

10 - Mer - 165 - PM 29.8/30.3  
20.10.201.010  
10-0Q290K (1000000201)  
July 2011

## PROJECT STUDY REPORT

To

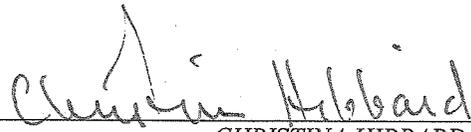
### Request for Programming in the 2010 SHOPP

On Route: 165

Between: Merced River Bridge

And: 0.2 Miles South of Westside boulevard

APPROVAL RECOMMENDED:

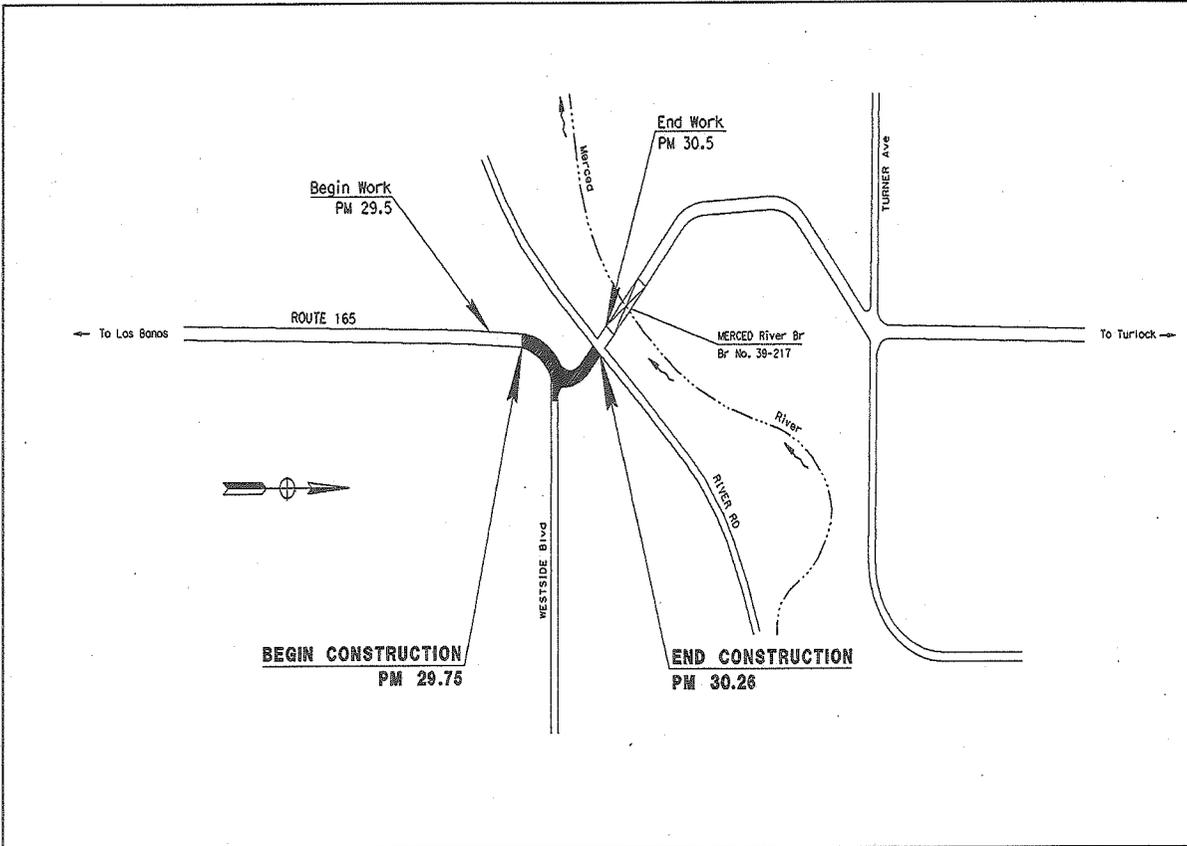
  
\_\_\_\_\_  
CHRISTINA HIBBARD  
PROJECT MANAGER

APPROVED:

  
\_\_\_\_\_  
CARRIE L. BOWEN  
DISTRICT DIRECTOR

8-16-11  
\_\_\_\_\_  
DATE

10 - Mer - 165 - PM 29.8/30.3  
20.10.201.010  
10-0Q290K (1000000201)  
July 2011



On Route 165

Between Merced River Bridge

And 0.2 Miles South of Westside Boulevard

10 - Mer - 165 - PM 29.8/30.3

This Project Study Report has been prepared under the direction of the following Registered Engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

  
\_\_\_\_\_  
HONGLOAN LUONG, REGISTERED CIVIL ENGINEER

08/15/2011  
\_\_\_\_\_  
DATE



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## 1. INTRODUCTION

The California State Department of Transportation proposes to realign a segment of State Route (SR) 165 in Merced County, south of the Merced River Bridge, at the Westside Boulevard intersection to improve the radius and superelevation of two horizontal curves. The shoulder will be widened to the standard 8 feet with rumble strips. The SR 165/Westside Boulevard intersection will be modified accordingly with the elimination of the free right turn lanes for eastbound and westbound traffic on Westside Boulevard. Additional right of way will be required.

This project is needed to address the identified pattern of run-off roadway (ROR) collisions occurring at this location. Two build alternatives and one no-build alternative were studied for this Project Study Report.

The total construction cost for this project ranges from \$ 3,094,000 to \$4,173,000 including right of way cost (June 2011). Programming is anticipated from the SHOPP program with funding from the 201.010 Highway Safety Improvement Program, in the 2013/2014 Fiscal Year. This project has been designated as Category 4B since it has minimal economic, social, and environmental significance.

See the Cost estimate for specific work items included in this project.

<b>Project Limits</b> (Dist., Co., Rte., PM)	10-Mer-165, PM 29.8/30.3
<b>Number of Alternatives:</b>	3
<b>Alternative Recommended for Programming:</b>	Alternative 2
<b>Programmed or Proposed Capital Construction Costs</b>	\$2,889,000 (June 2011)
<b>Programmed or Proposal Capital Right of Way Costs:</b>	\$205,000 (December 2009)
<b>Funding Source:</b>	201.010
<b>Type of Facility</b> (conventional, expressway, freeway):	Conventional Highway
<b>Number of Structures:</b>	0
<b>Anticipated Environmental Determination/Document</b>	Negative Declaration/Finding of No Significant Impact
<b>Legal Description</b>	Curve Correction
<b>Project Category</b>	4B

A project report will serve as the approval of the "selected" alternative.

## **2. BACKGROUND**

The State Route 165 corridor is a rural north/south corridor, which begins at Interstate 5 south of Los Banos in Merced County and ends at State Route 99 near Turlock in Stanislaus County. The corridor traverses the flat land of the Valley and serves the City of Los Banos and the communities of Stevinson and Hilmar. The corridor serves as a connector between Interstate 5 and State Route 152, 140 and 99. This corridor accommodates local commute traffic as well as serves to transport farm produce to processors and wholesale distributors. The corridor also provides access to the Kesterson Wildlife Refuge and serves as a connector to State Route 132 and 108/120 via Stanislaus County roads.

SR 165, within the project limits, is a two-lane conventional highway consisting of two 12-foot lanes and 4-foot shoulders. Westside Boulevard is a two-lane county road that connects to SR 165 at an at-grade "tee" intersection. The Merced River Bridge is at the north end of the project limits, approximately 500 feet north of the SR 165/Westside Boulevard tee intersection. The Merced River Bridge was built skewed perpendicular to the river, which created a series of non-standard horizontal curves on a highway that is primarily straight. The existing horizontal curves and superelevation within the project limits are substandard.

