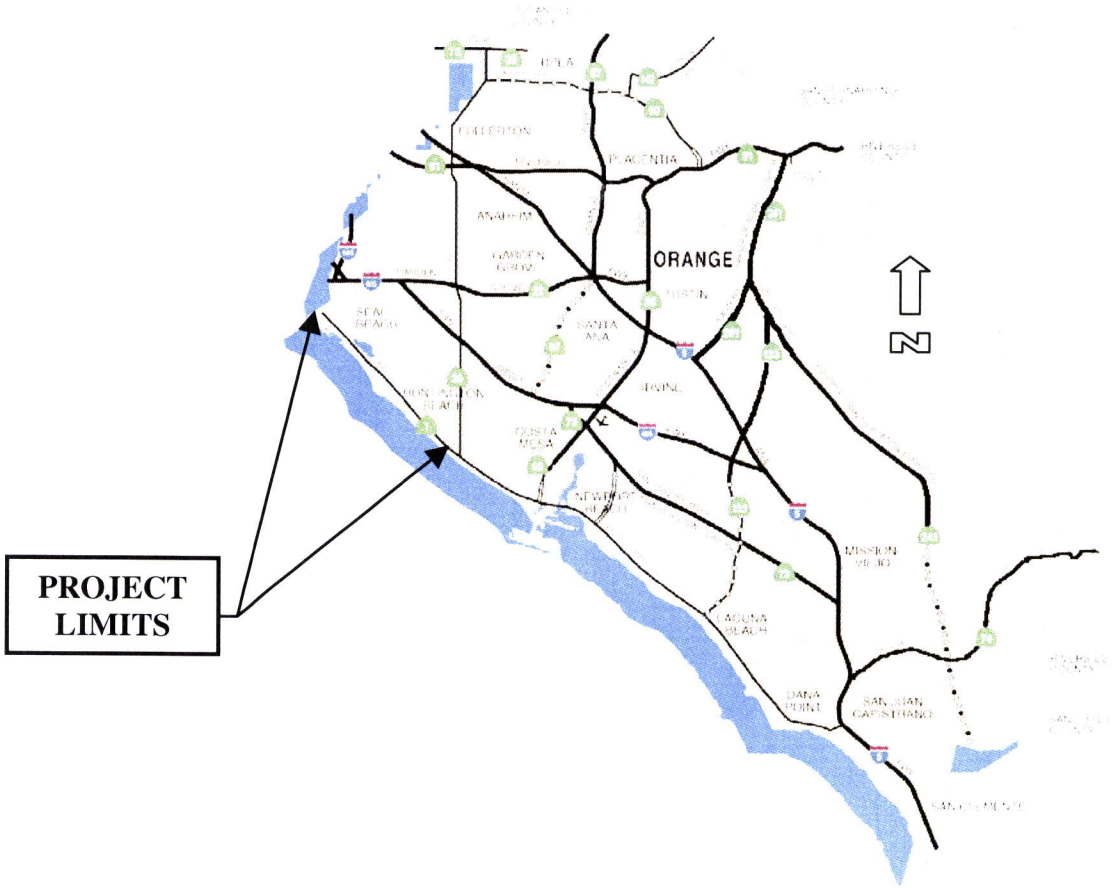
12-ORA-1
PM 25.89 / 33.72
12840-0H160K
Program Code: 20.10.201.121
September 2005

CAPITAL PREVENTIVE MAINTENANCE PROJECT REPORT



ON STATE ROUTE 1
FROM GOLDENWEST ST. TO ORANGE/LOS ANGELES COUNTY LINE

APPROVAL RECOMMENDED:

8/30/05
Date

Gary Slater
Chief, Project Study Unit

8/30/05
Date

Nooshin Yoosefi
Project Manager

APPROVED:

8/30/05
Date

Cindy Quon,
District Director, District 12

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.

Andrew Ngo

Andrew A. Ngo
Registered Civil Engineer

08/30/2005

Date

CAPITAL PREVENTIVE MAINTENANCE PROJECT REPORT

1. Project Limits: 12-ORA-001 PM 25.89 / 33.72

The project is on northbound and southbound State Route 1 (Pacific Coast Highway) from Goldenwest Street (PM 25.89) in the City of Huntington Beach to Orange/Los Angeles County line (PM 33.72) in the City of Seal Beach. See **Attachment A** for Strip Map.

2. Brief Project Description:

The project proposes to:
(1) Cold-plane 0.2 ft existing pavement structural section and replace with new rubberized asphalt concrete – gap graded (RAC-G) on the traveled lanes and shoulders.
(2) Upgrade nonstandard roadside signs.
(3) Upgrade existing and build new ADA access ramps at various locations.
(4) Replace existing Metal Beam Guard Railing with terminal systems (type ET).

The project will not include upgrading of any other geometric features and appurtenances.
The construction cost of the project is estimated at $7,410,000. This project will be federal/state funded. It is not on the interstate system and not an interstate completion nor is it considered new construction or reconstruction. Therefore per FHWA/Department stewardship agreement, this project is exempt from federal oversight.

3. Environmental Status:

A. Environmental Document:

A Categorical Exemption / Programmatic Categorical Exclusion (CE/PCE) is the appropriate environmental compliance by California Environmental Quality Act (CEQA) Class 1(c) and National Environmental Policy Act. No significant environmental consequences are anticipated with the proposed project. A CE/PCE has been prepared for the project and is included as **Attachment B**.

B. California Coastal Act Compliance:

This project requires a Coastal Development Permit (CDP) from the California Coastal Commission. The time period for application, processing and obtaining a CDP is six to nine months. Initiation of the coastal permit process should commence as early in the PS&E phase as possible to ensure adequate processing time. It is possible that this project could be partially or entirely exempt from a CDP under Sections 30610 (d), II, A (6), (15), and (17)d. Eligibility for such an exemption must be determined under consultation with the California Coastal Commission staff after the project is programmed. The greatest effort should be made to avoid or minimize any temporary or permanent impacts to coastal access, bike lane or parking as a result of construction or final design of this project. Any loss of parking will require replacement at a ratio of 3:1 or greater, and any loss of access is not allowed. Construction or any project related lane closures in the area will not be allowed by the California Coastal Commission during Memorial Day weekend through Labor Day weekend, summer peak access season.

4. Traffic Data:

The current Average Daily Traffic (ADT) and the peak period Design Hourly Volume (DHV) (according to 2004 Traffic and Vehicle Data System Unit), and the maximum truck percentage (according to 2003 Annual Average Daily Truck Traffic on CSHS) are as follows:

Postmile	Description	ADT	DHV	% Truck
25.89	Huntington Beach, Golden West Street	38,000	3,900	0.8
29.89	Huntington Beach, Warner Avenue	37,000	3,900	-
32.72	Seal Beach, Seal Beach Blvd	43,000	4,450	-
33.72	Orange-Los Angeles County Line	40,500	3,850	-

Max. ADT: 43,000 Max. DHV: 4,450 10-Year T.I.: 9.0 % Truck: 0.8%

5. Roadway Information:

Postmile Limits (North Bound)	Through-Traffic Lanes			Paved Shoulder Width		Median		Bile Lane / Street Parking	
	# of Lanes	Lane Width (ft)	Type (AC/ PCC)	Left (ft)	Right (ft)	Width (ft)	Type	Bike Lane (ft)	Street Parking (ft)
25.89/26.90	2	12	AC	2 - 4	6 - 8	8-10	Raised	-	-
26.90/27.25	2	12	AC	-	6 - 8	8-10	*	-	-
27.25/30.00	2	12	AC	2 - 4	6 - 8	8-10	Raised	-	-
30.00/30.36	2	12	AC	-	6 - 8	8-10	*	-	-
30.36/30.72	2	12	AC	-	8 - 10	8-10	*	-	8 - 10
30.72/30.90	2	12	AC	-	8 - 10	8-10	Raised	-	8 - 10
30.90/31.16	2	12	AC	-	8 - 10	8-10	*	-	8 - 10
31.16/31.55	2	12	AC	-	4 - 6	8-10	*	4 - 6	-
31.55/32.63	2	12	AC	2 - 4	4 - 6	-	Barrier	4 - 6	-
32.63/33.23	2	12	AC	-	8 - 10	8-10	Raised	-	8 - 10
33.23/33.45	2	12	AC	-	6 - 8	8-10	Raised	-	-
33.45/33.72	2	12	AC	-	4 - 6	8-10	Raised	4 - 6	-

* 2-way left-turn lane

Postmile Limits (South Bound)	Through Traffic Lanes			Paved Shoulder Width		Median		Bile Lane / Street Parking	
	# of Lanes	Lane Width (ft)	Type (AC/ PCC)	Left (ft)	Right (ft)	Width (ft)	Type	Bike Lane (ft)	Street Parking (ft)
33.72/33.45	2	12	AC	-	4 - 6	10	Raised	4 - 6	-
33.45/32.68	2	12	AC	-	8 - 10	10	Raised	-	8 - 10
32.68/32.63	2	12	AC	-	4 - 6	10	Raised	4 - 6	-
32.63/31.55	2	12	AC	2 - 4	4 - 6	-	Barrier	4 - 6	-
31.55/31.16	2	12	AC	-	4 - 6	10	*	4 - 6	-
31.16/30.90	2	12	AC	-	8 - 10	10	*	-	8 - 10
30.90/30.72	2	12	AC	-	8 - 10	10	Raised	-	8 - 10
30.72/30.00	2	12	AC	-	8 - 10	10	*	-	8 - 10
30.00/29.82	2	12	AC	-	6 - 8	10	*	-	-
29.82/27.25	2	12	AC	-	6 - 8	10	Raised	-	-
27.25/26.90	2	12	AC	-	6 - 8	10	*	-	-
26.90/25.89	2	12	AC	-	6 - 8	10	Raised	-	-

* 2-way left-turn lane

Structure Information:

Facility		Vertical Clearance			Width between curbs			Replace Bridge Approach Slab	
Structure Name	PM	Exist	3R Std	Prop	Exist	3R Std	Prop	(Y/N)	# Slabs
Anaheim Bay (55-10)	31.757	N/A	N/A	N/A	68'	94'	68'	N	-
Naval Ammo Depot OH (55-65)	32.355	21'-3"	19"	21'-3"	80'	94'	80'	N	-

6. Condition of Existing Pavement:

Pavement condition survey data is shown below: **(Attachment C)**

PMS Category (1-29): 8 (Manor Structural Deficiencies 21%) Priority Index: 41
IRI (MAX): 195 IRI (Average): 138

AC Pavement: Yes (Rubberized Asphalt Concrete – Type G)

Alligator A Cracking: 12.5
Alligator B Cracking: 22.5

Patching: 3%
Rutting: None
Bleeding: None
Raveling: 8%

7. Flexible Pavement Deflection Study Data:

As per Department's Design and Local Programs' memorandum dated June 07, 1999, deflection studies were no longer required for scoping stage (PSSRs and PSRs). District 12's Materials and Research (M&R) Branch, in response to the Project Studies Unit's request, recommends a variable structural sections based upon general variable Traffic Index (TI) and a conservative R-Value of 10. See **Attachment H.**

The project engineer shall need to request the M&R Branch to prepare a Materials Report / Deflection Studies Test in the early stage of PS&E. The report will provide pavement design and materials recommendations in accordance with Topic 114 of Highway Design Manual. M&R Branch recommends follow up with deflection testing recommendations instead of arbitrary removal and replace of the pavement.

Any surface water due to runoffs shall be properly drained into the cross-culvert and inlets or catch basins. The impact of a new drainage system on the existing drainage shall be considered.

Rubberized Asphalt Concrete Gap Graded (RAC-G) shall be ¾ inch maximum grading and follow Caltrans SSP's 39-400 November 01, 2004.

8. Cost Estimate Break Down:

Structural Section Work	***Quantity***	***Unit cost***	***Cost***
Cold Plane AC Pavement ($2^{1/2}$ in)	304,445 yd^2	\$2.00 / yd^2	\$ 608,890.00
RAC-G of AC pavement ($2^{1/2}$ in)	42,810 Tons	\$70.00 / Ton	\$ 2,996,700.00
Remove existing AC dike	1,500 LF	\$2.50 / LF	\$ 3,225.00
Place new AC dike	1,500 LF	\$2.50 / LF	\$ 3,225.00
		SUBTOTAL (1)	**\$ 3,612,040.00**

Non-Structural Section Work	***Quantity***	***Unit Cost***	***Cost***
Traffic Control System	260 days	\$3,000/day	\$ 780,000.00
Portable CMS	4 EA	\$15,000/EA	\$ 60,000.00
Traffic Stripes (Solid & Broken Thermoplastic)	340,000 ft	\$0.25 / ft	\$ 85,00.00
Pavement Markings (Arrows & Words)	7,100 ft^2	\$2.75 / ft^2	\$ 19,525.00
Temporary Stripes (Tape)	340,000 ft	\$1.00 / ft	\$ 340,000.00
Pavement Markers (Retro-reflective)	2,000 EA	\$3.25 / EA	\$ 6,500.00
Pavement Markers (Non-reflective)	8,000 EA	\$1.60 / EA	\$ 12,800.00
Manholes and Valves (lowered / raised)	60 EA	\$1,500/Mh, \$1,000/Vlv	\$ 75,000.00
Access Ramps	60 EA	\$3,500 / EA	\$ 210,000.00
Metal Beam Guard Railing	2,000 ft	\$16 / ft	\$ 32,000.00
MBGR Terminal with ET	4 EA	\$12,500 / EA	\$ 50,000.00
Loop Detectors	200 units	\$500.00	\$ 100,000.00
Roadside Signs	Lump Sum		\$ 10,000.00
Preparation of Water Pollution Control Program	Lump Sum		\$ 7,000.00
Water Pollution Control	Lump Sum		\$ 49,500.00
Addition Water Pollution Control (Supplemental)	Lump Sum		\$ 10,000.00
RE Office	Lump Sum		\$ 70,000.00
Traffic Management Plan (TMP)	Lump Sum		\$ 60,000.00
Public Awareness Campaign	Lump Sum		\$ 60,000.00
COZEEP	Lump Sum		\$ 50,000.00
Mobilization (10%)	Lump Sum		\$ 561,436.00
		SUBTOTAL (2)	**\$ 2,563,761.00**
		SUM OF SUBTOTALS	**\$ 6,175,801.00**
		20% Contingency	**\$ 1,234,199.00**
		TOTAL PROJECT COST	**\$ 7,410,000.00**

9. Other Agencies Involved:

All traffic handling and detours must be coordinated with the cities of Huntington Beach and Seal Beach.

Due to project location, other agencies include California Fish and Game (Wetlands, Endangered Species), U.S. Fish and Wildlife, California Coastal Commission (Coast Development Permit CDP), Cities and County (permits), Bolsa Chica State Beach, U.S. Coast Guard, U.S. Army Corps of Engineers (Wetland, Clean Water Act) and California Regional Water Quality Control Board (Clean Water Act).

10. Other Considerations:

NPDES/Storm Water Quality Compliance

This project will be covered by Caltrans Statewide NPDES Permit (Order No. 99-06-DWQ, NPDES No. CAS000003). This project will result in less than 0.4 Hectares (1 Acre) of disturbed soil area, therefore a Water Pollution Control Program (WPCP) will be prepared and implemented during construction.

"Critical" construction Site BMPs that will be included in the PS&E are still to be determined, especially the handling of grinding residues.

