

Memorandum

*Flex your power!
Be energy efficient!*

To: RICHARD KRUMHOLZ
District Director
District 5

Date: June 11, 2007

File: 05-SB-101-PM 45.5
05-OK330K
201.151

For 
From: MALCOLM X. DOUGHERTY
District Director
District 6 - Central Region

Subject: Approval Recommendation – Supplemental Project Study Report

Attached herein is the Supplemental Project Study Report for the Gaviota Culvert Replacement project in Santa Barbara County. This report has been reviewed by the appropriated functional divisions and is ready for your consideration. Central Region comments are attached.

Attachment

Memorandum

To: RACHEL FALSETTI
Acting Division Chief
Division of Transportation Programming

Date: June 05, 2007
File: 05-SB-101, PM 45.5
EA: 05-0K330K
SHOPP Program 201.151

From: DEPARTMENT OF TRANSPORTATION
Central Region-Project Development

Subject: Supplemental Project Study Report

This supplemental Project Study Report (PSR) proposes to replace an existing reinforced concrete box/reinforced concrete pipe (RCB/RCP) culvert on State Route 101 (SR-101) in Santa Barbara County at PM 45.5 near Gaviota State Park.

PROPOSED WORK

The original PSR (approved in August 2004) proposed a project to replace an existing RCB/RCP culvert by jacking a new 6.0-foot diameter Reinforced Concrete Pipe (RCP) culvert adjacent to the existing culvert. Upon completion of the new culvert, inlet and outlet headwalls and wingwalls would be constructed and the existing RCB/RCP culvert would be abandoned in place. Partial diversion of the stream will likely be required to allow the work area to remain dry during construction of the new culvert, headwalls, and wingwalls. It was also proposed to either repair (if possible) or replace the median DI and pipe riser.

No substantive changes in the design concept have been made since the approval of the original PSR on August 20, 2004. The project scope remains unchanged. A copy of the approved PSR is attached.

The current total construction cost estimate has been updated to \$1,848,000 and the estimated escalated R/W cost is \$116,000 for land acquisition, permits, and utility relocation.

The escalated construction, right of way, and support cost are summarized in the table below followed by the proposed project schedule.

PROJECT COST COMPONENT	FISCAL YEARS						TOTAL
	Prior	2008/09	2009/10	2010/11	2011/12	2013/+	
PA&ED Support		436					\$ 436
PS&E Support			635				\$ 635
R/W Support				104			\$ 104
Construction Support					526		\$ 526
R/W Capital				116			\$ 116
Constr Capital					2,359		\$ 2,359
Total		436	635	220	2,885		\$ 4,176

Note: All costs X\$1,000. Support Categories are the same as those identified by SB 45. Support costs escalated at 8% in 07/08 and 08/09, 5% in 09/10, and 3% for years thereafter. Construction Capital is escalated at 5%. Right of Way Capital escalated to future year.

Project Milestone	Date
Circulate DED	January 2010
PA&ED	July 2010
District PS&E to HQ	December 2011
R/W Certificate	February 2012
Ready to List	March 2012
Construction Complete	July 2013

Note: All the above schedule assumes that PA&ED begins July 2008.

REMARKS

Environmental

Environmental has stated that the original PEAR in the previously approved Project Study Report (PSR) is still appropriate. However, the mitigation costs have been updated. An updated Mitigation Cost Compliance Estimate Form (MCCE) is included as Attachment B.

Storm Water Data Report (SWDR)

A Storm Water Data Report (SWDR) has been prepared and approved for this project. The report indicates that a Water Pollution Control Program (WPCP) will be required. This project is not required to consider permanent Treatment BMPs.

Risk Management Plan (RMP)

A Risk Management Plan (RMP) has been prepared for this project.

DISTRICT CONTACTS

Scott Eades	Project Manager	(805) 549-3144
Foad Al-Hamdani	Design Manager	(559) 243-3546
Jeffrey Whitaker	Project Engineer	(559) 243-3515
Musa Alhamdani	Design Engineer	(559) 243-3544

ATTACHMENTS

- A. Storm Water Data Report
- B. Mitigation Cost Compliance Estimate Form
- C. R/W Data Sheet
- D. Updated Cost Estimate
- E. Updated Traffic Management Plans
- F. Approved Project Study Report (August 2004)
- G. Risk Management Plan

DISTRIBUTION LIST

FHWA, Dominic Hoang
HQ Division of Design, (2)
HQ Program Advisor, Wes Wilson
HQ Division of Engineering Services, (5)
HQ Transportation Programming, Ross Chittenden
HQ Transportation Programming, Rick Guevel, (SHOPP)
HQ Environmental, Kelly Dunlap
Project Manager, Scott Eades
Design Manager, Original + 2
Resident Engineer, Held by Design Engineer
D-05 Maintenance, Lance Gorman
D-05 Maintenance, Kelly McClain
D-05 Traffic Safety, David Chesebro SB/SBt
Region Traffic Design / D-10, Hassan Marei
D-05 Traffic Operation, Paul McClintic
Region Materials, Ron Sekhon
Region Environmental, David Hyatt
Region Landscape, Dennis Reeves
Region Right of Way, John Maddux
D-05 Planning, Claudia Espino
PPM, Teresa Rix
Region Surveys, Howard Brunetti, (*Electronic Only*)
Region Surveys, Rob Isakson
D-05 Surveys, Nick Tatarian, SB/SLO
HQ DES/OPPM, Andrew T S Tan
D-05 Records, Gail Hayes (2)
Region Records, Victoria Pozuelo

APPROVAL RECOMMENDED:



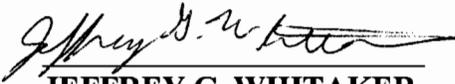
SCOTT EADES
Project Manager

APPROVED BY:



RICHARD L. KRUMHOLZ
District Director – District 5

This Supplemental Project Study 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.


JEFFREY G. WHITAKER
Registered Civil Engineer

5/21/07
DATE



Short Form - Storm Water Data Report

Dist-County-Route: 05-SB-101

Kilometer Post (Post Mile) Limits: 73.2(45.5)

Project Type: Replacing Culvert

EA: 05-0K330K

RU: _____

Program Identification: SHOPP

Phase: PID PA/ED PS&E

Regional Water Quality Control Board(s): Central Coast Region (3)

- 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: July 2013 Construction Completion Date: July 2014

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.


Jeffrey Whitaker, Registered Project Engineer 5/9/07
Date

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

STAMP
[Required for PS&E only]


FOR Marissa Nishikawa, District/Regional SW Coordinator or Designee 5/15/07
Date

ATTACHMENT A

1. Project Description

This project proposes to replace an existing culvert in Santa Barbara County on Route 101 PM 45.5 (KP 73.2). It is proposed to jack a new 36-inch reinforced concrete pipe (RCP) culvert next to the existing culvert. Upon completion of the jacking operation, the existing culvert will be abandoned in place.

The total disturbed soil area for this project is projected to be 0.097 ha (.243 acres). This figure was calculated using the preliminary project plans and calculating the area of disturbance using tools provided in MicroStation.

The project site lies within the South Coast/Arguello HSA 515.10. The culvert lies within the Canada del Barro Creek. No receiving water bodies within the project limits are listed on the 303(d) list, have established TMDLs or are considered high risk areas. The project is not located in an urban MS4.

The project area occurs within the Transverse Ranges Geomorphic Province. Route 101 is bordered to the north by Santa Ynez Mountains and to the south by the Pacific Ocean. Geologic formations occurring within the project area include Pliocene aged older alluvium, and Miocene aged Monterey Shale, Rincon Shale, and Vaqueros Sandstone. The older Alluvium consists of remnants of weakly consolidated stream terrace deposits of silt, sand and gravel. The Monterey Shale is composed predominantly of soft, fissile, punky, organic shale and a lesser amount of interbedded hard siliceous shale, calcareous shale, and thin limestone layers. The Rincon Shale is blue gray, massive to poorly bedded, compact, moderately hard, argillaceous, and finely micaceous. The Rincon Shale is overlain conformably by a layer of bentonite that forms the base of the Monterey Shale. The Rincon Shale is underlain by the Vaqueros Sandstone. The Vaqueros Sandstone is composed almost entirely of thick-bedded to massive, medium grained sandstone.

Oil and gas exploration in the project vicinity has taken place since the 1920's. Several wells both onshore and offshore have either been abandoned or are continuing to produce. Most of the oil and gas in the area is produced from the Vaqueros Sandstone and the underlying Sespe Formation. Small amounts of oil and gas production were made from a handful of wells in fractured Rincon Shale. Natural seeps of tar, oil, and gas are common in the coastal area south of the Santa Ynez Range. Most of these seeps issue from or near outcrops of Monterey Shale, on or near the sea cliffs. Bituminous seeps in the Monterey Shale and younger formations of the coastal bluffs are of asphalt tar or heavy black asphalt base oil that are probably indigenous to the Monterey Shale. Regional and local ground water levels in the project area have not been determined.

2. Construction Site BMPs

Since this project disturbs less than 1 acre of soil, a water pollution control plan (WPCP) will be required.

- Coordinate with Construction to determine the appropriate selection of Construction Site BMPs being implemented into the contract documents (e.g. separate line items and/or lump sum).

In process and will continue through PA/ED and PS&E.

- Summarize those Construction Site BMPs that have been designated as separate Bid Line Items.

Will be completed by PS&E.

- Describe any pertinent details from the strategy used for estimating Construction Site BMPs.

As outlined in Appendix F of the Project Planning and Design Guide, the percent of total cost method was used for estimating the cost of Construction Site BMPs. At this time, no Construction Site BMPs

Short Form - Storm Water Data Report

have been designated as separate bid line items. The current estimated cost for Construction Site BMPs is 1.5% of the total project cost.

- Document coordination effort to get concurrence from Construction regarding the Construction Site BMP strategy and associated quantities (provide names of staff and date of meeting(s)). Attach a copy of the Construction Site BMP Consideration Form to the SWDR at PS&E. **By PS&E.**

REQUIRED ATTACHEMENTS

- Vicinity Map
- Evaluation Documentation Form

Evaluation Documentation Form

DATE: 03-12-2007

See Figure 4-1, Project Evaluation Process for Consideration of Permanent Treatment BMPs

EA: 05-0K330K

NO.	CRITERIA	YES	NO	SUPPLEMENTAL INFORMATION FOR EXEMPTION
1.	Begin Project Evaluation regarding requirement for consideration of Treatment BMPs	<input checked="" type="checkbox"/>		Go to 2
2.	Is this an emergency or Safety project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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). <i>BL</i> (Dist./Reg. SW Coordinator initials) If No , continue to 4.
4.	Is the project within an urban MS4? NOT IN AN URBAN AREA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	If Yes , continue to 5. <u>Santa Barbara County</u> If No , go to 12.
5.	Is the project directly or indirectly discharging to surface waters?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Yes , continue to 6. If No , go to 12.
6.	Is it a new facility or major reconstruction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	If Yes , continue to 8. If No , go to 7.
7.	Will there be a change in line/grade or hydraulic capacity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	If Yes , continue to 8. If No , go to 10.
8.	Is the Disturbed Soil Area (DSA) created by the project <u>greater than or equal to 1.2 hectares?</u>	<input type="checkbox"/>	<input type="checkbox"/>	If Yes , continue to 11. If No , go to 9. _____ (Total DSA quantity)
9.	Is the project part of a Common Plan of Development?	<input type="checkbox"/>	<input type="checkbox"/>	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)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	If Yes , continue to 11. If No , go to 12.
11.	Consider approved Treatment BMPs for the project.	<input type="checkbox"/>		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. <i>JRP</i> (Dist./Reg. SW Coord. Initials) <i>JW</i> (Project Engineer Initials) <u>5/9/07</u> (Date)	<input checked="" type="checkbox"/>		Document for Project Files by completing this form, and attaching it to the SWDR.
13.	End of checklist	<input checked="" type="checkbox"/>		

Construction Site BMP Consideration Form

DATE: 03-12-2007

Project Evaluation Process for the Consideration of Construction Site BMPs

EA: 05-0K330K

NO.	CRITERIA	YES	NO	SUPPLEMENTAL INFORMATION
1.	Will construction of the project result in areas of disturbed soil as defined by the Project Planning and Design Guide (PPDG)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Yes , Construction Site BMPs for Soil Stabilization (SS) will be required. Complete CS-1, Part 1. Continue to 2. If No , Continue to 3.
2.	Is there a potential for disturbed soil areas within the project to discharge to storm drain inlets, drainage ditches, areas outside the right of way, etc?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Yes , Construction Site BMPs for Sediment Control (SC) will be required. Complete CS-1, Part 2. Continue to 3.
3.	Is there a potential for sediment or construction related materials and wastes to be tracked offsite and deposited on private or public paved roads by construction vehicles and equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Yes , Construction Site BMPs for Tracking Control (TC) will be required. Complete CS-1, Part 3. Continue to 4.
4.	Is there a potential for wind to transport soil and dust offsite during the period of construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Yes , Construction Site BMPs for Wind Erosion Control (WE) will be required. Complete CS-1, Part 4. Continue to 5.
5.	Is dewatering anticipated or will construction activities occur within or adjacent to a live channel or stream?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Yes , Construction Site BMPs for Non-Storm Water Management (NS) will be required. Complete CS-1, Part 5. Continue to 6.
6.	Will construction include saw-cutting, grinding, drilling, concrete or mortar mixing, hydro-demolition, blasting, sandblasting, painting, paving, or other activities that produce residues?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Yes , Construction Site BMPs for Non-Storm Water Management (NS) will be required. Complete CS-1, Part 5. Continue to 7.
7.	Are stockpiles of soil, construction related materials, and/or wastes anticipated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Yes , Construction Site BMPs for Waste Management and Materials Pollution Control (WM) will be required. Complete CS-1, Part 6. Continue to 8.
8.	Is there a potential for construction related materials and wastes to have direct contact with precipitation; storm water run-on, or stormwater runoff; be dispersed by wind; be dumped and/or spilled into storm drain systems?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Yes , Construction Site BMPs for Waste Management and Materials Pollution Control (WM) will be required. Complete CS-1, Part 6. Continue to 9.
9.	End of checklist.	<input checked="" type="checkbox"/>		Document for Project Files by completing this form, and attaching it to the SWDR.

PE to initialize after concurrence with Construction (PS&E only)

Date

Construction Site BMPs			
Checklist CS-1, Part 1			
Prepared by: <u>Amir Eftekhari</u>	Date: <u>03-12-2007</u>	District-Co-Route: <u>05-SB-101</u>	
KP (PM): <u>73.2(45.5)</u>	EA: <u>05-0K330K</u>		
RWQCB: <u>Central Coast Region (3)</u>			

Soil Stabilization

General Parameters

- | | |
|--|--|
| 1. How many rainy seasons are anticipated between begin and end of construction? | 1 |
| 2. What is the total disturbed soil area for the project? (ha/ac) | 0.243 acres |
| (a) How much of the project DSA consists of slopes 1V:4H or flatter? (ha/ac) | 0.225 acres |
| (b) How much of the project DSA consists of 1V:4H < slopes < 1V:2H? (ha/ac) | 0.018 acres |
| (c) How much of the project DSA consists of slopes 1V:2H and steeper? (ha/ac) | 0 |
| (d) How much of the project DSA consists of slopes with slope lengths longer than 6 m (20 ft)? (ha/ac) | 0 |
| 3. What rainfall area does the project lie within? (Refer to Table 2-1 of the Construction Site Best Management Practices Manual) | 2 |
| 4. Review the required combination of temporary soil stabilization and temporary sediment controls and barriers for area, slope inclinations, rainy and non-rainy season, and active and non-active disturbed soil areas. (Refer to Tables 2-2, and 2-3 of the Construction Site Best Management Practices Manual for Rainfall Area requirements.) | <input checked="" type="checkbox"/> Complete |

Scheduling (SS-1)

- | | |
|--|---|
| 5. Does the project have a duration of more than one rainy season and have disturbed soil area in excess of 10 ha (25 acres)? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| (a) Include multiple mobilizations (Move-in/Move-out) as a separate contract bid line item to implement permanent erosion control or revegetation work on slopes that are substantially complete. (Estimate at least 6 mobilizations for each additional rainy season. Designated Construction Representative may suggest an alternate number of mobilizations.) | <input type="checkbox"/> Complete |
| (b) Edit Order of Work specifications for permanent erosion control or revegetation work to be implemented on slopes that are substantially complete. | <input type="checkbox"/> Complete |
| (c) Edit permanent erosion control or revegetation specifications to require seeding and planting work to be performed when optimal. | <input type="checkbox"/> Complete |

Preservation of Existing Vegetation (SS-2)

6. Do Environmentally Sensitive Areas (ESAs) exist within or adjacent to the project limits? (Verify the completion of DPP-1, Part 5) Yes No
- (a) Verify the protection of ESAs through delineation on all project plans. Complete
- (b) Protect from clearing and grubbing and other construction disturbance by enclosing the ESA perimeter with high visibility plastic fence or other BMP. Complete
7. Are there areas of existing vegetation (mature trees, native vegetation, landscape planting, etc.) that need not be disturbed by project construction? Will areas designated for proposed treatment BMPs need protection (infiltration characteristics, vegetative cover, etc.)? (Coordinate with District Environmental and Construction to determine limits of work necessary to preserve existing vegetation to the maximum extent possible.) Yes No
- (a) Designate as outside of limits of work (or designate as ESAs) and show on all project plans. Complete
- (b) Protect with high visibility plastic fence or other BMP. Complete
8. If yes for 6, 7, or both, then designate ESA fencing as a separate contract bid line item, *if not already incorporated as part of design pollution prevention work (See DPP-1, Part 5).* Complete

Slope Protection

9. Provide a soil stabilization BMP(s) appropriate for the DSA, slope steepness, slope length, and soil erodibility. (Consult with District/Regional Landscape Architect.) **All DSA's are anticipated to be active during construction as per Table 2-2 and 2-3 of the Construction Site BMP Manual. A temporary soil stabilization BMP is not required. Also, existing vegetation will only be cut down to the ground level leaving the roots and lower stem intact to facilitate regrowth and to help stabilize the slopes.**
- (a) Select SS-3 (Hydraulic Mulch), SS-4 (Hydroseeding), SS-5 (Soil Binders), SS-6 (Straw Mulch), SS-7 (Geotextiles, RECPs, Etc.), SS-8 (Wood Mulching), other BMPs or a combination to cover the DSA throughout the project's rainy season. Complete
- (b) Increase the quantities by 25% for each additional rainy season. (Designated Construction Representative may suggest an alternate increase.) Complete
- (c) Designate as a separate contract bid line item. Complete

Slope Interrupter Devices

10. Provide slope interrupter devices for all slopes with slope lengths equal to or greater than of 6 m (20 ft) in length. (Consult with District/Regional Landscape Architect and Designated Construction Representative.) **N/A**
- (a) Select SC-5 (Fiber Rolls) or other BMPs to protect slopes throughout the project's rainy season. Complete
 - (b) For slope inclination of 1V:4H and flatter, SC-5 (Fiber Rolls) or other BMPs shall be placed along the contour and spaced 6.0 m (20 ft) on center. Complete
 - (c) For slope inclination between 1V:4H and 1V:2H, SC-5 (Fiber Rolls) or other BMPs shall be placed along the contour and spaced 4.5 m (15 ft) on center. Complete
 - (d) For slope inclination of 1V:2H and greater, SC-5 (Fiber Rolls) or other BMPs shall be placed along the contour and spaced 3.0 m (10 ft) on center. Complete
 - (e) Increase the quantities by 25% for each additional rainy season. (Designated Construction Representative may suggest alternate increase.) Complete
 - (f) Designate as a separate contract bid line item. Complete

Channelized Flow

11. Identify locations within the project site where concentrated flow from stormwater runoff can erode areas of soil disturbance. Identify locations of concentrated flow that enters the site from outside of the right of way (off-site run-on). **The project will require extensive work in the creek where water will flow from upstream. The stream flow will have to be diverted away from work area.** Complete
- (a) Utilize SS-7 (Geotextiles, RECPs, etc.), SS-9 (Earth Dikes/Swales, Ditches), SS-10 (Outlet Protection/Velocity Dissipation), SS-11 (Slope Drains), SC-4 (Check Dams), or other BMPs to convey concentrated flows in a non-erosive manner. **By PS&E** Complete
 - (b) Designate as a separate contract bid line item. **By PS&E** Complete

Construction Site BMPs			
Checklist CS-1, Part 2			
Prepared by: <u>Amir Eftekhari</u>	Date: <u>03-12-2007</u>	District-Co-Route: <u>05-SB-101</u>	
KP (PM): <u>73.2 (45.5)</u>	EA: <u>05-0K330K</u>		
RWQCB: <u>Central Coast Region 3</u>			

Sediment Control

Perimeter Controls - Run-off Control

1. Is there a potential for sediment laden sheet and concentrated flows to discharge offsite from runoff cleared and grubbed areas, below cut slopes, embankment slopes, etc.? Yes No
 - (a) Select linear sediment barrier such as SC-1 (Silt Fence), SC-5 (Fiber Rolls), SC-6 (Gravel Bag Berm), SC-8 (Sand Bag Barrier), SC-9 (Straw Bale Barrier), or a combination to protect wetlands, water courses, roads (paved and unpaved), construction activities, and adjacent properties. (Coordinate with District Construction for selection and preference of linear sediment barrier BMPs.) **By PS&E** Complete
 - (b) Increase the quantities by 25% for each additional rainy season. (Designated Construction Representative may suggest an alternate increase.) Complete
 - (c) Designate as a separate contract bid line item. **By PS&E** Complete

Perimeter Controls - Run-on Control

2. Do locations exist where sheet flow upslope of the project site and where concentrated flow upstream of the project site may contact DSA and construction activities? Yes No
 - (a) Utilize linear sediment barriers such as SS-9 (Earth Dike/Drainage Swales and Lined Ditches), SC-5 (Fiber Rolls), SC-6 (Gravel Bag Berm), SC-8 (Sand Bag Barrier), SC-9 (Straw Bale Barrier), or other BMPs to convey flows through and/or around the project site. (Coordinate with District Construction for selection and preference of perimeter control BMPs.) **By PS&E** Complete
 - (b) Designate as a separate contract bid line item. **By PS&E** Complete