The Conceptual Report for this project was prepared by District 10 Traffic Safety and approved on May 14, 2008. This location was investigated after it appeared on the Traffic Accident Surveillance and Analysis System (TASAS) Table C list of December 11, 2002.

## **3. PURPOSE AND NEED STATEMENT**

### **Need:**

There have been many accidents in this segment due to the unexpected sharp turns preceding the bridge. Although numerous warning signs are posted in both directions, many motorists are traveling too fast for the curve. Ten of the fifteen collisions occurred from October 1, 2002 to September 30, 2007 are run-off roadway (ROR) collisions. The need is an improved horizontal alignment with improved curve radii and superelevation.

### **Purpose:**

The purpose of this project is to reduce the number and the severity of ROR collisions within this highway segment.

#### 4. DEFICIENCIES

Within this section of roadway, deficiencies include 4-foot shoulders, non-standard curve radii, and non-standard superelevation.

- Current and Forecasted Traffic:

The travel forecasting and analysis from September 26, 2008 is as follows:

ADT 2008 (Existing) = 8,100	DHV = 1,800
ADT 2012 = 9,200	D = 55%
ADT 2032 = 17,700	T = 7%
TI (10 yrs) = 9.5	
TI (20 yrs) = 11.0	

- Accidents Rates:

During the 5-year period from April 1, 2005 through March 31, 2010, SR 165 within the project limits had the following accident rates (accident rates are in accidents per million vehicle miles):

			Fatal + Injury Rate (ACCS/MV)		Total Rate (ACCS/MV)	
Total	Fatal	Fatal+Injury	Actual	Average	Actual	Average
12	0	6	0.95	0.34	1.91	0.80

Seven out of the twelve reported accidents were ROR accidents. This project has a Safety Index over 230 based upon the estimated construction and right of way cost of \$3,095,000 of the preferred alternative, which will be recommended for programming.

#### 5. CORRIDOR AND SYSTEM COORDINATION

State Route 165 is classified as a Minor Arterial for the entire route with the exception of the segment through Los Banos where it is functionally classified as a Principal Arterial. SR 165 is not designated as a Surface Transportation Assistance Act (STAA) national truck network truck route. It is not on the Scenic Highway System or on the National Highway System (NHS). SR 165 is not designated as a Strategic Highway Network (STRAHNET) Deployment Route and it is not on the Freeways and Expressways (F&E) System. SR 165 is, however designated as a STAA Terminal Access Route as part of the state truck route system. It is also accessible to bicycles.

## Planning Horizon

The March 2004 SR 165 Transportation Concept Report (TCR) identifies the current level of Service (LOS) of 'C'. The 2025 Concept Level of Service is 'D'. The portion of the route at the project location (PM 29.8-30.3) is a 2-lane conventional highway. The 2004 Final TCR for SR-165 identifies the 2025 concept facility as a 2-lane conventional highway with left turn channelization. The UTC for this portion of highway is a 4-lane conventional highway.\*

\*In some cases, an expressway or freeway may be more appropriate than a conventional highway, so that access management may be implemented, if necessary, to reach the desired LOS if it is not being achieved. Each circumstance will be evaluated taking into consideration all alternatives and the California Statute 2004, California Streets and Highway Code, Chapter 2, Article 2., Context Sensitive Solutions (CSS), all traffic data including project specific issues.

### Corridor Designation and Functional Classification

County	Post Mile	Description	Functional Classification	Rural/Urban/Urbanized	NHS (Y/N)	Freeway/Expressway System	STRAHNET	IRRS	STAA (NTN, TA)	Scenic	Bike Use Allowed
Merced	29.75-30.26	Merced Co. SR-165 in Stevenson	Minor Arterial	Rural	N	N	N	Y	TA	N	Y
NHS = National Highway System STRAHNET = Strategic Highway Network IRRS = Interregional Road System (Yes: HE=High Emphasis, F=Focus, G=Gateway) or No						STAA = Surface Transportation Assistance Act (Yes: NTN = National Truck or TA = Terminal Access) or No Scenic (Yes: OD = Officially Designated, E=Eligible) or No					

### Programmed Projects (STIP, SHOPP, ITS, Bike, Pedestrian, Transit)

State Route	Expenditure Authorization	Post Mile	Description of Location	Project Description	Estimated Project Cost (1,000)	Project Source
165	EA38150	26.9-30.00	Near Stevenson From Route 140 to 0.2 KM South of Westside Blvd right.	Stevenson Rehab – AC overlay, digouts, intersection improvements & shoulder widening.	7,498	SHOPP

**Planned Projects (STIP, SHOPP, ITS, Bike, Pedestrian, Transit)**

State Route	Expenditure Authorization	Post Mile	Description of Location	Project Description	Estimated Project Cost (1,000)	Project Source
165	EAOP810	0.00-30.5	Hilmar	Hilmar Truck Bypass New Bypass to take truck traffic from SR-165, around Hilmar and Turlock to SR-99	\$43,000	Local
165	none	UNK	North of Hilmar	Widening	\$26	Local
165	none	33.331 (East-West)	Bloss Ave East - West	Bicycle Lanes, Class 2	UNK	Local
165	none	33.331 (North - South)	SR-165 through Hilmar	Bicycle Lanes, Class 2	UNK	Local
165	OJ430	32.6-32.9	Geer Rd/SR-165 in Hilmar	Extend Left turn lane	\$990	SHOPP

**6. ALTERNATIVES**

**Alternative 1 (Standard Alternative)**

This alternative proposes to realign this segment based on a design speed adhering to Caltrans HDM standards. This alternative replaces the two nonstandard curves with two 1000 foot radii curves based on a 55 mph design speed. A tangent of 424.7 feet will connect the two horizontal curves providing sufficient length for superelevation transition. Lane and shoulder widths will be 12 and 8 feet, respectively, through the length of the project. The SR 165/Westside Boulevard intersection will be modified, providing a right turn lane from SR 165 to Westside Boulevard and from Westside Boulevard to SR 165. This alternative requires 10 acres of additional right of way. The total cost to build Alternative 1 is approximately \$4,173 million. The Safety Index for this alternative is below 230 and did not meet the minimum required to be programmed for the PID phase.

The estimated cost (06/2011) for this alternative is as follows (see **Attachment F**):

Roadway	\$3,804,000
Structures	\$0
Right of Way	<u>\$369,000</u>
Total	\$4,173,000

**Alternative 2 (Preferred Alternative-Recommended for Programming)**

Alternative 2 proposes to realign the horizontal curves using 550-foot radii based on a 40 mph design speed as proposed in the approved Conceptual Report . A tangent of 267 feet will connect the two horizontal curves. The SR 165/Westside Boulevard intersection will be modified, though separate right turn lanes will not be included in the design. Lane and shoulder widths will be 12 and 8 feet, respectively, through the length of the project. This alternative requires approximately 5.5 acres of additional right of way.

Alternative 2 requires a Mandatory Design Exception for the proposed 550-foot non-standard horizontal curve radii. The Fact Sheet Exceptions to Mandatory Design Standards was prepared and approved on June 30, 2011.

The estimated cost (06/2011) for this alternative is as follows (see **Attachment F**):

Roadway	\$2,889,000
Structures	\$0
Right of Way	<u>\$ 205,000</u>
Total	\$3,094,000

The Safety Index for this alternative is over 230.