Project is exempt from Treatment BMPs as documented in the Evaluation Documentation Form.

Refer to **Attachment D** for Storm Water Report and Evaluation Documentation Form.

Service Loop Stations

There are approximately 200 loop detectors within the project limits that will need to be removed and replaced.

Hazardous Waste Disposal Site Requirement

Since the traffic stripe and pavement marking are being removed as part of a pavement grinding project, the lead chromate may be so diluted in the waste stream that disposal at a Class 1 landfill is not necessary. Deliberate dilution is not allowed. The waste stream must be generated by normal construction practices.

Materials and/or Disposal Site Needs and Availability

The drying or storing of wet residue from grinding asphalt concrete pavement will not be permitted within the project limits or elsewhere within the State right-of-way. Residue from grinding operations will be disposed of outside the highway right-of-way in accordance with the provisions in section 7-1.13, "Dispose of Material Outside of the Highway right-of-way", of the Standard Specifications.

Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the state.

Right of Way/Utility Involvement

The proposed project is within the existing State owned right-of-way. This project will not require public utilities relocations.
However, Utility owners may need to lower the existing approximate thirty (30) manholes and thirty (30) valves prior to cold planing and paving to facilitate the operations, then to raise them back to profile grade. The contractor must perform the construction in such a manner that all the existing utilities are preserved and protected. See **Attachment E**.

Railroad Involvement

There exists a railroad under-crossing at the Naval Ammunition Depot overhead structure (bridge No. 55-0065) within the project limits. The railroad must be notified of work adjacent to the Naval Ammunition Depot Overhead. Any work within 25 feet of existing railroad's right-of-way will require Service Agreement for flagging. If work is being done on the overhead structure, the railroad tracks will require protection clauses in specification and office engineer clearance is required for certification. See **Attachment E**.

Effects on Bicycle Traffic

Within the project limits, State Route 1 is designated as a Class 3 bike trail. The needs of bicyclists must be included in the Traffic Management Plan, PS&E and Construction phases. The bike lane along the State Route 1 (Pacific Coast Highway) within the construction zone would temporarily be closed during construction and detours will be provided. The bike lane must be fully opened to bicycle traffic during daylight time.

Environmental Considerations:

Two segments of SR-1 within the project limits are adjacent to environmentally sensitive areas, the Bolsa Chica Wetlands/State Ecological Reserve and the Seal Beach National Wildlife Refuge. Dune habitat and wetlands are directly adjacent to the highway. Federal and State endangered species are located within the areas. See **Attachment B** for additional information and for recommendations and conditions during construction activities.

This project requires a Coastal Development Permit (CDP) from the California Coastal Commission. A submittal of the final, signed, and approved Project Report to Environmental Planning, and a request for the initiation of the permits process are needed at the beginning of PS & E stage.

Environmental review and compliance will be required for any changes in project scope as well as all disposal sites, borrow sites, staging areas and haul roads associated with this project which are selected by the contractor, or have not, to date, been identified with this project. Environmental review and compliance is also required for any geo-technical work, earthwork or vegetation clearing and grubbing, which has not been identified to date.

Consistency with other Planning

The following projects, in various programming phases, are within or adjacent to the limits of this project. PS&E project engineer will coordinate with each project listed.

EA	Program	Begin PM	End PM	Cost (x1000)	CCA	Project Description
03630	SHOPP	25.90	33.70	$33,990	01/01/10	Drainage Improvement
09030	Partnership, Local	27.00	29.90	$15,000	10/01/06	Construct Ocean Inlet Bridge from Seapoint St. to Warner Ave.
07800	SHOPP	31.70	32.10	$1,008	07/01/07	Rock Slope Protection @ Anaheim Bay Bridge Abutments & Approaches.

Traffic Management Plan

A Traffic Management Plan (TMP) will be required for this project due to the expected impact on traffic during construction. The TMP will identify methods to reduce traffic delay, maintain traffic flow through the State Route 1 corridor, and provide a safe environment for the work force and motoring public. A traffic analysis should be performed as part of the TMP in order to evaluate the potential impact that the project will have on traffic and identify the benefit of implementing a TMP. Elements expected to be recommended or discussed in the project TMP include:

- Public Awareness Campaign
- Detour or Alternative Routes with signing (for both motorists and bicyclists)
- Fixed and Portable Changeable Message Signs
- Traffic Signal Modifications (if applicable)
- Traffic Management Center (TMC)
- Highway Advisory Radio
- COZEEP/CHP Support
- Freeway Service Patrol
- Traffic Management team
- TMP Coordination & Review

A detailed estimate is included as part of this report. Refer to project estimate for the elements to be included and the associated costs. A Traffic Management Plan (TMP) will be required during the PS&E phase of this project.

Salvaging and recycling of AC or other non-renewable resources

Not anticipated.

Prolonged temporary intersection closures

Only temporary closures of local streets intersecting with State Route 1 during off-peak hours that facilitate cold planing and paving operations are anticipated.

Constructability:

The estimated working days for this project are 260 days. No work may occur from March 1 to September 1 due to bird nesting season restrictions (See **Attachment B**, CE/PCE). Traffic lanes may be reduced for temporary lane closures during construction but should be fully opened during peak hours and in accordance with the provisions stated in Traffic Management Plan.

This project will require a Level 3 Constructability Review, which includes reviews at the PID stage, and 95% design reviews. Detour plans will be provided during the PS&E phase. Cities of Huntington Beach and Seal Beach and Caltrans Public Information should be contacted during the design phase to address Traffic Management and public awareness issues.

Existing Flooding Issue between Sea Point Street and Warner Avenue:

There exists seasonal road closures between Sea Point Street and Warner Avenue due to intermittent heavy rains during the months of December through February of every year. The highway flooding occurs statistically 2-3 times in 2-3 days stretch in a span of 2-3 months in a year, every year.

The Project Study Unit is investigating possible solutions. The remedy of this existing flooding problem is beyond the scope and intent of CAMP projects, thus will not be proposed in this report.

11. The project has been field reviewed by:

District

Majid Movahed, *Maintenance*	Date:	06/23/2005
Mike Ogle, *Maintenance*		06/23/2005
Francis Alviar, *Hydraulics*		06/23/2005
Andrew Ngo, *PSR*		06/23/2005

Project Reviewed by:

District Maintenance (Majid Movahed)	Date:	08/04/2005
District Materials (Behdad Baseghi)	Date:	08/30/2005
HQ Division of Design (Bob Chapman)	Date:	08/17/2005
HQ Maintenance Program (Ron Jones)	Date:	08/29/2005
(HA22 Program Coordinator)		

12. Proposed Funding

This project is proposed to be funded through the 2006 State Highway Operation and Protection Program (SHOPP). The cost will be captured through the Roadway Preservation program under account code 20.10.201.121 for Pavement Preservation. Construction is proposed for the Fiscal Year 2008/2009. Refer to **Attachment F** for the Project Schedule and Support. This project will be a federal/state-funded project.

13. Project Support:

Proposed Program FY	District Hrs			Engineering Service Center PY'S					FY Total Hrs	Other Costs ($)
				METS		Others		Office Engr		
	Des.	R/W	Const	Des	Const	Des.	Const			
2005/2006	1,617	176							1,793	
2006/2007	8,333			176					8,509	
2007/2008	9,282	703	861	260	1,108			967	13,181	
2008/2009	10,356			1653					12,007	
2009/2010	1,758			176					1,934	
Total	19,232	879	12,974	435	2,936	0.00	0.00	967	37,423	

14. Remarks:

As discussed in section 7 of Flexible Pavement Deflection Study Data above, the District's Project Studies Unit and Maintenance Engineering Branch have selected Rubberized Asphalt Concrete – Gap Graded for this project to conform to Department's commitment to use rubberized pavements in more projects across the state. See **Attachment H**.

This 5-year rehabilitation strategy proposes to:
(1) Cold-plane $2^{1/2}$ inches existing pavement structural section and replace with $2^{1/2}$ in. Rubberized Asphalt Concrete – Gap Graded (RAC-G). It will maintain the existing profile grade.
(2) Upgrade existing nonstandard roadside signs.
(3) Upgrade existing 45 ADA access ramps to current standards and build approximate 15 new ADA ramps at various locations.
(4) Replace approximate 2,000 feet Metal Beam Guard Railing with 4 terminal systems (type ET).

This project has a no-build and one alternative. This build-alternative will cost approximately $7,410,000.
The RAC-G pavement is relatively cost-effective, and highly skid-resistant. RAC-G provides longer life span at half the thickness of conventional dense graded asphalt concrete, excellent long-lasting color contrast for striping and marking, increased crack resistance, traffic noise reduction, and recycles more than 2,000 waste tires per lane mile, thereby conserving natural resources and landfill capacity.

The Open Graded Asphalt Concrete (OGAC) will not be used since there is no wet Table "C" reports within the last 12 quarters for the project limits to justify the purpose.

15. List of Attachments:

Attachment A	Strip Map
Attachment B	Categorical Exemption/Programmatic Categorical Exclusion (CE/PCE)
Attachment C	Pavement Condition Survey
Attachment D	Storm Water Data Report / Exemption Documentation Form
Attachment E	Right of Way Data Sheet
Attachment F	Project Schedule and Support
Attachment G	Typical Cross Sections
Attachment H	Memorandums

16. District Contacts:

Andrew Ngo Project Engineer, Project Studies Unit	(949) 756-4984
Gary Slater Brach Chief, Project Studies Unit	(949) 756-7685
Nooshin Yoosefi Project Manager, Project Management	(949) 724-2131
Majid Movahed Transportation Engineer, Maintenance Engineering	(949) 724-2243
Kathy Anderson Project Coordinator, Right-of-Way	(949) 724-2407
Tam Nguyen Acting Office Chief, Design	(949) 724-2282
Massoud Tajik Program Advisor, Maintenance Engineering	(949) 724-2478

17. Recommended:

for Majid Morad
MASSOUD TAJIK
Program Advisor
Maintenance Engineering
Date: 8/30/05

GARY SLATER
Branch Chief
Project Study Unit
Date: 8/30/05

CONCURRED:

GALE McINTYRE
Deputy District Director
Planning
Date: 8/30/05

FRANK LIN
Acting, Deputy District Director
Program/Project Management
Date: 8/30/05

JAMES PINHEIRO
Deputy District Director
Operations & Maintenance
Date: 8/30/05

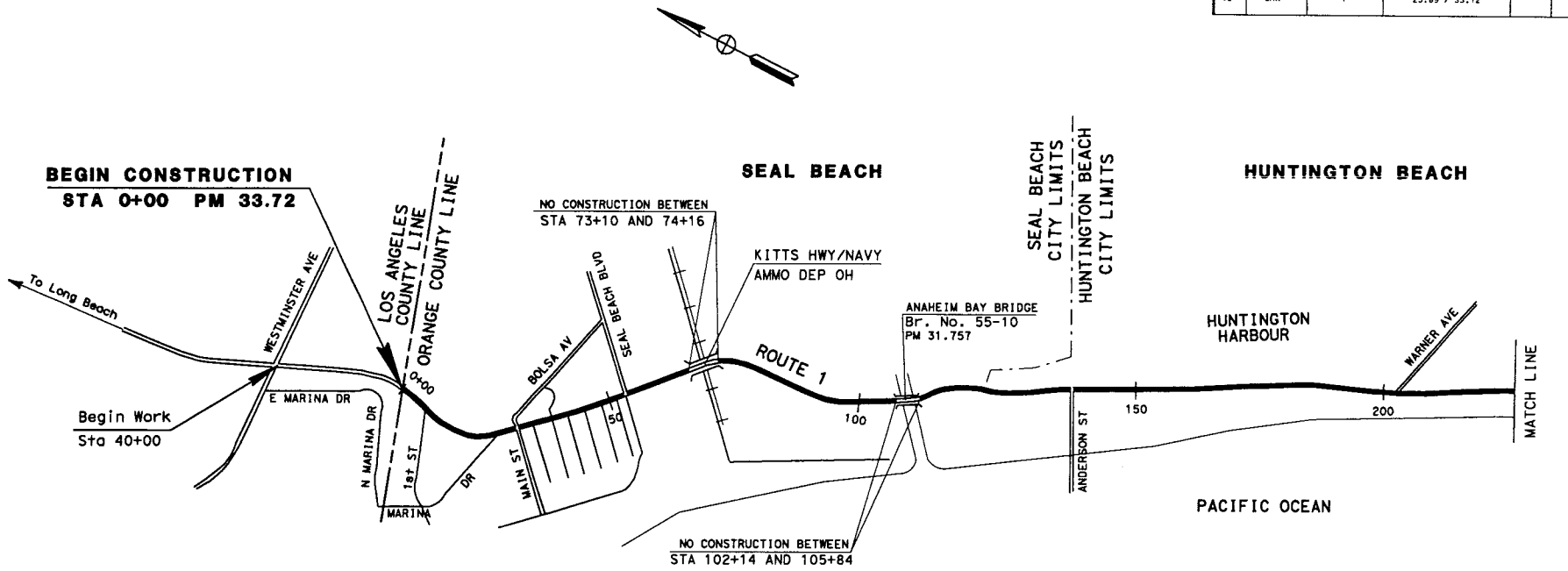
TAM NGUYEN
Acting Office Chief
Design
Date: 8/30/05

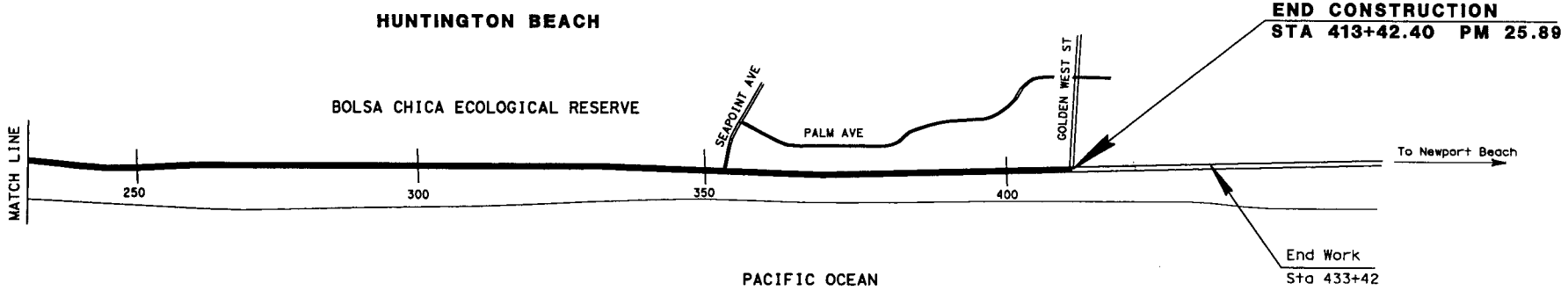
for **SYLVIA VEGA**
Office Chief
Environmental Planning
Date: 8/30/05

ATTACHMENT A

Strip Map

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	ORA	1	25.89 / 33.72		





STRIP MAP
NO SCALE

PROJECT ENGINEER	DATE	PROJECT MANAGER	DATE
ANDREW HOO			

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => angp
DGN FILE => strip map.dgn

CU 12840

EA 0H160K

LAST REVISION 00-00-00

DATE PLOTTED => 18-AUG-2005 12:53

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ATTACHMENT B

Categorical Exemption (CE)
Programmatic Categorical Exclusion (PCE)

State of California

Business Transportation and Housing Agency

Memorandum

To: ANDREW NGO
DISTRICT 12

Date: August 30, 2005

From: ALISON ARMY
DISTRICT 12

File: 12-ORA-1
KP 41.5/53.9 PM 25.89/33.72
EA 0H160_

Subject: Environmental Determination for Pavement Rehabilitation on SR-1 from Goldenwest Street to the Orange County/ Los Angeles County Line

Environmental Planning has reviewed the proposed project to rehabilitate by cold planing and replacing existing pavement on SR-1 from Goldenwest Street in Huntington Beach to the Orange County/Los Angeles County line in Seal Beach. The project work will include replacing existing pavement with 2 ½ inch Rubberized Asphalt Concrete-Gap Graded (RAC-G) for the mainline and shoulder within the project areas. Work will also include upgrading non-standard roadside signs, upgrade existing and build new ADA access ramps, and replace approximately 2,700 feet of MBGR with terminal systems (type ET). The following are comments from Environmental Planning Branch A:

Cultural Resources

It has been determined that the project has no potential to affect on historic properties. Contingent upon the following conditions, this project may proceed:

1. If cultural remains are discovered in or adjacent to Caltrans Right of Way during excavation and/or construction activities, all earth moving activity within and around the site area must be diverted until a qualified Caltrans Archeologist can assess the find.
2. If human remains are discovered, State Health and Safety Code Section 7050.5 states that disturbances and activities shall cease. The County Coroner must be notified of the find immediately so that he/she may ascertain the origin and disposition, pursuant to Public Resources Code Section 5097.98. Further, the Caltrans District 12 Archaeologist must be notified of the find immediately.
3. If the remains are determined to be prehistoric then the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). The MLD may inspect the remains with the approval of the landowner or the authorized representative. The MLD must complete this inspection within 24 hours after notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis.