Storm Drain Inlets

3. Do existing or proposed drainage inlets exist within the project limits? Yes No
- (a) Select SC-10 (Storm Drain Inlet Protection) to protect municipal storm drain systems or receiving waters wetlands at each drainage inlet. (Coordinate with District Construction for selection and preference of inlet protection BMPs.) **By PS&E** Complete
- (b) Designate as a separate contract bid line item. **By PS&E** Complete
4. Can existing or proposed drainage inlets utilize an excavated sediment trap as described in SC-10 (Storm Drain Inlet Protection- Type 2)? Yes No
- (a) Include with other types of SC-10 (Storm Drain Inlet Protection). Complete

Sediment/Desilting Basin (SC-2)

5. Does the project lie within a Rainfall Area where the required combination of temporary soil stabilization and sediment control BMPs includes desilting basins? (Refer to Tables 2-1, 2-2, and 2-3 of the Construction Site Best Management Practices Manual for Rainfall Area requirements.) Yes No
- (a) Consider feasibility for desilting basin allowing for available right-of-way within the project limits, topography, soil type, disturbed soil area within the watershed, and climate conditions. Document if the inclusion of sediment/desilting basins is infeasible. Complete
- (b) If feasible, design desilting basin(s) per the guidance in SC-2 Sediment/Desilting Basins of the Construction Site BMP Manual to maximize capture of sediment laden runoff. Complete
- Designate as a separate contract bid item. Complete
6. Will the project benefit from the early implementation of proposed permanent Treatment BMPs? (Coordinate with District Construction.) Yes No
- (a) Edit Order of Work specifications for permanent treatment BMP work to be implemented in a manner that will allow its use as a construction site BMP. Complete

Sediment Trap (SC-3)

7. Can sediment traps be located within collected or channelized runoff from disturbed soil areas prior to discharge? Yes No
- (a) Design sediment traps in accordance with the Construction Site BMP Manual. Complete
- (b) Designate as a separate contract bid line item. Complete

**Construction Site BMPs
Checklist CS-1, Part 3**

Prepared by: <u>Amir Eftekhari</u>	Date: <u>03-12-2007</u>	District-Co-Route: <u>05-SB-101</u>
KP (PM): <u>73.2 (45.5)</u>	EA: <u>05-0K330K</u>	
RWQCB: <u>Central Coast Region 3</u>		

Tracking Controls

Stabilized Construction Entrance/Exit (TC-1)

1. Are there points of entrance and exit from the project site to paved roads where mud and dirt could be transported offsite by construction equipment? (Coordinate with District Construction for selection and preference of tracking control BMPs.) Yes No
 - (a) Identify and designate these entrance/exit points as stabilized construction entrances (TC-1). **By PS&E** Complete
 - (b) Designate as a separate contract bid line item. **By PS&E** Complete

Tire/Wheel Wash (TC-3)

1. Are site conditions anticipated that would require additional or modified tracking controls such as entrance/outlet tire wash? (Coordinate with District Construction.) Yes No

Designate as a separate contract bid line item. Complete

Stabilized Construction Roadway (TC-2)

3. Are temporary access roads necessary to access remote construction activity locations or to transport materials and equipment? (In addition to controlling dust and sediment tracking, access roads limit impact to sensitive areas by limiting ingress, and provide enhanced bearing capacity.) (Coordinate with District Construction.) Yes No
 - (a) Designate these temporary access roads as stabilized construction roadways (TC-2). Complete
 - (b) Designate as a separate contract bid line item. Complete

Street Sweeping and Vacuuming (SC-7)

1. Is there a potential for tracked sediment or construction related residues to be transported offsite and deposited on public or private roads? (Coordinate with District Construction for preference of including street sweeping and vacuuming with tracking control BMPs.) Yes No

Designate as a separate contract bid line item. **By PS&E** Complete

Construction Site BMPs

Checklist CS-1, Part 4

Prepared by: <u>Amir Eftekhari</u>	Date: <u>03-12-2007</u>	District-Co-Route: <u>05-SB-101</u>
KP (PM): <u>73.2 (45.5)</u>	EA: <u>05-0K330K</u>	
RWQCB: <u>Central Coast Region 3</u>		

Wind Erosion Controls

Wind Erosion Control (WE-1)

1. Is the project located in an area where standard dust control practices in accordance with Standard Specifications, Section 10: Dust Control, are anticipated to be inadequate during construction to prevent the transport of dust offsite by wind? *(Note: Dust control by water truck application is paid for through the various items of work. Dust palliative, if it is included, is paid for as a separate item.)* Yes No
 - (a) Select SS-3 (Hydraulic Mulch), SS-4 (Hydroseeding), SS-5 (Soil Binders), SS-7 (Geotextiles, Plastic Covers, & Erosion Control Blankets/Mats), SS-8 (Wood Mulching) or a combination to cover the DSA subject to wind erosion year-round, especially when significant wind and dry conditions are anticipated during project construction. (Coordinate with District Construction for selection and preference of wind erosion control BMPs.) **By PS&E** Complete
 - (b) Designate as a separate contract bid line item. **By PS&E** Complete

Construction Site BMPs			
Checklist CS-1, Part 5			
Prepared by: <u>Amir Eftekhari</u>	Date: <u>03-12-2007</u>	District-Co-Route: <u>05-SB-101</u>	
KP (PM): <u>73.2 (45.5)</u>	EA: <u>05-0K330K</u>		
RWQCB: <u>Central Coast Region 3</u>			

Non-Storm Water Management

Temporary Stream Crossing (NS-4) & Clear Water Diversion (NS-5)

1. Will construction activities occur within a waterbody or watercourse such as a lake, wetland, or stream? (Coordinate with District Construction for selection and preference for stream crossing and clear water diversion BMPs.) Yes No
 - (a) Select from types offered in NS-4 (Temporary Stream Crossing) to provide access through watercourses consistent with permits and agreements.¹ Complete
 - (b) Select from types offered in NS-5 (Clear Water Diversion) to divert watercourse consistent with permits and agreements.¹ **By PS&E** Complete
 - (c) Designate as a separate contract bid line item(s). **By PS&E** Complete

Other Non-Storm Water Management BMPs

2. Are construction activities anticipated that will generate wastes or residues with the potential to discharge pollutants? Yes No
 - (a) Identify potential pollutants associated with the anticipated construction activity and select the corresponding BMP such as NS-1 (Water Conservation Practices), NS-2 (Dewatering Operations), NS-3 (Paving and Grinding Operations), NS-7 (Potable Water/Irrigation), NS-8 (Vehicle and Equipment Cleaning), NS-9 (Vehicle and Equipment Fueling), NS-10 (Vehicle and Equipment Maintenance), NS-11 (Pile Driving Operations), NS-12 (Concrete Curing), NS-13 (Material and Equipment Use Over Water), NS-14 (Concrete Finishing), and NS-14 (Structure Demolition/Removal Over or Adjacent to Water).¹ **By PS&E** Complete
 - (b) Verify that costs for non-storm water management BMPs are identified in the contract documents. Designate BMP as a separate contract bid line item if requested by Construction. **By PS&E** Complete

1. Coordinate with District Environmental for consistency with US Army Corps of Engineers 404 permit and Dept. of Fish and Game 1601 Streambed alteration Agreements.

Construction Site BMPs			
Checklist CS-1, Part 6			
Prepared by: <u>Amir Eftekhari</u>	Date: <u>03-12-2007</u>	District-Co-Route: <u>05-SB-101</u>	
KP (PM): <u>73.2 (45.5)</u>	EA: <u>05-0K330K</u>		
RWQCB: <u>Central Coast Region 3</u>			

Waste Management & Materials Pollution Control

Concrete Waste Management (WM-8)

1. Does the project include concrete pours or mortar mixing? Yes No
- (a) Select from types offered in WM-8 (Concrete Waste Management) to provide concrete washout facilities. In addition, consider portable concrete washouts and vendor supplied concrete waste management services. (Coordinate with District Construction for selection and preference of waste management and materials pollution control BMPs.) **This project will include a temporary concrete washout facility. By PS&E** Complete
- (b) Designate as a separate contract bid line item. **By PS&E** Complete

Other Waste Management and Materials Pollution Controls

2. Are construction activities anticipated that will generate wastes or residues with the potential to discharge pollutants? Yes No
- (a) Identify potential pollutants associated with the anticipated construction activity and select the corresponding BMP such as WM-1 (Material Delivery and Storage), WM-2 (Material Use), WM-4 (Spill Prevention and Control), WM-5 (Solid Waste Management), WM-6 (Hazardous Waste Management), WM-7 (Contaminated Soil Management), WM-9 (Sanitary/Septic Waste Management) and WM-10 (Liquid Waste Management) **By PS&E** Complete
- (b) Verify that costs for waste management and materials pollution control BMPs are identified in the contract documents. Designate BMP as a separate contract bid line item if requested by Construction. **By PS&E** Complete

Temporary Stockpiles (Soil, Materials, and Wastes)

3. Are stockpiles of soil, etc. anticipated during construction? Yes No
- (a) Select WM-3 (Stockpile Management), SS-3 (Hydraulic Mulch), SS-4 (Hydroseeding), SS-5 (Soil Binders), SS-7 (Geotextiles, RECPs etc.), or a combination as appropriate to cover temporary stockpiles of soil, etc. **By PS&E** Complete
- (b) Select linear sediment barrier such as SC-1 (Silt Fence), SC-5 (Fiber Rolls), SC-6 (Gravel Bag Berm), SC-8 (Sand Bag Barrier), SC-9 (Straw Bale Barrier), or a combination to encircle temporary stockpiles of soil, etc. (Coordinate with District Construction for selection and preference of BMPs related to stockpiles.) **By PS&E** Complete

Checklist CS-1, Part 6

- (c) Designate as a separate contract bid line item. **By PS&E** Complete
4. Is there a potential for dust and debris from construction material (fill material, etc.) and waste (concrete, contaminated soil, etc.) stockpiles to be transported offsite by wind? Yes No
- (a) Select SS-7, temporary cover, plastic sheeting or other BMP to cover stockpiles subject to wind erosion year-round, especially when significant wind and dry conditions are anticipated during project construction. (Coordinate with District Construction for selection and preference of wind erosion control BMPs.) **By PS&E** Complete
- (b) Designate as a separate contract bid line item. **By PS&E** Complete

Central Region Environmental Division
Mitigation Cost Compliance Estimate Form

PEAR Draft ED Final ED PS&E

Dist.-Co.-Rte.-PM: 05-SB-101-45.5EA: 0K330KProject Name: Gaviota CulvertAlternative #: 1Project Description: Replace CulvertEnvironmental Manager: Larry NewlandPhone Number: (805) 542-4603Environmental Planner: Lara BertainaPhone Number: (805) 549-3777Project Manager: Scott EadesPhone Number: (805) 549-3144Design Manager: Foad Al-HamdaniDate: 01/25/07

Numbers are in thousands

	Right of Way Capital (Prior to Construction – Biology only) (050)	Construction Capital (During and Post Construction) (042)
Archaeological		
Historical		
Paleontology		
Hazardous Waste		
Noise		
Biological		
Mitigation parcels (# of acres only)		
Mitigation/Bank Credits (\$-amt)*		
Monitoring (\$-amt)		100,000
Permit Costs		
401 Permit Fee	5,000	
404 Permit Fee	0	
1600 Permit Fee	4,000	
Coastal Development Permit Fee	15,000	
DFG Doc Review	1,800	
Other		
Total (add only \$-amounts from Bio/Permits/Review fees)	25,800	100,000

- This form is completed as part of the PEAR for all candidate projects, at completion of the Draft Environmental Document, at the completion of the Final Environmental Document, and during preparation of the PS&E.
- This form is to be completed for all SHOPP, STIP, and Minor A & B projects (**even those without Mitigation**).
- Include all costs necessary to complete the commitment including: capital outlay (non-staffing support costs); cost of right-of-way or easements; long-term monitoring and reporting by consultants during the construction phase, and any follow-up maintenance post construction.
- Timing of Enhancement/Endowment funds will depend on which agency is requiring the mitigation. Funds may need to be available as 050 or as 042.
- *Mitigation Bank Credits (\$-amt) may include enhancement and/or endowment.

Memorandum

To: SCOTT EADES

Date: 2/20/2007

File: EA 0K330K ALT 1

Attn: JEFFREY WHITAKER
DIST 06, BRANCH 7

DESCRIPTION:

REPLACE 6' X 6' RCB CLUVERT UNDERNEATH ROUTE 101
IN SANTA BARBARA COUNTY.

From: Department of Transportation
Division of Right of Way Central Region

Subject: RIGHT OF WAY DATA SHEET

We have completed an estimate of the right of way costs for the above-referenced project based on the Right of Way Data Sheet Request Form dated

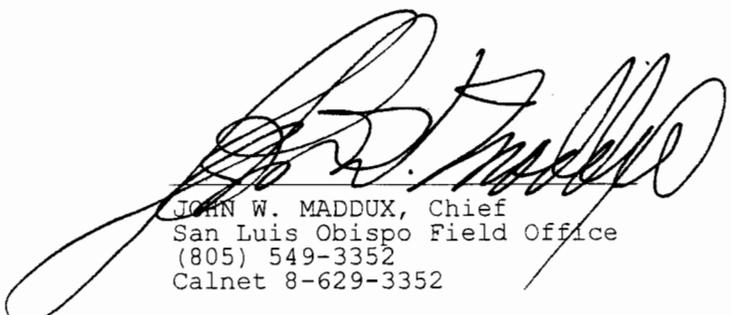
1/29/2007

The following assumptions and limiting conditions were identified:

Additional information includes the following:

As this is the replacement of an existing culvert the utility aspect of design should consist mainly of identifying the location of the existing utilities within the project limits. Several high risk facilities have been granted encroachment permits within the general vicinity of the project and thus it may be necessary to conduct some positive location activities. Money has been included to cover these costs.

Right of Way Lead Time will require a minimum of 15 months after we receive certified Appraisal Maps, the necessary environmental clearance has been obtained, and freeway agreements have been approved.



JOHN W. MADDUX, Chief
San Luis Obispo Field Office
(805) 549-3352
Calnet 8-629-3352

RIGHT OF WAY COST ESTIMATE	CURRENT YR 2007	CONTINGENCY RATE	RIGHT OF WAY ESCALATION RATE	ESCALATED YEAR (Rounded) 2012
ACQUISITION	\$46,865	25.00%	6.00%	\$63,000
PERMIT FEES	\$32,250	25.00%	6.00%	\$43,000
MITIGATION	\$0.00	25.00%	6.00%	\$0
STATE SHARE OF UTILITIES	\$4,375	25.00%	5.00%	\$6,000
RAP	\$0	25.00%	6.00%	\$0
CLEARANCE/DEMO	\$0	25.00%	6.00%	\$0
TITLE AND ESCROW	\$2,968	25.00%	6.00%	\$4,000
EXPERT WITNESS	\$0	25.00%	6.00%	\$0
SUPPORT HOURS				
TOTAL CURRENT VALUE *				\$116,000

ESTIMATED CONSTRUCTION CONTRACT WORK

\$3,000

R/W LEAD TIME/MONTH

15

PARCEL DATA			
# OF PCL TYPE X	0	# OF DUAL APPR X	0
# OF PCL TYPE A	0	# OF DUAL APPR A	0
# OF PCL TYPE B	2	# OF DUAL APPR B	0
# OF PCL TYPE C	0	# OF DUAL APPR C	0
# OF PCL TYPE D	0	# OF DUAL APPR D	0
# OF MITIGATION	0		
TOTALS	2	TOTALS	0
# OF EXCESS PARCEL 0			

UTILITIES	
U4-1	0
U4-2	0
U4-3	0
U4-4	0
U5-7	7
U5-8	0
U5-9	7

RR INVOLVEMENT	
ARE RAILROAD FACILITIES OR RIGHTS OF WAY	NO
CONST/MAINT AGREEMENT	NO
SERVICE CONTRACT	NO
RIGHT OF ENTRY	NO
CLAUSES	NO

MISC R/W WORK	
# OF RAP DISPLACEMENT	0
# OF CLEARANCE/DEMO	0
# OF CONST PERMITS	3
# OF CONDEMNATION	0

* IF R/W COST ESTIMATE FIELDS ARE BLANK, TOTAL CURRENT VALUE = \$0

ARE UTILITIES OR OTHER RIGHTS OF WAY AFFECTED

RAILROAD LEADTIME REQUIRED

<u>PARCEL AREA</u>		<u>UNIT: ACRE</u>	
TOTAL R/W TAKE	3.462	TOTAL R/W FEE	\$27,492
TOTAL EXCESS AREA	0	TOTAL EXCESS COST	\$0
TOTAL MITIGATION AREA	0		

PROVIDE GENERAL DESCRIPTION OF R/W AND EXCESS LANDS REQUIRED (ZONING, USE, MAJOR IMPROVEMENTS, CRITICAL OR SENSITIVE PARCELS, ETC.):

Two large Coastal Ag parcels impacted with permanent drainage easements and temporary construction easements. Estimate mapping does not show ownerships, APNs, total parcel area, etc. Estimator used mapping from previous request. Also, it is assumed that permanent drainage easements will be required at both ends of the culvert. Data Sheet Request indicates borrow or disposal site required, but no mapping provided for such a site to be estimated for acquisition by Right of Way. Environmental Cost Compliance Estimate indicates \$25,800 for permits and no mitigation. Grantor appraisal costs (SB 1210) of \$5,000 per parcel (2) have been added to acquisition costs.

IS THERE A SIGNIFICANT EFFECT ON ASSESSED VALUATION?

WERE ANY PREVIOUSLY UNIDENTIFIED SITES WITH HAZARDOUS WASTE OR MATERIAL FOUN

ARE RAP DISPLACEMENTS REQUIRE

OF SINGLE FAMILY # OF MULTI FAMILY # OF BUSINESS/NONPROFIT # OF FARMS

SUFFICIENT REPLACEMENT HOUSING WILL BE AVAILABLE WITHOUT LAST RESORT HOUSING

ARE MATERIAL BORROW OR DISPOSAL SITES REQUIRED

ARE THERE POTENTIAL RELINQUISHMENTS OR ABANDONMENTS?

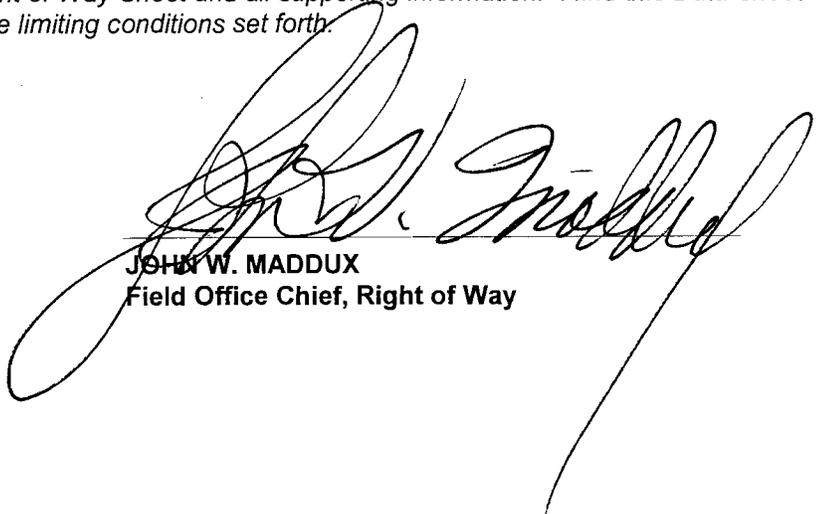
ARE THERE ANY EXISTING OR POTENTIAL AIRSPACE SITES

ARE ENVIRONMENTAL MITIGATION PARCELS REQUIRED

DATA FOR EVALUATION PROVIDED BY

ESTIMATOR	REQUIRED	PHIL ACOSTA	2/7/2006
RAILROAD LIAISON AGENT		SALLY A. HOPKINS	2/16/2007
UTILITY RELOCATION COORDINATOR		PATRICK MASON	2/2/2007

I have personally reviewed this Right of Way Sheet and all supporting information. I find this Data Sheet complete and current, subject to the limiting conditions set forth.



JOHN W. MADDUX
Field Office Chief, Right of Way

DATE ENTERED PMCS 2/20/2007
BY NANCIE THOMAS

ADD RECORD

CLOSE FORM

FIND RECORD

PRINT

UTILITIES DATA SHEET

EA 0K330K

ALT

1

STATE SHARE OF R/W UTILITY RELOCATION COST \$3,500

CONTINGENCY RATE 25.00% STATE SHARE OF UTIL + CONTINGENCY \$4,375

UTILITY ESCALATION RATE 5.00% ESCALATED YR 2012

OF ESCALATED YRS 5 ESCALATED STATE SHARE OF UTIL \$5,584

U4-1 0 U4-2 0 U4-3 0 U4-4 0 U5-7 7 U5-8 0 U5-9 7

ARE UTILITIES OR OTHER RIGHTS OF WAY AFFECTED? NO List companies involved

ELECTRIC So. Cal. Edison GAS SCG - Dist & Trans TELEPHONE Verizon

CABLE TV WATER SEWER

FIBER OPTICS Level(3) Communications OTHER Exxon; Texaco

UTILITY	UNIT COST	% STATE LIABILITY *	TOTAL
GAS LINE @	\$0.00 /LF		\$0.00
GAS LINE SIZE			
UG ELEC	\$0.00 /LF		\$0.00
UG TEL	\$0.00 /LF		\$0.00
UG CABLE TV	\$0.00 /LF		\$0.00
WOOD POLES TELE	\$0.00 /WOOD POLE TELE		\$0.00
WOOD POLES ELEC	\$0.00 /WOOD POLE ELEC		\$0.00
JOINT POLES	\$0.00 /POLE		\$0.00
POLE ANCHORS	\$0.00 /EA		\$0.00
STEEL POLES	\$0.00 /STEEL POLE		\$0.00
STEEL TOWERS	\$0.00 /TOWER		\$0.00
WATER LINE	\$0.00 /FH		\$0.00
WATER LINE SIZE			
SEWER LINE	\$0.00 /LINE		\$0.00
TELE JUNCTION BOXES	\$0.00 /LF		\$0.00
ELEC VAULTS	\$0.00 /VAULT		\$0.00
TELE VAULTS	\$0.00 /EACH		\$0.00

* 1.0 = 100%, .50 = 50%

TOTAL ESTIMATE OF STATE COST

\$0.00

ADDITIONAL INFORMATION CONCERNING UTILITY INVOLVEMENTS ON THIS PROJECT

As this is the replacement of an existing culvert the utility aspect of design should consist mainly of identifying the location of the existing utilities within the project limits. Several high risk facilities have been granted encroachment permits within the general vicinity of the project and thus it may be necessary to conduct some positive location activities. Money has been included to cover these costs.

