Green	1	1.339
	L5	JPC		0.00	1.28				61	Good	Green	1	1.339
Post Mile: 4.890 to 4.924 Length: 0.034 Estimated Lane Mileage: 0.136	L1	JPC		0.00	0.03				61	Good	Green	1	0.034
	L2	JPC		0.00	0.14				61	Good	Green	1	0.034
	L3	JPC		0.00	1.28				61	Good	Green	1	0.034
	L4	JPC		0.00	1.28				61	Good	Green	1	0.034
Post Mile: 4.924 to 85.469	L1	JPC		0.00	0.03				61	Good	Green	1	0.545

Post Mile: 4.924R to R5.469L Length: 0.545 Estimated Lane Mileage: 2.180	L2	JPC		0.00	0.14				61	Good	Green	1	0.545
	L3	JPC		0.00	1.28				86	Good	Green	1	0.545
	L4	JPC		0.00	1.28				61	Good	Green	1	0.545
Post Mile: 4.924R to R5.496R Length: 0.572 Estimated Lane Mileage: 2.725	R1	JPC		0.00	0.03				140	Fair	Green	1	0.545
	R2	JPC		0.00	0.03				82	Good	Green	1	0.545
	R3	JPC		0.00	0.14				61	Good	Green	1	0.545
	R4	JPC		0.00	1.28				67	Good	Green	1	0.545
	R5	JPC		0.00	1.28				106	Fair	Green	1	0.545
Post Mile: R5.469L to R5.650L Length: 0.181 Estimated Lane Mileage: 0.543	L1	JPC		0.00	0.03				61	Good	Green	1	0.181
	L2	JPC		0.00	1.28				61	Good	Green	1	0.181
	L3	JPC		0.00	1.28				61	Good	Green	1	0.181
Post Mile: R5.496R to R5.667R Length: 0.171 Estimated Lane Mileage: 0.564	R1	JPC		0.00	0.03				61	Good	Green	1	0.141
	R2	JPC		0.00	0.14				61	Good	Green	1	0.141
	R3	JPC		0.00	1.28				61	Good	Green	1	0.141
	R4	JPC		0.00	1.28				61	Good	Green	1	0.141
Post Mile: R5.904 to R5.967 Length: 0.063 Estimated Lane Mileage: 0.039	L1	JPC		0.00	0.03				122	Fair	Green	1	0.013
	L2	JPC		0.00	0.14				89	Good	Green	1	0.013
	L3	JPC		0.00	1.28				154	Fair	Green	1	0.013
Post Mile: R5.904 to R6.174 Length: 0.270 Estimated Lane Mileage: 1.100	R1	JPC		0.00	0.03				61	Good	Green	1	0.220
	R2	JPC		0.00	0.03				61	Good	Green	1	0.220
	R3	JPC		0.00	0.03				61	Good	Green	1	0.220
	R4	JPC		0.00	1.28				61	Good	Green	1	0.220
	R5	JPC		0.00	1.28				61	Good	Green	1	0.220
Post Mile: R5.957 to R5.967 Length: 0.010 Estimated Lane Mileage: 0.002	L4	JPC		0.00	1.28				119	Fair	Green	1	0.002
Post Mile: R5.967 to R6.477 Length: 0.510 Estimated Lane Mileage: 2.886	L1	JPC		0.00	0.03				61	Good	Green	1	0.481
	L2	JPC		0.00	0.03				61	Good	Green	1	0.481
	L3	JPC		0.00	0.03				61	Good	Green	1	0.481
	L4	JPC		0.00	0.14				61	Good	Green	1	0.481
	L5	JPC		0.00	1.28				61	Good	Green	1	0.481
	L6	JPC		0.00	1.28				61	Good	Green	1	0.481
Post Mile: R6.174 to R6.477 Length: 0.303 Estimated Lane Mileage: 1.644	R1	JPC		0.00	0.03				61	Good	Green	1	0.274
	R2	JPC		0.00	0.03				61	Good	Green	1	0.274
	R3	JPC		0.00	0.03				61	Good	Green	1	0.274
	R4	JPC		0.00	0.14				61	Good	Green	1	0.274
	R5	JPC		0.00	1.28				61	Good	Green	1	0.274
	R6	JPC		0.00	1.28				61	Good	Green	1	0.274
Post Mile: R6.477 to R7.255 Length: 0.778 Estimated Lane Mileage: 7.500	L1	JPC		0.00	0.03				61	Good	Green	1	0.750
	L2	JPC		0.00	0.03				61	Good	Green	1	0.750
	L3	JPC		0.00	0.14				61	Good	Green	1	0.750
	L4	JPC		0.00	1.28				61	Good	Green	1	0.750
	L5	JPC		0.00	1.28				61	Good	Green	1	0.750
	R1	JPC		0.00	0.03				61	Good	Green	1	0.750
	R2	JPC		0.00	0.03				61	Good	Green	1	0.750
	R3	JPC		0.00	0.14				61	Good	Green	1	0.750
	R4	JPC		0.00	1.28				61	Good	Green	1	0.750