Biological Resources

The review of this project has led to the finding that no sensitive biological resources including threatened or endangered species appear to be within the area of projected impact.

No work may occur from March 1- September 1 due to bird nesting season restrictions.

Water Quality

This project is covered under the Caltrans Statewide NPDES Permit (Order No. 99-06-DWQ, NPDES No. CAS000003) issued by the State Water Resources Control Board (SWRCB) and is located within the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB). This project must conform to all applicable water quality regulations and/or permit requirements of the SWRCB, SARWQCB, and the Caltrans Storm Water Management Plan (May 2003), and any subsequent revisions and/or additional requirements at the time of construction.

Since the project would require less than 0.4 hectares (one acre) of Disturbed Soil Area (DSA), a Water Pollution Control Program (WPCP) must be prepared and implemented. Please note that project activities should pay extra attention to storm water pollution control during the "Rainy Season" (October 1st – May 1st).

The proposed project is in close proximity to the Pacific Ocean. Appropriate Best Management Practices (BMPs) must be implemented in order to avoid impacting the water quality of the Pacific Ocean.

A Storm Water Data Report must be prepared for this project

Coastal Requirements

This project is located within the California Coastal Zone. A Coast Development Permit (CDP) exemption or permit must obtained from the California Coastal Commission (CCC) prior to the beginning of project work. At the beginning of PS&E, the project engineer needs to contact Environmental Planning to prepare the application for CDP exemption. The exemption request may require 35 days to process. However, the CCC may deny the exemption request and require a Coastal Development Permit which may take 3-6 months to obtain.

Determination

We have determined that a Categorical Exemption and Programmatic Categorical Exclusion (CE/PCE) is the appropriate environmental compliance by CEQA Class 1c and NEPA 771.117 (c) (8). A CE/PCE has been approved for the project contingent upon adherence to the conditions set forth above. ***Attached is the completed Categorical Exemption, which will be valid once the Project Manager signs it and the original is returned to Environmental Planning.*** In addition, we have attached a memorandum to the "Pending RE File", which must be placed into the RE File.

As of October 1, 2004, the Office Engineer's RTL Guide requires an Environmental Certification to ensure environmental commitments are properly incorporated into PS&E, construction contracts, and activities on the ground. Please provide a copy of the final draft PS&E, which includes the special provisions for the above conditions for our review. An Environmental Certification for RTL must be requested at 100% PS&E.

Environmental Planning must be consulted regarding any change in project scope or project schedule. Any associated work or work areas that are selected by the contractor or have not been identified to date (including but not limited to: haul roads, geotechnical work, earth moving, clearing, grubbing, disposal sites, borrow sites, staging/storage areas, etc.) require environmental review and compliance.

Please feel free to contact me at ext. 2568, if you have any questions.

Attachments: (1) CE/PCE **(to be signed by PM and original returned to Env.)**

(2) Memo for RE file

CATEGORICAL EXEMPTION
CATEGORICAL EXCLUSION/PROGRAMMATIC CATEGORICAL EXCLUSION
DETERMINATION FORM

12-ORA-1	KP [CLICK HERE] (PM 25.89-33.72)	0H1600	
Dist.-Co.-Rte. (or Local Agency)	K.P./K.P.(P.M./P.M.)	E.A. (State project)	Proj. No. (Local project) (Fed.Prog. Prefix Proj. No., Agr. No.)

PROJECT DESCRIPTION: (Briefly describe project, purpose, location, limits, right-of-way requirements, and activities involved.)

Cold plane and replace existing structural pavement with new 2.5 inch Rubberized Asphalt Concrete-Gap Graded (RAC-G) for the mainline lanes of SR-1, upgrade roadside signs, upgrade ADA access ramps and replace Metal Beam Guard Rail with terminal systems (type ET) from Goldenwest Street in Huntington Beach to the Orange County/LA County line in Seal Beach (reissue of orignal CE signed 8/18/05)

CEQA COMPLIANCE *(for State Projects only)*

Based on an examination of this proposal, supporting information, and the following statements (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

☐ **Exempt by Statute** (PRC 21080)
Based on an examination of this proposal, supporting information, and the above statements, the project is:
☒ **Categorically Exempt**. Class 1, or ☐ **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)])

Signature: Environmental Office Chief	Date	Signature: Project Manager	Date
	8/30/05		8/30/05

NEPA COMPLIANCE (23 CFR 771.117)

Based on an examination of this proposal, supporting information, and the following statements:

- This project does not have a significant impact on the environment as defined by the NEPA.
- This project does not involve substantial controversy on environmental grounds.
- This project does not involve significant impacts on properties protected by Section 4(f) of the DOT Act or Section 106 of the National Historic Preservation Act.
- In nonattainment or maintenance areas for Federal air quality standards: this project comes from a currently conforming plan and Transportation Improvement Program or is exempt form regional conformity.
- This project is consistent with all Federal, State, & local laws, requirements or administrative determinations relating to the environmental aspects of this action.

Programmatic Categorical Exclusion have been met.

NEPA DETERMINATION

Based on an examination of this proposal, supporting information, and the statements above under "NEPA Compliance", it is determined that the project is a:

☒ **PROGRAMMATIC CATEGORICAL EXCLUSION (PCE):** Based on the evaluation of this project and supporting documentation in the project files, all the conditions of the November 18, 2003 Programmatic Categorical Exclusion Agreement have been met.

☐ **CATEGORICAL EXCLUSION (CE):** For actions that do not individually or cumulatively have a significant environmental effect and are excluded from the requirement to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS). Requires FHWA Determination.

Signature: Environmental Office Chief	Date	Signature: Project Manager/DLA Engineer	Date
	8/30/05		8/30/05

FHWA DETERMINATION

Based on the evaluation of this project and the statements above, it is determined that the project meets the criteria of and is properly classified as a Categorical Exclusion (CE).

N/A	
Signature: FHWA Project Devel. Engineer	Date

☒ Additional information is attached or referenced, as appropriate (e.g. Mitigation commitments **for NEPA only**; Air Quality studies or documentation of exemption from regional conformity or use of CO Protocol; §106 commitments; §4(f) or Programmatic §4(f); date of COE nationwide permit; § 7 species survey results; Wetlands Finding; Floodplain Finding; additional studies; design conditions.) **Rev. 11/2003**

CATEGORICAL EXEMPTION
CATEGORICAL EXCLUSION/PROGRAMMATIC CATEGORICAL EXCLUSION
DETERMINATION FORM
CONTINUATION SHEET
EA _____

12-ORA-1	KP [CLICK HERE] (PM 25.89-33.72)	0H1600	
Dist.-Co.-Rte. (or Local Agency)	K.P./K.P.(P.M./P.M.)	E.A. (State project)	Proj. No. (Local project) (Fed.Prog. Prefix Proj. No., Agr. No.)

PROJECT DESCRIPTION (continued):

No significant environmental consequences are anticipated with the proposed project. In addition to the measures relating to construction noise, air pollution control, water pollution control, and erosion, as given in the Caltrans Standard Specifications, the following measures are required:

1. This project is covered under the Caltrans Statewide NPDES Permit (Order No. 99-06-DWQ, NPDES No. CAS000003) issued by the State Water Resources Control Board (SWRCB) and is located within the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB). This project must conform to all applicable water quality regulations and/or permit requirements of the SWRCB, SARWQCB, and the Caltrans Storm Water Management Plan (May 2003), and any subsequent revisions and/or additional requirements at the time of construction.

2. Since the project would require less than 0.4 hectares (one acre) of Disturbed Soil Area (DSA), a Water Pollution Control Program (WPCP) must be prepared and implemented. Please note that project activities should pay extra attention to storm water pollution control during the "Rainy Season" (October 1st – May 1st).

3. The proposed project is in close proximity to the Pacific Ocean. Appropriate Best Management Practices (BMPs) must be implemented in order to avoid impacting the water quality of the Pacific Ocean.

4. A Storm Water Data Report must be prepared for this project

5. No work may occur from March 1 to September 1 due to nesting season restricitons.

6. This project is located within the California Coastal Zone. A Coast Development Permit (CDP) exemption or permit must be obtained from the California Coastal Commission prior to the beginning of project work.

7. Project construction may only occur outside the peak summer coastal access season; otherwise, the project will not be eligible for a CDP exemption. The peak summer coastal access season includes the days between Memorial Day and Labor Day.

State of California Business Transportation and Housing Agency

MEMORANDUM

To: RE PENDING FILE
DISTRICT 12
CONSTRUCTION

Date: August 30, 2005

From: ALISON ARMY
DEPARTMENT OF TRANSPORTATION
DISTRICT 12
ENVIRONMENTAL PLANNING BRANCH B

File: 12-ORA-1
KP 41.5/53.9 PM 25.89/33.72
EA 0H160_

Subject: For RE Pending File: Environmental Compliance for Pavement Rehab from Goldenwest to Orange County/Los Angeles County Line

Environmental Planning has reviewed the proposed project to rehabilitate by cold planing and replacing existing pavement, road sign upgrades, ADA access ramp upgrades and MBGR replacement with terminal systems (type ET) on SR-1 from Goldenwest Street in Huntington Beach to the Orange County/Los Angeles County line in Seal Beach. A Categorical Exemption and Programmatic Categorical Exclusion (CE/PCE) by CEQA Class 1c and NEPA 771.117 (c) (8) has been approved for the project contingent upon adherence to the conditions set forth below. In addition to the measures relating to construction noise, air pollution control, water pollution control, and erosion, as given in the Caltrans Standard Specifications, the following measures are required:

1. Work is to remain within the Caltrans Right of Way.

2. If cultural materials and/or human remains are discovered in or adjacent to Caltrans Right of Way during excavation and/or construction activities, all soil disturbing activity within and around the site area must cease until the Caltrans cultural staff can inspect the find (as per the Public Resources Code (PRC) 5097.5 for cultural materials and PRC 5097.98 including State Health & Safety Code 7050.5 for human remains).

3. If the project involves removal of the trees during nesting season (March 1- Sept.1), the District Biologist may have to conduct a nesting bird survey prior to the removal of those trees. If nesting birds are present, no work shall occur until the young have fledged and will no longer be impacted by the project.

4. This project is located within the California Coastal Zone. A Coast Development Permit (CDP) exemption or permit must obtained from the California Coastal Commission prior to the beginning of project work.

5. Project construction may only occur outside the peak summer coastal access season; otherwise, the project will not be eligible for a CDP exemption. The peak summer coastal access season includes the days between Memorial Day and Labor Day.

6. This project is covered under the Caltrans Statewide NPDES Permit (Order No. 99-06-DWQ, NPDES No. CAS000003) issued by the State Water Resources Control Board (SWRCB) and is located within the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB). This project must conform to all applicable water quality regulations and/or permit requirements of the SWRCB, SARWQCB, and the Caltrans Storm Water Management Plan (May 2003), and any subsequent revisions and/or additional requirements at the time of construction.

7. Since the project would require less than 0.4 hectares (one acre) of Disturbed Soil Area (DSA), a Water Pollution Control Program (WPCP) must be prepared and implemented. Please note that project activities should pay extra attention to storm water pollution control during the "Rainy Season" (October 1st – May 1st).

8. A Storm Water Data Report must be prepared for this project.

9. Environmental Planning must be consulted regarding any change in project scope or project schedule. Any associated work or work areas that are selected by the contractor or have not been identified to date (including but not limited to: haul roads, geotechnical work, earth moving, clearing, grubbing, disposal sites, borrow sites, staging/storage areas, etc.) require environmental review and compliance.

Contact Alison Army at (949) 724-2568 if you have any questions.

ATTACHMENT C

Pavement Condition Survey

State of California

Business, Transportation and Housing Agency

Memorandum

To: Gary Slater, Chief
Project Studies Unit

Date: September 16, 2004

File: 12-Ora-001
KP 7.4/23.4 (PM 4.6/7.4)
KP 41.4/53.9 (PM 25.9/33.7)

FROM: **DEPARTMENT OF TRANSPORTATION**
District 12 - Maintenance Engineering Branch

SUBJECT: Project Initiation Request

Maintenance Engineering Branch requests that PSR Unit prepare a Capital Preventive Maintenance (CAPM) Report to address the pavement needs (high alligator "B" cracklings, rough rides) of the Pacific Coast Highway (SR-1) from Via Menton St. to Newport Coast Dr. in the City of Laguna Beach; also from Goldenwest St. to LA/Orange County line in the Cities of Huntington Beach and Seal. The proposed project will resurfaced a total of 86 lane miles. Attachment 1 shows the limits of the proposed project.

This segment of Route 1 is a generally four-lane facility, with left turn lane in the median in both directions and is surrounded by businesses and commercial and residential developments. Route 1 is heavily traveled by tourists, visitors and residents. According to 2003 traffic volumes, AADT within the project limits reached a maximum of 42,000 with a monthly peak of 45,000. Peak hourly volume and percentage of trucks were estimated at 3,800 and 1.7%, respectively.

According to 2003 Pavement Condition Survey (PCS) inventory, the highest International Roughness Index (IRI) for the segment was 256, with the average IRI of 150.

Funding for this project is estimated to be $12,900,000 under 2006 SHOPP program (201.121) scheduled for 08/09 FY, with priority index number (PIN) of 48.

If you have any questions or need more information, please contact Majid Movahed at x-3563.