ARE VERIFICATION PLANS REQUIRED? YES IF YES, HOW MANY MONTHS? 8

UTILITY RELOCATION COORDINATOR PATRICK MASON DATE 2/2/2007

PRELIMINARY COST ESTIMATE SUMMARY

DATE: 4/05/2007

District-County-Route 05-SB-101
PM 45.5
EA 05-OK330K
SHOPP 201.151

PROJECT DESCRIPTION: Gaviota Culvert Replacement Project

Limits At PM 45.5 near the Gaviota rest area in Santa Barbara County

Proposed Improvement (Scope) Culvert Replacement

Alternative 1

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	<u>\$1,848,000</u>
TOTAL STRUCTURE ITEMS	<u>\$0</u>
SUBTOTAL CONSTRUCTION COSTS	<u>\$1,848,000</u>
TOTAL RIGHT OF WAY ITEMS	<u>\$116,000</u>
TOTAL PROJECT CAPITAL OUTLAY COSTS	<u>\$1,964,000</u>

Reviewed by District Program Manager

Jim Kramer for Kelly McElroy (Signature) Date 5/23/07

Approved by Project Manager

[Signature] (Signature) Date 5.23.07

District-County-Route	05-SB-101
PM	45.5
EA	05-0K330K

I. ROADWAY ITEMS

Section 1 Earthwork

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Roadway excavation	0			\$0	
Imported Borrow	0			\$0	
Clearing and Grubbing	1	LS	\$1,000	\$1,000	
Develop Water Supply	0			\$0	
			Subtotal Earthwork		\$1,000

Section 2 Pavement Structural Section*

Asphalt Concrete Type B	0			\$0	
Asphalt-Treated Base	0			\$0	
Class 2 Aggregate Base	0			\$0	
Class 4 Aggregate Sub Base	0			\$0	
Rubberized Asphalt Concrete (Type G)	0			\$0	
			Subtotal Pavement Structural Section		\$0

Section 3 Drainage

Large Drainage Facilities	0			\$0	
Storm Drains	0			\$0	
Pumping Plants	0			\$0	
1800 mm RCP Culvert (Jacked)	525	Ft	\$900	\$472,500	
Construct Headwall & Wingwall	206	Ft ³	\$60	\$12,360	
Construct Endwall & Wingwall	0	Ft ³		\$0	
Replace Pipe Riser	1	LS	\$27,950.00	\$27,950	
Replace DI	1	Ea	\$7,100.00	\$7,100	
Abandon pipe Riser	1	Ea	\$1,450.00	\$1,450	
Abandon Culvert	1	LS	\$69,900.00	\$69,900	
Stream Diversion	1	LS	\$17,000	\$17,000	
			Subtotal Drainage		\$608,260

District-County-Route	05-SB-101
PM	45.5
EA	05-0K330K

Section 6 Minor Items

			<u>Item Cost</u>	<u>Section Cost</u>
	<u>\$1,213,553</u>	x (5%)	=	<u>\$60,678</u>
	(Subtotal Sections 1 thru 5)			
		TOTAL MINOR ITEMS		<u>\$60,678</u>

Section 7 Roadway Mobilization

	<u>\$1,274,230</u>	x (10%)	=	<u>\$127,423</u>
	(Subtotal Sections 1 thru 6)			
		TOTAL ROADWAY MOBILIZATION		<u>\$127,423</u>

Section 8 Roadway Additions

Supplemental Work

	<u>\$1,274,230</u>	x (10%) =		<u>\$127,423</u>
	(Subtotal Sections 1 thru 6)			

Contingencies

	<u>\$1,274,230</u>	x (25%)=		<u>\$318,558</u>
	(Subtotal Sections 1 thru 6)			

TOTAL ROADWAY ADDITIONS \$445,981

TOTAL ROADWAY ITEMS \$1,847,634
(Subtotal Sections 1 thru 8)

Estimate Prepared By	Amir Eftekhari	Phone#	559-243-3544	2/9/2007
Estimate Checked By	Jeff Whitaker	Phone#	559-243-3515	4/5/2007

District-County-Route
PM
EA

05-SB-101
45.5
05-0K330K

II. STRUCTURES ITEMS

	Structure (1)
Bridge Name	_____
Structure Type	_____
Diameter - (m)	_____
Span Lengths - (m)	_____
Total Area - (m2)	_____
Footing Type (pile/spread)	_____
Cost	\$0
(incl. 10% mobilization and 25% contingency)	\$0
	\$0
Total Cost for Structure	\$0

SUBTOTAL STRUCTURES ITEMS \$0
(Sum of Total Cost for Structures)

Railroad Related Costs:

_____	_____
\$0	\$0
\$0	\$0

SUBTOTAL RAILROAD ITEMS \$0

TOTAL STRUCTURES ITEMS \$0
(Sum of Structures Items plus Railroad Items)

District-County-Route	<u>05-SB-101</u>
PM	<u>45.5</u>
EA	<u>05-0K330K</u>

III. RIGHT OF WAY ITEMS

	ESCALATED VALUE
A. Acquisition, including excess lands, damages to remainder(s) and Goodwill	\$63,000
B. Permit Fees	\$43,000
C. Mitigation	\$0
D. Utilities (State share)	\$6,000
E. Relocation Assistance	\$0
F. Clearance/Demolition	\$0
G. Title and Escrow Fees	\$4,000

TOTAL RIGHT OF WAY ITEMS	<u>\$116,000</u>
(Escalated Value)	

Anticipated Date of Right of Way Certification (Date to which Values are Escalated)	<u>2009</u>
--	-------------

H. Construction Contract Work

Brief Description of Work:

Right of Way Branch Cost Estimate for Work *	<u>\$0</u>
--	------------

* This dollar amount is to be included in the Roadway and/or Structures Items of Work, as appropriate. Do not include in Right of Way Items.

COMMENTS:

Estimate Prepared By Amir Eftekhari Phone# (559) 243-3544

Estimate Checked By Jeff Whitaker Phone# (559) 243-3515

PROJECT RISK MANAGEMENT PLAN

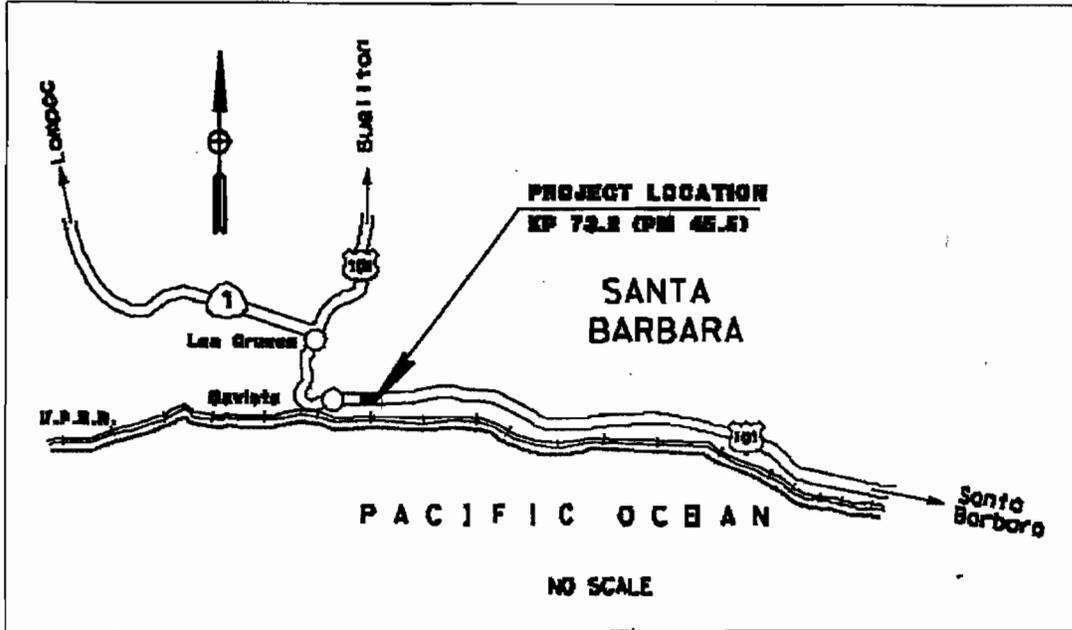
Dist - E.A 05-0K330K Gaviota Culvert Replacement
 Co-Rte-PM SB-101-45.5
 Date 4/30/2007
 Project Mngr S Eades Telephone Number (805) 549-3144

PROJECT RISK MANAGEMENT PLAN																				
Priority	Identification						Qualitative Analysis			OPTIONAL Quantitative Analysis			Response Strategy		Monitoring and Control					
	Status	ID #	Date Identified	Functional Assignment	Threat/Opportunity Event	SMART Column	Risk Trigger	Type	Probability	Impact	Risk Matrix	Probability (%)	Impact (\$ or days)	Effect (\$ or days) = (13)x(14)	Strategy	Response Actions including advantages and disadvantages	Affected WBS Tasks	Responsibility (Task Manager)	Status Interval or Milestone Check	Date, Status and Review Comments
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
1	Active		4/30/2007	Cultural Resources	Phase II studies: Native American Consultation	If skeletal remains are found, rebunial could delay delivery or construction costs could increase.	Phase II studies required or discovery during construction.	Schedule	Low	Low					Mitigation	Complete archeological survey. Avoid higher probability sites with detailed design. Add construction schedule contingency. If construction schedule contingency is used it must be implemented one FY prior to CCA date.	WBS 165 Perform Environmental Studies and Prepare Draft Environmental Document (DED)			
1	Active		4/30/2007	Bio Resources	Endangered Species	Gaviota Tarplant and Red Legged Frog. Endangered species consultation is anticipated.	Discovery during environmental studies	Schedule	Moderate	Moderate					Mitigation	Begin field studies asap and Design phase early in the zero phase and avoid impacts if possible. If not possible to avoid, reduce the impacts to greatest extent possible. Initiate Formal Consultation with USFWS. Include contingency costs in MCCE Form for plant mitigation and monitoring.	WBS 165 Perform Environmental Studies and Prepare Draft Environmental Document (DED)			
1	Active		4/30/2007	Environmental/Design	Coastal Development Permit	Anticipate need for Section 404 permit, Section 401 certification, and CDFG Streambed Alteration Agreement (1601) as noted in PEAR. A Coastal Development Permit (CDP) from Santa Barbara County is also required.	Need for permits determined during project scoping.	Schedule	Moderate	Moderate					Mitigation	Obtain design surveys in zero phase. Begin detailed design in the zero phase. Begin permit process early in the design phase. Accelerate design at specific sites that require permits. Make early contact with permit agencies and establish schedule priorities and discuss ways to achieve them.	WBS 230 Prepare Draft PS&E			
1	Active		4/30/2007	Design/Env	Survey Windows	Field survey windows for biology could affect the schedule if they are missed.	Begin 0 Phase	Schedule	Moderate	High					Mitigation	Request Permits to enter as soon as resources are available. Perform surveys as soon as possible once resources are available. Ensure that schedule allows time for all studies/surveys to be completed.	WBS 165 Perform Environmental Studies and Prepare Draft Environmental Document (DED)			
1	Active		4/30/2007	Design/Construction	Construction Window	Location may have construction work window constraint (ie. May-Oct, or June Oct).	Env studies phase	Schedule	High	Moderate					Mitigation	Ensure that contract language specifies order of work that considers construction windows	WBS 230 Prepare Draft PS&E			
								Schedule												
								Cost												



05-SB 101-KP 73.2 (PM 45.5)
 EA 05-0K330K
 201.151 SHOPP Program
 August 2004

PROJECT STUDY REPORT



On Route 101 in Santa Barbara County, near Gaviota State Park and just south of Gaviota Safety Roadside Rest Area.

APPROVAL RECOMMENDED:

[Signature]

ROCHELLE VIERRA
 PROJECT MANAGER

APPROVED:

[Signature]

R. GREGG ALBRIGHT
 DISTRICT 5 DIRECTOR

[Signature]
 DATE

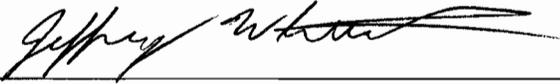
CONCURRENCE:

[Signature]

JAY NORVELL
 ACTING DISTRICT DIRECTOR
 DISTRICT 6 - CENTRAL REGION

PROJECT SCOPE & TECHNICAL DATA ARE VALID THROUGH: 8/2007
 Schedule Cost & Work Plan must be updated prior to use for Programming after 7/2005.

This Project Study 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.



JEFFREY WHITAKER
REGISTERED CIVIL ENGINEER

7/15/2004

DATE



I. INTRODUCTION

This Project Study Report (PSR) proposes to replace an existing reinforced concrete box (RCB) culvert on State Route 101 (SR-101) in Santa Barbara County at KP 73.2 (PM 45.5) near Gaviota State Park. Two alternatives are discussed in this report with current costs ranging from approximately \$1,763,000 for the replacement alternative to \$0 for the no-build alternative. For the replacement alternative, the escalated costs for construction, right of way, and support are \$2,044,000, \$65,000, and \$947,000, respectively. No non-standard features are proposed with the replacement alternative. This project was initiated by District 5 Maintenance Design (Maintenance Design). The project team recommends the replacement alternative.

II. RECOMMENDATION

It is recommended that this Project Study Report be approved, and that the project be programmed in the 2006 SHOPP to be funded in the Drainage System Restoration (201.151) for delivery in the 2009/10 fiscal year.

III. BACKGROUND

SR-101 is a 4-lane divided highway and is the main northern/southern route within District 5, primarily serving interregional traffic. A field review by Maintenance Design staff determined that an existing 1.83 m x 1.83 m RCB culvert that crosses beneath SR-101 is deteriorating and has exposed bar reinforcement in the floor, walls, soffit, and concrete joints. Portions of the RCB culvert have settled. The RCB culvert changes to a 1.83-m reinforced concrete pipe (RCP) culvert at some point under the highway and the RCP appears to be in good condition. The RCB/RCP culvert crosses under SR-101 and serves as the major artery for the stormwater collected from the adjacent mountain range and roadway that directly discharges to the Pacific Ocean.

IV. NEED AND PURPOSE

Maintenance Design recommended that a project be initiated to replace the existing RCB/RCP culvert to maintain facility integrity and operation. The RCB portion of the existing culvert showed excessive cracking and spalling of the concrete structure resulting from possible corrosion of the embedded reinforcement steel and alkali-silica reactivity. In addition, the left inlet wingwall of the RCB has moderate scour behind and underneath it where it would normally taper into the slope. Failure to address corrective action at this location would allow continued scouring and abrasion leading to eventual failure of the structure. This would undermine the roadway above it, resulting in closure of the highway for an extended period.

In addition, a pipe riser connecting a median drainage inlet (DI) to the existing RCB at the soffit has collapsed and must be replaced. To replace the RCB/RCP and headwalls/wingwalls, access to environmentally sensitive areas, including the streambed, will be required. Access to the culvert is through steep and difficult terrain and may require specialized heavy equipment.

Traffic Data

The Design Designation for the existing facility is as follows:

YEAR	2002	2008	2018
DHV	2,750	2,904	3,179
AADT	29,500	33,887	42,697

% Trucks in DH: 9.0%
 % Trucks in ADT: 11.9%
 Directional Split: 60%

Latest 3-Year Accident Data: The Traffic Accident Surveillance and Analysis System (TASAS) Table B for the 3-year period from 7/1/00 to 6/30/03 shows a total of 6 accidents occurred within the project limits (0 fatalities, 1 injury).

The accident rate for State Route 101 within the project limits for the aforementioned 3-year period is as follows:

ACTUAL			AVERAGE		
FATAL	F+I	TOTAL	FATAL	F+I	TOTAL
0.00	0.06	0.36	0.019	0.32	0.71

(Unit = accidents/million vehicle km)

This project's accident rate is lower than the State average for similar roadways with comparable traffic volumes.

V. ALTERNATIVES

One alternative is proposed for this project, in addition to the No-build Alternative.

Alternative 1 – Culvert Replacement

This alternative proposes to replace the existing RCB/RCP culvert by jacking a new 1.83-meter RCP culvert adjacent to the existing culvert. Upon completion of

the new culvert, inlet and outlet headwalls and wingwalls would be constructed. Partial diversion of the stream will likely be required to allow the work area to remain dry during construction of the new culvert, headwalls, and wingwalls.

The median DI and pipe riser would need to either be repaired, if possible, or replaced. The repair would involve cleaning out debris from the old pipe riser and placing a new sleeve through the DI and pipe riser to the existing RCB culvert and then extending it to the outlet of the RCP prior to abandoning the RCB/RCP culvert by filling with a sand/cement slurry. If the existing pipe riser is permanently collapsed, a new DI will need to be constructed adjacent to the existing DI and extended vertically to the new RCP culvert or angled towards the outlet endwall. Upon completion of all jacking and headwall work, the existing RCB/RCP culvert will be abandoned by capping the ends with concrete and filling the void space with sand/cement slurry. The inlet and outlet of the new RCP culvert will require ¼ tonne rock slope protection at the outlet and the slope at the inlet will require reshaping to repair scour. No non-standard features are proposed.

To access the construction area, significant removal of existing vegetation and access to the streambed will be required. Access to the inlet side of the culvert can be obtained by using an adjacent road and footpath. The outlet side is through steep terrain and is more difficult. Jacking of the RCP culvert would likely be from the inlet side.

Additional Right of Way will be required for this alternative. The right of way needs consist of agricultural and open space land, and no homes or businesses will be affected. The anticipated right of way required consists of two temporary construction easements and two permanent drainage easements totaling 1.40 hectares (3.454 acres). Although no utility relocations are anticipated, a \$6,000 State share of utilities is included in the estimate for potholing, if necessary.

The estimated costs for Alternative 1 are:

Roadway Costs	\$	1,763,000
Right of Way Costs (escalated to 2009)	\$	65,000
Structure Costs	\$	0
Total	\$	1,828,000

Alternative 2 – No-build

With this alternative, there would be no improvements within project limits and conditions would likely worsen over time causing failure of the culvert and the roadway above it.

Analysis of Proposal

Alternative 1 is recommended for programming. It provides a replacement culvert with the same flow capacity without requiring full closure of the roadway above it. It will also provide improved roadway drainage and rock slope protection that will prevent further scour at the inlet and outlet.

The RCB portion of the existing culvert exhibits significant spalling caused by abrasion resulting in exposure of reinforcement steel required to maintain structural integrity. Further degradation of the concrete and steel will cause structural failure. If this occurs, scour at the inlet will eventually wash away the embankment beneath the roadbed, resulting in closure of the facility for an extended period.

Another alternative to replace the culvert by the open trench method was discussed and subsequently rejected due to the high costs associated with removing the existing fill. The depth of the existing RCB/RCP culvert is as much as 25 meters below the roadway.

VI. SYSTEM PLANNING

The existing facility is a four-lane freeway and expressway and is classified as a principle arterial. Route 101 is a part of the National Highway System and is on the Interregional Road System (IRRS) and is a designated Focus Route in the Caltrans Interregional Transportation Strategic Plan (ITSP). Route 101 is also a designated route on the National Truck Network under the Surface Transportation Assistance Act (STAA). The proposed project is a Drainage System Restoration project that will not preclude any plans to improve nor harm the operation of the facility.

VII. HAZARDOUS MATERIALS/WASTE

No hazardous waste sites or hazardous materials were identified within the project limits. Aerially deposited lead is not expected to be an issue due to the nature of the project. There is no evidence of Franciscan Melange rock formations that are indicative of naturally-occurring asbestos.

VIII. TRANSPORTATION MANAGEMENT PLAN (TMP)

A TMP is required for the construction of this project. The preliminary lane closure chart for this project indicates that daytime work is acceptable except for the first three hours in the morning (6 to 9 a.m.) in the SB direction and three hours during the evening rush hour (4 to 7 p.m.) in the NB direction. No closure would be allowed on Friday evening, holidays, and weekends, except for Sunday

night. Construction Zone Enhanced Enforcement Program (COZEEP) will be required during lane closures. The preliminary project estimate includes anticipated TMP costs (see Attachments E and I).

IX. ENVIRONMENTAL PROCESSING TYPE

The anticipated environmental document for the proposed project is a Negative Declaration/Categorical Exclusion. The California Department of Transportation (Department) will act as lead agency in the preparation of a joint CEQA/NEPA (California Environmental Quality Act/National Environmental Policy Act) environmental document. The Department will be required to work with Santa Barbara County since the proposed work is within the coastal zone. The project will require a Section 4(f) study to show that all feasible measures are taken to minimize impacts to State Park land that will need to be acquired, including avoidance alternatives. The final environmental determination is projected to occur within 20 months from the start of environmental studies.

A. Biological Resources

This project may affect sensitive biological resources. Formal consultation with US Fish and Wildlife Service (USFWS) on the California red-legged frog and the tarplant critical habitat will be required. The existing culvert should be inspected for the presence/absence of bats, nesting swallows and other protected species. Bird and bat surveys should be completed in the spring/summer season.

The project is located within critical habitat for Gaviota tarplant, requiring surveys be performed between May and October. Surveys will be required for Davidson's saltscale between April and October. In order to minimize impacts to the critical habitat, every effort should be made to minimize the footprint of this project. Surveys for the California red legged frog and the two-stripe garter snake will need to be performed between May and October. All disturbed areas of native grassland and coastal sage scrub (Gaviota Tarplant Critical Habitat) must be restored to their pre-project condition. An estimated \$5,000 will be required for tree/vegetation replacement. If Gaviota tarplants are found within the project limits, an additional \$10,000 will be needed for rare plant mitigation. This project could require up to 5 years of monitoring.

B. Cultural Resources

Cultural resources have been identified within the project vicinity. However, none are anticipated to be found within the project limits. An archeological survey will be required for the project. The proposed Area of Potential Effect (APE) must include all access roads, work areas and staging areas beyond the

existing paved highway. Any subsequent changes in project scope may require additional archaeological or historical review. Native American tribes or groups that may have an interest in or be affected by the proposed project include the Santa Ynez Band of Mission Indians (Chairperson) and Santa Ynez Tribal Elders Council.

C. Aesthetic Resources

Scenic resources will not be impacted by the project. However, due to its location within the Coastal Zone, limiting tree removal is recommended where possible.