No significant traffic delays are anticipated due to the construction of this project; however, a TMP will be needed. Construction will be done with the use of standard lane closures as stipulated in the CA MUTCD and the Standard Specifications as necessary. COZEEP will be used during the construction of this project. Funds will be provided to cover traffic management plan and traffic control system (see **Attachment I**).

There will be in excess of one acre of disturbed soil area, so a Long Form Storm Water Data Report is required (see **Attachment H**). During construction a Storm Water Pollution Prevention Plan will be prepared by the contractor to ensure the implementation of Best Management Practices (BMPs) to reduce or eliminate sediment and other pollutants in storm water as well as non-storm water discharges. These BMPs will be designed to satisfy the National Pollutant Discharge Elimination System (NPDES) permit and Clean Water Act requirements.

**Alternative 3 (No-Build Alternative)**

This is the no-build alternative. This alternative will do nothing to alleviate the problem of continuing high accident rates within the project limits.

**7. COMMUNITY INVOLVEMENT**

The proposed project is not expected to have effects on the local community or economy.

**8. ENVIRONMENTAL DETERMINATION/DOCUMENT**

The anticipated environmental document for the proposed project is a Negative Declaration/Finding of No Significant Impact (ND/FONSI). The California Department of Transportation would act as the lead agency in the preparation of a joint NEPA/CEQA (National Environmental Policy Act/California Environmental Quality Act) environmental document (see Attachment G).

**9. FUNDING**

**9A. CAPITAL COST**

The project is proposed for programming in the 2010 SHOPP with funding from the 201.010 Safety Improvement Program (HB1) for the 2013/2014 fiscal year.

**Capital Cost Estimate for the Alternative Identified for Programming in the 2010 SHOPP**

Fiscal Year	Right of Way Capital	Construction Capital
2010/2011		
2011/2012		
2012/2013		
2013/2014	\$238	\$3,157

Notes:

1. All costs XS1,000. Support Categories are the same s those identified by SB45
2. Construction Capital escalated at 3%. Right of Way Capital estimated support cost escalated at 5.0%.

**CAPITAL SUPPORT ESTIMATE FOR THE PROGRAMMABLE ALTERNATIVE IN THE 2010 SHOPP**

	PROJECT SUPPORT COMPONENTS								Total
	PA&ED 0 Phase		Design 1 Phase		Right of Way 2 Phase		Construction 3 Phase		
	Dist	DES	Dist	DES	Dist	DES	Dist	DES	
Estimated PY's									
Estimated PS S's	\$528		\$871		\$285		\$747		\$2,431
Estimated PYE S's									
Total S's	\$528		\$871		\$285		\$747		\$2,431

**Notes:**

1. All costs XS\$1,000. Support Categories are the same as those identified by SB45
2. Support Costs are not escalated.

**10. SCHEDULE**

<b>HQ Milestones</b>	<b>Delivery Date (Month, Day, Year)</b>
Program Project	09/01/2011
Begin Environmental	02/26/2012
PA & ED	02/26/2013
Project PS&E	04/30/2014
Right of Way Certification	05/01/2014
Ready to List	05/01/2014
HQ Advertise	06/01/2014
Approve Contract	08/01/2014

**11. FHWA COORDINATION**

This project is eligible for federal-aid funding and is considered to be state-authorized under current FHWA-Caltrans Stewardship Agreements.

**12. DISTRICT CONTACTS**

Christina Hibbard (209) 948-7889  
Project Manager

Jose Huerta (209) 948-7902  
Design Manager, Branch L

HongLoan Luong (209) 948-3999  
Project Engineer

James Gonzalez (559) 445-6219  
Chief, Right of Way

Duper Tong (209) 948-7859  
Traffic Safety

Mark Orr (209) 639-3854  
Traffic Engineering

Mary Oliva (209) 941-1919

Environmental Manager

Ali Juma  
Maintenance Engineering

(209) 948-7373

### 13. PROJECT REVIEWS

Field Review _____	Date <u>02/09/2009</u>
District Safety Review _____	Date <u>05/05/2010</u>
Constructability Review _____	Date <u>06/02/2010</u>
HQ Design Coordinator _____	Date <u>06/02/2010</u>
District SHOPP Program Advisor _____	Date <u>06/22/2010</u>

### 14. ATTACHMENTS

Attachment A	Title Sheet
Attachment B	Typical Cross Section
Attachment C	Project Layout (Alternative 1) (Alternative 2)
Attachment D	Traffic Data
Attachment E	Right of Way Data Sheet
Attachment F	Preliminary Project Cost Estimate Summary (Alternative 1) (Alternative 2)
Attachment G	Preliminary Environmental Analysis Report
Attachment H	Storm Water Data Report Cover Page
Attachment I	Transportation Management Plan Checklist