M. Tajik

Massoud Tajik, Chief
Maintenance Engineering Branch
Division of Maintenance

2 projects:

1st Project: Via Menton (PM 4.6) to Newport Coast Drive (PM 7.4) @ $ 7,650,000. —

2nd Project: Goldenwest (PM 25.9) to OC/LA County Line (PM 33.7) @ $ 5,230,000

Attachments
Cc: JBeil
NYoosefi
MMovahed
LMahserelli

Printed 08/03/2005

Caltrans Maintenance Program
2004 Pavement Summary
Caltrans Drive Order
District 12, ORA, Rte 001, PM 25 - 34

District	**12**
County	**ORA**
Route	**001**
Begin PM	**23.739**

District 12 County ORA Route 001

Priority	County	Route	Begin PM	-	End PM	Length	Pave Type	Dir.	Trig. Dir.	Trig. Ln Mi	AADT (,000)	MSL	Maximum Observed Values: Allig. A	Allig. B	Patching	Bleeding	Rutting	1st St. Crk.	3rd St. Crk.	Corner Crk.	Faulting	Int'l Rough. Index	Defect
99	ORA	001	23.739	-	24.479	0.740	F	R		0.000	37	2										151	NO DISTRESS OBSERVED
99	ORA	001	23.739	-	24.479	0.740	F	L		0.000	37	2										149	NO DISTRESS OBSERVED
99	ORA	001	24.479	-	25.919	1.440	F	R		0.000	39	2										151	NO DISTRESS OBSERVED
99	ORA	001	24.479	-	25.919	1.440	F	L		0.000	39	2										143	NO DISTRESS OBSERVED
8	**ORA**	**001**	**25.919**	**-**	**26.979**	**1.060**	**F**	**R**	**R**	**1.060**	36	2		50								195	HIGH ABC
8	**ORA**	**001**	**25.919**	**-**	**26.979**	**1.060**	**F**	**L**	**L**	**1.060**	36	2		50	50							N/A	HIGH ABC
32	ORA	001	26.979	-	27.779	0.800	F	R	R	1.600	36	2	19									119	FINE RAVEL
8	**ORA**	**001**	**26.979**	**-**	**27.779**	**0.800**	**F**	**L**	**L**	**0.800**	36	2		50								N/A	HIGH ABC
32	ORA	001	27.779	-	28.344	0.565	F	R	R	1.130	36	2	50									97	FINE RAVEL
8	**ORA**	**001**	**27.779**	**-**	**28.344**	**0.565**	**F**	**L**	**L**	**0.565**	36	2		100								N/A	HIGH ABC
8	**ORA**	**001**	**28.344**	**-**	**28.779**	**0.435**	**F**	**R**	**R**	**0.435**	36	2		50								118	HIGH ABC
10	**ORA**	**001**	**28.344**	**-**	**28.779**	**0.435**	**F**	**L**	**L**	**0.435**	36	2	25	19								N/A	MOD ABC
8	**ORA**	**001**	**28.779**	**-**	**29.874**	**1.095**	**F**	**R**	**R**	**1.095**	36	2	50	38								110	HIGH ABC
8	**ORA**	**001**	**28.779**	**-**	**29.874**	**1.095**	**F**	**L**	**L**	**2.190**	36	2		50								164	HIGH ABC
98	ORA	001	29.874	-	30.779	0.905	F	R		0.000	38	2										156	GOOD CONDITION
98	ORA	001	29.874	-	30.779	0.905	F	L		0.000	38	2										122	GOOD CONDITION
98	ORA	001	30.779	-	32.279	1.500	F	R		0.000	38	2										122	GOOD CONDITION
98	ORA	001	30.779	-	32.279	1.500	F	L		0.000	38	2										123	GOOD CONDITION
98	ORA	001	32.279	-	33.719	1.440	F	R		0.000	40	2										143	GOOD CONDITION
33	ORA	001	32.279	-	33.719	1.440	F	L	L	1.440	40	2			7							148	MISC. UNSEALED CRACKS

Total Triggered Lane Miles **11.810**

Note: HA Project locations highlighted in bold typeface.

California Department of Transportation, Maintenance Program, Pavement Management Information Branch, Phone (916) 654-2355.

Collection Date: 03/15/2004
Printed: 06/23/2005

Caltrans Maintenance Program
2004 Pavement Condition Survey Inventory
Caltrans Drive Order

District 12, ORA, Rte 001, PM 25.9 - 33.7

District 12 County ORA Route 001

District	12
County	ORA
Route	001
Begin PM	24.479

Begin PM - End PM		Length	LaneMi. (Est.)	Type	AADT (,000)	MSL
24.479 - 25.919		**1.440**	**5.760**	**MLD**	**39**	**2**

Lane	Surface Type	Alligator Cracking A %	Alligator Cracking B %	Alligator Cracking C (Y/N)?	Rutting, Bleeding	Slab Cracking 1st %	Slab Cracking 3rd %	Slab Cracking Corner %	Faulting	Patching Area %	Patching Poor Cond.?	Ride, IRI	Priority	Skid	Defect
L1	F-DG	0	0									19 142	99		NO DISTRESS OBSERVED
L2	F-DG	0	0									19 143	99		NO DISTRESS OBSERVED
R1	F-DG	0	0									21 151	99		NO DISTRESS OBSERVED
R2	F-DG	0	0									17 134	99		NO DISTRESS OBSERVED
25.919 - 26.979		**1.060**	**4.240**	**MLD**	**36**	**2**									
L1	F-DG	0	50	Yes								N/A	8		HIGH ABC
L2	F-DG	0	0							50		N/A	32		FINE RAVEL
R1	F-DG	0	0	Yes								15 127	32		FINE RAVEL
R2	F-DG	0	50	Yes								33 195	8		HIGH ABC
26.979 - 27.779		**0.800**	**3.200**	**MLD**	**36**	**2**									
L1	F-DG	0	0									N/A	32		FINE RAVEL
L2	F-CS	0	50	Yes								N/A	8		HIGH ABC
R1	F-DG	0	0									13 119	32		FINE RAVEL
R2	F-DG	19	0									N/A	32		FINE RAVEL
27.779 - 28.344		**0.565**	**2.260**	**MLD**	**36**	**2**									
L1	F-DG	0	0	Yes								N/A	32		FINE RAVEL
L2	F-CS	0	100	Yes								N/A	8		HIGH ABC
R1	F-DG	38	0									8 97	32		FINE RAVEL
R2	F-DG	50	0									N/A	32		FINE RAVEL
28.344 - 28.779		**0.435**	**1.740**	**MLD**	**36**	**2**									
L1	F-CS	25	0	Yes								N/A	32		FINE RAVEL
L2	F-CS	0	19	Yes								N/A	10		MOD ABC
R1	F-CS	0	0	Yes								13 118	32		FINE RAVEL
R2	F-CS	0	50									N/A	8		HIGH ABC
28.779 - 29.874		**1.095**	**4.380**	**MLD**	**36**	**2**									
L1	F-DG	0	19	Yes								10 105	10		MOD ABC
L2	F-CS	0	50	Yes								25 164	8		HIGH ABC
R1	F-DG	50	0	Yes								11 110	32		FINE RAVEL
R2	F-DG	25	38									N/A	8		HIGH ABC

*Surface type of 'EB' is Enhanced Binder.

Collection Date: 03/15/2004
Printed: 06/23/2005

Caltrans Maintenance Program
2004 Pavement Condition Survey Inventory
Caltrans Drive Order

District 12, ORA, Rte 001, PM 25.9 - 33.7

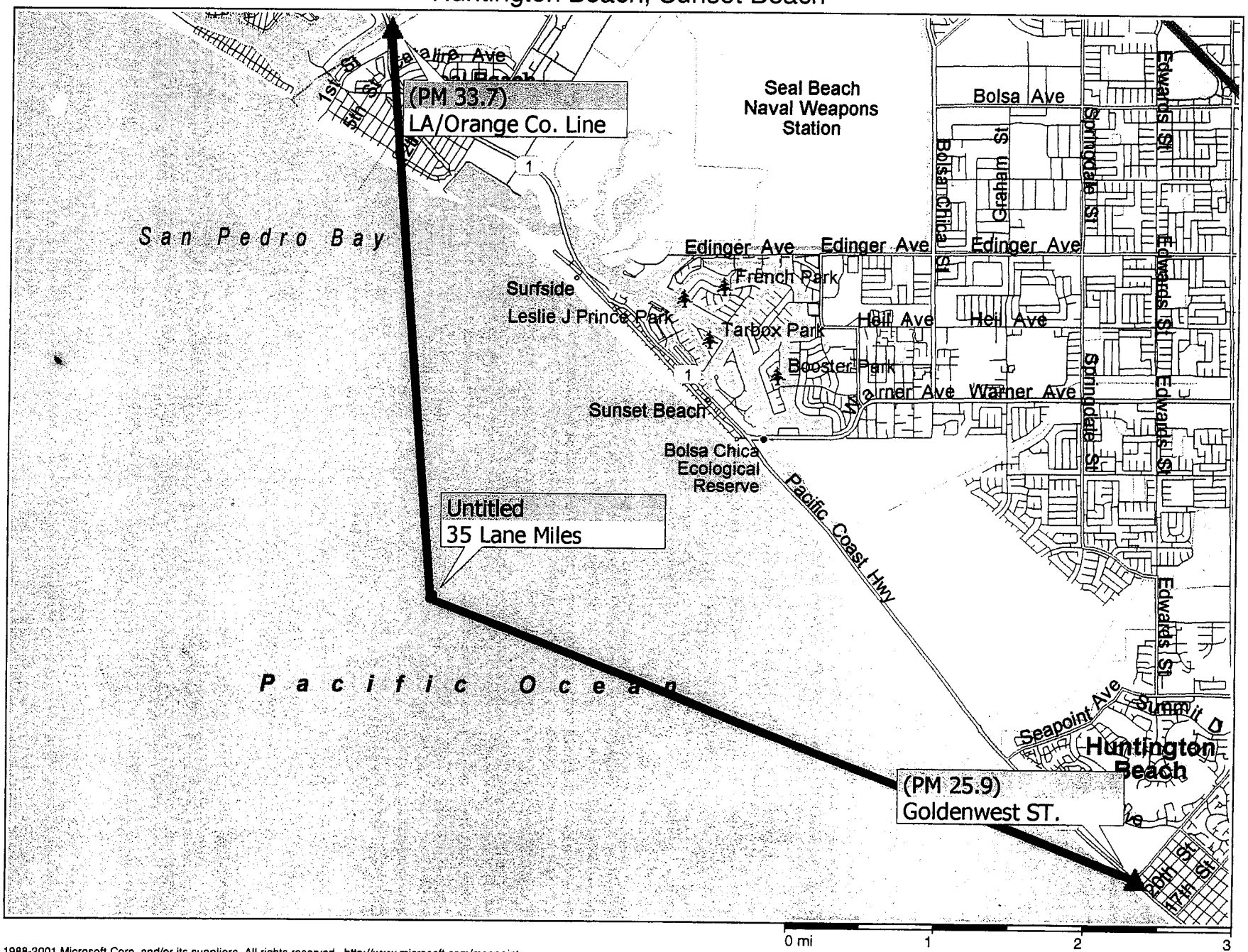
District 12 County ORA Route 001

District	12
County	ORA
Route	001
Begin PM	29.874

Begin PM - End PM		Length	LaneMi. (Est.)	Type	AADT (,000)	MSL							
Lane	Surface Type	Alligator Cracking A %	B %	C (Y/N)?	Rutting, Bleeding	Slab Cracking 1st %	3rd %	Corner %	Faulting	Patching Area %	Poor Cond.?	Ride, IRI	Priority	Skid	Defect
29.874 - 30.779			**0.905**		**3.620**	**MLD**	**38**	**2**							
L1	F-OG	0	0									13 117	98		GOOD CONDITION
L2	F-OG	0	0									14 122	98		GOOD CONDITION
R1	F-OG	0	0									14 122	98		GOOD CONDITION
R2	F-OG	0	0									23 156	98		GOOD CONDITION
30.779 - 32.279			**1.500**		**6.000**	**MLD**	**38**	**2**							
L1	F-OG	0	0									10 107	98		GOOD CONDITION
L2	F-OG	0	0									14 123	98		GOOD CONDITION
R1	F-OG	0	0									11 109	98		GOOD CONDITION
R2	F-OG	0	0									14 122	98		GOOD CONDITION
32.279 - 33.719			**1.440**		**5.760**	**MLD**	**40**	**2**							
L1	F-OG	0	0									21 148	98		GOOD CONDITION
L2	F-OG	0	0							7		19 143	33		MISC. UNSEALED CRACKS
R1	F-OG	0	0									19 143	98		GOOD CONDITION
R2	F-OG	0	0									17 133	98		GOOD CONDITION

*Surface type of 'EB' is Enhanced Binder.

Huntington Beach, Sunset Beach



ATTACHMENT D

Storm Water Data Report / Exemption Documentation Form

Caltrans Metric

Dist-County-Route: 12 - ORA - 001
Post Mile Limits: 25.89 / 33.72
Project Type: Pavement Preservation
EA: 0H160K
RU: 12840
Program Identification: 20.xx.201.121
Phases: ☑ PID
❑ PA/ED
❑ PS&E

Regional Water Quality Control Board(s): Santa Ana, Region 8

1.	Is the project required to consider incorporating Treatment BMPs?	Yes ❑	No ☑
2.	Does the project disturb more than 0.1 hectares of soil?	Yes ❑	No ☑
3.	Is the project part of a Common Plan of Development?	Yes ❑	No ☑
4.	Does the project potentially create permanent water quality impacts?	Yes ❑	No ☑
5.	Does the project require a notification of ADL reuse?	Yes ❑	No ☑

If the answer to any of the preceding questions is "Yes", prepare a Long Form - Storm Water Data Report.

Estimated Construction Start Date: June 2008 Construction Completion Date: December 2008

Separate Dewatering Permit (if yes, permit number) Yes ❑ Permit # _____ No ❑ N/A ☑

This Short Form - Storm Water 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.

Andrew Ngo 8/29/2005
[Name], Registered Project Engineer/Landscape Architect *Date*

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

8/29/05
[Name], District/Regional SW Coordinator or Designee *Date*

STAMP
[Required for PS&E only]

APPENDIX E

Evaluation Documentation Form

DATE: July 12, 2005

See Figure 4-1, Project Evaluation Process for Consideration of Permanent Treatment BMPs EA: 0H160K

NO.	CRITERIA	YES ✓	NO ✓	SUPPLEMENTAL INFORMATION
1.	Begin Project Evaluation regarding requirement for consideration of Treatment BMPs	√		Go to 2
2.	Is this an emergency or Safety project?		√	If **Yes**, go to 12. (Safety Projects must be funded from the 010 SHOPP Program). If **No**, continue to 3.
3.	Have TMDLs been established for surface waters within the project limits?		√	If **Yes**, contact the District/Regional NPDES coordinator to discuss the Department's participation in the TMDL (if Applicable), go to 11 or 4 (as determined by the NPDES Coordinator). _____ *(Dist./Reg. SW Coordinator initials)* If **No**, continue to 4.
4.	Is the project within an urban MS4?	√		If **Yes**, continue to 5. *(write the MS4 Area here)* If **No**, go to 12.
5.	Is the project directly or indirectly discharging to surface waters?	√		If **Yes**, continue to 6. If **No**, go to 12.
6.	Is it a new facility or major reconstruction?		√	If **Yes**, continue to 8. If **No**, go to 7.
7.	Will there be a change in line/grade or hydraulic capacity?		√	If **Yes**, continue to 8. If **No**, go to 10.
8.	Is the Disturbed Soil Area (DSA) created by the project greater than or equal to 1.2 hectares?			If **Yes**, continue to 11. If **No**, go to 9. _____ *(Total DSA quantity)*
9.	Is the project part of a Common Plan of Development?			If **Yes**, continue to 11. If **No**, go to 10.
10.	Are there any Pollution Control Requirements within the project limits? *(Contact your Dist./Reg. SW Coordinator)*		√	If **Yes**, continue to 11. If **No**, go to 12.
11.	Consider approved Treatment BMPs for the project.		See Sections 2.4 and either Section 5.5 or 6.5 for BMP Evaluation and Selection Process. Complete Checklist T-1 in this Appendix E.	
12.	Project is not required to consider Treatment BMPs. *(Dist./Reg. SW Coord. Initials)* *(Project Engineer Initials)* 8/29/05 *(Date)*	√	Document for Project Files by completing this form, and attaching it to the SWDR.	
13	End of checklist.	√		

ATTACHMENT E

Right-of Way Data Sheet

SOUTHERN R/W REGION

To: Gary Slater, Chief

Attn: Andrew Ngo

Date: September 2, 2005
Dist: 12 Co: ORA Route: 1
PM: 25.89/33.72
EA.: 0H160K
Project Description: To cold plane and to replace existing pavement with 2.5 inches Rubberized Asphalt Concrete .