	R5	JPC		0.00	1.28				61	Good	Green	1	0.750
Post Mile: R7.255 to R7.624 Length: 0.369 Estimated Lane Mileage: 2.214	L1	JPC		0.00	0.03				61	Good	Green	1	0.369
	L2	JPC		0.00	0.03				61	Good	Green	1	0.369
	L3	JPC		0.00	0.03				61	Good	Green	1	0.369
	L4	JPC		0.00	0.14				61	Good	Green	1	0.369
	L5	JPC		0.00	1.28				61	Good	Green	1	0.369
	L6	JPC		0.00	1.28				61	Good	Green	1	0.369
Post Mile: R7.255 to R7.679 Length: 0.424 Estimated Lane Mileage: 2.120	R1	JPC		0.00	0.03				61	Good	Green	1	0.424
	R2	JPC		0.00	0.03				61	Good	Green	1	0.424
	R3	JPC		0.00	0.03				61	Good	Green	1	0.424
	R4	JPC		0.00	0.14				61	Good	Green	1	0.424
	R5	JPC		0.00	1.28				61	Good	Green	1	0.424
Post Mile: R7.370 to R7.679 Length: 0.309 Estimated Lane Mileage: 0.309	R6	JPC		0.00	1.28				61	Good	Green	1	0.309
Post Mile: R7.624 to R7.860	L1	JPC		0.00	0.03				61	Good	Green	1	0.236
	L2	JPC		0.00	0.03				61	Good	Green	1	0.236

Length: 0.236 Estimated Lane Mileage: 1.180	L3	JPC		0.00	0.14				61	Good	Green	1	0.236
	L4	JPC		0.00	1.28				61	Good	Green	1	0.236
	L5	JPC		0.00	1.28				61	Good	Green	1	0.236
Post Mile: R7.679 to R7.860 Length: 0.181 Estimated Lane Mileage: 0.905	R1	JPC		0.00	0.03				61	Good	Green	1	0.181
	R2	JPC		0.00	0.03				61	Good	Green	1	0.181
	R3	JPC		0.00	0.14				61	Good	Green	1	0.181
	R4	JPC		0.00	1.28				61	Good	Green	1	0.181
	R5	JPC		0.00	1.28				61	Good	Green	1	0.181
Post Mile: R7.860 to R8.387 Length: 0.527 Estimated Lane Mileage: 2.544	L1	JPC		0.00	0.03				61	Good	Green	1	0.424
	L2	JPC		0.00	0.03				61	Good	Green	1	0.424
	L3	JPC		0.00	0.03				61	Good	Green	1	0.424
	L4	JPC		0.00	0.14				61	Good	Green	1	0.424
	L5	JPC		0.00	1.28				61	Good	Green	1	0.424
	L6	JPC		0.00	1.28				61	Good	Green	1	0.424
Post Mile: R7.860 to R8.277 Length: 0.417 Estimated Lane Mileage: 0.349	R6	JPC		0.00	1.28				61	Good	Green	1	0.349
Post Mile: R7.860 to R8.500 Length: 0.640 Estimated Lane Mileage: 2.680	R1	JPC		0.00	0.03				61	Good	Green	1	0.536
	R2	JPC		0.00	0.03				61	Good	Green	1	0.536
	R3	JPC		0.00	0.03				61	Good	Green	1	0.536
	R4	JPC		0.00	0.14				61	Good	Green	1	0.536
	R5	JPC		0.00	1.28				61	Good	Green	1	0.536
Post Mile: R8.387 to R8.963 Length: 0.576 Estimated Lane Mileage: 2.555	L1	JPC		0.00	0.03				61	Good	Green	1	0.511
	L2	JPC		0.00	0.03				61	Good	Green	1	0.511
	L3	JPC		0.00	0.14				61	Good	Green	1	0.511
	L4	JPC		0.00	1.28				61	Good	Green	1	0.511
	L5	JPC		0.00	1.28				61	Good	Green	1	0.511
Post Mile: R8.500 to R8.963 Length: 0.463 Estimated Lane Mileage: 1.995	R1	JPC		0.00	0.03				61	Good	Green	1	0.399
	R2	JPC		0.00	0.03				61	Good	Green	1	0.399
	R3	JPC		0.00	0.14				61	Good	Green	1	0.399
	R4	JPC		0.00	1.28				61	Good	Green	1	0.399
	R5	JPC		0.00	1.28				61	Good	Green	1	0.399
Post Mile: R8.963 to R9.396 Length: 0.433 Estimated Lane Mileage: 1.805	L1	JPC		0.00	0.03				61	Good	Green	1	0.361
	L2	JPC		0.00	0.03				61	Good	Green	1	0.361
	L3	JPC		0.00	0.03				61	Good	Green	1	0.361
	L4	JPC		0.00	1.28				61	Good	Green	1	0.361
	L5	JPC		0.00	0.14				61	Good	Green	1	0.361
Post Mile: R8.963 to R9.503 Length: 0.540 Estimated Lane Mileage: 2.340	R1	JPC		0.00	0.03				72	Good	Green	1	0.468