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	MER	165	29.75/30.26		

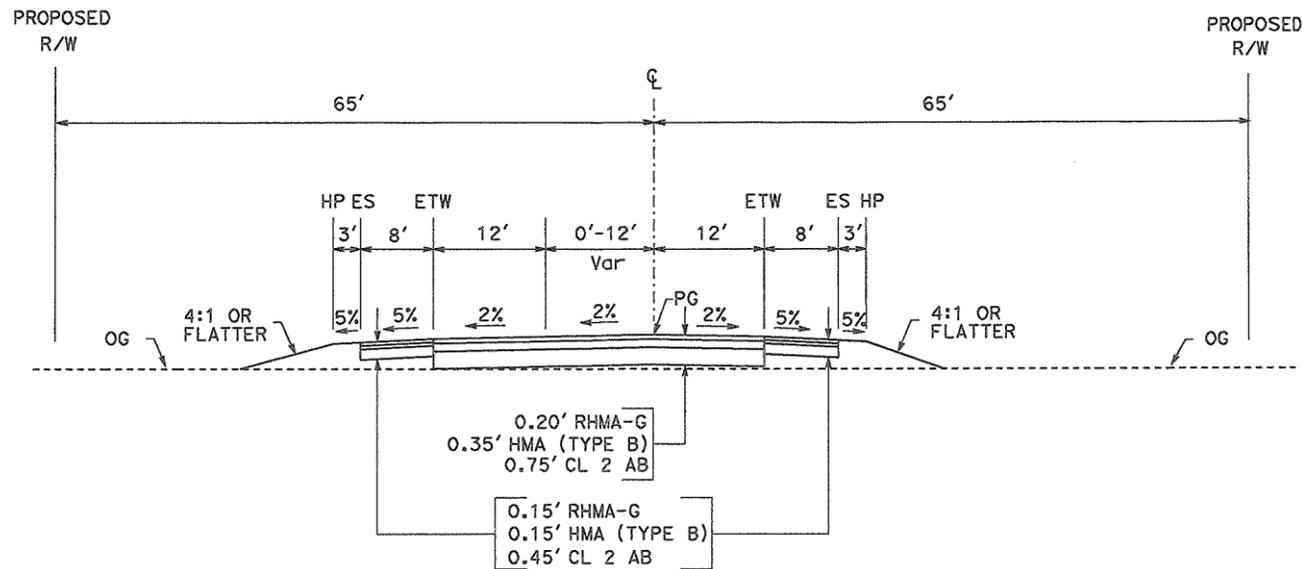
  

REGISTERED CIVIL ENGINEER DATE	
PLANS APPROVAL DATE	

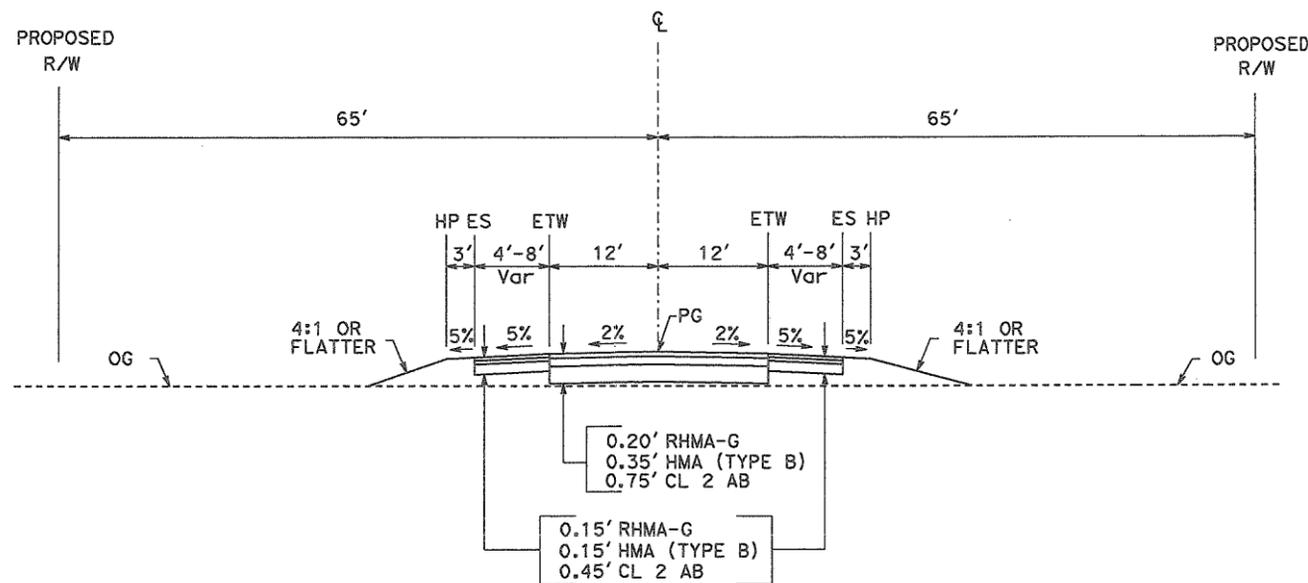
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

**NOTES:**

1. DIMENSIONS OF STRUCTURAL SECTIONS ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATION.
2. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.



**ROUTE 165**  
Sta 10+00.00 TO Sta 30+39.05



**WESTSIDE BOULEVARD**  
STA 19+39.90 TO STA 22+07.49

**ATTACHMENT B**  
**TYPICAL CROSS SECTIONS**  
NO SCALE **X-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
	JOSE A. HUERTA	PERLITA BALBIN	HONGLOAN LUONG
	DESIGN	CALCULATED-DESIGNED BY	CHECKED BY

CURVE DATA

No.	R	Δ	T	L
①	1000.00'	36°26'42"	329.22'	636.09'
②	1000.00'	86°59'33"	948.84'	1518.30'
③	1000.00'	17°2'09"	149.77'	297.33'



10+00 POT Rte 165  
BEGIN CONSTRUCTION  
Exist. R/W

12+80.00 BC Rte 165

40+54.09 POT Rte 165  
END CONSTRUCTION

Exist. R/W

Proposed R/W

Existing R/W

Proposed R/W

Existing R/W

19+16.09 EC Rte 165

23+40.79 BC Rte 165

+68.12 Rte 165

+56.37 Rte 165

+52.33 Rte 165

+6.73 Rte 165

+36.96 Rte 165

+56.91 Rte 165

+67.55 Beg Transition  
Rte 165

32+73.62 POC Rte 165  
19+64.81 POT Westside Blvd  
+41.21 End Transition Rte 165

+21.28 End Transition  
Rte 165

38+59.09 EC Rte 165

+96.38 Beg Transition Rte 165

+26.39 Rte 165

+46.72 Rte 165

+15.91 Rte 165

20+35.19 BC Westside Blvd

+99.23 Rte 165

+27.57 Westside Blvd

+16.63 Westside Blvd

23+32.52 EC Westside Blvd

LIMITS OF CONSTRUCTION

**Alternative 1**

**MER 165-PM 29.8/30.3**



To: Allen Lao

September 26, 2008

From: DISTRICT 10 PLANNING –  
OFFICE OF PROJECT INITIATION AND TRAVEL FORECASTING

EA: 0Q290K

County: MER

Route: 165

PM: 29.75-30.26

Project Description: Curve Correction

DATA TRANSMITTED				
Design Year Period 2012 to 2032				
<b>1. DESIGN DESIGNATION</b>				
ADT 2008 (existing)	8,100	=	DHV = 800	D = 55%
ADT 2012	9,200	=	DHV = 900	T = 7%
ADT 2032	17,700	=	DHV = 1,800	
<b>2. TRAFFIC INDEX</b>				
10 year TI (1 or 2 lanes) TW = 9.5, SHLD = 6.0 (3 or + lanes) TW = 9.5, SHLD = 6.0				
20 year TI (1 or 2 lanes) TW = 11.0, SHLD = 7.0 (3 or + lanes) TW = 10.5, SHLD = 6.5				
<b>3. REMARKS</b>				
Any Operational Analysis for this project should be requested from District 10 Traffic Operations.				
Note: Forecasting methodology for this project used multiple sources of data and information, one of them being a Traffic Demand Model (TDM). Most of the TDM's the District 10 Project Initiation & Travel Forecasting/Analysis Department uses are created primarily for RTP / Air Quality conformity in a financially constrained environment. All TDM's used for these purposes are not produced by District 10 but by local transportation planning agencies represented within the boundaries of District 10. A Traffic Index (T.I.) is used to assist in determining only the structural section depth, not capacity, of a particular roadway. Therefore, a conforming forecast is not necessarily required.				

Data prepared & transmitted

By:

Eduardo Fuentes

for

Perfecto Robledo  
Chief, Office of Project Initiation  
& Travel Forecasting

ATTACHMENT D

**Memorandum**

To: Ram Narayan Gupta  
Stockton PPM

Date: 9/29/2009

Attn: Hongloan Luong  
Design IV, Branch "L"  
Jose Huerta  
Design IV, Branch "L"

File: CD 10 EA 0Q290K Alt 3  
Co MER RTE 165

**DESCRIPTION:**

Curve correction on Route 165 at Westside Boulevard.

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 5/11/2009

The following assumptions and limiting conditions were identified:

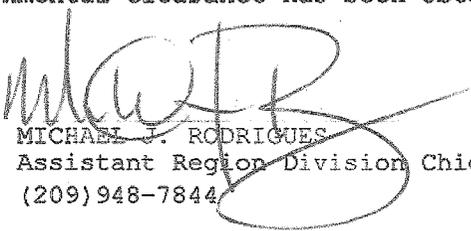
**Appraisal**

It was assumed that the new right of way would acquire new right of way off the frontage of two parcels that are developed with wine grapes. It was assumed that the severance damages of providing irrigation water, utilities and new end post for the excess parcels would be more money than to acquire these parcels as excess parcels and incorporating them into the operating right of way.

**Utility**

Engineer states two electrical and three telephone poles are in conflict. The survey maps indicate the power poles on SR 165 and Westside Blvd lay within the existing R/W and the telephone poles are centered on the R/W line. Based on this information, the cost of relocating these poles will be at the expense of the utility owners.