From: KATHY J. ANDERSON, Chief
R/W Project Coordination

Subject: CURRENT ESTIMATED RIGHT OF WAY COSTS

We have completed an estimate of the right of way costs for the above referenced project based on maps we received from you on August 1, 2005, and the following assumptions and limiting conditions:

[ ] 1. The mapping did not provide sufficient detail to determine the limits of the right of way required.

[ ] 2. The transportation facilities have not been sufficiently designed so our estimator could determine the damage to any of the remainder parcels affected by the project.

[ ] 3. Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the early design requirements.

[x] 4. As per maps provided.

[ ] 5. We have determined there are no right of way functional involvement's in the proposed project at this time, as designed.

Right of Way Lead-time will require a minimum of 6 months after we begin Regular right of way (PYPSCAN node No. 224), necessary environmental clearance has been obtained, and freeway agreements have been approved. From the date of receipt of final right of way requirements (PYPSCAN node No. 265), we will require a minimum of 4 months prior to the date of certification of the project.

KATHY J. ANDERSON, Chief
R/W Project Coordination, Local Programs
and Project Control
Irvine Office
Southern Right of Way Region

Attachments:

[x] Right of Way Data Sheet – Page one (always required)
[x] Right of Way Data Sheet – All Pages (required when interest in real property is being acquired)
[X] Utility Information Sheet
[X] Railroad Information Sheet

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY DATA SHEET

(Form #)

To: Gary Slater, Chief
Project Study Unit
Attention: Andrew Ngo

Date September 2, 2005
Dist 12 Co ORA Rte 1 PM: 25.89/33.72
EA 0H160K
Project Description To cold plane & to replace existing pavement with 2.5 inches of Rubberized Asphalt Concrete.

Subject: Right of Way Data Sheet

Alternate No. Preferred

This Alternate meets the criteria for a Design/Build project: Yes ☐ No ☒

1. Right of Way Cost Estimate: To be entered into PMCS COST RW1-5 Screens.

		Current Value Future Use	Escalation Rate	Escalated Value
A.	**Total Acquisition Cost:** Acquisition, including Excess Lands, Damages, and Goodwill.	$ 0.00	%	$ 0.00
	Project Permit Fees.	$ 0.00		$ 0.00
B.	**Utility Relocation** (State Share)	$ 30,000.00	10 %	$ 39,000.00
C.	**Relocation Assistance**	$ 0.00	%	$ 0.00
D.	**Clearance/Demolition**	$ 0.00	%	$ 0.00
E.	**Title and Escrow**	$ 0.00	%	$ 0.00
F.	**Total Estimated Cost**	$ 30,000.00		$ 39,000.00
G.	**Construction Contract Work**	$ 0.00		

2. Current Date of Right of Way Certification 2/1/08 T

3. Parcel Data: To be entered into PMCS EVNT RW Screen.

Type		Dual/Appr	Utilities	
X			U4-1	2
A			-2	8
B			-3	0
C			-4	0
D			U5-7	6
E	XXXX		-8	0
F	XXXX		-9	10

Total 0

RR Involvements	
None	No
C&M Agrmt	No
Svc Contract	No
Lic/RE/Clauses	Yes

Misc. R/W Work	
RAP Displ	N/A
Clear/Demo	N/A
Const Permits	N/A
Condemnation	N/A
Excess	0

Areas: R/W 0 No. Excess Parcels 0
Entered PMCS Screens 9/2/05 by SIMIN YAZDAN
Entered AGRE Screen (Railroad data only) ___/___/___ by _____

RIGHT OF WAY DATA SHEET (Cont.)
(Form #)

4. Are there any major items of construction contract work? Yes ☐ No X (If "Yes," explain.)

5. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.). No right of way required. X

6. Is there an effect on assessed valuation? Yes ☐ Not Significant ☐ No X (If "Yes," explain.)

7. Are utility facilities or rights of way affected?
Yes ☒ No (If "Yes," attach Utility Information Sheet, Exhibit 4-EX-5.)
The following checked items may seriously impact lead time for utility relocation:
☐ Longitudinal policy conflict(s)
☐ Environmental concerns impacting acquisition of potential easements
☐ Power lines operating in excess of 50 KV and substations
(See attached Exhibit 4-EX-5 for explanation.)

8. Are Railroad facilities or rights of way affected?
Yes ☐ No X (If "Yes," attach Railroad Information Sheet, Exhibit 4-EX-6.)

9. Were any previously unidentified sites with hazardous waste and/or material found?
Yes ☐ None Evident X (If "Yes," attach memorandum per R/W Manual, Chapter 4, Section 4.01.10.00.)

10. Are RAP displacements required? Yes ☐ No X (If "Yes," provide the following information.)

No. of single family _____ No. of business/nonprofit _____

No. of multi-family _____ No. of farms _____

Based on Draft/Final Relocation Impact Statement/Study dated N/A, it is anticipated that sufficient replacement housing (will/will not) be available without Last Resort Housing.

11. Are there Material Borrow and/or Disposal Sites required? Yes ☐ No X (If "Yes," explain.)

12. Are there potential relinquishments and/or abandonments? Yes ☐ No X (If "Yes," explain.)

13. Are there any existing and/or potential airspace sites? Yes ☐ No X (If "Yes," explain.)

14. Indicate the anticipated Right of Way schedule and lead time requirements. (Discuss if district proposes less than PMCS lead-time and/or if significant pressures for project advancement are anticipated.)

Based on the R/W requirements on Page 1 of this Data Sheet, R/W will require a lead-time of 6 months from the date regular appraisals can begin to project certification.

In any event, RW Maps will require 4 months from Final Maps to project certification.

15. Is it anticipated that Caltrans staff will perform all Right of Way work? Yes X No ☐ (If "No," discuss.)

Evaluation Prepared By:

Right of Way: Name _____ Date 9.2.05

Railroad: Name _____ Date 9-2-05

Utilities: Name _____ Date 9-2-05

I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set forth, and I find this Data Sheet complete and current.

KATHY J. ANDERSON, Chief
R/W Project Coordination, Local Programs
and Project Control
Irvine Office
Southern Right of Way Region

9-2-05
Date

UTILITY INFORMATION SHEET

1. Name of utility companies involved in project:

   - **Southern California Edison Company**
   - **Southern California Gas Company**
   - **GTE**
   - **COX**
   - **OCSD**
   - **Time Warner**
   - **Seal Beach Water**
   - **Seal Beach Sewer**
   - **SBC**
   - **Adelphia**

2. Types of facilities and agreements required:

   - **Notice to owner & Utility Agreements .**

3. Is any facility a longitudinal encroachment in existing or proposed access controlled right of way? Explain.

   - **None**

   Disposition of longitudinal encroachment(s):
   ☐ Relocation required.
   ☐ Exception to policy needed.
   ☐ Other. Explain.

4. Additional information concerning utility involvement's on this project, i.e., long lead-time materials, growing or species seasons, customer service seasons (no transmission tower relocations in summer).

   - **None**

5. PMCS Input Information
   Total estimated cost of State's obligation for utility relocation on this project:
   $ 30,000.00

   Note: Total estimated cost to include any Department obligation to relocate longitudinal encroachments in access controlled right of way and acquire any necessary utility easements.

	Utility Involvements		
U4-1	2	U5-7	6
-2	8	-8	0
-3	0	-9	10
-4	0		

Prepared By:

Right of Way Utility Estimator

RAILROAD INFORMATION SHEET

1. Describe railroad facilities or right of way affected.

   - **KIHS Hwy/ Navy Ammo Depot OH, on Rte 1, PM 32.36 BR # 55-65.**

2. 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 construction of a facility to perpetuate the rail service? Yes _____ No __X___
   (If yes, explain)

3. Discuss types of agreements and right required from the railroads. Are grade crossings requiring service contracts or grade separations requiring construct and maintenance agreements involved?

   - **OE Clearance & Section 13 Protection Clauses Required.**

4. Remarks (non-operating railroad right of way involved?):

   - **Project crosses over Navy R/R- all work to be completed from top of Bridge.**

5. PMCS Input Information

RR Involvements		
None		None
C&M Agreement		None
Service Contract		None
Design	None	
Const.	None	
Lic/RE/Clauses		1

Prepared By:

Right of Way Railroad Coordinator — Date: 9-2-05

ATTACHMENT F

Project Schedule & Support

PROJECT SCHEDULE

08/18/2005

TASK NAME	IDENTIFIER	START DATES	END DATES	RESOURCES	DUR DAYS	% Complete
12-0H160_PROJ MGMT - PID COMPONENT	CT.12.CO.0H160_.0.100.05	04/01/2005	03/02/2006	274	335.00	0
12-0H160_PROJ MGMT - PA&ED COMPONENT	CT.12.CO.0H160_.0.100.10	03/01/2006	07/01/2006	330	122.00	0
12-0H160_PROJ MGMT - PS&E COMPONENT	CT.12.CO.0H160_.0.100.15	07/01/2006	06/01/2008	1422	701.00	0
12-0H160_PROJ MGMT - CONSTR COMPONENT	CT.12.CO.0H160_.0.100.20	06/01/2008	02/01/2010	323	610.00	0
12-0H160_PERF PRELIM ENGRG STUDIES & PREP DRA	CT.12.CO.0H160_.2.160	03/01/2006	06/01/2006	925	92.00	0
12-0H160_PERF ENVIRO STUDIES & PREP DED	CT.12.CO.0H160_.2.165	04/01/2006	06/01/2006	58	61.00	0
12-0H160_PREP & APPROVE PROJ RPT & FNL ENVIRO	CT.12.CO.0H160_.2.180	05/01/2006	07/01/2006	336	61.00	0
12-0H160_OBT PERMITS/AGREMNTS & ROUTE ADOPTIO	CT.12.CO.0H160_.2.205	07/01/2006	07/01/2007	1110	365.00	0
12-0H160_PERF DSGN SURVEYS & PHOTOG MAPPING	CT.12.CO.0H160_.3.185.10	07/01/2006	01/01/2007	1500	184.00	0
12-0H160_PREP 'ALL OTHER' BASE MAPS & PLAN SH	CT.12.CO.0H160_.3.185.99	10/01/2006	04/01/2007	1283	182.00	0
12-0H160_PREP DRAFT ROADWAY PLANS	CT.12.CO.0H160_.3.230.05	12/01/2006	06/01/2007	2268	182.00	0
12-0H160_PREP DRAFT HIGHWAY PLANTING PLANS	CT.12.CO.0H160_.3.230.10	04/01/2007	07/01/2007	72	91.00	0
12-0H160_PREP DRAFT TRAFFIC PLANS	CT.12.CO.0H160_.3.230.15	05/01/2007	08/01/2007	1128	92.00	0
12-0H160_PREP TRANSPORTATION MGMT PLAN [TMP]	CT.12.CO.0H160_.3.230.20	04/01/2007	07/01/2007	156	91.00	0
12-0H160_PREP DRAFT UTIL PLANS	CT.12.CO.0H160_.3.230.25	12/01/2006	05/01/2007	72	151.00	0
12-0H160_PREP DRAFT DRAINAGE PLANS	CT.12.CO.0H160_.3.230.30	05/01/2007	09/01/2007	972	123.00	0
12-0H160_PREP DRAFT SPECIFICATIONS	CT.12.CO.0H160_.3.230.35	08/01/2007	09/01/2007	929	31.00	0
12-0H160_PREP DRAFT PS&E QUANTITIES & ESTS	CT.12.CO.0H160_.3.230.40	07/01/2007	09/01/2007	960	62.00	0
12-0H160_REV & UPDATE PROJ INFO FOR PS&E PACK	CT.12.CO.0H160_.3.230.60	09/01/2007	10/01/2007	0	30.00	0
12-0H160_MITIGATE ENVIRO IMPACTS & CLEAN UP H	CT.12.CO.0H160_.3.235	12/01/2006	10/01/2007	120	304.00	0
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	4278	61.00	0
12-0H160_PREP CONTRACT DOCS	CT.12.CO.0H160_.3.260	12/01/2007	02/01/2008	942	62.00	0
12-0H160_ADVERTISE/OPEN BIDS/AWARD & APPROVE	CT.12.CO.0H160_.3.265	03/01/2008	06/01/2008	887	92.00	0
12-0H160_COORDINATE UTIL	CT.12.CO.0H160_.4.200	08/02/2007	01/01/2008	407	152.00	0
12-0H160_PERF R/W ENGRG	CT.12.CO.0H160_.4.220	10/02/2007	01/01/2008	900	91.00	0
12-0H160_OBT R/W INTERESTS FOR PROJ R/W CERTI	CT.12.CO.0H160_.4.225	12/02/2007	02/01/2008	360	61.00	0
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	8493	365.00	0
12-0H160_PREP & ADMINISTER CONTRACT CHANGE OR	CT.12.CO.0H160_.5.285	06/01/2008	08/15/2009	3557	440.00	0
12-0H160_RESOLVE CONTRACT CLAIMS	CT.12.CO.0H160_.5.290	06/01/2008	01/29/2010	1066	607.00	0
12-0H160_ACPT CONTRACT/PREP FNL CONSTR EST &	CT.12.CO.0H160_.5.295	04/01/2009	01/30/2010	1578	304.00	0
12-0H160_PA & ED	CT.12.CO.0H160_.M200	07/01/2006	07/01/2006	0	0.00	0
12-0H160_PROJECT PS&E	CT.12.CO.0H160_.M380	12/01/2007	12/01/2007	0	0.00	0
12-0H160_RIGHT OF WAY CERTIFICATION	CT.12.CO.0H160_.M410	02/01/2008	02/01/2008	0	0.00	0
12-0H160_READY TO LIST	CT.12.CO.0H160_.M460	02/01/2008	02/01/2008	0	0.00	0
12-0H160_HEADQUARTERS ADVERTISE	CT.12.CO.0H160_.M480	03/01/2008	03/01/2008	0	0.00	0
12-0H160_APPROVE CONTRACT	CT.12.CO.0H160_.M500	06/01/2008	06/01/2008	0	0.00	0
12-0H160_CONTRACT ACCEPTANCE	CT.12.CO.0H160_.M600	06/01/2009	06/01/2009	0	0.00	0
12-0H160_END PROJECT	CT.12.CO.0H160_.M800	02/01/2010	02/01/2010	0	0.00	0
Total				36707		

RESOURCE REQ.