	R2	JPC		0.00	0.03				61	Good	Green	1	0.468
	R3	JPC		0.00	0.03				61	Good	Green	1	0.468
	R4	JPC		0.00	1.28				69	Good	Green	1	0.468
	R5	JPC		0.00	0.14				61	Good	Green	1	0.468
Post Mile: R9.396 to R9.613 Length: 0.217 Estimated Lane Mileage: 1.302	L1	JPC		0.00	0.03				61	Good	Green	1	0.217
	L2	JPC		0.00	0.03				61	Good	Green	1	0.217
	L3	JPC		0.00	0.03				61	Good	Green	1	0.217
	L4	JPC		0.00	0.14				61	Good	Green	1	0.217
	L5	JPC		0.00	0.14				61	Good	Green	1	0.217
	L6	JPC		0.00	0.14				80	Good	Green	1	0.217
Post Mile: R9.503 to R10.978 Length: 1.475 Estimated Lane Mileage: 7.375	R1	JPC		0.00	0.03				61	Good	Green	1	1.475
	R2	JPC		0.00	0.03				61	Good	Green	1	1.475
	R3	JPC		0.00	0.03				61	Good	Green	1	1.475
	R4	JPC		0.00	0.14				61	Good	Green	1	1.475
	R5	JPC		0.00	0.14				61	Good	Green	1	1.475
Post Mile: R9.613 to R10.973 Length: 1.360 Estimated Lane Mileage: 6.800	L1	JPC		0.00	0.03				61	Good	Green	1	1.360
	L2	JPC		0.00	0.03				61	Good	Green	1	1.360
	L3	JPC		0.00	0.03				61	Good	Green	1	1.360
	L4	JPC		0.00	0.14				61	Good	Green	1	1.360
	L5	JPC		0.00	0.14				61	Good	Green	1	1.360
Post Mile: R10.973 to R11.199 Length: 0.226 Estimated Lane Mileage: 0.000	L1	JPC		0.00	0.03				61	Good	Green	1	0.000
	L2	JPC		0.00	0.03				93	Good	Green	1	0.000
	L3	JPC		0.00	0.03				61	Good	Green	1	0.000
	L4	JPC		0.00	0.14				86	Good	Green	1	0.000
	L5	JPC		0.00	0.14				61	Good	Green	1	0.000
	R1	JPC		0.00	0.03				61	Good	Green	1	0.000

Post Mile: R10.978 to R11.200 Length: 0.222 Estimated Lane Mileage: 0.000	R2	JPC		0.00	0.03				61	Good	Green	1	0.000
	R3	JPC		0.00	0.03				61	Good	Green	1	0.000
	R4	JPC		0.00	0.14				61	Good	Green	1	0.000
	R5	JPC		0.00	0.14				61	Good	Green	1	0.000
Post Mile: R11.199 to R12.360 Length: 1.161 Estimated Lane Mileage: 5.620	L1	JPC		0.00	0.03				61	Good	Green	1	1.124
	L2	JPC		0.00	0.03				61	Good	Green	1	1.124
	L3	JPC		0.00	0.03				61	Good	Green	1	1.124
	L4	JPC		0.00	0.14				61	Good	Green	1	1.124
	L5	JPC		0.00	0.14				61	Good	Green	1	1.124
Post Mile: R11.200 to R12.510 Length: 1.310 Estimated Lane Mileage: 6.365	R1	JPC		0.00	0.03				61	Good	Green	1	1.273
	R2	JPC		0.00	0.03				61	Good	Green	1	1.273
	R3	JPC		0.00	0.03				61	Good	Green	1	1.273
	R4	JPC		0.00	0.14				61	Good	Green	1	1.273
	R5	JPC		0.00	0.14				61	Good	Green	1	1.273
Post Mile: R12.360 to R12.568 Length: 0.208 Estimated Lane Mileage: 1.040	L1	JPC		0.00	0.03				61	Good	Green	1	0.208
	L2	JPC		0.00	0.03				61	Good	Green	1	0.208
	L3	JPC		0.00	0.03				61	Good	Green	1	0.208
	L4	JPC		0.00	0.14				61	Good	Green	1	0.208
	L5	JPC		0.00	0.14				61	Good	Green	1	0.208
Post Mile: R12.510 to R12.946 Length: 0.436 Estimated Lane Mileage: 0.612	R1	JPC		0.00	0.03				61	Good	Green	1	0.102
	R2	JPC		0.00	0.03				61	Good	Green	1	0.102
	R3	JPC		0.00	0.03				61	Good	Green	1	0.102
	R4	JPC		0.00	0.14				61	Good	Green	1	0.102
	R5	JPC		0.00	0.14				61	Good	Green	1	0.102
	R6	JPC		0.00	0.14				97	Fair	Green	1	0.102
Post Mile: R12.568 to R12.902 Length: 0.334 Estimated Lane Mileage: 0.000	L1	JPC		0.00	0.03				61	Good	Green	1	0.000
	L2	JPC		0.00	0.03				61	Good	Green	1	0.000