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.

  
MICHAEL J. RODRIGUES  
Assistant Region Division Chief, Right of Way  
(209) 948-7844

**Right Of Way Cost Estimate**

	Current Year 2009	Contingency Rate	Right of Way Escalation Rate	Escalated Year 2012
Acquisition:	\$195,869	25%	5%	\$226,743
Mitigation:	\$0	25%	5%	\$0
State Share of Utilities:	\$0	25%	5%	\$0
Expert Witness:	\$0	25%	5%	\$0
Relocation Assistance:	\$0	25%	5%	\$0
Demolition and Clearance:	\$5,000	25%	5%	\$5,788
Title and Escrow:	\$4,146	25%	5%	\$4,800
Condemnation:	\$0	25%	5%	\$0
Ad Signs:	\$0	25%	5%	\$0
<b>Total Current Value:</b>	<b>\$205,015</b>			<b>\$237,330</b>

If RW Cost Est fields are blank, Costs = \$0

Estimated Construction Contract Work (CCW):

0 R/W LEAD TIME/Mo. 12

Pot Hole	0
Mitigation	
Land	0
Bank	0
Permit Fee	0

**RR Involvement**

Railroad Facilities or Right of Way Affected?	NO
Const/Maint Agreement:	
Service Contract:	
Right of Entry:	
Clauses:	
Estimated Lead-time	

**Parcel Data**

# of Parcel Type X:	0		
# of Parcel Type A: less than \$10,000 non-complex	0		
# of Parcel Type B: more than \$10,000 non-complex	1		
# of Parcel Type C: complex, special valuation	1		
# of Parcel Type D: most complex and time consuming	0	# of Duals Needed:	0
<b>Totals:</b>	<b>2</b>	<b>Totals:</b>	<b>0</b>

# of Excess Parcels: 2

**Misc R/W Work**

# of RAP Displacements:	0
# of Clearance/Demos:	2
# of Const Permits:	0
# of Condemnations:	0

**Utilities**

U4-1: Owner Expense	2
U4-2: State Expense, Conventional no Fed Aid	0
U4-3: State Expense, Freeway no Fed Aid	0
U4-4: State Expense, Both no Fed Aid	0
U5-7: Utility verification, no relocation/potholing	0
U5-8: Utility verification, w/ some relocation/potholing	0
U5-9: Utility verifications, relocation/potholing required	2

EA: 10-0Q290K ALT: 3

Parcel Area		Unit:	ac.
Total RW Required:	5.11	Total RW Cost:	\$74,095
Total Excess Area:	3.8	Total Excess Cost:	\$55,100

**General Description of R/W and Excess Lands Required (zoning, use, major improvements, critical or sensitive parcels, etc.):**

Project proposes to increase the turning radius of SR-165 and Westside Blvd, to do so will require the acquisition of new right of way off two vineyards, along with two excess land parcels between the new right of way and the existing right of way. Land is developed to grapes for wine

**General Description of Utility Involvement:**

The engineer is predicting that there are two electrical poles and three telephone poles in conflict. However after viewing the project site, at least two additional telephone poles and four electrical poles may need to be relocated due to the pole line positions. In addition, there are two irrigation systems possibly owned by Gallo Vineyards Inc in the project area. The engineer does not expect the pumps to be in conflict.

Is there a significant effect on assessed valuation:  No

Were any previously unidentified sites with hazardous waste or material found:  No

Are RAP displacements required:  No

# 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:  No

Are there potential relinquishments or abandonments:  No

Are there any existing or potential airspace sites:  No

Are environmental mitigation parcels required:  No

**Data for evaluation provided by:**

Estimator:	LL Birdwell	9/21/2009
Railroad Liason Agent:	Maria Toles	9/24/2009
Utility Relocation Coordinator:	JENNIFER E. JONES	8/26/2009

*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.*

  
**MICHAEL J. RODRIGUES**  
 Assistant Region Division Chief, Right of Way

Date  
 ENTERED PMCS 9/29/2009  
 BY: B McCURRY

**PROJECT STUDY REPORT COST ESTIMATE**



Dist-Co-Rte: 10-Mer-165  
 PM: PM 29.75/30.26  
 EA: 10-0Q290K  
 Program Code: 20.10.201.010

**PROJECT DESCRIPTION:**

**Limits:** Merced SR 165 at Westside Blvd Intersection, south of Hilmar.

**Proposed Improvement:**  
 (Scope of Work) Curve correction, Realign 2 curves, superelevations, widen shoulder, intersection lighting, and install rumble strips.

**Alternative:** 1 (Standard Design)

**SUMMARY OF PROJECT COST ESTIMATE**

I. ROADWAY ITEMS	Sections 1 - 5	\$	<u>2,217,400</u>
II. ROADSIDE ITEMS	Sections 6 - 7	\$	<u>167,000</u>
III. ROADWAY ADDITIONS	Sections 8 - 10	\$	<u>1,418,718</u>
<b>TOTAL ROADWAY</b>	<b>Total of Sections 1 - 10 shown above</b>	\$	<u>3,803,118</u>
<b>TOTAL STRUCTURES</b>		\$	<u>0</u>
	<b>SUBTOTAL CONSTRUCTION COSTS</b>	\$	<u>3,803,118</u>
	<b>TOTAL RIGHT OF WAY ITEMS (Not Escalated)</b>	\$	<u>369,200</u>
	<b>TOTAL PROJECT CAPITAL OUTLAY COSTS</b>	\$	<u>4,172,318</u>

Reviewed by  
 District Program Manager:

*[Signature]*  
 \_\_\_\_\_  
 (Signature)

7/11/11  
 \_\_\_\_\_  
 (Date)

Approved by Project Manager:

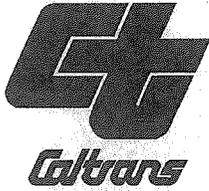
*[Signature]*  
 \_\_\_\_\_  
 (Signature)

7/12/11  
 \_\_\_\_\_  
 (Date)

Phone Number: \_\_\_\_\_

Form revised 8/21/07

**PROJECT STUDY REPORT COST ESTIMATE**



Dist-Co-Rte: 10-Mer-165  
 PM: PM 29.75/30.26  
 EA: 10-0Q290K  
 Program Code: 20.10.201.010

**I. ROADWAY ITEMS**

<u>Section 1 - Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Roadway Excavation	260	CY	90.0	\$23,400	
Imported Borrow	23,200	CY	20.0	\$464,000	
Clearing & Grubbing	1	LS	50000.0	\$50,000	
Develop Water Supply	0	LS	0.0	\$0	
Obliterate Surfacing	131,000	SQ FT	1.0	\$131,000	
Stepped Slopes and Slope				\$0	
Rounding (Contour Grading)				\$0	
			<b>Subtotal Earthwork:</b>		<b>\$668,400</b>
 <u>Section 2 - Pavement Structural Section*</u>					
PCC Pvmt <u>Depth</u>	0	CY	0.0	\$0	
PCC Pvmt <u>Depth</u>	0	CY	0.0	\$0	
RHMA-G	2,400	Tons	110.0	\$264,000	
Lean Concrete Base	0	CY	0.0	\$0	
Cement-Treated Base	0	CY	0.0	\$0	
Class 2 AB	3,900	CY	60.0	\$234,000	
Treated Permeable Base	0	CY	0.0	\$0	
Aggregate Subbase	0	CY	0.0	\$0	
Pavement Reinforcing Fabric	0	FT <sup>2</sup>	0.0	\$0	
Edge Drains	0	FT	0.0	\$0	
HMA (Type B)	3,600	Tons	100.0	\$360,000	
				\$0	
			<b>Subtotal Structural Section:</b>		<b>\$858,000</b>
 <u>Section 3 - Drainage</u>					
Large Drainage Facilities	0	LS	0.0	\$0	
Storm Drains	0		0.0	\$0	
Pumping Plants	0		0.0	\$0	
Project Drainage	1	LS	193000.0	\$193,000	
(X-Drains, overside, etc.)					
AC Dike (Lowside of Curves)	0	FT	0.0	\$0	
CMP	0	FT	0.0	\$0	
RCP	0	FT	0.0	\$0	
			<b>Subtotal Drainage:</b>		<b>\$193,000</b>

\* Reference sketch showing typical pavement structural section elements of the roadway. Include (if available) T.I., R-Value and date when tests were performed.