D. Air, Noise, Paleontology, and Water Quality

There will be no long-term impacts on air or noise quality from this project. Detailed technical studies are not required. The proposed work areas have high and low potential for encountering sensitive paleontology resources. Although significant soil disturbance is expected with this work, particularly at the culvert entrance and exits, no impacts on sensitive paleontological resources are expected since primarily only non-native fill material from the overlying roadbed will be disturbed. No further investigation of the potential for finding any impacts is required. If any vertebrate or plant fossils are discovered during construction, it is required that construction activity be halted in the immediate vicinity of the discovery until the District Archaeologist or District Paleontology Coordinator have the opportunity to review the site.

All streams within the project area discharge directly to the Pacific Ocean. No other receiving waters have been identified within the project limits and within Caltrans right of way where spill activities or facilities can discharge directly to municipal or domestic water supply. The proposed project does not significantly increase velocity, volume, or increase sediment loading potential of downstream flow, nor does it create line, grade, or significant hydraulic changes. Partial stream diversion at the inlet and outlet will be utilized for this project.

Moderate scour at the inlet will need to be repaired which will involve minor grading and backfill. All other existing slopes are stable and vegetated. Affected areas will be managed for erosion control, re-vegetation, and noxious weed control. In areas where access to the site is required by equipment and materials requiring vegetation removal, existing plants will be cut down near the roots rather than removed so that plant re-establishment will take less time and soil erosion will be minimal. Traditional clearing and grubbing will not be utilized except at the jacking pit. A plant establishment period will be necessary to ensure restoration success. The Area of Potential Effect is 4.05

hectares, which includes those areas within State's right of way. This project is exempt from Permanent Treatment BMPs.

E. Permits

A Section 404 permit, Section 401 certification, and CDFG Streambed Alteration Agreement (1601) will be necessary. In addition, a Coastal Development Permit will be required from Santa Barbara County.

X. FUNDING/SCHEDULING

This project is a candidate for programming in the 2006 SHOPP to be funded in the Drainage System Restoration (201.151) for delivery in the 2009/10 fiscal year. As previously mentioned in Sections I and V, the current estimated project cost is \$1,825,000. The proposed estimated resources and schedule for this project are summarized below:

PROJECT COST COMPONENT	FISCAL YEARS						TOTAL
	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	
R/W Capital					65		65
Construction Capital						2,044	2,044
PA&ED			240				240
PS&E			340				340
R/W Support					75		75
Construction Support						292	292
Total Each Column			580		140	2,336	3,056

Note: All costs X \$1,000. Construction Capital and Support Costs escalated at 3.0% & 2.0% per year respectively. Right of Way Capital costs for acquisitions and utilities each escalated at 5% per year. Support Categories are the same as those identified by SB 45.

PROJECT MILESTONE	DATE
Approve PSR	September 2004
PA&ED	July 2008
Certify Right of Way	October 2009
District PS&E to HQ	August 2009
RTL	November 2009
Construction Complete	October 2010

Consideration of Change Control

As mandated by Brent Felker's Memorandum dated July 28, 2000, change control has been incorporated into the proposed project through modifications to the schedule and the work breakdown structure. This will enhance Caltrans' ability to honor delivery commitments and reduces any re-work. Change control has also been implemented by starting Task Activity 185 (prepare base maps and plan sheets) prior to completion of PA&ED.

XI. DISTRICT CONTACTS

The following individuals may be contacted for information pertaining to this Project Study Report:

Rochelle Vierra	(805) 549-3003
Project Manager	Calnet 629-3003
Tom Fisher	(559) 243-3498
Hydraulics Senior	Calnet 425-3498
Foad Al-Hamdani	(559) 243-3546
Design Manager, Office of Design II - Y	Calnet 425-3546
Jeffrey Whitaker	(559) 243-3544
Project Engineer, Office of Design II - Y	Calnet 425-3544
Ali Jirde	(559) 243-3544
Office of Design II - Y	Calnet 425-3544

XII. ATTACHMENTS

- A. Vicinity Map
- B. Typical Cross Section
- C. Layout Map
- D. Preliminary Environmental Analysis Report
- E. Preliminary Cost Estimate Summary
- F. Constructability Review Attendance Roster
- G. R/W Data Sheet
- H. Storm Water Data Report
- I. Traffic Management Plan Checklist & Lane Closure Chart

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DESIGN DIVISION
 PROJECT ENGINEER
JEFF WHITAKER
 CALCULATED/DESIGNED BY
 CHECKED BY

DATE REVISED BY
 DATE REVISED

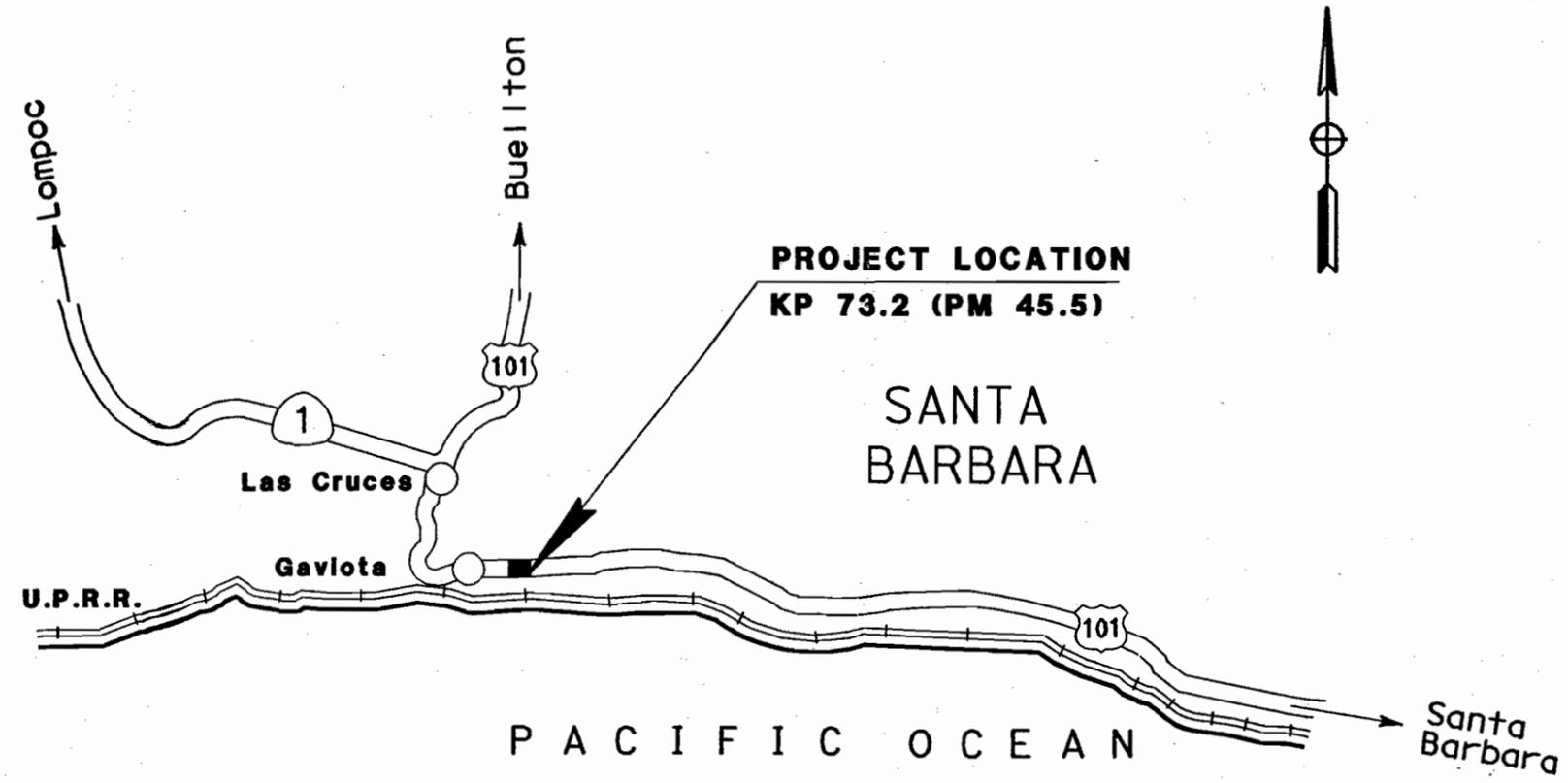


DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
05	SB	101	73.2		

REGISTERED CIVIL ENGINEER

 PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.
 Caltrans now has a web site! To get to the web site, go to: <http://www.dcl.ca.gov>



VICINITY MAP
 NO SCALE

ATTACHMENT A

LAST REVISION: DATE PLOTTED => 15-JUL-2004
 05-07-04 TIME PLOTTED => 15:07

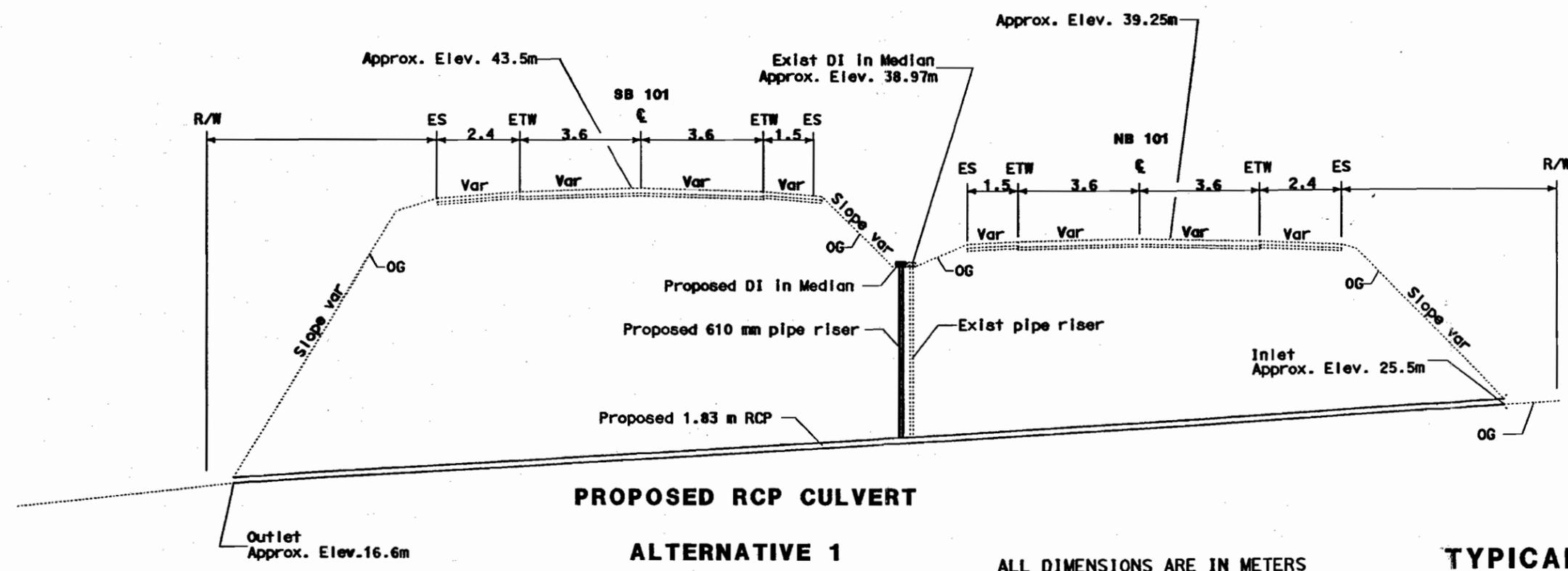
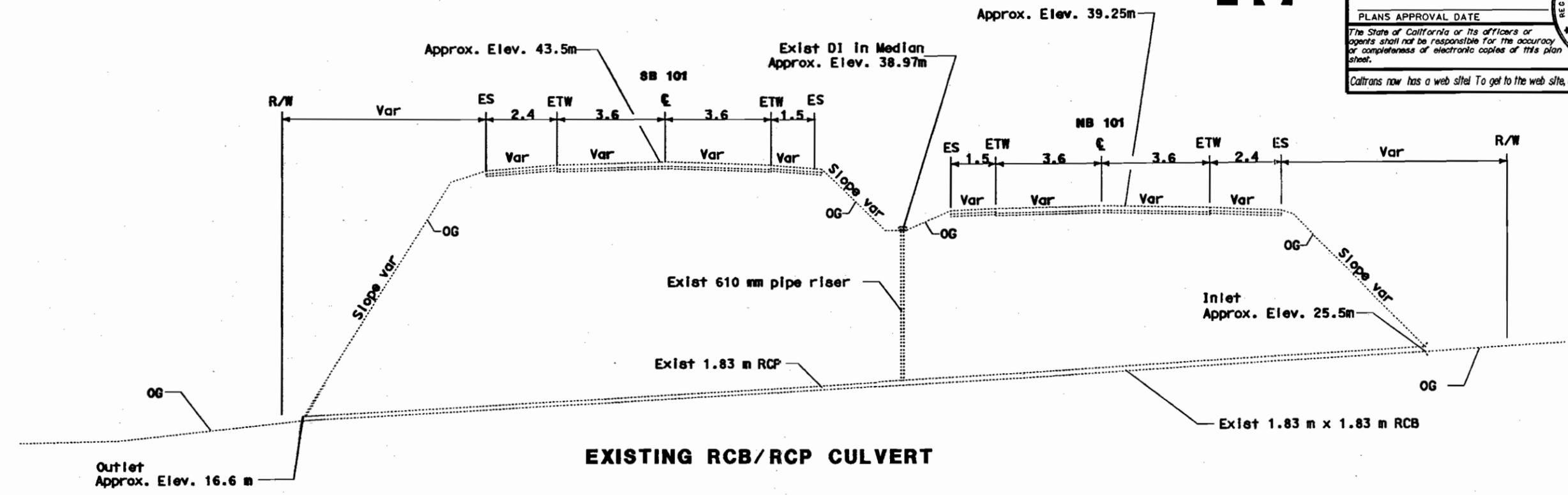
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
05	SB	101	73.2		

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

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ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN

ATTACHMENT B
TYPICAL CROSS SECTION

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

PROJECT ENGINEER
JEFFREY WHITAKER

DESIGN DIVISION

REVISOR
DATE

DESIGNED BY
CHECKED BY

REVISIONS

DATE PLOTTED => 15-JUL-2004
TIME PLOTTED => 15:32



DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
05	SB	101	73.2		

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

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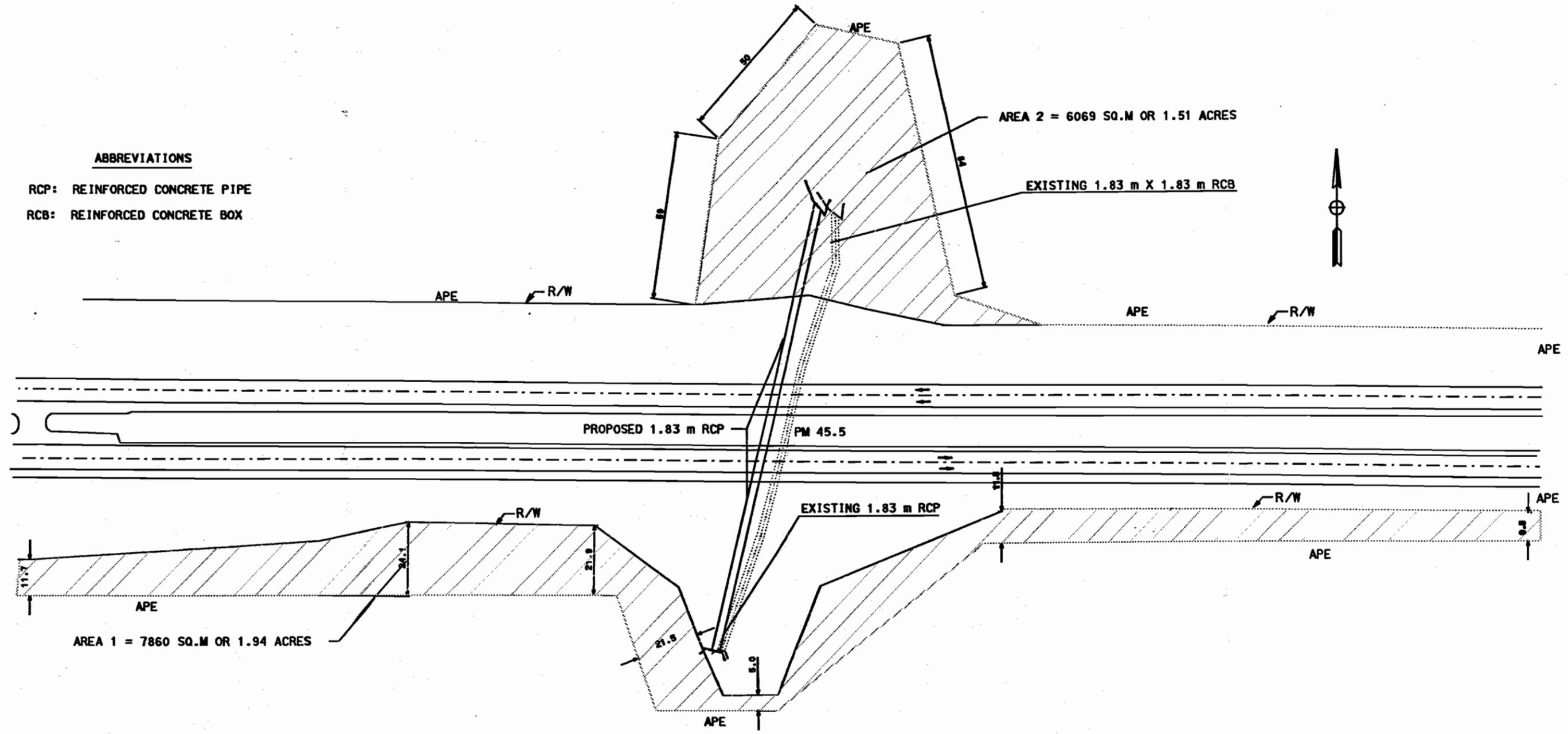


LEGEND

TEMPORARY CONSTRUCTION EASEMENT TOTAL AREA = 13,930 SQ.M OR 3.44 ACRES

ABBREVIATIONS

RCP: REINFORCED CONCRETE PIPE
 RCB: REINFORCED CONCRETE BOX



PROJECT ENGINEER: **JEFF WHITAKER**
 CALCULATED/DESIGNED BY: [Blank]
 CHECKED BY: [Blank]
 DATE REVISIED BY: [Blank]
 DATE REVISIED: [Blank]

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

**LAYOUT
ATTACHMENT C**

LAST REVISION: [Blank]
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 TIME PLOTTED => 15:37



Preliminary Environmental Analysis Report

Project Information

District 05 County SB Route 101 Kilometer Post (Post Mile) KP 73.2 (PM 45.5) EA 0K330K

Project Title: Gaviota Culvert Replacement

Project Manager Rochelle Vierra Phone # (805) 549-3003

Project Engineer Foad Al-Hamdani Phone # (559) 243-3546

Environmental (Manager) Office Chief Larry Newland Phone # (805) 542-4603

Environmental Planner Generalist Lara Bertaina Phone # (805) 549-3783

Project Description

Purpose and Need: The project is needed because the RCP concrete has excessive cracking and spalling and the left inlet wingwall has moderate scour behind and underneath it. The purpose of the project is to repair the damage and restore the culvert and wingwall to functioning order.

Description of work: Replace the existing culvert by jacking new 1.83m reinforced concrete pipe culvert under the highway, adjacent to the existing culvert, construct a new headwall, and repair scour at the inlet. The old culvert would be capped and filled with concrete slurry.

Alternatives: Alternative 1: described above. Alternative 2: no build.

Anticipated Environmental Approval

CEQA

- Categorical/Statutory Exemption
- Negative Declaration / focused ND
- Environmental Impact Report

NEPA

- Categorical Exclusion
- Finding of No Significant Impact
- Environmental Impact Statement

Caltrans will be the CEQA Lead Agency for this project. The project would require approximately 20 months to complete environmental approval and approximately 1,370 hours to complete.

PSR Summary Statement

The project is located within critical habitat for Gaviota tarplant, requiring surveys be performed between May and October. Surveys will be required for Davidson's saltscale between April and October. Formal consultation will be required with US Fish and Wildlife Service for effects to the tarplant critical habitat.

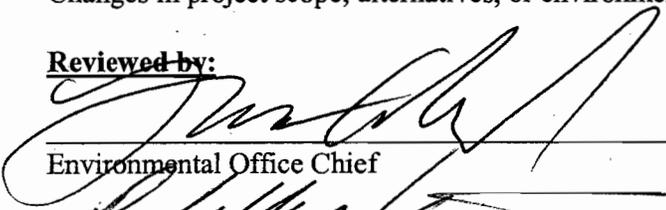
Anticipated Project Mitigation (for standard PSR only)

All disturbed areas of native grassland and coastal sage scrub (Gaviota Tarplant Critical Habitat) must be restored to their pre-project condition. \$30,000 will be required for tree/vegetation replacement. If Gaviota tarplants are found within the project limits, an additional \$10,000 will be needed for rare plant mitigation. Duff collection would require \$50,000.

Disclaimer

This report is not an environmental document. Preliminary analysis, determinations, and estimates of mitigation costs are based on the project description provided in this report. The estimates and conclusions provided are approximate and are based on cursory analysis of probable effects. This report is to provide a preliminary level of environmental analysis to supplement the Project Study Report. Changes in project scope, alternatives, or environmental laws will require a re-evaluation of this report.

Reviewed by:



Environmental Office Chief

Date: 11 Nov 2001



Project Manager

Date: 8/11/04

State Coastal Permit Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
NPDES Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
US Coast Guard (Section 10)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion of Technical Review

*Use brief paragraphs focused on topics that will need environmental review. Indicate the absence of issues to document that they were considered. Follow the Checklist when preparing the summary discussion. Make a separate statement for each viable alternative. **Samples follow:***

Socio-economic and Community Effects. The project is not expected to have any effects on the local community or the economy.

Farmlands. Because no additional ROW is anticipated, no farmlands study would be required.

4(f) Impacts. A programmatic Section 4(f) study would need to be completed for this project.

Visual Effects. A visual assessment will not be required, however a memo to file recommending visual impact avoidance is recommended.

Water Quality and Erosion. The site should be evaluated for potential water quality impacts associated with the project. If site dewatering is required for new construction, a dewatering plan is required. Site access for construction must be included in any water quality analysis.

Floodplain. A floodplain evaluation report will not need to be prepared for this project.

Air and Noise. Potential long-term air quality and noise impacts are not anticipated.

Cultural Resources. An archeological survey will be required for the project. The proposed Area of Potential Effect (APE) must include all access roads, work areas and staging areas beyond the existing paved highway. Any subsequent changes in project scope may require additional archaeological or historical review.