	L3	JPC		0.00	0.03				61	Good	Green	1	0.000
	L4	JPC		0.00	0.14				61	Good	Green	1	0.000
	L5	JPC		0.00	0.14				61	Good	Green	1	0.000
Post Mile: R12.902 to R13.300 Length: 0.398 Estimated Lane Mileage: 1.535	L1	JPC		0.00	0.03				88	Good	Green	1	0.307
	L2	JPC		0.00	0.03				76	Good	Green	1	0.307
	L3	JPC		0.00	0.03				92	Good	Green	1	0.307
	L4	JPC		0.00	0.14				85	Good	Green	1	0.307
	L5	JPC		0.00	0.14				80	Good	Green	1	0.307
Post Mile: R12.946 to R13.300 Length: 0.354 Estimated Lane Mileage: 1.320	R1	JPC		0.00	0.03				61	Good	Green	1	0.264
	R2	JPC		0.00	0.03				61	Good	Green	1	0.264
	R3	JPC		0.00	0.03				61	Good	Green	1	0.264
	R4	JPC		0.00	0.14				61	Good	Green	1	0.264
	R5	JPC		0.00	0.14				77	Good	Green	1	0.264
Post Mile: R13.300 to R13.341 Length: 0.041 Estimated Lane Mileage: 0.315	L1	JPC		13.70	15.74				208	Poor	Red	1	0.032
	L2	JPC		11.60	42.18				197	Poor	Red	1	0.032
	L3	JPC		3.70	44.52				211	Fair	Orange	1	0.032
	L4	JPC		19.90	38.88				206	Poor	Red	1	0.032
	L5	JPC		11.00	34.34				201	Poor	Red	1	0.032
	R1	JPC		7.70	7.20				174	Fair	Blue	1	0.031
	R2	JPC		6.30	32.31				175	Fair	Orange	1	0.031
	R3	JPC		13.30	16.12				172	Poor	Red	1	0.031
	R4	JPC		7.10	36.60				174	Fair	Orange	1	0.031
	R5	JPC		10.80	30.20				197	Poor	Red	1	0.031
				0.03	**0.48**				**63**				**116.938**
				Lane Weighted Average									Total

Attachment P

MGS and ADA Curb Ramp Locations

MGS LOCATION - RAMP

Location	Beg. PM	End PM	PRIFIX	DECRIPTION	Midwest Guardrail LF
1	3.031	2.932		WB RRTE 134 OFF RAMP FROM BUENA VISTA TO RIVERSIDE BRIDGE UC	525.5
2	2.261	2.222		WB RRTE 134 OFF RAMP FROM HOLLYWOOD TO OLIVE Ave OC	212.5
3	0.095	0.249		EB RTE 134 MAINLANE FROM NORTHEAST END OF OVER RIVERSIDE BRIDGE UC EASTERLY	732.5
4	0.315	0.33		EB RTE 134 MAINLNE FROM SOUTHWEST END OF VINELAND AVE BRIDGE UC WESTERLY	87.5
5	0.873	0.895		EB RTE 134 MAINLNE FROM SOUTHWEST END OF CAHUENGA Blvd BRIDGE EASTERLY	125
6	1.063	1.343		EB RTE 134 MAINLNE FROM SOUTHWEST END OF FORMAN AVE BRIDGE UC WESTERLY	827
7	1.879	1.96		EB RTE 134 MAINLNE FROM SOUTHWEST END OF ALAMEDA AVE BRIDGE OC WESTERLY	295.5
8	2.03	2.08		EB RTE 134 MAINLNE FROM SOUTHWEST END OF ALAMEDA AVE BRIDGE OC EASTERLY	212
9	2.059	2.113		WB RRTE 134 OFF RAMP FROM HOLLYWOOD WAY BRIDGE OC	143.5
10	3.506	3.587		EB RTE 134 MAINLNE FROM SOUTHWEST END OF LA RIVER BRIDGE EASTERLY	437
11	5.278	5.324	R	EB RTE 134 MAINLNE LEFT SIDE OVER HEAD SIGN LOCATION	178.5
11A	5.399	5.437	R	EB RTE 134 MAINLNE LEFT SIDE AT 525' EAST FROM OVER HAED SIGN	200
12	5.368	5.473	R	EB RTE 134 MAINLNE LEFT SIDE AT 525' EAST FROM SOUTHWEST END OF LA 134/5 SEP BRIDGE WESTERNLY	564.5
13	5.523	5.572	R	EB RTE 134 MAINLNE LEFT SIDE FROM NORTHEAST END OF LA 134/5 SEP BRIDGE	242
14	5.613	5.627	R	EB RTE 134 MAINLNE LEFT SIDE AT 500' EAST FROM NORTHEAST END OF LA 134/5 SEP BRIDGE	87.5
16	6.54	6.557	R	EB RTE 134 MAINLNE FROM SOUTHWEST END OF PACIFIC AVE UC BRIDGE WESTERLY	87.5
17	6.845	6.877	R	EB RTE 134 MAINLNE LEFT SIDE AT 350' FROM SOUTHWEST END CENTRAL AVE OC BRIDGE WESTERNLY	175
18	8.512	10.515	R	EB RTE 134 MAINLNE FROM SOUTHWEST END OF HARVEY DR UC BRIDGE WESTERLY	87.5