**PROJECT STUDY REPORT COST ESTIMATE**



Dist-Co-Rte: 10-Mer-165  
 PM: PM 29.75/30.26  
 EA: 10-0Q290K  
 Program Code: 20.10.201.010

<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		0.0	\$0	
Noise Barriers	0		0.0	\$0	
Barriers and Guardrails	0		0.0	\$0	
Equipment/Animal Passes	0		0.0	\$0	
Water Pollution Control	1	LS	132000.0	\$132,000	
Hazardous Waste Investigation and/or Mitigation Work	0		0.0	\$0	
Environmental Compliance	0		0.0	\$0	
Resident Engineer Office	1	LS	20000.0	\$20,000	
Rumble Strips	0	FT	0.0	\$0	
	0		0.0	\$0	
				\$0	
<b>Subtotal Specialty Items:</b>				<u>\$152,000</u>	

<u>Section 5 - Traffic Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Lighting	1	LS	20000.0	\$20,000	
4"Thermoplastic Traffic Stripe	1	LS	43000.0	\$43,000	
Pavement Marker(Retroflective)	1	LS	4000.0	\$4,000	
Overhead Sign Structures	0	LS	0.0	\$0	
Roadside Signs	1	LS	3000.0	\$3,000	
Traffic Control Systems	1	LS	90000.0	\$90,000	
Traffic Management Plan	1	LS	136000.0	\$136,000	
Construction Area Signs	1	LS	5000.0	\$5,000	
Traffic Handling (CMS)	0	LS	0.0	\$0	
Temporary Detection System	0	LS	0.0	\$0	
Staging	0	LS	0.0	\$0	
Maintain Traffic	1	LS	45000.0	\$45,000	
COZEEP	0	LS	0.0	\$0	
PIO	0	LS	0.0	\$0	
<b>Subtotal Traffic Items:</b>				<u>\$346,000</u>	

**TOTAL ROADWAY ITEMS Sections 1 thru 5** \$2,217,400



PROJECT STUDY REPORT COST ESTIMATE



Dist-Co-Rte: 10-Mer-165
PM: PM 29.75/30.26
EA: 10-0Q290K
Program Code: 20.10.201.010

III. ROADWAY ADDITIONS

Section 8 - Minor Items

Item Cost Section Cost
\$2,384,400 x 0.1 = \$238,440
(Subtotal Sections 1 thru 7) (5 to 10%)

Minor Items: \$238,440

Section 9 - Roadway Mobilization

\$2,622,840 x 0.10 = \$262,284
(Subtotal Sections 1 thru 8) (10%)

Roadway Mobilization: \$262,284

Section 10 - Supplemental Work & Contingencies

Supplemental Work

\$2,622,840 x 0.10 = \$262,284
(Subtotal Sections 1 thru 8) (5 to 10%)

Contingencies

\$2,622,840 x 0.25 = \$655,710
(Subtotal Sections 1 thru 8) (\*\*%)

Supplemental Work & Contingencies: \$917,994

TOTAL ROADWAY ADDITIONS Sections 8 thru 10: \$1,418,718

TOTAL ROADWAY: \$3,803,118
(Subtotal Sections 1 thru 10)

Estimate

Prepared by: Allen Lao Phone: 209-948-7905 04/15/09
(Print or Type Name) (Date)

Estimate

Checked by: HongLoan Luong Phone: 209-948-3999 06/28/11
(Print or Type Name) (Date)

**PROJECT STUDY REPORT COST ESTIMATE**



Dist-Co-Rte: 10-Mer-165  
PM: PM 29.75/30.26  
EA: 10-0Q290K  
Program Code: 20.10.201.010

**\*\*Use appropriate percentage per PDPM, Part 3 Chapter 20.**

<http://www.dot.ca.gov/hq/oppd/pdpm/pdpm.htm> - pdpm

**PROJECT STUDY REPORT COST ESTIMATE**



Dist-Co-Rte: 10-Mer-165  
 PM: PM 29.75/30.26  
 EA: 10-0Q290K  
 Program Code: 20.10.201.010

**II. STRUCTURE ITEMS**

	STRUCTURE		
	No. 1	No. 2	No. 3
Bridge Name	_____	_____	_____
Structure Type	_____	_____	_____
Width (out to out) - (ft)	<u>0</u>	<u>0.0</u>	<u>0</u>
Span Length - (ft)	<u>0</u>	<u>0.0</u>	<u>0</u>
Total Area - ft <sup>2</sup>	<u>0</u>	<u>0.0</u>	<u>0</u>
Footing Type (pile/spread)	_____	_____	_____
Cost Per ft <sup>2</sup> (incl. 10% mobilization & 25% contingencies)	<u>\$0</u>	<u>0.0</u>	<u>\$0</u>
Total Cost for Structure	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Other	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>

\* Add additional structures as necessary

SUBTOTAL STRUCTURES ITEMS \_\_\_\_\_ \$0

Railroad Related Costs (Not incl. in R/W Est) \_\_\_\_\_ \$0

TOTAL STRUCTURES ITEMS \_\_\_\_\_ \$0

**COMMENTS:**

Estimate Prepared by: \_\_\_\_\_ Phone: \_\_\_\_\_ 0/0/00  
 (Print or Type Name) (Date)

(If appropriate, attach additional pages as backup)

**PROJECT STUDY REPORT COST ESTIMATE**



Dist-Co-Rte: 10-Mer-165  
 PM: PM 29.75/30.26  
 EA: 10-0Q290K  
 Program Code: 20.10.201.010

**III. RIGHT OF WAY ITEMS**

	Current Values (Future Use)	<u>Escalation Rates</u>	-	Escalated Values*
Acquisition (10 acres )	<u>\$360,000</u>	<u>0.1</u>	-	<u>\$416,745</u>
Utility Relocation (State share)	<u>\$0</u>	<u>0.0</u>	-	<u>\$0</u>
Clearance/Demolition	<u>\$5,000</u>	<u>0.1</u>	-	<u>\$5,788</u>
RAP	<u>\$0</u>	<u>0.0</u>	-	<u>\$0</u>
Title and Escrow Fees	<u>\$4,200</u>	<u>0.1</u>	-	<u>\$4,862</u>
Construction Contract Work	<u>\$0</u>	<u>0.0</u>	-	<u>\$0</u>
	<u>\$369,200</u>			
	<b>TOTAL RIGHT OF WAY**</b>			<u>\$427,395</u>

**ESCALLATED VALUE\***

Date to which Values are Escalated: 12/29/12

\* Escalated to assumed year of advertising.