Native American Coordination. The following Native American tribes or groups may have an interest in or be affected by the proposed project: Santa Ynez Band of Mission Indians (Chairperson) and Santa Ynez Tribal Elders Council.

Hazardous Waste/Materials. An Initial Site Assessment (ISA) will be required to address the potential for hazardous waste. The risk ranking for this project is low.

Biological Resources. This project may affect sensitive biological resources. Formal consultation with USFWS on the California red-legged frog and the tarplant critical habitat will be required. The existing culvert should be inspected for the presence/absence of bats, nesting swallows and other protected species. Bird and bat surveys should be completed in the spring/summer season. The California Natural Diversity Data Base (CNDDDB) does not indicate any other known sensitive biological resources in this location.

Wetlands. Wetlands were not identified at the project site.



Preliminary Environmental Analysis Report

Project Information

District 05 County SB Route 101 Kilometer Post (Post Mile) KP 73.2 (PM 45.5) EA 0K330K

Project Title: Gaviota Culvert Replacement

Project Manager Rochelle Vierra Phone # (805) 549-3003

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NEPA

- Categorical Exclusion
- Finding of No Significant Impact
- Environmental Impact Statement

Caltrans will be the CEQA Lead Agency for this project. The project would require approximately 20 months to complete environmental approval and approximately 1,370 hours to complete.

PSR Summary Statement

The project is located within critical habitat for Gaviota tarplant, requiring surveys be performed between May and October. Surveys will be required for Davidson's saltscale between April and October. Formal consultation will be required with US Fish and Wildlife Service for effects to the tarplant critical habitat.

In order to minimize impacts to the critical habitat, **every effort should be made to minimize the footprint** of this project. Surveys for the California red legged frog (CRLF) and the Two-stripe garter snake will also need to be performed between May and October. All disturbed areas of native grassland and coastal sage scrub (Gaviota Tarplant Critical Habitat) must be restored to their pre-project condition. \$90,000 (this amount includes \$50,000 for duff collection, \$25,000 for highway planting, \$5,000 for replacement planting and \$10,000 *if* Gaviota tarplant is identified at the project site), will be required for tree/vegetation replacement. This project could require up to 5 years of monitoring.

A section 404 permit, Section 401 certification and CDFG Streambed Alteration Agreement (1601) will be necessary. A Coastal Development Permit will be required from the County of Santa Barbara.

Cultural resources have been identified within the project vicinity, however none are anticipated to be found within the project limits. There is no apparent evidence of hazardous waste in the field or indication in the available literature. No long-term water quality impacts are anticipated, however adherence to Caltrans National Pollutant Discharge Elimination System (NPDES) permit, the Caltrans Storm Water Management plan (SWMP), the Caltrans Project Planning and Design Guide, the Construction Site Best Management Practices Manual, and Caltrans Standard Specifications will be required. If the total disturbed soil area for the proposed project will be greater than 1 acre, the contractor will be required to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). Otherwise, a Water Pollution Control Plan will be required. The project is exempt from an air quality conformity determination in accordance with 40 CFR 93.126. Construction emissions will have to be minimized. Because the project is in a rural area with no sensitive receptors near the highway in the vicinity of the proposed work, no night work is proposed and long-term noise levels will not be effected, noise will not be an issue. There is a low potential of finding sensitive paleontological resources within the project limits. Scenic Resources will not be impacted by the project, however, due to its location within the Coastal Zone, limiting tree removal is recommended where possible.

A Section 4(f) study will need to be prepared due to the necessity to acquire State Park land.

Permits to enter will be required to conduct environmental surveys outside the right of way.

Special Considerations

Formal consultation will be required with US Fish and Wildlife Service for effects to the tarplant critical habitat. In order to minimize impacts to the critical habitat, **every effort should be made to minimize the footprint** of this project. If Gaviota tarplants are found within the project limits, an additional \$10,000 will be needed for rare plant mitigation. This project could require up to 5 years of monitoring.

Some of the mitigation costs may change considerably due to the 2004 Gaviota Fire. Most of the existing vegetation was obliterated by the fire and, depending on when the project is built, replacement and highway planting may be higher, due to new vegetation growth, or lower, due to lack of vegetation growth.

It has been Environmental's experience, when working in the coastal region in Santa Barbara County, that fees for the County's Coastal Development Permit process have been considerably higher than most other counties. This is not reflected in the CDP fees listed in the Mitigation and Compliance Cost Estimate at the end of this form.

Section 4(f) requires that all feasible measures be taken to minimize impacts to Section 4(f) properties, including avoidance alternatives.

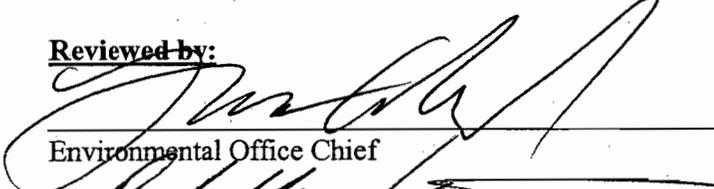
Anticipated Project Mitigation (for standard PSR only)

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Disclaimer

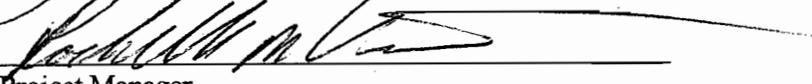
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Reviewed by:



Environmental Office Chief

Date: 11/06/2001



Project Manager

Date: 8/11/04

Environmental Technical Reports or Studies Required

	Study	Document	N/A
Community Impact Study	<input type="checkbox"/>	<input type="checkbox"/>	X
Farmland	<input type="checkbox"/>	<input type="checkbox"/>	X
Section 4(f) Evaluation	X	<input type="checkbox"/>	<input type="checkbox"/>
Visual Resources	<input type="checkbox"/>	X	<input type="checkbox"/>
Water Quality	X	<input type="checkbox"/>	<input type="checkbox"/>
Floodplain Evaluation	<input type="checkbox"/>	<input type="checkbox"/>	X
Noise Study	<input type="checkbox"/>	X	<input type="checkbox"/>
Air Quality Study	<input type="checkbox"/>	X	<input type="checkbox"/>
Paleontology	<input type="checkbox"/>	X	<input type="checkbox"/>
Wild and Scenic River Consistency	<input type="checkbox"/>	<input type="checkbox"/>	X
Cumulative Impacts	<input type="checkbox"/>	X	<input type="checkbox"/>
Cultural			
ASR	X	<input type="checkbox"/>	<input type="checkbox"/>
HSR	<input type="checkbox"/>	<input type="checkbox"/>	X
HASR	<input type="checkbox"/>	<input type="checkbox"/>	X
HPSR	<input type="checkbox"/>	<input type="checkbox"/>	X
Section 106 / SHPO	<input type="checkbox"/>	<input type="checkbox"/>	X
Native American Coordination	X	<input type="checkbox"/>	<input type="checkbox"/>
Other			
Finding of Effect _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data Recovery Plan _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hazardous Waste			
ISA (Additional)	<input type="checkbox"/>	X	<input type="checkbox"/>
PSI	<input type="checkbox"/>	<input type="checkbox"/>	X
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biological			
Endangered Species (Federal)	X	<input type="checkbox"/>	<input type="checkbox"/>
Endangered Species (State)	X	<input type="checkbox"/>	<input type="checkbox"/>
Species of Concern (CNPS, USFS, BLM, S, F)	<input type="checkbox"/>	X	<input type="checkbox"/>
Biological Assessment (USFWS, NMFS, State)	X	<input type="checkbox"/>	<input type="checkbox"/>
Wetlands	<input type="checkbox"/>	<input type="checkbox"/>	X
Invasive Species	<input type="checkbox"/>	<input type="checkbox"/>	X
Natural Environment Study	X	<input type="checkbox"/>	<input type="checkbox"/>
NEPA 404 Coordination	<input type="checkbox"/>	<input type="checkbox"/>	X
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Permits			
401 Permit Coordination	X	<input type="checkbox"/>	<input type="checkbox"/>
404 Permit Coordination	X	<input type="checkbox"/>	<input type="checkbox"/>
1601 Permit Coordination	X	<input type="checkbox"/>	<input type="checkbox"/>
City/County Coastal Permit Coordination	X	<input type="checkbox"/>	<input type="checkbox"/>

State Coastal Permit Coordination	<input type="checkbox"/>	<input type="checkbox"/>	X
NPDES Coordination	X	<input type="checkbox"/>	<input type="checkbox"/>
US Coast Guard (Section 10)	<input type="checkbox"/>	<input type="checkbox"/>	X

Discussion of Technical Review

*Use brief paragraphs focused on topics that will need environmental review. Indicate the absence of issues to document that they were considered. Follow the Checklist when preparing the summary discussion. Make a separate statement for each viable alternative. **Samples follow:***

Socio-economic and Community Effects. The project is not expected to have any effects on the local community or the economy.

Farmlands. Because no additional ROW is anticipated, no farmlands study would be required.

4(f) Impacts. A programmatic Section 4(f) study would need to be completed for this project.

Visual Effects. A visual assessment will not be required, however a memo to file recommending visual impact avoidance is recommended.

Water Quality and Erosion. The site should be evaluated for potential water quality impacts associated with the project. If site dewatering is required for new construction, a dewatering plan is required. Site access for construction must be included in any water quality analysis.

Floodplain. A floodplain evaluation report will not need to be prepared for this project.

Air and Noise. Potential long-term air quality and noise impacts are not anticipated.

Cultural Resources. An archeological survey will be required for the project. The proposed Area of Potential Effect (APE) must include all access roads, work areas and staging areas beyond the existing paved highway. Any subsequent changes in project scope may require additional archaeological or historical review.

Native American Coordination. The following Native American tribes or groups may have an interest in or be affected by the proposed project: Santa Ynez Band of Mission Indians (Chairperson) and Santa Ynez Tribal Elders Council.

Hazardous Waste/Materials. An Initial Site Assessment (ISA) will be required to address the potential for hazardous waste. The risk ranking for this project is low.

Biological Resources. This project may affect sensitive biological resources. Formal consultation with USFWS on the California red-legged frog and the tarplant critical habitat will be required. The existing culvert should be inspected for the presence/absence of bats, nesting swallows and other protected species. Bird and bat surveys should be completed in the spring/summer season. The California Natural Diversity Data Base (CNDDDB) does not indicate any other known sensitive biological resources in this location.

Wetlands. Wetlands were not identified at the project site.

Invasive Pest Plant Species. Executive Order 13112 requires that any Federal action may not cause or promote the spread or introduction of invasive species. No invasive pest plant species have been identified.

Right-of-Way Relocation or Staging Area. Construction access roads are indicated but not shown on the plans. These areas, which must be identified prior to initiating environmental studies, will require complete environmental evaluation as part of this project.

Mitigation (For standard PSR only). Mitigation for temporary and permanent impacts to sensitive biological resources (wetlands, riparian vegetation, regulated plants and animals) will be required. Reasonable mitigation costs are generally considered to be up to 10% of the project cost. For this project, mitigation could include habitat restoration or habitat replacement; the cost of which is estimated to be around \$90,000 (this amount includes \$50,000 for duff collection, \$25,000 for highway planting, \$5,000 for replacement planting and \$10,000 if Gaviota tarplant is identified at the project site).

Some of the mitigation costs may change considerably due to the 2004 Gaviota Fire. Most of the existing vegetation was obliterated by the fire and, depending on when the project is built, replacement and highway planting may be higher, due to new vegetation growth, or lower, due to lack of vegetation growth.

Permits. Permits from the State Department of Fish and Game (1601), U. S. Army Corps of Engineers, and the Regional Water Quality Control Board (401) will be required. Additional permits for the material site and disposal site may be required. A Coastal Development Permit will be required from the County of Santa Barbara.

Coastal Zone. This project is within the County coastal jurisdiction and may require a County Coastal Development Permit. It is not within state coastal jurisdiction nor within state appealable jurisdiction. A CDP is required for maintenance projects which require excavation or disposal of fill outside of the roadway prism. If these activities do not occur with this project, an exemption could be applicable.

List of Preparers

Hazardous Waste Review by Eric Covington	Date 01/27/04
Biological Review by Mike Lisitza	Date 03/04/04
Cultural Review by Terry Joslin	Date 03/05/04
Community Impact Review Lara Bertaina	Date 03/05/04
Visual Review by Bob Carr	Date 03/08/04
Floodplain Review by Lara Bertaina	Date 03/10/04

Attachment A - PEAR Mitigation and Compliance Cost Estimate*(Standard PSRs Only)

Dist.-Co.-Rte.-KP/PM: 05-SB-101-73.2 (45.5) EA: 0K330K

Project Description: Replace a culvert on Highway 101 in Santa Barbara County at Post Mile 45.5

Person completing form/Dist. Office: Lara Bertaina

Project Manager: Rochelle Vierra

Phone number: (805) 549-3003

Date: 03/10/04

	Mitigation			Compliance
	Project Feature ¹	Enviro. Obligation ²	Statutory Require. ³	Permit & Agreement ⁴
Fish & Game 1601 Agreement				1,125
Coastal Development Permit				5,000
State Lands Agreement				
NPDES Permit				
COE 404 Permit- Nationwide				0
COE 404 Permit- Individual				
COE Section 10 Permit				
COE Section 9 Permit				
Other: RWQCB 401				5,000
DFG Document Review Fee				1,200
Noise attenuation				
Special landscaping	25,000			
Archaeological				
Biological			15,000	
Historical				
Scenic resources				
Wetland/riparian				
Other: duff collection			50,000	
TOTAL (Enter zeros if no cost)	25,000		65,000	12,325

- Costs are to be reported in \$1,000's.
- Costs are to include all costs to complete the commitment including: 1) capital outlay and staff support; 2) cost of right-of-way or easements; 3) long-term monitoring and reporting; and 4) any follow-up maintenance.

¹ Mitigation that Caltrans would normally do if not required by a permit or environmental agreement.

² Mitigation that Caltrans would not normally do but is required by conditions of a permit or environmental agreement.

³ Mitigation that Caltrans would not normally do and is not required by a permit or Enviro. Agreement, but is required by a law.

⁴ Non-mitigation Caltrans would not normally do but is required by conditions of a permit or agreement.

*Prepare a separate form for each practicable alternative in the PSR.



Preliminary Environmental Analysis Report

Project Information

District 05 County SB Route 101 Kilometer Post (Post Mile) KP 73.2 (PM 45.5) EA 0K330K

Project Title: Gaviota Culvert Replacement

Project Manager Rochelle Vierra Phone # (805) 549-3003

Project Engineer Foad Al-Hamdani Phone # (559) 243-3546

Environmental (Manager) Office Chief Larry Newland Phone # (805) 542-4603

Environmental Planner Generalist Lara Bertaina Phone # (805) 549-3783

Project Description

Purpose and Need: The project is needed because the RCP concrete has excessive cracking and spalling and the left inlet wingwall has moderate scour behind and underneath it. The purpose of the project is to repair the damage and restore the culvert and wingwall to functioning order.

Description of work: Replace the existing culvert by jacking new 1.83m reinforced concrete pipe culvert under the highway, adjacent to the existing culvert, construct a new headwall, and repair scour at the inlet. The old culvert would be capped and filled with concrete slurry.

Alternatives: Alternative 1: described above. Alternative 2: no build.

Anticipated Environmental Approval

CEQA

- Categorical/Statutory Exemption
- Negative Declaration / focused ND
- Environmental Impact Report

NEPA

- Categorical Exclusion
- Finding of No Significant Impact
- Environmental Impact Statement

Caltrans will be the CEQA Lead Agency for this project. The project would require approximately 20 months to complete environmental approval and approximately 1,370 hours to complete.

PSR Summary Statement

The project is located within critical habitat for Gaviota tarplant, requiring surveys be performed between May and October. Surveys will be required for Davidson's saltscale between April and October. Formal consultation will be required with US Fish and Wildlife Service for effects to the tarplant critical habitat.

In order to minimize impacts to the critical habitat, **every effort should be made to minimize the footprint** of this project. Surveys for the California red legged frog (CRLF) and the Two-stripe garter snake will also need to be performed between May and October. All disturbed areas of native grassland and coastal sage scrub (Gaviota Tarplant Critical Habitat) must be restored to their pre-project condition. \$90,000 (this amount includes \$50,000 for duff collection, \$25,000 for highway planting, \$5,000 for replacement planting and \$10,000 *if* Gaviota tarplant is identified at the project site), will be required for tree/vegetation replacement. This project could require up to 5 years of monitoring.

A section 404 permit, Section 401 certification and CDFG Streambed Alteration Agreement (1601) will be necessary. A Coastal Development Permit will be required from the County of Santa Barbara.

Cultural resources have been identified within the project vicinity, however none are anticipated to be found within the project limits. There is no apparent evidence of hazardous waste in the field or indication in the available literature. No long-term water quality impacts are anticipated, however adherence to Caltrans National Pollutant Discharge Elimination System (NPDES) permit, the Caltrans Storm Water Management plan (SWMP), the Caltrans Project Planning and Design Guide, the Construction Site Best Management Practices Manual, and Caltrans Standard Specifications will be required. If the total disturbed soil area for the proposed project will be greater than 1 acre, the contractor will be required to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). Otherwise, a Water Pollution Control Plan will be required. The project is exempt from an air quality conformity determination in accordance with 40 CFR 93.126. Construction emissions will have to be minimized. Because the project is in a rural area with no sensitive receptors near the highway in the vicinity of the proposed work, no night work is proposed and long-term noise levels will not be effected, noise will not be an issue. There is a low potential of finding sensitive paleontological resources within the project limits. Scenic Resources will not be impacted by the project, however, due to its location within the Coastal Zone, limiting tree removal is recommended where possible.

A Section 4(f) study will need to be prepared due to the necessity to acquire State Park land.

Permits to enter will be required to conduct environmental surveys outside the right of way.

Special Considerations

Formal consultation will be required with US Fish and Wildlife Service for effects to the tarplant critical habitat. In order to minimize impacts to the critical habitat, **every effort should be made to minimize the footprint** of this project. If Gaviota tarplants are found within the project limits, an additional \$10,000 will be needed for rare plant mitigation. This project could require up to 5 years of monitoring.

Some of the mitigation costs may change considerably due to the 2004 Gaviota Fire. Most of the existing vegetation was obliterated by the fire and, depending on when the project is built, replacement and highway planting may be higher, due to new vegetation growth, or lower, due to lack of vegetation growth.

It has been Environmental's experience, when working in the coastal region in Santa Barbara County, that fees for the County's Coastal Development Permit process have been considerably higher than most other counties. This is not reflected in the CDP fees listed in the Mitigation and Compliance Cost Estimate at the end of this form.

Section 4(f) requires that all feasible measures be taken to minimize impacts to Section 4(f) properties, including avoidance alternatives.

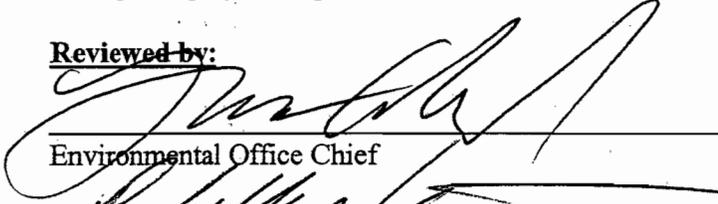
Anticipated Project Mitigation (for standard PSR only)

All disturbed areas of native grassland and coastal sage scrub (Gaviota Tarplant Critical Habitat) must be restored to their pre-project condition. \$30,000 will be required for tree/vegetation replacement. If Gaviota tarplants are found within the project limits, an additional \$10,000 will be needed for rare plant mitigation. Duff collection would require \$50,000.

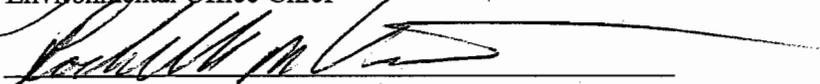
Disclaimer

This report is not an environmental document. Preliminary analysis, determinations, and estimates of mitigation costs are based on the project description provided in this report. The estimates and conclusions provided are approximate and are based on cursory analysis of probable effects. This report is to provide a preliminary level of environmental analysis to supplement the Project Study Report. Changes in project scope, alternatives, or environmental laws will require a re-evaluation of this report.

Reviewed by:


Environmental Office Chief

Date: 11 NOV 2001


Project Manager

Date: 8/11/04

Environmental Technical Reports or Studies Required

	Study	Document	N/A
Community Impact Study	<input type="checkbox"/>	<input type="checkbox"/>	X
Farmland	<input type="checkbox"/>	<input type="checkbox"/>	X
Section 4(f) Evaluation	X	<input type="checkbox"/>	<input type="checkbox"/>
Visual Resources	<input type="checkbox"/>	X	<input type="checkbox"/>
Water Quality	X	<input type="checkbox"/>	<input type="checkbox"/>
Floodplain Evaluation	<input type="checkbox"/>	<input type="checkbox"/>	X
Noise Study	<input type="checkbox"/>	X	<input type="checkbox"/>
Air Quality Study	<input type="checkbox"/>	X	<input type="checkbox"/>
Paleontology	<input type="checkbox"/>	X	<input type="checkbox"/>
Wild and Scenic River Consistency	<input type="checkbox"/>	<input type="checkbox"/>	X
Cumulative Impacts	<input type="checkbox"/>	X	<input type="checkbox"/>
Cultural			
ASR	X	<input type="checkbox"/>	<input type="checkbox"/>
HSR	<input type="checkbox"/>	<input type="checkbox"/>	X
HASR	<input type="checkbox"/>	<input type="checkbox"/>	X
HPSR	<input type="checkbox"/>	<input type="checkbox"/>	X
Section 106 / SHPO	<input type="checkbox"/>	<input type="checkbox"/>	X
Native American Coordination	X	<input type="checkbox"/>	<input type="checkbox"/>
Other			
Finding of Effect _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data Recovery Plan _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hazardous Waste			
ISA (Additional)	<input type="checkbox"/>	X	<input type="checkbox"/>
PSI	<input type="checkbox"/>	<input type="checkbox"/>	X
Other			
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biological			
Endangered Species (Federal)	X	<input type="checkbox"/>	<input type="checkbox"/>
Endangered Species (State)	X	<input type="checkbox"/>	<input type="checkbox"/>
Species of Concern (CNPS, USFS, BLM, S, F)	<input type="checkbox"/>	X	<input type="checkbox"/>
Biological Assessment (USFWS, NMFS, State)	X	<input type="checkbox"/>	<input type="checkbox"/>
Wetlands	<input type="checkbox"/>	<input type="checkbox"/>	X
Invasive Species	<input type="checkbox"/>	<input type="checkbox"/>	X
Natural Environment Study	X	<input type="checkbox"/>	<input type="checkbox"/>
NEPA 404 Coordination	<input type="checkbox"/>	<input type="checkbox"/>	X
Other			
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Permits			
401 Permit Coordination	X	<input type="checkbox"/>	<input type="checkbox"/>
404 Permit Coordination	X	<input type="checkbox"/>	<input type="checkbox"/>
1601 Permit Coordination	X	<input type="checkbox"/>	<input type="checkbox"/>
City/County Coastal Permit Coordination	X	<input type="checkbox"/>	<input type="checkbox"/>

State Coastal Permit Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
NPDES Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
US Coast Guard (Section 10)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion of Technical Review

*Use brief paragraphs focused on topics that will need environmental review. Indicate the absence of issues to document that they were considered. Follow the Checklist when preparing the summary discussion. Make a separate statement for each viable alternative. **Samples follow:***

Socio-economic and Community Effects. The project is not expected to have any effects on the local community or the economy.