19	9.592	10.697	R	EB RTE 134 MAINLNE LEFT SIDE AT 600' EAST FROM DUM EB TO RTE 2	3687
20	10.346	10.95	R	EB RTE 134 MAINLNE LEFT SIDE AT 250' EAST FROM THE END OF LOCATION 19 MGS	892.5
21	10.614	11.409	R	EB RTE 134 MAINLNE LEFT SIDE AT 490' EAST FROM THE END OF LOCATION 20 MGS	437.5
22	10.738	11.491	R	EB RTE 134 MAINLNE LEFT SIDE AT 212' EAST FROM THE END OF LOCATION 21 MGS	1187
23	11.399	1.549	R	EB RTE 134 MAINLNE FROM SOUTHWEST END OF FINGUEROA ST BRIDGE UC WESTERLY	62.5
24	11.465	1.664	R	EB RTE 134 MAINLNE 120' FROM SOUTHWEAST END OF FIFUEROA ST BRIDGE UC EASTERLY	140
25	11.526	2.511	R	EB RTE 134 MAINLNE 512' FROM SOUTHWEAST END OF FIGUEROA ST BRIDGE UC EASTERLY AT OVER HEAD SIGN LOCATION	120.5
26	11.787	12.966	R	EB RTE 134 MAINLNE 525' FROM SOUTHWEAST END OF PATRICIAN WAY BRIDGE OC EASTERLY	912.5
27	12.488	13.056	R	EB RTE 134 MAINLNE 815' FROM SOUTHWEAST END OF N SAN RAFAEL AVE OC EASTERLY	62.5
28	12.925	13.23	R	EB RTE 134 MAINLNE 605' FROM SOUTHWEAST END OF ORANGE GROVE Blvd OC EASTERLY	124.5
29	13.028	12.931	R	EB RTE 134 MAINLNE 515' FROM SOUTHWEAST END OF ORANGE GROVE Blvd OC EASTERLY	300
30	13.207	11.37	R	EB RTE 134 MAINLNE FROM SOUTHWEAST END OF RTE 134/210, 710 SEP BRIDGE EASTERLY	121.5
31	12.966	1.236	R	WB RTE 134 MAINLNE FROM SOUTHWEAST END OF ARYO SECO BRIDGE & SEP EASTERLY	184.8

32	11.419	1.177	R	WB RTE 134 MAINLNE FROM SOUTHWEAST END OF FINGUEROA ST BRIDGE UC WESTERLY	258.72
33	11.246	1.136	R	WB RTE 134 MAINLNE 885' FROM SOUTHWEAST END OF FINGUEROA ST BRIDGE UC WESTERLY	62.5
34	11.187	0.765	R	WB RTE 134 MAINLNE 1045' FROM SOUTHWEAST END OF FINGUEROA ST BRIDGE UC WESTERLY AT OVERHEAD SIGN Loc	62.5
35	11.148	10.631	R	WB RTE 134 MAINLNE FROM SOUTHWEAST END OF ARBOR-DELL-HILLMONT BRIDGE UC EASTERLY	62.5
36	10.946	10.459	R	WB RTE 134 MAINLNE FROM SOUTHWEAST END OF ARBOR-DELL-HILLMONT BRIDGE UC WESTERLY	955.68
37	10.706	10.339	R	WB RTE 134 MAINLNE 1320' FROM SOUTHWEAST END OF ARBOR-DELL-HILLMONT BRIDGE UC WESTERLY	396
38	10.526	10.246	R	WB RTE 134 MAINLNE 2225' FROM SOUTHWEAST END OF ARBOR-DELL-HILLMONT BRIDGE UC WESTERLY	353.76
39	10.436	10.048	R	WB RTE 134 MAINLNE 101' WEST FROM SOUTHWEAST END OF LOCATION 38 WESTERLY	512.16
40	10.267	10.246	R	WB RTE 134 MAINLNE 440' WEST FROM SOUTHWEAST END OF LOCATION 39 WESTERLY	110.88
41	10.162	10.048	R	WB RTE 134 MAINLNE 442' WEST FROM SOUTHWEAST END OF LOCATION 40 WESTERLY	602
42	9.949	9.927	R	WB RTE 134 MAINLNE 470' WEST FROM SOUTHWEAST END OF LOCATION 41 WESTERLY	116.16
43	9.885	9.873	R	WB RTE 134 MAINLNE 195' WEST FROM SOUTHWEAST END OF LOCATION 42 WESTERLY	62.5
44	9.825	9.813	R	WB RTE 134 MAINLNE 235' WEST FROM SOUTHWEAST END OF LOCATION 43 WESTERLY	62.5
45	9.781	9.749	R	WB RTE 134 MAINLNE 152' WEST FROM SOUTHWEAST END OF LOCATION 44 WESTERLY	168.96
46	9.682	9.652	R	WB RTE 134 MAINLNE 340' WEST FROM SOUTHWEAST END OF LOCATION 45 WESTERLY	158.4
47	9.637	9.612	R	WB RTE 134 MAINLNE 80' WEST FROM SOUTHWEAST END OF LOCATION 46 WESTERLY	132
48	9.228	9.084	R	WB RTE 134 MAINLNE 560' WEST FROM SOUTHWEAST END OF W134-W2CONNECTOR BRIDGE UC EASTERLY	760.32