08/18/2005

TASK NAME	IDENTIFIER	START DATES	END DATES	RESOURCES	DUR DAYS
12.601-MAINT					
12-0H160_PERF ENVIRO STUDIES & PREP DED	CT.12.CO.0H160_.2.165	04/01/2006	06/01/2006	24	61.00
12-0H160_PREP & APPROVE PROJ RPT & FNL ENVIRO DOC	CT.12.CO.0H160_.2.180	05/01/2006	07/01/2006	24	61.00
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	24	61.00
Sub-Total				72	
12.510-CONST_OFC					
12-0H160_ADVERTISE/OPEN BIDS/AWARD & APPROVE CONTRAC	CT.12.CO.0H160_.3.265	03/01/2008	06/01/2008	252	92.00
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	1692	365.00
12-0H160_PREP & ADMINISTER CONTRACT CHANGE ORDERS	CT.12.CO.0H160_.5.285	06/01/2008	08/15/2009	1872	440.00
12-0H160_ACPT CONTRACT/PREP FNL CONSTR EST & PREP FN	CT.12.CO.0H160_.5.295	04/01/2009	01/30/2010	342	304.00
Sub-Total				4158	
12.513-CONST_OFC-CONST_QUALITY_CONTROL					
12-0H160_PROJ MGMT - PA&ED COMPONENT	CT.12.CO.0H160_.0.100.10	03/01/2006	07/01/2006	35	122.00
12-0H160_PROJ MGMT - PS&E COMPONENT	CT.12.CO.0H160_.0.100.15	07/01/2006	06/01/2008	50	701.00
12-0H160_PROJ MGMT - CONSTR COMPONENT	CT.12.CO.0H160_.0.100.20	06/01/2008	02/01/2010	30	610.00
12-0H160_PERF PRELIM ENGRG STUDIES & PREP DRAFT PROJ	CT.12.CO.0H160_.2.160	03/01/2006	06/01/2006	90	92.00
12-0H160_PREP 'ALL OTHER' BASE MAPS & PLAN SHEETS	CT.12.CO.0H160_.3.185.99	10/01/2006	04/01/2007	50	182.00
12-0H160_PREP DRAFT ROADWAY PLANS	CT.12.CO.0H160_.3.230.05	12/01/2006	06/01/2007	72	182.00
12-0H160_PREP TRANSPORTATION MGMT PLAN [TMP]	CT.12.CO.0H160_.3.230.20	04/01/2007	07/01/2007	18	91.00
12-0H160_PREP DRAFT SPECIFICATIONS	CT.12.CO.0H160_.3.230.35	08/01/2007	09/01/2007	25	31.00
12-0H160_PREP DRAFT PS&E QUANTITIES & ESTS	CT.12.CO.0H160_.3.230.40	07/01/2007	09/01/2007	120	62.00
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	60	61.00
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	180	365.00
12-0H160_PREP & ADMINISTER CONTRACT CHANGE ORDERS	CT.12.CO.0H160_.5.285	06/01/2008	08/15/2009	100	440.00
12-0H160_ACPT CONTRACT/PREP FNL CONSTR EST & PREP FN	CT.12.CO.0H160_.5.295	04/01/2009	01/30/2010	36	304.00
Sub-Total				866	
12.518-FIELD_CONST					
12-0H160_PREP TRANSPORTATION MGMT PLAN [TMP]	CT.12.CO.0H160_.3.230.20	04/01/2007	07/01/2007	6	91.00
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	27	61.00
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	45	365.00
Sub-Total				78	
12.540-FIELD_CONST					
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	540	61.00
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	1800	365.00
12-0H160_PREP & ADMINISTER CONTRACT CHANGE ORDERS	CT.12.CO.0H160_.5.285	06/01/2008	08/15/2009	900	440.00
12-0H160_RESOLVE CONTRACT CLAIMS	CT.12.CO.0H160_.5.290	06/01/2008	01/29/2010	360	607.00
12-0H160_ACPT CONTRACT/PREP FNL CONSTR EST & PREP FN	CT.12.CO.0H160_.5.295	04/01/2009	01/30/2010	360	304.00
Sub-Total				3960	
12.590-CONTRACT_CLAIMS					
12-0H160_RESOLVE CONTRACT CLAIMS	CT.12.CO.0H160_.5.290	06/01/2008	01/29/2010	252	607.00
Sub-Total				252	
12.366-TRAF_OPS-STUDIES					

12-0H160_PERF PRELIM ENGRG STUDIES & PREP DRAFT PROJ	CT.12.CO.0H160_.2.160	03/01/2006	06/01/2006	80	92.00
12-0H160_PREP & APPROVE PROJ RPT & FNL ENVIRO DOC	CT.12.CO.0H160_.2.180	05/01/2006	07/01/2006	30	61.00
12-0H160_PREP 'ALL OTHER' BASE MAPS & PLAN SHEETS	CT.12.CO.0H160_.3.185.99	10/01/2006	04/01/2007	90	182.00
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	225	61.00
Sub-Total				425	
12.367-TRAF_OPS-S					
12-0H160_PERF PRELIM ENGRG STUDIES & PREP DRAFT PROJ	CT.12.CO.0H160_.2.160	03/01/2006	06/01/2006	90	92.00
12-0H160_PERF ENVIRO STUDIES & PREP DED	CT.12.CO.0H160_.2.165	04/01/2006	06/01/2006	9	61.00
12-0H160_PREP & APPROVE PROJ RPT & FNL ENVIRO DOC	CT.12.CO.0H160_.2.180	05/01/2006	07/01/2006	12	61.00
12-0H160_PREP 'ALL OTHER' BASE MAPS & PLAN SHEETS	CT.12.CO.0H160_.3.185.99	10/01/2006	04/01/2007	21	182.00
12-0H160_PREP DRAFT TRAFFIC PLANS	CT.12.CO.0H160_.3.230.15	05/01/2007	08/01/2007	60	92.00
12-0H160_PREP DRAFT SPECIFICATIONS	CT.12.CO.0H160_.3.230.35	08/01/2007	09/01/2007	60	31.00
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	36	61.00
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	21	365.00
12-0H160_PREP & ADMINISTER CONTRACT CHANGE ORDERS	CT.12.CO.0H160_.5.285	06/01/2008	08/15/2009	21	440.00
Sub-Total				330	
12.368-TRAF_OPS-ENGR					
12-0H160_PROJ MGMT - PS&E COMPONENT	CT.12.CO.0H160_.0.100.15	07/01/2006	06/01/2008	6	701.00
12-0H160_PROJ MGMT - CONSTR COMPONENT	CT.12.CO.0H160_.0.100.20	06/01/2008	02/01/2010	11	610.00
12-0H160_PERF PRELIM ENGRG STUDIES & PREP DRAFT PROJ	CT.12.CO.0H160_.2.160	03/01/2006	06/01/2006	29	92.00
12-0H160_PREP & APPROVE PROJ RPT & FNL ENVIRO DOC	CT.12.CO.0H160_.2.180	05/01/2006	07/01/2006	72	61.00
12-0H160_PREP DRAFT TRAFFIC PLANS	CT.12.CO.0H160_.3.230.15	05/01/2007	08/01/2007	396	92.00
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	187	61.00
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	58	365.00
12-0H160_PREP & ADMINISTER CONTRACT CHANGE ORDERS	CT.12.CO.0H160_.5.285	06/01/2008	08/15/2009	29	440.00
Sub-Total				788	
12.379-TRAF_OPS					
12-0H160_PERF PRELIM ENGRG STUDIES & PREP DRAFT PROJ	CT.12.CO.0H160_.2.160	03/01/2006	06/01/2006	6	92.00
12-0H160_PREP & APPROVE PROJ RPT & FNL ENVIRO DOC	CT.12.CO.0H160_.2.180	05/01/2006	07/01/2006	6	61.00
12-0H160_PREP 'ALL OTHER' BASE MAPS & PLAN SHEETS	CT.12.CO.0H160_.3.185.99	10/01/2006	04/01/2007	12	182.00
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	300	61.00
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	120	365.00
12-0H160_PREP & ADMINISTER CONTRACT CHANGE ORDERS	CT.12.CO.0H160_.5.285	06/01/2008	08/15/2009	120	440.00
Sub-Total				564	
12.386-TRAF_ENGR-RAMP_METERING					
12-0H160_PREP 'ALL OTHER' BASE MAPS & PLAN SHEETS	CT.12.CO.0H160_.3.185.99	10/01/2006	04/01/2007	12	182.00
12-0H160_PREP TRANSPORTATION MGMT PLAN [TMP]	CT.12.CO.0H160_.3.230.20	04/01/2007	07/01/2007	60	91.00
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	30	365.00
12-0H160_PREP & ADMINISTER CONTRACT CHANGE ORDERS	CT.12.CO.0H160_.5.285	06/01/2008	08/15/2009	1	440.00
Sub-Total				103	
12.390-ELEC_SYS-ELEC_DESIGN					
12-0H160_PREP & APPROVE PROJ RPT & FNL ENVIRO DOC	CT.12.CO.0H160_.2.180	05/01/2006	07/01/2006	90	61.00
12-0H160_PREP 'ALL OTHER' BASE MAPS & PLAN SHEETS	CT.12.CO.0H160_.3.185.99	10/01/2006	04/01/2007	36	182.00
12-0H160_PREP DRAFT TRAFFIC PLANS	CT.12.CO.0H160_.3.230.15	05/01/2007	08/01/2007	360	92.00
12-0H160_PREP DRAFT SPECIFICATIONS	CT.12.CO.0H160_.3.230.35	08/01/2007	09/01/2007	180	31.00
12-0H160_PREP DRAFT PS&E QUANTITIES & ESTS	CT.12.CO.0H160_.3.230.40	07/01/2007	09/01/2007	90	62.00
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	90	61.00
12-0H160_COORDINATE UTIL	CT.12.CO.0H160_.4.200	08/02/2007	01/01/2008	18	152.00
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	41	365.00
12-0H160_PREP & ADMINISTER CONTRACT CHANGE ORDERS	CT.12.CO.0H160_.5.285	06/01/2008	08/15/2009	22	440.00

Sub-Total				927	
12.285-PS&E/OE					
12-0H160_PREP DRAFT ROADWAY PLANS	CT.12.CO.0H160_.3.230.05	12/01/2006	06/01/2007	300	182.00
12-0H160_PREP DRAFT HIGHWAY PLANTING PLANS	CT.12.CO.0H160_.3.230.10	04/01/2007	07/01/2007	72	91.00
12-0H160_PREP DRAFT TRAFFIC PLANS	CT.12.CO.0H160_.3.230.15	05/01/2007	08/01/2007	72	92.00
12-0H160_PREP TRANSPORTATION MGMT PLAN [TMP]	CT.12.CO.0H160_.3.230.20	04/01/2007	07/01/2007	72	91.00
12-0H160_PREP DRAFT UTIL PLANS	CT.12.CO.0H160_.3.230.25	12/01/2006	05/01/2007	72	151.00
12-0H160_PREP DRAFT DRAINAGE PLANS	CT.12.CO.0H160_.3.230.30	05/01/2007	09/01/2007	72	123.00
12-0H160_PREP DRAFT SPECIFICATIONS	CT.12.CO.0H160_.3.230.35	08/01/2007	09/01/2007	360	31.00
12-0H160_PREP DRAFT PS&E QUANTITIES & ESTS	CT.12.CO.0H160_.3.230.40	07/01/2007	09/01/2007	180	62.00
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	800	61.00
12-0H160_PREP CONTRACT DOCS	CT.12.CO.0H160_.3.260	12/01/2007	02/01/2008	180	62.00
12-0H160_ADVERTISE/OPEN BIDS/AWARD & APPROVE CONTRAC	CT.12.CO.0H160_.3.265	03/01/2008	06/01/2008	90	92.00
Sub-Total				2270	
12.302-DRAFTING_SVCS					
12-0H160_PROJ MGMT - PS&E COMPONENT	CT.12.CO.0H160_.0.100.15	07/01/2006	06/01/2008	48	701.00
12-0H160_PREP DRAFT ROADWAY PLANS	CT.12.CO.0H160_.3.230.05	12/01/2006	06/01/2007	96	182.00
12-0H160_PREP DRAFT TRAFFIC PLANS	CT.12.CO.0H160_.3.230.15	05/01/2007	08/01/2007	240	92.00
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	768	61.00
12-0H160_ACPT CONTRACT/PREP FNL CONSTR EST & PREP FN	CT.12.CO.0H160_.5.295	04/01/2009	01/30/2010	840	304.00
Sub-Total				1992	
12.308-SURVEYS					
12-0H160_PERF DSGN SURVEYS & PHOTOG MAPPING	CT.12.CO.0H160_.3.185.10	07/01/2006	01/01/2007	1200	184.00
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	1800	365.00
Sub-Total				3000	
12.309-SURVEYS-R/W_ENGR					
12-0H160_PROJ MGMT - PA&ED COMPONENT	CT.12.CO.0H160_.0.100.10	03/01/2006	07/01/2006	30	122.00
12-0H160_PERF R/W ENGRG	CT.12.CO.0H160_.4.220	10/02/2007	01/01/2008	900	91.00
Sub-Total				930	
12.312-HYDRAULICS					
12-0H160_PROJ MGMT - PID COMPONENT	CT.12.CO.0H160_.0.100.05	04/01/2005	03/02/2006	120	335.00
12-0H160_PROJ MGMT - PA&ED COMPONENT	CT.12.CO.0H160_.0.100.10	03/01/2006	07/01/2006	30	122.00
12-0H160_PROJ MGMT - PS&E COMPONENT	CT.12.CO.0H160_.0.100.15	07/01/2006	06/01/2008	78	701.00
12-0H160_PERF PRELIM ENGRG STUDIES & PREP DRAFT PROJ	CT.12.CO.0H160_.2.160	03/01/2006	06/01/2006	144	92.00
12-0H160_PREP 'ALL OTHER' BASE MAPS & PLAN SHEETS	CT.12.CO.0H160_.3.185.99	10/01/2006	04/01/2007	72	182.00
12-0H160_PREP DRAFT DRAINAGE PLANS	CT.12.CO.0H160_.3.230.30	05/01/2007	09/01/2007	900	123.00
12-0H160_PREP DRAFT SPECIFICATIONS	CT.12.CO.0H160_.3.230.35	08/01/2007	09/01/2007	180	31.00
12-0H160_PREP DRAFT PS&E QUANTITIES & ESTS	CT.12.CO.0H160_.3.230.40	07/01/2007	09/01/2007	180	62.00
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	90	61.00
12-0H160_COORDINATE UTIL	CT.12.CO.0H160_.4.200	08/02/2007	01/01/2008	60	152.00
12-0H160_PREP & ADMINISTER CONTRACT CHANGE ORDERS	CT.12.CO.0H160_.5.285	06/01/2008	08/15/2009	150	440.00
Sub-Total				2004	
12.317-MATLS_LAB					
12-0H160_PERF PRELIM ENGRG STUDIES & PREP DRAFT PROJ	CT.12.CO.0H160_.2.160	03/01/2006	06/01/2006	360	92.00
12-0H160_PREP & APPROVE PROJ RPT & FNL ENVIRO DOC	CT.12.CO.0H160_.2.180	05/01/2006	07/01/2006	72	61.00
12-0H160_PREP 'ALL OTHER' BASE MAPS & PLAN SHEETS	CT.12.CO.0H160_.3.185.99	10/01/2006	04/01/2007	720	182.00
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	72	61.00
12-0H160_ADVERTISE/OPEN BIDS/AWARD & APPROVE CONTRAC	CT.12.CO.0H160_.3.265	03/01/2008	06/01/2008	43	92.00
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	144	365.00