\*\* Current total value for use on Sheet 1

Estimate

Prepared by: Right of Way Department Phone: \_\_\_\_\_ 01/04/10  
 (Print or Type Name) (Date)

(If appropriate, attach additional pages and backup including Right of Way Data Sheet and Environmental Mitigation and Compliance Cost Estimate Sheet).

**PROJECT STUDY REPORT COST ESTIMATE**



Dist-Co-Rte: 10-Mer-165  
 PM: PM 29.8/30.3  
 EA: 10-0Q290K  
 Program Code: 20.10.201.010

**PROJECT DESCRIPTION:**

**Limits:** Merced SR 165 at Westside Blvd Intersection, south of Hilmar.

**Proposed Improvement:**  
 (Scope of Work) Curve correction: Realign 2 curves, superelevations, widen shoulder, and install rumble strips.

**Alternative:** Alternative 2-curve radii of 550 feet

**SUMMARY OF PROJECT COST ESTIMATE**

I. ROADWAY ITEMS	Sections 1 - 5	\$	1,666,600
II. ROADSIDE ITEMS	Sections 6 - 7	\$	144,000
III. ROADWAY ADDITIONS	Sections 8 - 10	\$	1,077,307
<b>TOTAL ROADWAY</b>	<b>Total of Sections 1 - 10 shown above</b>	\$	<b>2,887,907</b>
<b>TOTAL STRUCTURES</b>		\$	<b>0</b>
	<b>SUBTOTAL CONSTRUCTION COSTS</b>	\$	<b>2,887,907</b>
	<b>TOTAL RIGHT OF WAY ITEMS (Not Escalated)</b>	\$	<b>205,200</b>
	<b>TOTAL PROJECT CAPITAL OUTLAY COSTS</b>	\$	<b>3,093,107</b>

Reviewed by  
 District Program Manager:

*[Signature]*  
 \_\_\_\_\_  
 (Signature)

7/11/11  
 \_\_\_\_\_  
 (Date)

Approved by Project Manager:

*[Signature]*  
 \_\_\_\_\_  
 (Signature)

7/12/11  
 \_\_\_\_\_  
 (Date)

Phone Number: \_\_\_\_\_

**PROJECT STUDY REPORT COST ESTIMATE**



Dist-Co-Rte: 10-Mer-165  
 PM: PM 29.8/30.3  
 EA: 10-0Q290K  
 Program Code: 20.10.201.010

**I. ROADWAY ITEMS**

<u>Section 1 - Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Roadway Excavation	0	CY	0.00	\$0	
Imported Borrow	24,200	CY	20.00	\$484,000	
Clearing & Grubbing	1	LS	50000.00	\$50,000	
Develop Water Supply	0	LS	0.00	\$0	
Obliterate Surfacing	90,000	SQ FT	1.00	\$90,000	
Stepped Slopes and Slope				\$0	
Rounding (Contour Grading)				\$0	
			<b>Subtotal Earthwork:</b>		<b>\$624,000</b>
 <u>Section 2 - Pavement Structural Section*</u>					
PCC Pvmt <u>Depth</u>	0	CY	0.00	\$0	
PCC Pvmt <u>Depth</u>	0	CY	0.00	\$0	
RHMA-G	1,510	Tons	110.00	\$166,100	
Lean Concrete Base	0	CY	0.00	\$0	
Cement-Treated Base	0	CY	0.00	\$0	
Class 2 AB	2,520	CY	60.00	\$151,200	
Treated Permeable Base	0	CY	0.00	\$0	
Aggregate Subbase	0	CY	0.00	\$0	
Pavement Reinforcing Fabric	0	FT <sup>2</sup>	0.00	\$0	
Edge Drains	0	FT	0.00	\$0	
HMA (Type B)	2,340	Tons	95.00	\$222,300	
				\$0	
			<b>Subtotal Structural Section:</b>		<b>\$539,600</b>
 <u>Section 3 - Drainage</u>					
Large Drainage Facilities	0	LS	0.00	\$0	
Storm Drains	0		0.00	\$0	
Pumping Plants	0		0.00	\$0	
Project Drainage (X-Drains, overside, etc.)	1	LS	120000.00	\$120,000	
AC Dike	0	FT	0.00	\$0	
CMP	0	FT	0.00	\$0	
RCP	0	FT	0.00	\$0	
			<b>Subtotal Drainage:</b>		<b>\$120,000</b>

\* Reference sketch showing typical pavement structural section elements of the roadway. Include (if available) T.I., R-Value and date when tests were performed.

**PROJECT STUDY REPORT COST ESTIMATE**



Dist-Co-Rte: 10-Mer-165  
 PM: PM 29.8/30.3  
 EA: 10-0Q290K  
 Program Code: 20.10.201.010

<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		0.00	\$0	
Noise Barriers	0		0.00	\$0	
Barriers and Guardrails	0		0.00	\$0	
Equipment/Animal Passes	0		0.00	\$0	
Water Pollution Control (3%)	1	LS	90000.00	\$90,000	
Hazardous Waste Investigation and/or Mitigation Work	1	LS		\$0	
Environmental Compliance	0		0.00	\$0	
Resident Engineer Office	1	LS	19000.00	\$19,000	
Rumble Strips	4,000	FT	2.00	\$8,000	
	0		0.00	\$0	
				\$0	
<b>Subtotal Specialty Items:</b>					<b>\$117,000</b>

<u>Section 5 - Traffic Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Lighting	0	LS	0.00	\$0	
4"Thermoplastic Traffic Stripe	1	LS	25000.00	\$25,000	
Pavement Marker(Retroreflective)	1	LS	3000.00	\$3,000	
Overhead Sign Structures	0	LS	0.00	\$0	
Roadside Signs	1	LS	3000.00	\$3,000	
Traffic Control Systems	1	LS	70000.00	\$70,000	
Traffic Management Plan	1	LS	120000.00	\$120,000	
Construction Area Signs	1	LS	5000.00	\$5,000	
Traffic Handling (CMS)	0	LS	0.00	\$0	
Temporary Detection System	0	LS	0.00	\$0	
Staging	0	LS	0.00	\$0	
Maintain Traffic	1	LS	40000.00	\$40,000	
COZEEP	0	LS	0.00	\$0	
PIO	0	LS	0.00	\$0	
<b>Subtotal Traffic Items:</b>					<b>\$266,000</b>

**TOTAL ROADWAY ITEMS Sections 1 thru 5** \$1,666,600

**PROJECT STUDY REPORT COST ESTIMATE**



Dist-Co-Rte: 10-Mer-165  
 PM: PM 29.8/30.3  
 EA: 10-0Q290K  
 Program Code: 20.10.201.010

**II. ROADSIDE ITEMS**

<u>Section 6 Planting and Irrigation</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Highway Planting	0		0.00	\$0	
Replacement Planting	0		0.00	\$0	
Irrigation Modification	1	LS	100000.00	\$100,000	
Relocate Existing Irrigation	0		0.00	\$0	
Facilities	0		0.00	\$0	
Irrigation Crossovers	0		0.00	\$0	
	0		0.00	\$0	
	0	LS	0.00	\$0	
	0		0.00	\$0	
	0	LS	0.00	\$0	
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	0	LS	0.00	\$0	
	0		0.00	\$0	
	0	LS	0.00	\$0	
	0		0.00	\$0	
	0	LS	0.00	\$0	
	0		0.00	\$0	
	0	LS	0.00	\$0	
	0		0.00	\$0	
	0	LS	0.00	\$0	
	0		0.00	\$0	
	0	LS	0.00	\$0	
	0		0.00	\$0	
	0	LS	0.00	\$0	
	0		0.00	\$0	
	0	LS	0.00	\$0	
	0		0.00	\$0	
	0	LS	0.00	\$0	
	0		0.00	\$0	
	0	LS	0.00	\$0	
	0		0.00	\$0	
	0	LS	0.00	\$0	
	0		0.00	\$0	
	0	LS	0.00	\$0	
	0		0.00	\$0	
	0	LS	0.00	\$0	
	0		0.00	\$0	
	0	LS	0.00	\$0	
	0				