49	9.04	9.02	R	WB RTE 134 MAINLNE FROM SOUTHWEAST END OF W 134-W 2 CONNECTOR BRIDGE UC EASTERLY	350
50	8.878	8.801	R	WB RTE 134 MAINLNE FROM SOUTHWEAST END OF HARVEY DR BRIDGE UC EASTERLY	406.56
51	8.012	8.002	R	WB RTE 134 MAINLNE 644' FROM SOUTHWEAST END OF GLENDALE AVE BRIDGE OC EASTERLY AT END Ret WALL Loc	62.5
52	7.993	7.924	R	WB RTE 134 MAINLNE 220' FROM SOUTHWEAST END OF GLENDALE AVE BRIDGE OC EASTERLY AT END Ret WALL Loc	62.5
53	7.812	7.803	R	WB RTE 134 MAINLNE 245' FROM SOUTHWEAST END OF GLENDALE AVE BRIDGE OC WESTERLY AT END Ret WALL Loc	62.5
54	7.236	7.212	R	WB RTE 134 MAINLNE 432' FROM SOUTHWEAST END OF BRAND Blvd BRIDGE OC EASTERLY	126.72
55	6.736	6.726	R	WB RTE 134 MAINLNE 132' FROM SOUTHWEAST END OF COLUMBUS AVE BRIDGE UC EASTERLY	62.5
56	6.602	6.591	R	WB RTE 134 MAINLNE FROM SOUTHWEAST END OF PACIFIC AVE BRIDGE UC EASTERLY	62.5
57	6.148	6.133	R	WB RTE 134 MAINLNE 225' FROM SOUTHWEAST END OF LA RIVER BOH EASTERLY	87.5
58	5.638	5.535	R	WB RTE 134 MAINLNE FROM SOUTHWEAST END OF LA RIVER BOH WESTERLY	543.84
59	6.071	6.085	R	EB ON FROM SANFERNAANDO ROAD	75
60	6.601	6.622	R	EB ON FROM PACIFIC AVE	112.5
60A	6.601	6.622	R		75
61	6.645	6.659	R	EB OFF GLENDALE AVE	75
61A	7.71	7.713	R		75
62	7.684	7.702	R	EB ON FROM N GLENDALE AVE	285.5
62A	7.874	7.89	R	EB ON FROM S GLENDALE AVE	87.5

63	8.736	8.75	R	EB OFF HARVEY DRIVE	75
64	11.451	11.545	R	EB OFF FIGUEROA ST	310
65	11.477	11.506	R	SEG EB ON FROM FIGUEROA ST	150
66	12.233	12.282	R	EB OFF SANRAFAEL	75
67	6.049	6.089	R	WB OFF SAN FERNANDO ROAD	305
68	6.518	6.533	R	WB OFF FROM PACIFIC AVE	310
69	7.139	7.236	R	WB OFF BRAND ST	564
70	7.73	7.745	R	WB ON GLENDALE AVE	87.5
71	7.75	7.755	R	WB OFF GLENDALE AVE	300
72	11.481	11.848	R	WB ON FIGUEROA ST	94.5
73	11.619	11.691	R	SEG WB OFF COLORADO BLVD	283
73A	11.519	11.54	R		245
74	11.485	11.618	R	SEG WB OFF TO FIGUEROA ST	224.5
75	12.233	12.339	R	WB ON SA RAFAEL	87.5
75A	12.303	12.344	R		212
76	12.473	12.483	R	WB OFF TO SAN RAFAEL AVE	62.5
76A	12.369	12.448	R		375
77	12.795	12.801	R	WB ON FROM ORANGE GROVE BLVD	62.5
77A	12.789	12.795	R		62.5
78	12.795	12.801	R	WB OFF ORANGE GROVE BLVD	62.5
78A	12.792	12.795	R		50
SUB TOTAL					24901.46

.			ROUTE 134		CORNERS WITH ADA RAMPS THAT NEED UPGRADE								
No	Post Mile	MAIN LINE STA	Name / Location of Ramps	Detectable Warning	NW	NE	SW	SE	UPGRADE SIGNAL	Exist RAMPS	UPGRADES ON Str	Upgrade RAM	REMARKS
1	0.346	160+00	WB On from Vineland Ave	N		1 (F Mod)		1 (C Mod)	NO sig	2		2	Non Std Slope
2		162+78	EB On from Riverside/Lankershim Blvd	N	1 (F Mod)	1 (Case A)			NO sig	2		2	Non Std Slope/Width
3	0.509	167+51	WB Off ramp to Lankershim Blvd	N		1 (F Mod)		1 (F Mod)	Y	2		2	Non Std Slope
4	0.860	185+40	EB Off ramp to Cahuenga Blvd	N	1 (G Mod)		1 (CM Mod)		No ppb	2		2	Non Std Slope
5	0.860	186+20	WB Off ramp to Cahuenga Blvd	N		1 (CM Mod)		1 (G Mod)	Y	2		2	Non Std Slope/Width
6	0.860	186+40	EB On ramp from Cahuenga Blvd	N		1 (G Mod)		1 (F Mod)	No ppb	2		2	Non Std Slope
7	1.820	236+30	EB Off ramp to N Pass Ave	N	1 (CM Mod)				No ppb	2	1	1	*Near Str/Slope/Width