12-0H160_RESOLVE CONTRACT CLAIMS	CT.12.CO.0H160_.5.290	06/01/2008	01/29/2010	43	607.00
Sub-Total				1454	
12.326-IND_ASSUR_TSTNG					
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	960	365.00
Sub-Total				960	
12.349-HAZ_WASTE					
12-0H160_PROJ MGMT - PID COMPONENT	CT.12.CO.0H160_.0.100.05	04/01/2005	03/02/2006	12	335.00
12-0H160_PROJ MGMT - PA&ED COMPONENT	CT.12.CO.0H160_.0.100.10	03/01/2006	07/01/2006	6	122.00
12-0H160_PROJ MGMT - PS&E COMPONENT	CT.12.CO.0H160_.0.100.15	07/01/2006	06/01/2008	6	701.00
12-0H160_PROJ MGMT - CONSTR COMPONENT	CT.12.CO.0H160_.0.100.20	06/01/2008	02/01/2010	42	610.00
12-0H160_PERF PRELIM ENGRG STUDIES & PREP DRAFT PROJ	CT.12.CO.0H160_.2.160	03/01/2006	06/01/2006	30	92.00
12-0H160_PERF ENVIRO STUDIES & PREP DED	CT.12.CO.0H160_.2.165	04/01/2006	06/01/2006	15	61.00
12-0H160_PREP & APPROVE PROJ RPT & FNL ENVIRO DOC	CT.12.CO.0H160_.2.180	05/01/2006	07/01/2006	15	61.00
12-0H160_PREP DRAFT SPECIFICATIONS	CT.12.CO.0H160_.3.230.35	08/01/2007	09/01/2007	100	31.00
12-0H160_MITIGATE ENVIRO IMPACTS & CLEAN UP HAZ WAST	CT.12.CO.0H160_.3.235	12/01/2006	10/01/2007	120	304.00
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	12	365.00
12-0H160_PREP & ADMINISTER CONTRACT CHANGE ORDERS	CT.12.CO.0H160_.5.285	06/01/2008	08/15/2009	60	440.00
Sub-Total				418	
12.223-DESIGN-BR_D					
12-0H160_PROJ MGMT - PS&E COMPONENT	CT.12.CO.0H160_.0.100.15	07/01/2006	06/01/2008	150	701.00
12-0H160_PROJ MGMT - CONSTR COMPONENT	CT.12.CO.0H160_.0.100.20	06/01/2008	02/01/2010	60	610.00
12-0H160_PERF DSGN SURVEYS & PHOTOG MAPPING	CT.12.CO.0H160_.3.185.10	07/01/2006	01/01/2007	300	184.00
12-0H160_PREP 'ALL OTHER' BASE MAPS & PLAN SHEETS	CT.12.CO.0H160_.3.185.99	10/01/2006	04/01/2007	210	182.00
12-0H160_PREP DRAFT ROADWAY PLANS	CT.12.CO.0H160_.3.230.05	12/01/2006	06/01/2007	1800	182.00
12-0H160_PREP DRAFT PS&E QUANTITIES & ESTS	CT.12.CO.0H160_.3.230.40	07/01/2007	09/01/2007	360	62.00
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	900	61.00
12-0H160_PREP CONTRACT DOCS	CT.12.CO.0H160_.3.260	12/01/2007	02/01/2008	72	62.00
12-0H160_ADVERTISE/OPEN BIDS/AWARD & APPROVE CONTRAC	CT.12.CO.0H160_.3.265	03/01/2008	06/01/2008	54	92.00
12-0H160_COORDINATE UTIL	CT.12.CO.0H160_.4.200	08/02/2007	01/01/2008	72	152.00
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	72	365.00
12-0H160_PREP & ADMINISTER CONTRACT CHANGE ORDERS	CT.12.CO.0H160_.5.285	06/01/2008	08/15/2009	270	440.00
Sub-Total				4320	
12.232-DESIGN-BR_3					
12-0H160_PREP DRAFT SPECIFICATIONS	CT.12.CO.0H160_.3.230.35	08/01/2007	09/01/2007	24	31.00
12-0H160_PREP DRAFT PS&E QUANTITIES & ESTS	CT.12.CO.0H160_.3.230.40	07/01/2007	09/01/2007	24	62.00
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	72	61.00
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	24	365.00
Sub-Total				144	
12.169-ENV_PLNG-GENERAL					
12-0H160_PREP & APPROVE PROJ RPT & FNL ENVIRO DOC	CT.12.CO.0H160_.2.180	05/01/2006	07/01/2006	9	61.00
12-0H160_OBT PERMITS/AGREMNTS & ROUTE ADOPTIONS	CT.12.CO.0H160_.2.205	07/01/2006	07/01/2007	450	365.00
Sub-Total				459	
12.171-ENV_PLNG-ARCHITECT					
12-0H160_PERF ENVIRO STUDIES & PREP DED	CT.12.CO.0H160_.2.165	04/01/2006	06/01/2006	10	61.00
12-0H160_OBT PERMITS/AGREMNTS & ROUTE ADOPTIONS	CT.12.CO.0H160_.2.205	07/01/2006	07/01/2007	360	365.00
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	3	61.00
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	10	365.00
Sub-Total				383	

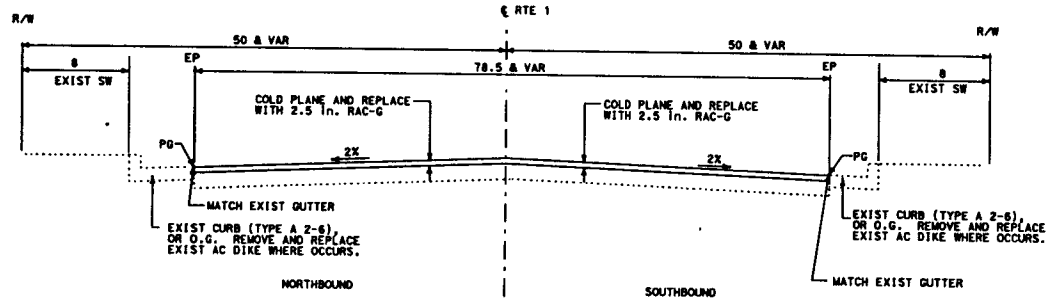
12.185-TRANSP_STUDIES					
12-0H160_PREP & APPROVE PROJ RPT & FNL ENVIRO DOC	CT.12.CO.0H160_.2.180	05/01/2006	07/01/2006	6	61.00
12-0H160_OBT PERMITS/AGREMNTS & ROUTE ADOPTIONS	CT.12.CO.0H160_.2.205	07/01/2006	07/01/2007	300	365.00
Sub-Total				306	
12.105-PROJ_MGRS					
12-0H160_PROJ MGMT - PID COMPONENT	CT.12.CO.0H160_.0.100.05	04/01/2005	03/02/2006	9	335.00
12-0H160_PROJ MGMT - PA&ED COMPONENT	CT.12.CO.0H160_.0.100.10	03/01/2006	07/01/2006	72	122.00
12-0H160_PROJ MGMT - PS&E COMPONENT	CT.12.CO.0H160_.0.100.15	07/01/2006	06/01/2008	450	701.00
12-0H160_PROJ MGMT - CONSTR COMPONENT	CT.12.CO.0H160_.0.100.20	06/01/2008	02/01/2010	72	610.00
Sub-Total				603	
12.140-PROJ_SCHED					
12-0H160_PROJ MGMT - PID COMPONENT	CT.12.CO.0H160_.0.100.05	04/01/2005	03/02/2006	90	335.00
12-0H160_PROJ MGMT - PA&ED COMPONENT	CT.12.CO.0H160_.0.100.10	03/01/2006	07/01/2006	54	122.00
12-0H160_PROJ MGMT - PS&E COMPONENT	CT.12.CO.0H160_.0.100.15	07/01/2006	06/01/2008	450	701.00
12-0H160_PROJ MGMT - CONSTR COMPONENT	CT.12.CO.0H160_.0.100.20	06/01/2008	02/01/2010	36	610.00
Sub-Total				630	
12.146-PROG_MGMT					
12-0H160_PROJ MGMT - PS&E COMPONENT	CT.12.CO.0H160_.0.100.15	07/01/2006	06/01/2008	20	701.00
Sub-Total				20	
59.285-ESC_PS&E/OE-PS&E-OE01.285					
12-0H160_PREP CONTRACT DOCS	CT.12.CO.0H160_.3.260	12/01/2007	02/01/2008	360	62.00
12-0H160_ADVERTISE/OPEN BIDS/AWARD & APPROVE CONTRAC	CT.12.CO.0H160_.3.265	03/01/2008	06/01/2008	180	92.00
Sub-Total				540	
59.286-ESC_PS&E/OE-CONT_PROG_&_SVS-OE02.286					
12-0H160_ADVERTISE/OPEN BIDS/AWARD & APPROVE CONTRAC	CT.12.CO.0H160_.3.265	03/01/2008	06/01/2008	70	92.00
Sub-Total				70	
59.291-ESC_PS&E/OE-PROJECT_CONTROL_&_SUPPT-OE03.291					
12-0H160_PREP CONTRACT DOCS	CT.12.CO.0H160_.3.260	12/01/2007	02/01/2008	300	62.00
12-0H160_ADVERTISE/OPEN BIDS/AWARD & APPROVE CONTRAC	CT.12.CO.0H160_.3.265	03/01/2008	06/01/2008	54	92.00
Sub-Total				354	
59.302-DRAFTING_SVCS-PROJ_PLANS-OE06.302					
12-0H160_PREP CONTRACT DOCS	CT.12.CO.0H160_.3.260	12/01/2007	02/01/2008	30	62.00
12-0H160_ADVERTISE/OPEN BIDS/AWARD & APPROVE CONTRAC	CT.12.CO.0H160_.3.265	03/01/2008	06/01/2008	144	92.00
Sub-Total				174	
23.412-R/W_TEAMS					
12-0H160_PROJ MGMT - PID COMPONENT	CT.12.CO.0H160_.0.100.05	04/01/2005	03/02/2006	43	335.00
12-0H160_PROJ MGMT - PA&ED COMPONENT	CT.12.CO.0H160_.0.100.10	03/01/2006	07/01/2006	43	122.00
12-0H160_PROJ MGMT - PS&E COMPONENT	CT.12.CO.0H160_.0.100.15	07/01/2006	06/01/2008	43	701.00
12-0H160_PERF PRELIM ENGRG STUDIES & PREP DRAFT PROJ	CT.12.CO.0H160_.2.160	03/01/2006	06/01/2006	72	92.00
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	72	61.00
12-0H160_COORDINATE UTIL	CT.12.CO.0H160_.4.200	08/02/2007	01/01/2008	257	152.00
12-0H160_OBT R/W INTERESTS FOR PROJ R/W CERTIFICATIO	CT.12.CO.0H160_.4.225	12/02/2007	02/01/2008	360	61.00
Sub-Total				891	
59.544-FIELD_CONST-CONST_OFFICE_E-CN02.544					
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	900	365.00
12-0H160_RESOLVE CONTRACT CLAIMS	CT.12.CO.0H160_.5.290	06/01/2008	01/29/2010	360	607.00

Sub-Total				1260	
59.312-HYDRAULICS-BRANCH_A					
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	14	365.00
Sub-Total				14	
59.317-MATLS_LAB-RIGID_PAVE_&_STRUC_CONC-ES08.317					
12-0H160_PROJ MGMT - CONSTR COMPONENT	CT.12.CO.0H160_.0.100.20	06/01/2008	02/01/2010	6	610.00
12-0H160_PERF PRELIM ENGRG STUDIES & PREP DRAFT PROJ	CT.12.CO.0H160_.2.160	03/01/2006	06/01/2006	24	92.00
12-0H160_PREP 'ALL OTHER' BASE MAPS & PLAN SHEETS	CT.12.CO.0H160_.3.185.99	10/01/2006	04/01/2007	30	182.00
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	9	61.00
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	120	365.00
12-0H160_RESOLVE CONTRACT CLAIMS	CT.12.CO.0H160_.5.290	06/01/2008	01/29/2010	15	607.00
Sub-Total				204	
59.318-MATLS_LAB-STRUC_MATLS-ES08.318					
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	195	365.00
Sub-Total				195	
59.319-MATLS_LAB-TEST_&_TECH-ES08.319					
12-0H160_PROJ MGMT - CONSTR COMPONENT	CT.12.CO.0H160_.0.100.20	06/01/2008	02/01/2010	6	610.00
12-0H160_PREP 'ALL OTHER' BASE MAPS & PLAN SHEETS	CT.12.CO.0H160_.3.185.99	10/01/2006	04/01/2007	15	182.00
12-0H160_PREP DRAFT PS&E QUANTITIES & ESTS	CT.12.CO.0H160_.3.230.40	07/01/2007	09/01/2007	6	62.00
12-0H160_CIRCULATE/REV & PREP FNL DISTRICT PS&E PKG	CT.12.CO.0H160_.3.255	10/01/2007	12/01/2007	3	61.00
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	210	365.00
12-0H160_PREP & ADMINISTER CONTRACT CHANGE ORDERS	CT.12.CO.0H160_.5.285	06/01/2008	08/15/2009	12	440.00
12-0H160_RESOLVE CONTRACT CLAIMS	CT.12.CO.0H160_.5.290	06/01/2008	01/29/2010	36	607.00
Sub-Total				288	
59.320-MATLS_LAB-FLEXIBLE_PAVEMENT_MATL-ES08.320					
12-0H160_PERF CONSTR ENGRG & GENERAL CONTRACT ADMIN	CT.12.CO.0H160_.5.270	06/01/2008	06/01/2009	45	365.00
Sub-Total				45	
59.321-MATLS_LAB-STRUCT_SEC_DESIGN_&_REHAB-ES08.321					
12-0H160_PREP 'ALL OTHER' BASE MAPS & PLAN SHEETS	CT.12.CO.0H160_.3.185.99	10/01/2006	04/01/2007	15	182.00
Sub-Total				15	
59.110-PROJ_MGRS-PROJ_COORDINATION_ENGR-EM01.110					
12-0H160_PROJ MGMT - PA&ED COMPONENT	CT.12.CO.0H160_.0.100.10	03/01/2006	07/01/2006	60	122.00
12-0H160_PROJ MGMT - PS&E COMPONENT	CT.12.CO.0H160_.0.100.15	07/01/2006	06/01/2008	120	701.00
12-0H160_PROJ MGMT - CONSTR COMPONENT	CT.12.CO.0H160_.0.100.20	06/01/2008	02/01/2010	60	610.00
Sub-Total				240	
Total				36707	