Farmlands. Because no additional ROW is anticipated, no farmlands study would be required.

4(f) Impacts. A programmatic Section 4(f) study would need to be completed for this project.

Visual Effects. A visual assessment will not be required, however a memo to file recommending visual impact avoidance is recommended.

Water Quality and Erosion. The site should be evaluated for potential water quality impacts associated with the project. If site dewatering is required for new construction, a dewatering plan is required. Site access for construction must be included in any water quality analysis.

Floodplain. A floodplain evaluation report will not need to be prepared for this project.

Air and Noise. Potential long-term air quality and noise impacts are not anticipated.

Cultural Resources. An archeological survey will be required for the project. The proposed Area of Potential Effect (APE) must include all access roads, work areas and staging areas beyond the existing paved highway. Any subsequent changes in project scope may require additional archaeological or historical review.

Native American Coordination. The following Native American tribes or groups may have an interest in or be affected by the proposed project: Santa Ynez Band of Mission Indians (Chairperson) and Santa Ynez Tribal Elders Council.

Hazardous Waste/Materials. An Initial Site Assessment (ISA) will be required to address the potential for hazardous waste. The risk ranking for this project is low.

Biological Resources. This project may affect sensitive biological resources. Formal consultation with USFWS on the California red-legged frog and the tarplant critical habitat will be required. The existing culvert should be inspected for the presence/absence of bats, nesting swallows and other protected species. Bird and bat surveys should be completed in the spring/summer season. The California Natural Diversity Data Base (CNDDB) does not indicate any other known sensitive biological resources in this location.

Wetlands. Wetlands were not identified at the project site.

Invasive Pest Plant Species. Executive Order 13112 requires that any Federal action may not cause or promote the spread or introduction of invasive species. No invasive pest plant species have been identified.

Right-of-Way Relocation or Staging Area. Construction access roads are indicated but not shown on the plans. These areas, which must be identified prior to initiating environmental studies, will require complete environmental evaluation as part of this project.

Mitigation (For standard PSR only). Mitigation for temporary and permanent impacts to sensitive biological resources (wetlands, riparian vegetation, regulated plants and animals) will be required. Reasonable mitigation costs are generally considered to be up to 10% of the project cost. For this project, mitigation could include habitat restoration or habitat replacement; the cost of which is estimated to be around \$90,000 (this amount includes \$50,000 for duff collection, \$25,000 for highway planting, \$5,000 for replacement planting and \$10,000 if Gaviota tarplant is identified at the project site).

Some of the mitigation costs may change considerably due to the 2004 Gaviota Fire. Most of the existing vegetation was obliterated by the fire and, depending on when the project is built, replacement and highway planting may be higher, due to new vegetation growth, or lower, due to lack of vegetation growth.

Permits. Permits from the State Department of Fish and Game (1601), U. S. Army Corps of Engineers, and the Regional Water Quality Control Board (401) will be required. Additional permits for the material site and disposal site may be required. A Coastal Development Permit will be required from the County of Santa Barbara.

Coastal Zone. This project is within the County coastal jurisdiction and may require a County Coastal Development Permit. It is not within state coastal jurisdiction nor within state appealable jurisdiction. A CDP is required for maintenance projects which require excavation or disposal of fill outside of the roadway prism. If these activities do not occur with this project, an exemption could be applicable.

List of Preparers

Hazardous Waste Review by Eric Covington	Date 01/27/04
Biological Review by Mike Lisitza	Date 03/04/04
Cultural Review by Terry Joslin	Date 03/05/04
Community Impact Review Lara Bertaina	Date 03/05/04
Visual Review by Bob Carr	Date 03/08/04
Floodplain Review by Lara Bertaina	Date 03/10/04

Attachment A - PEAR Mitigation and Compliance Cost Estimate*(Standard PSRs Only)

Dist.-Co.-Rte.-KP/PM: 05-SB-101-73.2 (45.5) EA: 0K330K

Project Description: Replace a culvert on Highway 101 in Santa Barbara County at Post Mile 45.5

Person completing form/Dist. Office: Lara Bertaina

Project Manager: Rochelle Vierra

Phone number: (805) 549-3003

Date: 03/10/04

	Mitigation			Compliance
	Project Feature ¹	Enviro. Obligation ²	Statutory Require. ³	Permit & Agreement ⁴
Fish & Game 1601 Agreement				1,125
Coastal Development Permit				5,000
State Lands Agreement				
NPDES Permit				
COE 404 Permit- Nationwide				0
COE 404 Permit- Individual				
COE Section 10 Permit				
COE Section 9 Permit				
Other: RWQCB 401				5,000
DFG Document Review Fee				1,200
Noise attenuation				
Special landscaping	25,000			
Archaeological				
Biological			15,000	
Historical				
Scenic resources				
Wetland/riparian				
Other: duff collection			50,000	
TOTAL (Enter zeros if no cost)	25,000		65,000	12,325

- Costs are to be reported in \$1,000's.
- Costs are to include all costs to complete the commitment including: 1) capital outlay and staff support; 2) cost of right-of-way or easements; 3) long-term monitoring and reporting; and 4) any follow-up maintenance.

¹ Mitigation that Caltrans would normally do if not required by a permit or environmental agreement.

² Mitigation that Caltrans would not normally do but is required by conditions of a permit or environmental agreement.

³ Mitigation that Caltrans would not normally do and is not required by a permit or Enviro. Agreement, but is required by a law.

⁴ Non-mitigation Caltrans would not normally do but is required by conditions of a permit or agreement.

*Prepare a separate form for each practicable alternative in the PSR.

Central Region Environmental Division Mitigation Cost Compliance Estimate Form

PEAR
 Draft ED
 Final ED

Dist.-Co.-Rte.-PM: 05-SB-101-45.5

EA: 0K330K

Project Name: Gaviota Culvert Repair

Project Description: Culvert Replacement, construct new headwall, repair scour.

Environmental Manager: Lara Bertaina

Phone Number: 549-3783

Project Manager: Rochelle Vierra

Phone Number: 549-3003

Date: 05-21-04

Numbers are in thousands

	Right of Way (Prior to Construction) (050)	During and Post Construction (042)
Archaeological		
Biological		\$15,000
Historical		
Paleontology		
Hazardous Waste Remediation		
Landscape		\$75,000
Noise		
Total Permit Cost*	\$6,125	
DFG Document Review Fee	\$1,200	
Other (CDP**)	\$5,000	
Total	\$12,325	\$90,000

* Includes 1601, 401 and 404 permit fees

**Coastal Development Permit

- This form is completed as part of the PEAR for all candidate projects, at completion of the Draft Environmental Document, and at the completion of the Final Environmental Document
- This form is to be completed for all SHOPP & STIP projects (even those w/o Mitigation)
- This form is to be completed for all Minor A & B projects with mitigation requirements
- Costs are to include all costs to complete the commitment including: capitol outlay (non-staffing support costs); cost of right-of-way or easements; long-term monitoring and reporting, and; any follow-up maintenance
- **Attach detailed descriptions of line items included in estimates**

Attach completed ROW data sheets when forwarded to ROW.

PA & ED Date	RTL Date	Months Between	Months Required

Right of Way Data Sheet Input Information

3.	Environmental mitigation parcels:	REQUIRED <input type="checkbox"/>	NOT REQUIRED <input checked="" type="checkbox"/>	
	<u>0</u> Acres	\$ _____ Additional funding	\$ <u>12,325</u> Permit Fees	
	(Mitigation required)			
** This information is to be obtained from the Environmental Branch prior to submittal to the Right of Way Field Office Chief				



PRELIMINARY COST ESTIMATE SUMMARY

District-County-Route
KP(PM)
EA

05-SB-101
KP 73.2 (PM 45.5)
EA # 0K330K
SHOPP

PROJECT DESCRIPTION: GAVIOTA CULVERT REPLACEMENT PROJECT

Limits AT KP 73.2 (PM 45.5) NEAR GAVIOTA REST AREA IN SANTA BARBARA COUNTY

Proposed Improvement (Scope) CULVERT REPLACEMENT

Alternative 1

SUMMARY OF PROJECT COST ESTIMATE

Table with 2 columns: Item Name and Amount. Rows include: TOTAL ROADWAY ITEMS (\$1,763,000), TOTAL STRUCTURE ITEMS (\$0), SUBTOTAL CONSTRUCTION COSTS (\$1,763,000), TOTAL RIGHT OF WAY ITEMS (\$65,000), TOTAL PROJECT CAPITAL OUTLAY COSTS (\$1,828,000).

Reviewed by District Program Manager

Handwritten signature of Kelly J. McLean over a line, with (Signature) printed below.

Approved by Project Manager

Handwritten signature over a line, with (Signature) printed below. Date 8/10/04 is written to the right over another line.

ATTACHMENT E

District-County-Route
 KP(PM)
 EA

05-SB-101
 KP 73.2 (PM 45.5)
 EA # 0K330K

I. ROADWAY ITEMS

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Section 1 Earthwork					
Roadway excavation	0			\$0	
Imported Borrow	0			\$0	
Clearing and Grubbing	0			\$0	
Develop Water Supply	0			\$0	
				Subtotal Earthwork	\$0
Section 2 Pavement Structural Section*					
Asphalt Concrete Type B	0			\$0	
Asphalt-Treated Base	0			\$0	
Class 2 Aggregate Base	0			\$0	
Class 4 Aggregate Sub Base	0			\$0	
Rubberized Asphalt Concrete (Type G)	0			\$0	
				Subtotal Pavement Structural Section	\$0
Section 3 Drainage					
Large Drainage Facilities	0			\$0	
Storm Drains	0			\$0	
Pumping Plants	0			\$0	
1800 mm RCP Culvert (Jacked)	165	M	\$ 2,500.00	\$412,500	
Construct Headwall & Wingwall	15	M3	\$ 2,000.00	\$30,000	
Construct Endwall & Wingwall	10	M3	\$ 2,000.00	\$20,000	
Replace DI & Pipe Riser	1	LS		\$50,000	
Project Drainage	0			\$0	
Abandon Culvert	1	LS		\$64,000	
Stream Diversion	1	LS		\$15,000	
				Subtotal Drainage	\$591,500

ATTACHMENT E

District-County-Route
 KP(PM)
 EA

05-SB-101
 KP 73.2 (PM 45.5)
 EA # 0K330K

<u>Section 4 Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Retaining Walls	0			\$0	
Noise Barriers	0			\$0	
Barriers and Guardrails	0			\$0	
Equipment / Animal Passes	0			\$0	
Cut Vegetation	1	LS		\$30,000	
Highway Planting	1	LS		\$25,000	
Replacement Planting	1	LS		\$15,000	
Irrigation Modification	0			\$0	
Erosion Control	1	LS		\$42,000	
Duff collection	1	LS		\$50,000	
Rock Slope Protection	1	LS		\$120,000	
Water Pollution Control	1	LS		\$102,000	
Hazard Waste Mitigation Work	0			\$0	
Storm Water Data Report	0			\$0	
Environmental Mitigation	0			\$0	
Repair Scour	1	LS		\$30,000	
Resident Engineer Office Space	1	LS		\$12,000	
				Subtotal Specialty Items	\$426,000
<u>Section 5 Traffic Items</u>					
Lighting	0				
Traffic Delineation Items	1	LS		\$800	
Cozeep	15	days	\$550	\$8,250	
Overhead Sign Structures	0			\$0	
Traffic Control Systems	1	LS		\$60,000	
Traffic Management Plan	1	LS		\$2,000	
Construction Area Signs	1	LS		\$19,000	
PCM Sign	2	EA	\$10,000	\$20,000	
Maintain Traffic	1	LS		\$30,000	
				Subtotal Traffic Items	\$140,050
				TOTAL SECTIONS 1 thru 5	\$1,157,550

ATTACHMENT E

District-County-Route
KP(PM)
EA

05-SB-101
KP 73.2 (PM 45.5)
EA # 0K330K

Section 6 Minor Items

			<u>Item Cost</u>	<u>Section Cost</u>
	<u>\$1,157,550</u>	x (5%)	=	<u>\$57,878</u>
	(Subtotal Sections 1 thru 5)			
			TOTAL MINOR ITEMS	<u>\$57,878</u>

Section 7 Roadway Mobilization

	<u>\$1,215,428</u>	x (10%)	=	<u>\$121,543</u>
	(Subtotal Sections 1 thru 6)			
			TOTAL ROADWAY MOBILIZATION	<u>\$121,543</u>

Section 8 Roadway Additions

Supplemental Work

	<u>\$1,215,428</u>	x (10%) =	<u>\$121,543</u>
	(Subtotal Sections 1 thru 6)		

Contingencies

	<u>\$1,215,428</u>	x (25%) =	<u>\$303,857</u>
	(Subtotal Sections 1 thru 6)		

TOTAL ROADWAY ADDITIONS **\$425,400**

TOTAL ROADWAY ITEMS **\$1,762,370**
(Subtotal Sections 1 thru 8)

Estimate Prepared By Jeffrey Whitaker Phone# 559-243-3544 Date 6/29/2004
(Print Name)

Estimate Checked By Ali Jirde Phone# 559-243-3544 Date 6/29/2004
(Print Name)

ATTACHMENT E

II. STRUCTURES ITEMS

	Structure (1)	
Bridge Name	_____	
Structure Type	_____	
Diameter - (m)	_____	
Span Lengths - (m)	_____	
Total Area - (m2)	_____	
Footing Type (pile/spread)	_____	
Cost	\$0	
(incl. 10% mobilization and 25% contingency)	\$0	
	\$0	
Total Cost for Structure	\$0	
	SUBTOTAL STRUCTURES ITEMS	\$0
	(Sum of Total Cost for Structures)	
Railroad Related Costs:	_____	
	_____	\$0
	\$0	\$0
	SUBTOTAL RAILROAD ITEMS	\$0
	TOTAL STRUCTURES ITEMS	\$0
	(Sum of Structures Items plus Railroad Items)	

ATTACHMENT E

District-County-Route
KP(PM)
EA

05-SB-101
KP 73.2 (PM 45.5)
EA # 0K330K

III. RIGHT OF WAY ITEMS

	ESCALATED VALUE
A. Acquisition, including excess lands, damages to remainder(s) and Goodwill	\$55,000
B. Mitigation	\$0
B. Utilities (State share)	\$6,000
C. Relocation Assistance	\$0
D. Clearance/Demolition	\$0
F. Title and Escrow Fees	\$4,000
TOTAL RIGHT OF WAY ITEMS (Escalated Value)	<u>\$65,000</u>

Anticipated Date of Right of Way Certification
(Date to which Values are Escalated) 2009

F. Construction Contract Work

Brief Description of Work:

Right of Way Branch Cost Estimate for Work * \$0

* This dollar amount is to be included in the Roadway and/or Structures Items of Work, as appropriate. Do not include in Right of Way Items.

COMMENTS:

Estimate Prepared By Jeffrey Whitaker Phone# (559) 243-3544 Date 6/29/2004
(Print Name)

ATTACHMENT E

Constructability/Safety Review Attendance Roster

May 19, 2004

05-0K330K

<u>Name</u>	<u>Functional Unit</u>	<u>Telephone</u>
Foad Al-Hamdani	Project Engineer, Design II-Y	(559) 243-3546
J. Micheal Dubin	Construction	(805) 549-3047
Ron Kraemer	Maintenance	(805) 549-3406
Rochelle Vierra	Project Manager	(805) 549-3003
Jeffrey Whitaker	Design Engineer, Design II-Y	(559) 243-3544
Ali Jirde	Design II-Y	(559) 243-3544
Nick Tatarian	Surveys	(805) 549-3220
Patrick Bolger	Landscape Architecture	(805) 549-3001

Memorandum

To: ROCHELLE VIERRA
SLO-DESIGN

Date: 8/3/2004

File: EA 0K330K ALT REV 1

Attn: JEFFREY WHITAKER
06 DESIGN II BR. Y

DESCRIPTION:
REPAIR CULVERTS

From: Department of Transportation
Division of Right of Way Central Region

Subject: RIGHT OF WAY DATA SHEET

We have completed an estimate of the right of way costs for the above-referenced project based on the Right of Way Data Sheet Request Form dated 5/21/2004

The following assumptions and limiting conditions were identified:

CORRECTED DATA SHEET TO SHOW PERMIT COSTS.

Additional information includes the following:

Temporary construction easements and permanent drainage easements required from one private and one State Parks coastal properties. RW cost also includes Permit Fees of \$12,325 (unesc) from Environmental Mitigation Cost Compliance Estimate Form. Mitigation Cost Compliance Estimate shows no mitigation parcels required, but mitigation costs (042) of \$47,000 are indicated for Biological and Landscape mitigation. Those costs are not included in this estimate. As this is the replacement of an existing culvert the utility aspect of design should consist mainly of identifying the location of the existing utilities within the project limits. Several high risk facilities have been granted encroachment permits within the general vicinity of the project and thus it may be necessary to conduct some positive location activities. Money has been included to cover these costs.

Right of Way Lead Time will require a minimum of 12 months after we receive certified Appraisal Maps, the necessary environmental clearance has been obtained, and freeway agreements have been approved.

Connie Shelloe
for JOHN W. MADDUX, Chief
San Luis Obispo Field Office
(805) 549-3352
Calnet 8-629-3352

REQUEST DATE 5/21/2004

EA 0K330K ALT REV 1

REVISED DATE

CO/RTE/KP-KP[route 1 route 2] SB/101/73.223- & /0.000-

RIGHT OF WAY COST ESTIMATE	CURRENT YR 2004	CONTINGENCY RATE	RIGHT OF WAY ESCALATION RATE	ESCALATED YEAR (Rounded) 2009
ACQUISITION	\$42,906	25.00%	5.00%	\$55,000
MITIGATION	\$0.00	25.00%	5.00%	\$0
STATE SHARE OF UTILITIES	\$4,375	25.00%	5.00%	\$6,000
RAP	\$0	25.00%	5.00%	\$0
CLEARANCE/DEMO	\$0	25.00%	5.00%	\$0
TITLE AND ESCROW	\$2,770	25.00%	5.00%	\$4,000
EXPERT WITNESS	\$0	25.00%	5.00%	\$0
SUPPORT HOURS				
TOTAL CURRENT VALUE *				\$85,000

ESTIMATED CONSTRUCTION CONTRACT WORK

\$0

R/W LEAD TIME/MONTHS

12

PARCEL DATA			
# OF PCL TYPE X	0	# OF DUAL APPR X	0
# OF PCL TYPE A	0	# OF DUAL APPR A	0
# OF PCL TYPE B	2	# OF DUAL APPR B	
# OF PCL TYPE C	0	# OF DUAL APPR C	0
# OF PCL TYPE D	0	# OF DUAL APPR D	0
# OF MITIGATION	0		
TOTALS	2	TOTALS	
# OF EXCESS PARCEL 0			

UTILITIES	
U4-1	0
U4-2	0
U4-3	0
U4-4	0
U5-7	7
U5-8	0
U5-9	7

RR INVOLVEMENT	
ARE RAILROAD FACILITIES OR RIGHTS OF WAY	NO
CONST/MAINT AGREEMENT	NO
SERVICE CONTRACT	NO
RIGHT OF ENTRY	NO
CLAUSES	NO

MISC R/W WORK	
# OF RAP DISPLACEMENT	0
# OF CLEARANCE/DEMO	0
# OF CONST PERMITS	1
# OF CONDEMNATION	0

* IF R/W COST ESTIMATE FIELDS ARE BLANK, TOTAL CURRENT VALUE = \$0

ARE UTILITIES OR OTHER RIGHTS OF WAY AFFECTED

RAILROAD LEADTIME REQUIRED

PARCEL AREA UNIT: ACRE

TOTAL RW TAKE	3.454
TOTAL EXCESS AREA	0
TOTAL MITIGATION AREA	0

TOTAL RW FEE	\$34,325
TOTAL EXCESS COST	\$0

PROVIDE GENERAL DESCRIPTION OF RW AND EXCESS LANDS REQUIRED (ZONING, USE, MAJOR IMPROVEMENTS, CRITICAL OR SENSITIVE PARCELS, ETC.):

Temporary construction easements and permanent drainage easements required from one private and one State Parks coastal properties. RW cost also includes Permit Fees of \$12,325 (unesc) from Environmental Mitigation Cost Compliance Estimate Form. Mitigation Cost Compliance Estimate shows no mitigation parcels required, but mitigation costs (042) of \$47,000 are indicated for Biological and Landscape mitigation. Those costs are not included in this estimate.

IS THERE A SIGNIFICANT EFFECT ON ASSESSED VALUATION?

WERE ANY PREVIOUSLY UNIDENTIFIED SITES WITH HAZARDOUS WASTE OR MATERIAL FOUND

ARE RAP DISPLACEMENTS REQUIRE

OF SINGLE FAMILY # OF MULTI FAMILY # OF BUSINESS/NONPROFIT # OF FARMS

SUFFICIENT REPLACEMENT HOUSING WILL BE AVAILABLE WITHOUT LAST RESORT HOUSING

ARE MATERIAL BORROW OR DISPOSAL SITES REQUIRED

ARE THERE POTENTIAL RELINQUISHMENTS OR ABANDONMENTS?