8	1.820	236+30	WB On ramp from N Pass Ave	N			1 (CM Mod)		No ppb	2	1	1	*Near Str/Slope/Width
9	2.033	248+00	WB On ramp from Hollywood Wy/Alameda	Y	1 (CM Mod)				NO sig	2		1	Slope/Width/Obstruction
10	2.033	248+00	WB On ramp from Hollywood Wy/Alameda	Y			1 (CM Mod)		NO sig	2	1	1	*Near Str/Slope/Width
11	2.155	249+70	EB On ramp from Riverside Dr	N	1 (F Mod)	1 (C Mod)			NO sig	2		2	Non Std Slope/Width
12	2.293	253+80	WB On ramp from W Alameda Ave							0		0	No ADA Ramps at this Loc
13	2.293	253+80	WB Off ramp to W Alameda Ave	N				1 (Case A)	N	1		1	Slope/Width/Obstruction
14	2.669	281+40	EB Off ramp to Bob Hope Dr	Y	x		1 (C Mod)		N	2		1	Non Std Slope/Width
15	2.896	292+90	EB On ramp from Riverside Dr							0		0	No ADA Ramps at this Loc
16	2.896	294+00	WB On from Riverside Dr/Buena Vista St	Y	x		x		NO sig	2		0	No sig
17	3.091	294+80	EB On from Riverside Dr/Buena Vista St							0		0	No ADA Ramps at this Loc
18	3.091	295+38	WB Off to Riverside Dr/Buena Vista St	Y		x			N	1		0	No need to upgrade
19	3.720	339+90	EB Off ramp to Forest Lawn Dr							0		0	No ADA Ramps at this Loc
20	3.720	340+30	EB On ramp from Forest Lawn Dr							0		0	No ADA Ramps at this Loc
21	3.810	341+80	WB On Ramp from Forest Lawn Dr							0		0	No ADA Ramps at this Loc
22	3.810	342+05	WB Off ramp to Forest Lawn DR							0		0	No ADA Ramps at this Loc
23	4.660	393+80	EB Off ramp to Riverside Dr/Victory Bl	N	1 (CM Mod)				NO sig	1	1	1	*Near Str/Slp/Wd/Np Ped Access
24	4.686	393+80	WB On from Riverside Dr/Victory Bl	N			1 (CM Mod)		NO sig	1	1	1	*Near Str/Slp/Wd/Np Ped Access
25	R 5.674	415+80	WB Off ramp to N Zoo Dr							0		0	No ADA Ramps at this Loc
26	R 5.678	439+75	EB On from Zoo Dr (NB 5/134 Connector)	Y	x				NO sig	1		0	No sig / No ppb
27	R 5.678	439+75	EB Off to Zoo Dr (NB 5/134 Connector)	Y			x		NO sig	1		0	No sig / No ppb
28	R 6.175	453+75	WB On ramp from San Fernando Rd	Y		x		x	N	2		0	No need to upgrade
29		458+60	EB Off ramp to San Fernando/Doran St	Y	1 (C Mod)				Y	1		1	Obstruction/Slope/Width
30		459+45	EB On ramp from San Fernando/Doran St	Y		x			NO sig	1		0	Chk Slp/ Chk Pasage way width
31		459+90	WB On from Fairmont/San Fernando							0		0	No ADA Ramps at this Loc
32		460+70	WB Off to Fairmont/San Fernando	Y				x	N	1		0	No need to upgrade/ Chk Slp
33	R 6.476	487+05	EB Off ramp to Pacific Ave	Y	x		x		N	2		0	No need to upgrade
34	R 6.476	487+70	EB On ramp from Pacific Ave	Y		x		x	N	2		0	No need to upgrade
35	R 6.477	488+10	WB On ramp from Pacific Ave	Y	x		x		N	2		0	No need to upgrade/ Chk Slp
36	R 6.477	488+80	WB Off ramp to Pacific Ave	Y		x		x	N	2		0	No need to upgrade

37	R 6.690	507+15	EB Off ramp to Central Ave	Y	1 (CM Mod)				Y	1	1	1	* Near Str/Slope/Width
38	R 6.690	507+15	EB Off ramp to Central Ave	Y			1 (Case C)		Y	1		1	Slope/Width
39	R 6.690	507+15	EB Off ramp to Central Ave	Y		x			Y	1		0	* Near Str/ No need to upgrade
40	R 6.690	507+15	EB Off ramp to Central Ave	Y				x	Y	1		0	No need to upgrade
41	R 6.709	507+15	WB On ramp from Central Ave	Y	x	x	x	x	Y	4		0	No need to upgrade
42	R 7.254	516+90	WB Off ramp to Brand Blvd	Y		1			Y	1		1	No ppb