ATTACHMENT G

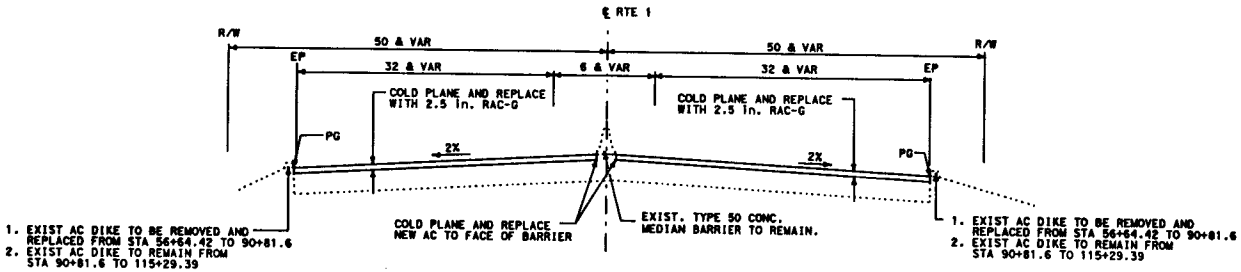
Typical Cross Section

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	ORA	1	25.89 / 33.72		



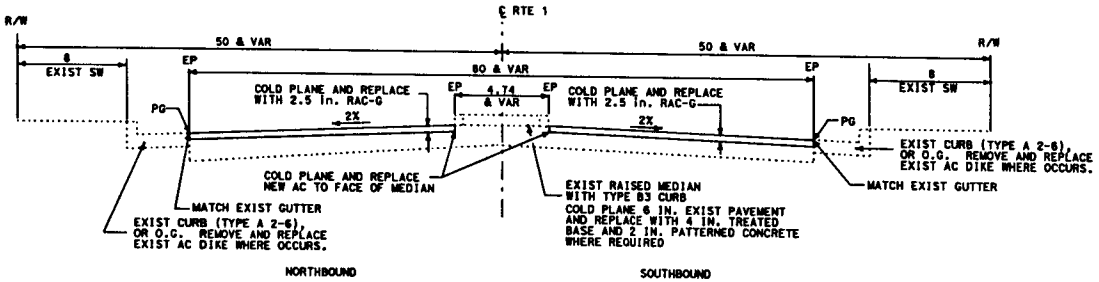
ROUTE 1

STA 115.29+39 TO STA 150+36.306
STA 159+40.83 TO STA 203+41.146



ROUTE 1

STA 56+64.42 TO STA 115+29.39



ROUTE 1

STA 0+00 TO STA 56+64.42
STA 150+36.306 TO STA 159+40.83
STA 203+41.146 TO STA 413+42.40

TYPICAL CROSS SECTIONS

NO SCALE

ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SHOWN

X-1

PROJECT ENGINEER	DATE	PROJECT MANAGER	DATE
ANDREW WOO			

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => smoo
DGN FILE => typical section 1.dgn

CU 12840

EA 0H160K

DATE PLOTTED => 14-AUG-2009 17:52

DATE REVISED 00-00-00

ATTACHMENT H

Memorandums

State of California Business, Transportation, and Housing Agency

Memorandum

To: ALL REGION/DISTRICT DIRECTORS
Attention: Regional/District Design Chiefs
& Region al/District Materials Engineers

Date: June 7, 1999

File:

From: **DEPARTMENT OF TRANSPORTATION**
DESIGN AND LOCAL PROGRAMS
MAIL STATION 28

Subject: Revised Cost Estimating Procedure for the Scoping of Projects that Include Asphalt Pavement Rehabilitation Work

As a result of a significant increase in the pavement rehabilitation workload, the following procedure to provide cost estimates for project scoping purposes has been developed in coordination with the Maintenance Program and the Pavement Branch in the Engineering Service Center (ESC)- Office of Materials and Foundations (OMF). Effective immediately, for **project cost estimating purposes at the project scoping stage (PSSRs and PSRs only), all AC rehabilitation work shall be assumed to require a 135-mm thick overlay. Deflection studies are no longer required for scoping purposes.** The use of this estimated thickness for cost estimating purposes is based upon a review of the 1996, 1997 and 1998 OMF overlay design recommendations for asphalt pavement rehabilitation projects. All other written guidance on this subject in the Project Development Procedures Manual (PDPM) or other sources is superseded until this memorandum is rescinded.

Deflection studies are still mandatory to determine all final pavement structural section designs for asphalt pavement rehabilitation work whether that is on major rehabilitation (HA22) projects, CAPM projects or other types of SHOPP or STIP programmed projects. All requests for deflection studies must be made by the Region/District Materials Engineer. In addition, as currently is the procedure, all final designs are to be based on deflection studies that are less than 1-1/2 years old. Follow-up pavement deflection studies, performed approximately one year prior to the submittal of the PS&E to Headquarters (the ESC Office of Office Engineer), should be requested only as necessary. These follow-up studies are only to be requested after a review of the existing pavement condition has been made and it is determined that a follow-up study is necessary because a significant amount of additional pavement deterioration has occurred or other significant changes have occurred since the previous study.

The adequacy of this cost estimating procedure will be reviewed periodically by the OMF Pavement Branch. In order to help them perform their analysis, one copy of all approved scoping documents (PSSRs or PSRs) that involve pavement rehabilitation shall be sent to the OMF Pavement Branch (Mail Station #5). In addition, for monitoring and planning purposes, one copy of all approved CAPM PRs shall be sent to the OMF Pavement Branch.

original signed by Robert L. Buckley
ROBERT L. BUCKLEY
Program Manager
Design and Local Programs

original signed by Randell H. Iwasaki
RANDELL H. IWASAKI
Program Manager
Maintenance Program

"We'll Find A Way"

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: DISTRICT DIRECTORS

Date: January 31, 2005

From: **RICHARD D. LAND**
Chief Engineer

Subject: Use of Rubberized Asphalt Concrete (RAC)

In January 2003, the California Department of Transportation (Caltrans) set a statewide goal that 15 percent of all asphalt pavements will incorporate rubberized asphalt concrete (RAC). In 2004 we exceeded that goal by placing 16 percent RAC and expect to continue to use more this year. Recycling strategies, such as RAC, are among the most effective strategy for pavement rehabilitation. Under most conditions the use of RAC results in pavement that is more durable, resistant to cracking, and can achieve the same service life at half the thickness of conventional dense graded asphalt concrete for rehabilitation projects. The strategy improves pavement performance, saves valuable resources and reduces the number of tires entering landfills and stockpiles. The Department is committed to the use of rubberized pavements in more projects across the State.

Districts are to make RAC the strategy of choice when evaluating alternatives for a project. If RAC is found to be inappropriate due to costs or environmental factors, it shall be documented in the scoping document, PSSR or Project Study report. The Department must be proactive in supporting these efforts to enhance the life of pavements and be a good steward of the environment.

Should you have any questions or require further information, please contact Phil Stolarski, Project Manager, Pavement Standards Team at (916) 227-7254.

c: Lawrence H. Orcutt
Steve Takigawa
Robert L. Buckley
Mark Leja
Robert Pieplow

State of California

Business, Transportation and Housing Agency

Memorandum

To: Gary Slater, Chief
Project Studies Branch

Date: April 19, 2005

File: 12-ORA-Varies
KP Varies
PM Varies
EA-Varies

From: **DEPARTMENT OF TRANSPORTATION**
District 12
Materials and Research Branch

Cat: 441.01

Subject: **General preliminary Materials Sampling and Testing Recommendation and Deflection Study for Structural Section Recommendation at Project Study Report (PSR/PR) Stage.**

The District Materials & Research (M&R) Branch has reviewed your March 10, 2005 recommendation to provide you with a general Materials recommendation at PSR/PR Stage. This recommendation include a variable structural sections based upon general variable Traffic Index (TI) and a conservative R-Value of 10. Also Materials and Research (M&R) Branch recommends to continue the communications between Project Studies Branch and M&R Branch during PSR/PR stage as needed bases. Also if as needed bases, included one set of plan (alternatives, typical cross-sections) and existing condition layout sheets and purpose of the project to be send to M&R Branch for a review and comment.

Our comments:

1. The project engineer shall request from the M&R Branch to prepare a Materials Report in the early stage of PS&E. The report shall include the results of field tests and sampling for R-Value, Sieve analysis, Sand Equivalent, Direct Shear, Consolidation, Expansion, Plasticity Index, Corrosion and Structural Section recommendation. Structural sections will be calculated based on R-values obtained from sampling and testing of the native materials and Traffic Index. The report provides pavement design and materials recommendations in accordance with Topic 114 of Highway Design Manual (1995). There are other issues such as settlement/slope stability of embankment fills, retaining walls, groundwater elevations, etc. that will be addressed by Roadway Geotechnical Design-South from HQ.

2. Cores are needed to identify (exploratory) the existing pavement structural sections and condition of the ramp and mainline.

3. If project requires OGAC resurfacing of mainline, therefore Materials and Research (M&R) Branch recommending 30mm of OGAC (12.5mm grading) for this project. A pavement deflection study is recommended to assess the state of the pavement prior to overlay.

4. A deflection study is needed to evaluate the integrity of the (mainline and ramp) pavement. The project engineer shall request from the Office of Materials Engineering and Testing Services (METS) to prepare a Deflection Study Test at the early stage of PS&E. Office of Materials Engineering and Testing Services (METS) will provide a uniform pavement recommendations based upon result of the Falling Weight Deflectometer testing.

5. If project requires retaining walls then the project engineer shall request from Roadway Geotechnical Design-South from Head Quarter, all Geotechnical (Geotechnical analysis and design consisting of foundation recommendations and other related design issues) shall be addressed by Roadway Geotechnical Design-South from HQ.

Mainline, Auxiliary lane and Shoulder

The following structural sections for mainline, auxiliary lane and shoulder are summarized in the following table are based upon assumed R-Value of 10 and variable TI. Please be advised that structural sections of shoulders calculated based upon 2% of TI of the adjacent traveled way, therefore no traffic shall be allowed on the shoulder pavement section for any period of time.

Alternative 1 (This alternative highly recommended):
OGAC/ RAC-G/ AC Type "A"/ ACB Type "A"/ AS Class 2

TI	R-Value	OGAC mm	RAC-G mm	AC Type "A" mm	ACB Type "A" mm	AS Class 2 mm
7.0	10	30	-	90	105	215
7.5	10	30	45	60	105	230
8.0	10	30	45	60	120	260
8.5	10	30	60	60	120	275
9.0	10	30	60	60	140	305
9.5	10	30	60	80	140	320
10.0	10	30	60	95	150	320
10.5	10	30	60	110	150	335
11.0	10	30	60	125	140	380
11.5	10	30	60	140	140	400
12.0	10	30	60	155	140	410
12.5	10	30	60	170	140	430
13.0	10	30	60	155	170	460
13.5	10	30	60	170	170	470
14.0	10	30	60	185	170	490
14.5	10	30	60	200	170	505
15.0	10	30	60	215	170	520

Alternative 2 (Use this alternative in special cases):
OGAC/AC Type "A"/ ACB Type "A"/ AS Class 2 (no RAC-G)

TI	R-Value	OGAC mm	AC Type "A" mm	ACB Type "A" mm	AS Class 2 mm
7.0	10	30	90	105	215
7.5	10	30	105	105	230
8.0	10	30	105	120	260
8.5	10	30	120	120	275
9.0	10	30	120	140	305
9.5	10	30	140	140	320
10.0	10	30	155	150	320
10.5	10	30	170	150	335
11.0	10	30	185	140	380
11.5	10	30	200	140	400
12.0	10	30	215	140	410
12.5	10	30	230	140	430
13.0	10	30	215	170	460
13.5	10	30	230	170	470
14.0	10	30	245	170	490
14.5	10	30	260	170	505
15.0	10	30	275	170	520

Ramp Widening

Based on TI value of 12 and an assumed R-value of 10, and the expected heavy truck volume that uses Freeways and ramps. We are recommending that the ramp to be widened using 60 mm of Rubberized Asphalt Concrete Type "G" 19-mm Maximum (RAC-G, 19-mm maximum) over 19 mm max coarse Type "A" Asphalt Concrete over a Type "A" Asphalt Concrete Base (ACB) over AS Class "2" over native subgrade. We also recommend that **same structural section to be used for the shoulder area of the ramp traveled way in order to compensate for wheel off tracking of heavy trucks on the shoulder area.**

60mm RAC-G / 125 mm AC (Type "A")/ 185 mm ACB (Type "A")/ 400 mm AS (Class "2")

If overlaying of existing AC within the portion of the ramps or mainline are required, the R.L. Buckly memo (dated June 7, 1999) shall be followed. In this memo for project cost estimate at the PSSR and PSR stages, the AC rehabilitation work shall be assumed to be a 135 mm thick

overlay. However, the final overlay recommendations will be provided as a result of a Pavement Deflection Study Test. Please provide the M&R Branch with a request for testing to be done.

PCC Pavement Mainline and Shoulder

Based upon variable TI and R-Value of 10 to 40 and PI>12.

TI	PCC Pavement mm	LCB mm	AS (Class - 2) mm
8 or less	205	105	120
8.5 – 10	215	105	150
10.5 – 12	230	120	185
12.5 – 13.5	270	150	215
14 +	300	150	215

6. Any surface water due to runoffs shall be properly drained into the cross-culvert and inlets or catch basins. The impact of a new drainage system on existing drainage shall be considered.

7. The imported borrow materials used for embankment shall have an R-Value of at least 40 (top 1.5m from finished grade) and be non-corrosive, low expansion and free of other deleterious properties that adversely affect all concrete/steel structures. The Imported borrow shall conform to Section 19-7.02 of Caltrans Standard Specifications (July 2002) and be tested prior to placement.

8. It is imperative that special attention is given to the mix design, compaction and temperature requirements for flexible pavement as stated in Caltrans Standard Specifications and project Standard Special Provisions. For all flexible pavements, special attention must be given to the mix design and compaction requirements. A copy of the approved mix design (plant sampling/laboratory test results from Southern Regional Laboratory) for AC shall be provided to our office prior to paving operation. A summary of all field compaction records (PCC Pavement, LCB, RAC-G, AC, AC Base and Class 2 Aggregate Base, Class 2 Aggregate Subbase) shall be provided to our office at the conclusion of the construction activities and during the project closeout. We also request a copy of all field temperature measurements to be submitted to our office at project closeout.

9. Asphalt Concrete (AC) shall be 19 mm Max Coarse, Type "A". AC mix follow requirement in section 39 of Caltrans Quality Control and Quality Assurance specifications for Asphalt Concrete (when quantity of AC is over 10,000 Tonnes), Asphalt Concrete Base (ACB) shall be Type "A" and follow section 39 of Caltrans Standard Specifications July 2002. Rubberized Asphalt Concrete Type-G (RAC-G 19-mm maximum) and follows Caltrans Standard Special Provisions **39-400 A03-15-00-04, SSP's updates 04**. Aggregate Subbase (AS) shall be Class 2 and follow requirements in section 26 of Caltrans Standard Specifications July 2002 respectively. PCC Pavement follows section 40 and sections 90 of Caltrans Standard Specifications July 2002.

10. For cost estimating purposes during the PSR stage, the following items are suggested to be added: Field investigation and Laboratory testing for Materials Report, Cost of PCC Pavement, LCB, RAC-G, AC (Type A), ACB (Type A), ATPB, CTPB, AB, AS, Edge drains are required.

Prepared by:

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Concurred by:

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Division of Project Delivery
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Cc: Tam Nguyen
File