ARE THERE ANY EXISTING OR POTENTIAL AIRSPACE SITES

ARE ENVIRONMENTAL MITIGATION PARCELS REQUIRED

DATA FOR EVALUATION PROVIDED BY

ESTIMATOR REQUIRED	Phil Acosta	8/3/2004
RAILROAD LIAISON AGENT	SALLY A. HOPKINS	6/23/2004
UTILITY RELOCATION COORDINATOR	LARK P. GRANGER;	6/23/2004

I have personally reviewed this Right of Way Sheet and all supporting information. I find this Data Sheet complete and current, subject to the limiting conditions set forth.

for Connie Stelloe
JOHN W. MADDUX
Field Office Chief, Right of Way

DATE ENTERED PMCS 7/1/2004
BY LINDA A. LANDRY

Before

COST 05 0K330K RW1 M SB 101 45.5 D P=F11 N=F12 *CAPITAL PLAN*
 EA *0K330K STIP *3330 LSTPGM TOT PGM APV COST
 PGM *HA42 FP CODE * 04 PGM STATE 04 ___/___ 05 ___/___
 ELEM *RAS LOCKOUT FED 04 ___/___ 05 ___/___
 PRI 9 R/W CONTB CONTB 04 ___/___ 05 ___/___
 RW EA 0K3309 EST DTE 07/01/04 CAT A APPR COMP TO DO
 PCLS DOLLARS TITLE ACQ UTIL RELOC DEMO&CLR FY'S
 TOTAL 2 62 3 53 6 * .61
 PRIOR * .00
 03-04 * .00
 04-05 * .00
 05-06 * .00
 06-07 * .00
 07-08 2 62 3 53 6 * .04
 08-09 * .35
 09-10 * .17
 10-11 * .05
 11-12 * .00
 PAGED ENV CLR RW MAPS REG RW DT PS&E RW CERT RDY LIST CNST FY
 *07/ /08 *07/08 *09/08 *10/08 *05/09 *10/09 *11/09
 COST REMARKS , ACQ COST INCLUDES 11,200 PERMIT FEES. LAL

THERE IS 1 COST-RW SCREEN FOR THIS PROJECT

After

COST 05 0K330K RW1 M SB 101 45.5 D P=F11 N=F12 *CAPITAL PLAN*
 EA *0K330K STIP *3330 LSTPGM TOT PGM APV COST
 PGM *HA42 FP CODE * 04 PGM STATE 04 ___/___ 05 ___/___
 ELEM *RAS LOCKOUT FED 04 ___/___ 05 ___/___
 PRI 9 R/W CONTB CONTB 04 ___/___ 05 ___/___
 RW EA 0K3309 EST DTE 08/03/04 CAT A APPR COMP TO DO
 PCLS DOLLARS TITLE ACQ UTIL RELOC DEMO&CLR FY'S
 TOTAL 2 65 4 55 6 * .61
 PRIOR * .00
 03-04 * .00
 04-05 * .00
 05-06 * .00
 06-07 * .00
 07-08 * .04
 08-09 2 65 4 55 6 * .35
 09-10 * .17
 10-11 * .05
 11-12 * .00
 PAGED ENV CLR RW MAPS REG RW DT PS&E RW CERT RDY LIST CNST FY
 *07/ /08 *07/08 *09/08 *10/08 *05/09 *10/09 *11/09
 COST REMARKS ACQ COST INCLUDES 12,325 PERMIT FEES. LAL

THERE IS 1 COST-RW SCREEN FOR THIS PROJECT

Find Record

Print Record

Close Form

ESTIMATE SUMMARY - PART III

OK330K

REV 1

NUMBER OF PARCELS TO BE APPRAISED 2

NUMBER OF PARCELS WITH EXEMPTS

NUMBER OF PARCELS 0

NUMBER OF ACRES 0

TOTAL RAW VALUE 3.45

ACRE

TOTAL EXEMPT VALUE 0.00

TOTAL RAW VALUE \$34,325

TOTAL EXEMPT VALUE \$0

TOTAL IMPROVEMENTS \$0

TOTAL IMPROVEMENTS \$0

TOTAL IMPROVEMENTS \$0

PERCENTAGE 5.00%

ASSESSMENT YEAR 2009

PERCENTAGE 6

PROPERTY TAX RATE 25.00%

ADDITIONAL TAXES \$34,325

ADDITIONAL TAXES \$8,581

TOTAL TAXES \$42,906

TOTAL TAXES \$55,000

PROPERTY TAXES \$0

PROPERTY TAXES \$0

SALES TAXES \$0

SALES TAXES \$0

LOCAL TAXES \$0

LOCAL TAXES \$0

TOTAL TAXES \$0

TOTAL TAXES \$0

PROPERTY TAXES \$0

PROPERTY TAXES \$0

TOTAL TAXES \$0

TOTAL TAXES \$0

PROPERTY TAXES \$0

PROPERTY TAXES \$0

TOTAL TAXES \$2,216

TOTAL TAXES \$554

PROPERTY TAXES \$2,770

PROPERTY TAXES \$4,000

TOTAL TAXES \$0

TOTAL TAXES \$0

PROPERTY TAXES \$0

PROPERTY TAXES \$0

ESTIMATED TAXES \$59,000

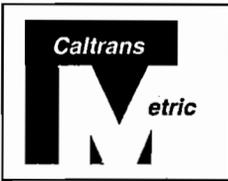
ESTIMATED TAXES \$0

APPROVAL Phil Acosta

DATE 8/3/2004

APPROVAL PHIL ACOSTA

DATE 8/3/2004



Dist-County-Route 05-SB-101
 Kilometer Post (Post Mile) Limits 73.2 (45.5)
 Project Type Replacing Culvert
 EA: 05-OK330K
 RU: 6-258
 Program Identification: SHOPP
 Phase: PID PA/ED PS&E

Regional Water Quality Control Board(s): Central Coast Region 3

Is the Project exempt from incorporating Treatment BMPs? Yes No
If yes, attach the Exemption Documentation Form

Are new Treatment BMPs incorporated into the Project? Yes No

Estimated Construction Start Date: July 2007

Notification of Construction (NOC) Date to be Submitted: June 2007

Notification of ADL reuse (if yes, provide date) Yes Date _____ No N/A

Separate De-watering Permit (if yes, permit no.) Yes Permit # _____ No N/A

This 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.

Jeffrey Whitaker 3/26/2004
 Jeffrey Whitaker, Registered Project Engineer Date

I have reviewed the storm water quality design issues contained in the Storm Water Data Report and Attachments attached hereto, and find the data to be complete, current, and accurate:

Rochelle Vierra 4/13/04
 Rochelle Vierra, Project Manager Date

Jon Wood 4/14/04
 Designated Maintenance Representative Date

[Signature] 4/14/04
 Designated Landscape Architect Representative Date

[Signature] 4/14/04
 Design District/Regional Storm Water Coordinator or Designee Date

STORM WATER DATA INFORMATION

1. Project Description

- This project proposes to replace an existing culvert in Santa Barbara County on Route 101 PM 45.5 (KP 73.2). It is proposing to jack a new culvert next to the existing one which will be plugged up and abandoned
- Include soil classifications and geology information, if pertinent. The project area occurs within the Transverse Ranges Geomorphic Province. Route 101 is bordered to the north by Santa Ynez Mountains and to the south by the Pacific Ocean.

Geologic formations occurring within the project area include Pliocene aged older alluvium, and Miocene aged Monterey Shale, Rincon Shale, and Vaqueros Sandstone. The older Alluvium consists of remnants of weakly consolidated stream terrace deposits of silt, sand and gravel. The Monterey Shale is composed predominantly of soft, fissile, punky, organic shale and a lesser amount of interbedded hard siliceous shale, calcareous shale, and thin limestone layers. The Rincon Shale is blue gray, massive to poorly bedded, compact, moderately hard, argillaceous, and finely micaceous. The Rincon Shale is overlain conformably by a layer of bentonite that forms the base of the Monterey Shale. The Rincon Shale is underlain by the Vaqueros Sandstone. The Vaqueros Sandstone is composed almost entirely of thick-bedded to massive, medium grained sandstone.

Oil and gas exploration in the project vicinity has taken place since the 1920's. Several wells both onshore and offshore have either been abandoned or are continuing to produce. Most of the oil and gas in the area is produced from the Vaqueros Sandstone and the underlying Sespe Formation. Small amounts of oil and gas production were made from a handful of wells in fractured Rincon Shale.

Natural seeps of tar, oil, and gas are common in the coastal area south of the Santa Ynez Range. Most of these seeps issue from or near outcrops of Monterey Shale, on or near the sea cliffs. Bituminous seeps in the Monterey Shale and younger formations of the coastal bluffs are of asphalt tar or heavy black asphalt base oil that are probably indigenous to the Monterey Shale.

Regional and local ground water levels in the project area have not been determined.

2. Define Site Data and Storm Water Quality Design Issues (refer to Checklists SW-1, SW-2, and SW-3)

- Receiving water bodies/303(d) list/Pollutants of concern (SW-2, Questions 1-4) PACIFIC OCEAN
- RWQCB special requirements/concerns (SW-2, Question 5) None
- Local agency requirements/concerns (SW-2, Questions 6 and 7) According to a Preliminary Geotechnical Report, and Cal/OSHA Division of Industrial Safety, states that when the preliminary investigation of a tunnel project is conducted, the agency proposing the construction of the tunnel shall submit the geological information to the Division for review and classification relative to flammable gas or vapors."
- Project design considerations (climate, soil, topography, geology, groundwater, right-of-way requirements, slope stabilization) (SW-2, Questions 8-16) The annual rainfall in the project area is 43 cm. On one side of the project it is mountainous and Pacific Ocean is on the other side. Regional and local ground water levels in the project area have not been determined. Some farming and animal grazing. There will be a need for temporary construction easement
- Right-of-way BMP costs and funding (SW-2, Questions 17 and 18) TBD
- Measures for avoiding or reducing potential storm water impacts (SW-3)

3. Regional Water Quality Control Board Agreements

There are no negotiated understandings or agreements with Central Coast RWQCB Region 3 pertaining to this project.

4. Describe Proposed Design Pollution Prevention BMPs to be used on the Project.**Downstream Effects Related to Potentially Increased Flow, Parts 1 and 2**

- Velocity or volume of downstream flow-Peak flow volumes or velocities will not be significantly increased.
- Existing - The existing culvert will be abandoned in place.
- Post Construction – post construction flows will be similar to pre-construction flow rates and volumes.
- Channels condition and design- Energy dissipaters (i.e., RSP) will be incorporated into project design as necessary to prevent downstream erosion.
- Sediment loading potential - The potential for sediment loading will be addressed through the incorporation of energy dissipation and culvert placement.

Slope/Surface Protection Systems, Parts 1 and 3

- Cut and fill requirements- TBD
- Existing slope conditions- TBD
- Total BMP area (before and after construction)- There will be no change in impervious surface as a result of this project.
- Vegetated surfaces (plants, soils, mulch, blankets, establishment periods) - All DSAs will be stabilized will erosion control or another soil/channel stabilization method upon the completion of construction.

Concentrated Flow Conveyance Systems, Parts 1 and 4

- List locations and unit volume of protection/velocity dissipation devices BMPs. Reference the current Construction Cost Data Book or local source for applicable unit costs. - TBD

Preservation of Existing Vegetation, Parts 1 and 5

- Areas of clearing and grubbing identified and defined in the contract plans

5. Describe Proposed Permanent Treatment BMPs to be used on the Project

Per the attached Treatment Exemption Documentation form, this project is exempt from further consideration of Treatment BMPs because the scope of work does not meet the criteria for new construction or major reconstruction.

6. Construction Cost Information

Summarize construction costs included in the Preliminary Project Construction Cost Estimate Summary (PPCE) associated with storm water pollution prevention and treatment. Summary shall include the following:

Roadway Items

- Section 1: Earthwork
 - Roadway Excavation (Treatment Basins)
 - Imported Borrow (Treatment Basins)

- Section 3: Drainage
 - Storm Drains
 - Drainage Inlets (Traction Sand Traps)
 - Overside Drains
 - Flared End Section (FES)
 - Other (List)

- Section 4: Specialty Items
 - Erosion Control
 - Erosion Control (Blanket) = \$22,000
 - Erosion Control (Type D) = \$20,000
 - Duff Collection = \$27,000
 - Highway planting = \$10,000
 - Section Sub-Total **\$ 79,000**
 - Basin Liner
 - Landscaping/Irrigation
 - I. Biofiltration Strips and Swales
 - Slope Protection
 - II. Slope/Surface Protection Systems-Vegetated Surfaces
 - III. Concentrated Flow Conveyance Systems
 - IV. Slope/Surface Protection Systems-Hard Surfaces
 - Other (List)
 - SWPPP \$ 12,000
 - Water Pollution control @ 3% of total construction cost \$ 45,000
 - Water Pollution Control Maintenance Sharing \$ 7,000
 - Additional Water Pollution Control \$ 11,000
 - Storm Water Sampling and Analysis \$ 15,000
 - Temporary Concrete Washout Facility \$ 12,000
 - Section Sub-Total **\$ 102,000**

- TOTAL STORM WATER TREATMENT & PREVENTION: **\$181,000**
- TOTAL RIGHT-OF -WAY FOR TREATMENT BASINS: \$ 0

7. Maintenance BMPs (Drain Inlet Stenciling)

Not Applicable

ATTACHMENTS:

- ⇒ Vicinity Map
- ⇒ Checklist SW-1, Site Data Sources
- ⇒ Checklists SW-2, Storm Water Quality Issues Summary
- ⇒ Checklist SW-3, Measures for Avoiding or Reducing Potential Storm Water BMPs
- ⇒ Checklist DPP-1, Parts 1-5 (Design Pollution Prevention BMPs)
- ⇒ Exemption Documentation Form (Treatment BMPs)

INDEX OF SHEETS

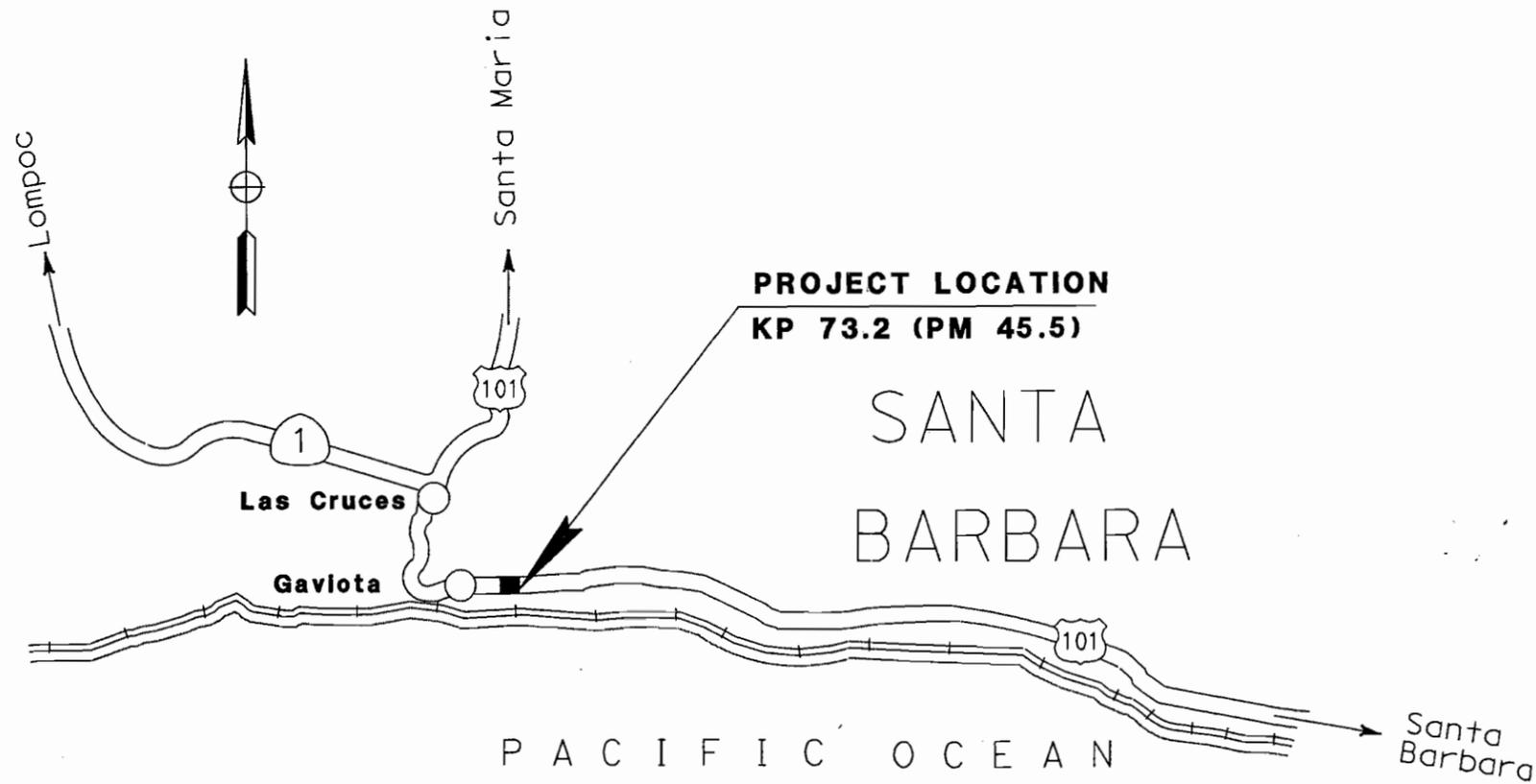
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**PROJECT PLANS FOR CONSTRUCTION ON
 STATE HIGHWAY**
 IN SANTA BARBARA COUNTY NEAR GAVIOTA
 AT KP 73.2 (PM 45.5) ON ROUTE 101

To be supplemented by Standard Plans dated July, 1999

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
05	SB	101	73.2		



The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.
 Caltrans now has a web site! To get to the web site, go to: <http://www.dot.ca.gov>



PROJECT LOCATION
 KP 73.2 (PM 45.5)

SANTA
 BARBARA

PACIFIC OCEAN

NO SCALE

PROJECT ENGINEER	DATE	PROJECT MANAGER	DATE

The Contractor shall possess the Class (or Classes) of license as specified in the "Notice to Contractors".

Project Engineer Date
 Registered Civil Engineer



Plans Approval Date

APPROVED

Contract No.

DATE PLOTTED => #DATE
 TIME PLOTTED => #TIME
 LAST REVISION
 03-26-04

Checklist SW-2, Storm Water Quality Issues Summary		
Prepared by: <u>Ali Jirde</u>	Date: <u>01/29/04</u>	District-Co-Route: <u>05-SB-101</u>
KP (PM): <u>73.2(45.5)</u>	EA: <u>05-0K330K</u>	
RWQCB: <u>Central Coast Region (3)</u>		

The following questions provide a guide to collecting critical information relevant to project storm water quality issues. Complete responses to applicable questions, consulting other Caltrans functional units (Environmental, Landscape Architecture, Maintenance) and the District/Regional NPDES Coordinator as necessary. Refer to Checklist SW-1 for data sources to develop responses. Attach pertinent information to the SWDR.

	Complete	Not Applicable
1. What are the receiving waters that may be affected by the project throughout the project life cycle (i.e., construction, maintenance and operation)? Pacific Ocean	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. For the project limits, list the 303(d) impaired receiving water bodies and their constituents of concern. None	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. What are the pollutant sources within the right-of-way to be treated and/or hazardous materials of concern? TBD	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Are there any locations where spills from Caltrans owned rights-of-way, activities or facilities can discharge directly to municipal or domestic water supply reservoirs or groundwater percolation facilities? Consider appropriate spill contamination and spill prevention control measures for these new areas. None	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. What are the RWQCB special requirements, including beneficial uses of receiving waters and groundwater, TMDLs, or effluent limits? TBD	<input type="checkbox"/>	<input type="checkbox"/>
6. Do regulatory agencies have seasonal construction restrictions? If so, list restrictions applicable to the project. OCTOBER 15- APRIL 15	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Are there any specific rainy season dates and construction work exclusion dates required by state or local regulatory agencies? TBD	<input type="checkbox"/>	<input type="checkbox"/>
8. What is the general climate of the project area? Identify annual rainfall and rainfall intensity curves. TBD, The annual rainfall in the project area is 43 cm.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. What is soil classification, permeability, erodibility, and depth to groundwater?	<input type="checkbox"/>	<input type="checkbox"/>
10. What contaminated or hazardous soils were identified within the project area? There is a potential for airily deposited lead to be present in the vicinity of the project due to the traffic on the highway	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. What is the total disturbed soil area of the project? TBD	<input type="checkbox"/>	<input type="checkbox"/>
12. Describe the topography of the project site. On one side of the project it is mountainous and Pacific ocean is on the other side	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. List any areas outside of the Caltrans right-of-way that will be included in the project (e.g. contractor's staging yard, work from barges, easements for staging, etc.). Temporary construction easement areas adjacent to project location	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14. Will additional right-of-way acquisition or easements and right-of-entry be required for design, construction and maintenance of BMPs. If so, how much? Yes there will be a need for temporary construction easement. A Total of 13,930 sq.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15. Are there any slope stabilization concerns? Yes	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16. Describe the local land use within the project area and adjacent areas. Some farming and animal grazing	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. Is dry weather flow present? TBD	<input checked="" type="checkbox"/>	<input type="checkbox"/>
18. What are the estimated unit costs for right-of-way should it be needed for Treatment BMPs, stabilized conveyance systems, lay-back slopes, or interception ditches? \$ 0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19. Is there adequate funding (including supplemental funds) for storm water pollution control (SWPPP or WPCP) during construction? Yes	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Checklist SW-3, Measures for Avoiding or Reducing Potential Storm Water Impacts

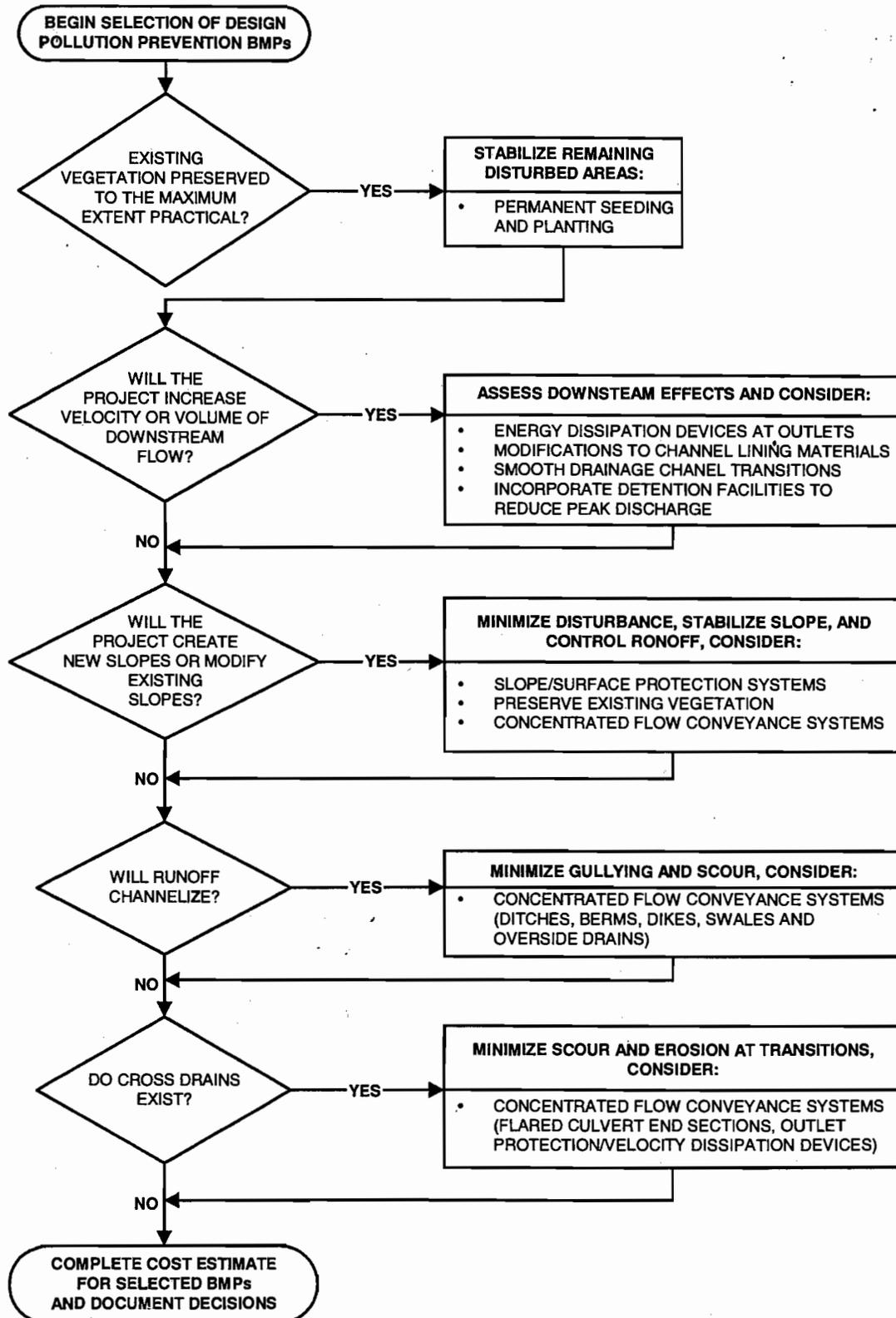
Prepared by: Ali Jirde Date: 01/29/04 District-Co-Route: 05-SB-101
 KP (PM): 73.2(45.5) EA: 05-0K330K
 RWQCB: Central Coast Region (3)

The PE must confer with other functional units, such as Landscape Architecture, Hydraulics, Environmental, Materials, Construction and Maintenance, as needed to assess these issues. Attach pertinent information to the SWDR.