43	R 7.254	516+90	WB Off ramp to Brand Blvd	Y				1	Y	1		1	*Near Str/No ppb
44	R 7.254	516+90	WB Off ramp to Brand Blvd	Y	1				Y	1		1	No ppb
45	R 7.254	516+90	WB Off ramp to Brand Blvd	Y			1		Y	1		1	*Near Str/No ppb
46	R 7.255	516+90	EB On ramp from Brand Blvd	Y	1				Y	1		1	No ppb
47	R 7.255	516+90	EB On ramp from Brand Blvd	Y			1 (Case C)		Y	1		1	Slope/Grade/Width/No ppb
48	R 7.255	516+90	EB On ramp from Brand Blvd	Y		1(Case F)			Y	1	1	1	*Near Str/Grade/Width/No ppb
49	R 7.255	516+90	EB On ramp from Brand Blvd	Y				1 (Case C)	Y	1		1	Grade/Width/ Obstruction
50	R 7.624	549+20	WB On from Monterey Rd/Glendale Av	N			x		N	1		1	No Warning Surface
51	R 7.624	549+90	WB Off to Monterey Rd/Glendale Ave							0		0	No ADA Ramps at this Loc
52	R 7.680	554+70	EB Off ramp to N Glendale Ave				x		Y	1		0	Under Const/ Chk Ped CW
53	R 7.860	555+80	EB On ramp from SB N Glendale Ave		x					1		0	Under Const/ Chk Ped CW
54	R 8.041	556+30	EB On ramp from NB N Glendale Ave	Y		x			NO sig	1		0	*Near Str / Width / No ppb
55	R 8.041	556+30	EB On ramp from NB N Glendale Ave	Y				x	NO sig	1		0	No sig / No ppb
56	R 8.840	605+40	EB Off to Harvey Dr	N	1 (Case F)		1 (C Mod)		Y	2		2	Slope/Width/No ppb
57	R 8.840	605+70	WB On from Harvey Dr	N	1 (C Mod)		1 (Case G)		Y	2		2	Slope/Width/No ppb
58	R 8.840	606+10	EB On from Harvey Dr	N		1 (Case G)		1 (C Mod)	Y	2		2	Slope/Width/No ppb
59	R 8.840	606+45	WB Off to Harvey Dr	N		1 (C Mod)		1 (Case G)	Y	2		2	Slope/Width/No ppb
60	11.754		WB Off Ramp to Colorado/Figueroa	Y	x	x			N	2		0	No need to upgrade
61	R 11.657		EB On ramp from Colorado/Figueroa	Y	x	xx			N	3		0	No need to upgrade
62	R 11.440		EB Off ramp to N Figueroa St	N		1 (Case A)			N	1		1	Non Std Slope/Width
63	R 11.440		EB On ramp from N Figueroa St	N				1 (C Mod)	Y	1		1	Non Std Slope/Width/No ppb
64	R 11.440		WB On ramp from N Figueroa St	N				1 (C Mod)	NO sig	1		1	Non Std Slope/Width/No ppb
65	R 11.440		WB Off ramp to N Figueroa St	N		1 (C Mod)			NO sig	1		1	Slope/Width/No ppb/ RW ?
66	R 12.360		WB On ramp from N San Rafael Ave	N	x		1 (Case G)		Y	2	1	1	*Near Str/Slp/W/No ppb
67	R 12.360		EB Off ramp to N San Rafael Ave	N	1 (Case CM)		x		Y	2	1	1	*Near Str/Slp/W/Obstruct/No ppb
68	R 12.360		EB On ramp from N San Rafael Ave	N		1 (Case G)		x	Y	2	1	1	*Near Str/Slp/W/Obstruct/No ppb
69	R 12.360		WB Off ramp to N San Rafael Ave	N		x		1 (Case G)	Y	2	1	1	*Near Str/Slp/W/ppb/Obstruc
70	R 12.965		EB Off to Orange Grove Bl/Colorado Bl	N			x		N	1		0	No need to upgrade
71	R 12.965		WB On from Orange Grove Bl/Colorado Bl	N	1 (C Mod)		xx		Y	3		1	Slope/Width/Obstruction
72	R 12.965		EB On from Orange Grove Bl (to 134/210)	N				1 (Case A)	Y	1		1	Slope/Width/Obstruction
73	R 12.965		WB Off to Orange Grove Bl (from 134/210)	N		1 (C Mod)			Y	1		1	Slope/Width/Obstruction
			Total Existing Ramps							97			
			Total Ramps on Str, or Near/Close to Structure								11		
			ADA RAMPS TO BE UPGRADED, TOTAL:									53	
			x = Existing Ramp does not need Upgrade.										
			*** ADA RAMP IS EITHER ON A STRUCTURE, OR NEAR/CLOSE TO A STRUCTURE.**										

Attachment Q

Layout Plans