Options for avoiding or reducing potential impacts during project planning include the following:

1. Can the project be relocated or realigned (while upholding safe design standards) to avoid or reduce impacts to receiving waters? Yes No NA
2. Can structures and bridges be designed or located to reduce work in live streams and minimize construction impacts? Yes No NA
3. Can the horizontal and vertical alignments be adjusted, without jeopardizing safe design standards, to minimize erosion from slopes by the following methods: NA
 - a. Disturbing existing slopes only when necessary? Yes No NA
 - b. Minimizing cut and fill areas to reduce slope lengths? Yes No NA
 - c. Incorporating retaining walls to reduce steepness of slopes or to shorten slopes? Yes No NA
 - d. Acquiring right-of-way easements (such as grading easements) to reduce steepness of slopes? Yes No NA
 - e. Avoiding soils or formations that will be particularly difficult to re-stabilize? Yes No NA
 - f. Providing cut and fill slopes flat enough to allow re-vegetation and limit erosion to pre-construction rates? Yes No NA
 - g. Providing benches or terraces on long cut and fill slopes to reduce concentration of flows? Yes No NA
 - h. Rounding and shaping slopes to reduce concentrated flow? Yes No NA
 - i. Collecting concentrated flows in stabilized drains and channels? Yes No NA
4. Can alternative materials or facilities be utilized to reduce future maintenance impacts on water quality (i.e., use of textured concrete in lieu of painted materials)? TBD Yes No NA
5. Does design allow for ease of maintenance? YES Yes No NA
6. Can the project be scheduled or phased to minimize soil-disturbing work during the rainy season? YES Yes No NA
7. Can permanent storm water pollution controls such as slurry-paved slopes, vegetated slopes, basins, and conveyance systems be installed early in the construction process to provide additional protection and to possibly utilize them in addressing construction storm water impacts? TBD Yes No NA

Decision Tree DPP-1



Design Pollution Prevention BMPs		
Checklist DPP-1, Part 1		
Prepared by: <u>Ali Jirde</u>	Date: <u>01/29/04</u>	District-Co-Route: <u>05-SB-101</u>
KP (PM): <u>73.2(45.5)</u>	EA: <u>05-0K330K</u>	
RWQCB: <u>Central Coast Region (3)</u>	OUTFALL: _____	

Consideration of Design Pollution Prevention BMPs

This checklist is for use in conjunction with Decision Tree DPP-1

1. Consideration of Downstream Effects Related to Potentially Increased Flow?

- (a) Will project increase velocity or volume of downstream flow? Yes No NA
- (b) Will the project discharge to unlined channels? Yes No NA
- (c) Will project increase potential sediment load of downstream flow? Yes No NA
- (d) Will project encroach, cross, realign, or cause other hydraulic changes to a stream that may affect downstream channel stability? Yes No NA

(If yes was answered to any of the above questions, consider downstream effects related to potentially increased flow and attach Part 2 of this BMP checklist)

2. Slope/Surface Protection Systems

- (a) Will project create new slopes or modify existing slopes? Yes No NA

(If yes was answered to the above question; consider **Slope/Surface Protection Systems**, complete and attach Part 3 of this BMP checklist)

3. Concentrated Flow Conveyance Systems

- (a) Will runoff from project channelize and potentially cause gullyng and scour? Yes No NA
- (b) Will project create new slopes or modify existing slopes? Yes No NA
- (c) Are roadways or facilities on site subject to flood drainage? Yes No NA
- (d) Will it be necessary to direct or intercept surface runoff? Yes No NA
- (e) Do cross drains exist? Yes No NA

(If yes was answered to any of the above questions, consider **Concentrated Flow Conveyance Systems**; complete and attach Part 4 of this BMP checklist)

4. Preservation of Existing Vegetation

- (a) Will project maximize protection of desirable existing vegetation to provide erosion and sediment control benefits? Yes No NA

(If yes, vegetation at areas on site where no construction activity is planned or will occur at a later date will be identified and preserved and remaining disturbed areas must be stabilized; consider **Preservation of Existing Vegetation**, complete and attach the Part 5 of this checklist)

(If no, document justification or consider **Preservation of Existing Vegetation**, complete and attach Part 5 of this checklist)

5. Cost Estimate for selected BMPs.

Completed

Design Pollution Prevention BMPs**Checklist DPP-1, Part 2**

Prepared by: Ali Jirde Date: 01/29/04 District-Co-Route: 05-SB-101
KP (PM): 73.2(45.5) EA: 05-0K330K
RWQCB: Central Coast Region (3) OUTFALL: _____

Downstream Effects Related to Potentially Increased Flow

1. **Review total paved area and reduce to the Maximum Extent Possible (MEP).** Completed
2. **Review channel lining materials and design for stream bank erosion control.** Completed
 - (a) See Chapters 860 and 870 of the HDM. Completed
 - (b) Consider collecting concentrated flows in stabilized drains and channels. Completed
 - (c) Consider channel erosion control measures within the project limits as well as downstream. Consider scour velocity. Completed
3. **Include, where appropriate, energy dissipation devices at culvert outlets.** Completed
4. **Ensure all transitions between culvert outlets/headwalls/wingwalls and channels are smooth to reduce turbulence and scour.** Completed
5. **Include, if appropriate, detention facilities to reduce peak discharges.** Completed

Design Pollution Prevention BMPs		
Checklist DPP-1, Part 3		
Prepared by: <u>Ali Jirde</u>	Date: <u>01/29/04</u>	District-Co-Route: <u>05-SB-101</u>
KP (PM): <u>73.2(45.5)</u>	EA: <u>05-0K330K</u>	
RWQCB: <u>C�ntral Coast Region (3).</u>	OUTFALL: _____	

Slope / Surface Protection Systems

DESIGN

- 1. What are the proposed areas of cut and fill? (attach plan or map) Completed
- 2. Are existing slopes disturbed or are new slopes created? Yes No NA
- 3. Were benches or terraces provided on long cut and fill slopes to reduce concentration of flows? Yes No NA
- 4. Were slopes rounded and/or shaped to reduce concentrated flow? Yes No NA
- 5. Were concentrated flows collected in stabilized drains or channels? Yes No NA
- 6. Are slopes > 1:4 vertical:horizontal (v:h) Yes No NA

(If yes, an erosion control plan must be prepared or approved by the District Landscape Architect. The District/Regional NPDES Storm Water Coordinator should verify Landscape Architect's approval. Coordinate with District Geotechnical Liaison.)

- 7. Are slopes > 1:2 (v:h) Yes No NA

(If yes, Geotechnical Services must prepare a Geotechnical Design Report, and the District Landscape Architect should prepare or approve an erosion control plan. Concurrence must be obtained from the District Maintenance Storm Water Coordinator for slopes steeper than 1:2. The District/Regional NPDES Coordinator should verify that the District Landscape Architect and the Maintenance Coordinator concur with slopes steeper than 1:2.)

- 8. Review and incorporate Working Details and appropriate SSPs listed below for Vegetated Surface and Hard Surface Protection Systems. Complete
- 9. Estimate the total area in hectares (before construction/after construction) of vegetated surface BMPs and hard surface BMPs to be used on the project (excluding existing vegetation or preserved areas). Complete

VEGETATED SURFACES

- 1. Identify existing vegetation. Complete
- 2. Evaluate site to determine appropriate vegetation and planting strategy. Complete
- 3. What are the soil types within the planting area? Complete
- 4. What are the vegetation types within the project limits? How long will it take for vegetation to re-establish? Complete
- 5. Minimize overland and concentrated flow depths and velocities. Complete

Design Pollution Prevention BMPs		
Checklist DPP-1, Part 3		
Prepared by: <u>Ali Jirde</u>	Date: <u>01/29/04</u>	District-Co-Route: <u>05-SB-101</u>
KP (PM): <u>73.2(45.5)</u>		EA: <u>05-0K330K</u>
RWQCB: <u>Central Coast Region (3).</u>		OUTFALL: _____

Slope / Surface Protection Systems

DESIGN

- 1. What are the proposed areas of cut and fill? (attach plan or map) Completed
- 2. Are existing slopes disturbed or are new slopes created? Yes No NA
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- 4. Were slopes rounded and/or shaped to reduce concentrated flow? Yes No NA
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- 6. Are slopes > 1:4 vertical:horizontal (v:h) Yes No NA

(If yes, an erosion control plan must be prepared or approved by the District Landscape Architect. The District/Regional NPDES Storm Water Coordinator should verify Landscape Architect's approval. Coordinate with District Geotechnical Liaison.)

- 7. Are slopes > 1:2 (v:h) Yes No NA

(If yes, Geotechnical Services must prepare a Geotechnical Design Report, and the District Landscape Architect should prepare or approve an erosion control plan. Concurrence must be obtained from the District Maintenance Storm Water Coordinator for slopes steeper than 1:2. The District/Regional NPDES Coordinator should verify that the District Landscape Architect and the Maintenance Coordinator concur with slopes steeper than 1:2.)

- 8. Review and incorporate Working Details and appropriate SSPs listed below for Vegetated Surface and Hard Surface Protection Systems. Complete
- 9. Estimate the total area in hectares (before construction/after construction) of vegetated surface BMPs and hard surface BMPs to be used on the project (excluding existing vegetation or preserved areas). Complete

VEGETATED SURFACES

- 1. Identify existing vegetation. Complete
- 2. Evaluate site to determine appropriate vegetation and planting strategy. Complete
- 3. What are the soil types within the planting area? Complete
- 4. What are the vegetation types within the project limits? How long will it take for vegetation to re-establish? Complete
- 5. Minimize overland and concentrated flow depths and velocities. Complete

Design Pollution Prevention BMPs		
Checklist DPP-1, Part 3		
Prepared by: <u>Ali Jirde</u>	Date: <u>01/29/04</u>	District-Co-Route: <u>05-SB-101</u>
KP (PM): <u>73.2(45.5)</u>		EA: <u>05-0K330K</u>
RWQCB: <u>Central Coast Region (3)</u>		OUTFALL: _____

Slope / Surface Protection Systems

DESIGN

- 1. What are the proposed areas of cut and fill? (attach plan or map) Completed
- 2. Are existing slopes disturbed or are new slopes created? Yes No NA
- 3. Were benches or terraces provided on long cut and fill slopes to reduce concentration of flows? Yes No NA
- 4. Were slopes rounded and/or shaped to reduce concentrated flow? Yes No NA
- 5. Were concentrated flows collected in stabilized drains or channels? Yes No NA
- 6. Are slopes > 1:4 vertical:horizontal (v:h) Yes No NA

(If yes, an erosion control plan must be prepared or approved by the District Landscape Architect. The District/Regional NPDES Storm Water Coordinator should verify Landscape Architect's approval. Coordinate with District Geotechnical Liaison.)

- 7. Are slopes > 1:2 (v:h) Yes No NA

(If yes, Geotechnical Services must prepare a Geotechnical Design Report, and the District Landscape Architect should prepare or approve an erosion control plan. Concurrence must be obtained from the District Maintenance Storm Water Coordinator for slopes steeper than 1:2. The District/Regional NPDES Coordinator should verify that the District Landscape Architect and the Maintenance Coordinator concur with slopes steeper than 1:2.)

- 8. Review and incorporate Working Details and appropriate SSPs listed below for Vegetated Surface and Hard Surface Protection Systems. Complete
- 9. Estimate the total area in hectares (before construction/after construction) of vegetated surface BMPs and hard surface BMPs to be used on the project (excluding existing vegetation or preserved areas). Complete

VEGETATED SURFACES

- 1. Identify existing vegetation. Complete
- 2. Evaluate site to determine appropriate vegetation and planting strategy. Complete
- 3. What are the soil types within the planting area? Complete
- 4. What are the vegetation types within the project limits? How long will it take for vegetation to re-establish? Complete
- 5. Minimize overland and concentrated flow depths and velocities. Complete

Slope/Surface Protection Systems – Vegetated Surfaces	Working Detail in PPDG	Standard Special Provision	Estimated Quantity (ha)
• Earthwork (Slope Roughening/Terracing/Rounding/Stepping)	√		
• Seeding and Planting	√	20-350 20-030 20-040	
• Temporary Erosion Control		07-350	
• Mulching	√	20-352 07-380	
• Erosion Control Blankets, and other geotextiles		20-010 07-390	
• Jute Mesh		20-356	
• Native Topsoil		20-170	
• Duff		20-005	
• Soil Bioengineering: Willow Cuttings (Plant Group W)		20-090	
• Fiber Rolls		20-060 07-420	
• Turf (Sod)		20-504	
• Track Walking			
• Erosion Control Type C, D or drill seed		20-030, 20-040 and 20-050, respectively	
• Bonded Fiber Matrix			

HARD SURFACES

1. Are hard surfaces required? (Safety, maintenance, soil stabilization, etc.) Yes No

Slope/Surface Protection Systems – Hard Surfaces	Working Detail in PPDG	Standard Special Provision	Estimated Quantity (ha)
• Rock Blanket	√	20-080	
• Rock Slope Protection	√	72-010	
• Concreted Rock Slope Protection	√		
• Sacked Concrete Slope Protection	√		
• Slope Paving	√	72-200	
• Articulated Revetments			
• Gabions			

Design Pollution Prevention BMPs		
Checklist DPP-1, Part 4		
Prepared by: <u>Ali Jirde</u>	Date: <u>01/29/04</u>	District-Co-Route: <u>05-SB-101</u>
KP (PM): <u>73.2(45.5)</u>		EA: <u>05-0K330K</u>
RWQCB: Central Coast Region (3)		

Concentrated Flow Conveyance Systems

1. Review Working Details and SSPs listed below for Vegetated Surface and Hard Surface Protection Systems. Complete
2. Estimate quantity of BMPs to be used on the project Complete

Concentrated Flow Conveyance Systems	Working Detail in PPDC	Standard Special Provision	Estimated Quantity (ha)
• Ditches, Berms, Dikes, and Swales	✓	None available	
• Overside Drains	✓	69-010, 69-020, 69-030, 69-100, 69-500	
• Flared Culvert End Sections	✓	70-1.02C	
• Outlet Protection/Velocity Dissipation Devices	✓	None available	

Ditches, Berms, Dikes and Swales

1. Evaluate risks due to erosion, overtopping, flow backups or washout. Complete
2. Consider outlet protection where localized scour is anticipated. Complete
3. Examine the site for run-on from off-site sources. Complete
4. Consider channel lining when velocities exceed scour velocity for soil. Complete

Overside Drains

1. Consider downdrains, as per HDM 834.3, paragraph 2. Complete
2. Consider paved spillways for side slopes flatter than 1:4. Complete

Flared Culvert End Sections

1. Install flared end sections on culvert inlets and outlets Complete

Outlet Protection/Velocity Dissipation Devices

1. Use outlet protection/velocity dissipation devices at outlets. Complete
2. Design apron at outlet. Complete
3. Design apron length appropriate to outlet flow and tailwater level. Complete



**Design Pollution Prevention BMPs
Checklist DPP-1, Part 5**

Prepared by: Ali Jirde Date: 01/29/04 District-Co-Route: 05-SB-101
 KP (PM): 73.2(45.5) EA: 05-0K330K
 RWQCB: Central Coast Region (3)

Preservation of Existing Vegetation

1. Review preservation of property, Standard Specifications 16-1.01 and 16-1.02 (clearing and grubbing) and Working Detail for Preservation of Existing Vegetation to reduce clearing and grubbing and maximize preservation of existing vegetation. Complete

2. Consider project changes (route/alignment modifications) to increase preservation or preserve critical areas such as floodplains, steep slopes, wetlands, and areas with problematic soil conditions. Complete

3. Have the following steps been taken?
 - (a) Has all vegetation to be retained been coordinated with Environmental, and identified and defined in the contract plans? Yes No
 - (b) Are all areas to be preserved marked and required to be protected with orange polypropylene fencing during construction? Yes No
 - (c) Have steps been taken to minimize disturbed areas, such as locating temporary roadways to avoid stands of trees and shrubs and following existing contours to reduce cutting and filling? Yes No
 - (d) Have impacts to preserved vegetation been considered while work is occurring in disturbed areas? Yes No



Appendix E

Exemption Documentation Form

See Section 4, Figure 4-1, Project Exemption Criteria for Treatment BMPS Only.

DATE: 01/29/04

EA: 0K330K

NO.	CRITERIA	YES ✓	NO ✓	SUPPLEMENTAL INFORMATION FOR EXEMPTION
1.	Start			Go to 2
2.	Will there be direct or indirect discharge to surface water?	✓		If yes, go to 3 If no, project is exempt, go to 14. Comment on location of project relative to nearest receiving water.
3.	Is this an emergency project?		✓	If yes, project is exempt, go to 14. If no, go to 4
4.	Does the project constitute new construction or major reconstruction?		✓	If yes, go to 13 If no, go to 5. Document why it is or not considered a new facility (new construction, major reconstruction, significant construction or reconstruction projects are considered new.)
5.	Will there be a change in line/grade or hydraulic capacity? Peak flow volumes and velocities will not change significantly.		✓	If yes, go to 6 If no go to 8.
6.	Is disturbed soil area <u>greater than or equal to 2 hectares</u> ?		✓	If yes, go to 13 If no, go to 7. Provide disturbed soil area in hectares.
7.	Part of a common plan of development?		✓	If yes, go to 13 If no, go to 8.
8.	Do the project limits encroach upon a High Risk Area?		✓	If yes, go to 13 If no, go to 9. Document source.
9.	Are there location specific requirements established by the RWQCB or other local agencies?		✓	If yes, go to 13 Briefly describe. If no, go to 10.
10.	Is the project in a Municipal Separate Storm Sewer System (MS4) jurisdiction?		✓	If yes, go to 11. If no, project is exempt, go to 14.
11.	Are there Municipal Separate Storm Sewer System (MS4) specific requirements?			If yes, go to 13. Briefly describe. If no, go to 12.
12.	Will the storm drain system be modified, replaced or upgraded?			If yes, go to 13 If no, project is exempt, go to 14.
13.	Consider approved Treatment BMPs.			Project is not exempt based on these criteria. Go to Section 5.5 for BMP Evaluation and Selection Process and Checklist T-1 and Decision Tree T-1 in this Appendix.
14.	Document for project files by completing this Exemption Documentation Form and the SWDR.			Attach this form to the SWDR.
15.	End PROJECT IS EXEMPT	✓		

**Chart No. 1
Multilane Lane Requirements**

Location: SB-101- PM 45.5 Direction: Northbound

FROM HOUR TO HOUR	a.m.												p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
Mondays through Thursdays	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					1	1	1	1	1
Fridays	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Saturdays																										
Sundays																						1	1	1	1	
Day before designated legal holiday	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Designated legal holidays																										

Legend:
 1 One lane open in direction of travel
 No lane closure allowed

REMARKS

 EA 0K330K
 By: S Sandeman
 Date: 1/6/04 Chart valid for charts advertised within one year of chart date.

**Chart No. 2
Multilane Lane Requirements**

Location: SB-101- PM 45.4 Direction: Southbound

FROM HOUR TO HOUR	a.m.												p.m.												
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	1	1	1	1	1	1					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Fridays	1	1	1	1	1	1					1	1	1	1	1	1									
Saturdays																									
Sundays																						1	1	1	1
Day before designated legal holiday	1	1	1	1	1	1					1	1	1	1	1	1									
Designated legal holidays																									

Legend:
 1 One lane open in direction of travel
 No lane closure allowed

REMARKS:

 EA 0K330K
 By: S Sandeman
 Date: 1/6/04 Chart valid for charts advertised within one year of chart date.