**PROJECT STUDY REPORT COST ESTIMATE**



Dist-Co-Rte: 10-Mer-165  
 PM: PM 29.8/30.3  
 EA: 10-0Q290K  
 Program Code: 20.10.201.010

**III. ROADWAY ADDITIONS**

Section 8 - Minor Items

			<u>Item Cost</u>	<u>Section Cost</u>
	<u>\$1,810,600</u>	x	<u>0.10</u>	= <u>\$181,060</u>
	(Subtotal Sections 1 thru 7)		(5 to 10%)	
			Minor Items:	<u>\$181,060</u>

Section 9 - Roadway Mobilization

	<u>\$1,991,660</u>	x	<u>0.10</u>	= <u>\$199,166</u>
	(Subtotal Sections 1 thru 8)		(10%)	
			Roadway Mobilization:	<u>\$199,166</u>

Section 10 - Supplemental Work & Contingencies

Supplemental Work

	<u>\$1,991,660</u>	x	<u>0.10</u>	= <u>\$199,166</u>
	(Subtotal Sections 1 thru 8)		(5 to 10%)	

Contingencies

	<u>\$1,991,660</u>	x	<u>0.25</u>	= <u>\$497,915</u>
	(Subtotal Sections 1 thru 8)		(**%)	

Supplemental Work & Contingencies: \$697,081

TOTAL ROADWAY ADDITIONS Sections 8 thru 10: \$1,077,307

TOTAL ROADWAY: \$2,887,907  
 (Subtotal Sections 1 thru 10)

Estimate

Prepared by:

Allen Lao

(Print or Type Name)

Phone: 209-948-7905

08/17/09

(Date)

Estimate

Checked by:

HongLoan Luong

(Print or Type Name)

Phone: 209-948-3999

06/28/11

(Date)

\*\*Use appropriate percentage per PDPM, Part 3 Chapter 20.

**PROJECT STUDY REPORT COST ESTIMATE**



Dist-Co-Rte: 10-Mer-165  
PM: PM 29.8/30.3  
EA: 10-0Q290K  
Program Code: 20.10.201.010

<http://www.dot.ca.gov/hq/oppd/pdpm/pdpm.htm> - pdpm

**PROJECT STUDY REPORT COST ESTIMATE**



Dist-Co-Rte: 10-Mer-165  
 PM: PM 29.8/30.3  
 EA: 10-0Q290K  
 Program Code: 20.10.201.010

**II. STRUCTURE ITEMS**

	STRUCTURE		
	No. 1	No. 2	No. 3
Bridge Name	_____	_____	_____
Structure Type	_____	_____	_____
Width (out to out) - (ft)	<u>0</u>	<u>0.00</u>	<u>0</u>
Span Length - (ft)	<u>0</u>	<u>0.00</u>	<u>0</u>
Total Area - ft <sup>2</sup>	<u>0</u>	<u>0.00</u>	<u>0</u>
Footing Type (pile/spread)	_____	_____	_____
Cost Per ft <sup>2</sup> (incl. 10% mobilization & 25% contingencies)	<u>\$0</u>	<u>0.00</u>	<u>\$0</u>
Total Cost for Structure	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Other	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>

\* Add additional structures as necessary

SUBTOTAL STRUCTURES ITEMS \_\_\_\_\_ \$0

Railroad Related Costs (Not incl. in R/W Est) \_\_\_\_\_ \$0

TOTAL STRUCTURES ITEMS \_\_\_\_\_ \$0

**COMMENTS:**

Estimate  
 Prepared by: \_\_\_\_\_ Phone: \_\_\_\_\_ 0/0/00  
(Print or Type Name) (Date)

(If appropriate, attach additional pages as backup)

**PROJECT STUDY REPORT COST ESTIMATE**



Dist-Co-Rte: 10-Mer-165  
 PM: PM 29.8/30.3  
 EA: 10-0Q290K  
 Program Code: 20.10.201.010

**III. RIGHT OF WAY ITEMS**

	Current Values (Future Use)	<u>Escalation Rates</u>		Escalated Values*
Acquisition (5.5 acres )	<u>\$196,000</u>	0.05	-	<u>\$226,895</u>
Utility Relocation (State share)	<u>\$0</u>	0.00	-	<u>\$0</u>
Clearance/Demolition	<u>\$5,000</u>	0.05	-	<u>\$5,788</u>
RAP	<u>\$0</u>	0.00	-	<u>\$0</u>
Title and Escrow Fees	<u>\$4,200</u>	0.05	-	<u>\$4,862</u>
Construction Contract Work	<u>\$0</u>	0.00	-	<u>\$0</u>
	<u>\$205,200</u>			<u>\$237,545</u>
	<b>TOTAL RIGHT OF WAY**</b>			<b>ESCALLATED VALUE*</b>

Date to which Values are Escalated: 09/29/12

\* Escalated to assumed year of advertising.

\*\* Current total value for use on Sheet 1

Estimate

Prepared by: Right of Way Department Phone: \_\_\_\_\_ 09/29/09  
 (Print or Type Name) (Date)

(If appropriate, attach additional pages and backup including Right of Way Data Sheet and Environmental Mitigation and Compliance Cost Estimate Sheet).

## Memorandum

*Flex your power!  
Be energy efficient!*

To: GILBERT BETANCOURT  
PROJECT MANAGER

Date: May 18, 2010

File: 10- MER -165- PM 29.75 / 30.26  
WESTSIDE BLVD IMPROVEMENTS  
AND CURVE CORRECTION  
E.A. 10-0Q290

From: MARY OLIVA, CHIEF *MO*  
Northern San Joaquin Valley  
Environmental Management Branch

Subject: **Preliminary Environmental Analysis Report Amendment**

The purpose of this memo is update only the cultural sections of the Preliminary Environmental Analysis Report (PEAR) issued for the above referenced project on September 29, 2009. All other portions of the original PEAR remain in valid.

### Background

The California State Department of Transportation proposes to realign a segment of State Route (SR) 165 in Merced County, south of the Merced River Bridge, at the Westside Boulevard intersection to improve the radius and superelevation of two horizontal curves. The shoulder will be widened to the standard 8 feet with rumble strips. The SR 165/Westside Boulevard intersection will be modified accordingly with the elimination of the free right turn lanes for eastbound and westbound traffic on Westside Boulevard. Additional right of way will be required.

This project is needed to address the identified pattern of run-off roadway collisions occurring at this location. Two build alternatives and one no-build alternative were studied for this Project Study Report.

The total construction cost for this project ranges from \$4,173,000 to \$3,095,000 including right of way cost (January 2010). Programming is anticipated from the SHOPP program with funding from the 201.010 HB-1 Safety Improvements Program, in the 2010/2011 Fiscal Year. This project has been designated as Category 5 since it has minimal economic, social, and environmental significance

### Summary Statement

The PEAR dated September 29, 2009, identified the need for archaeological Phase III mitigation due to the presence of an eligible prehistoric archaeological site. The cost for the Phase III mitigation was set at \$320,000 in construction capital.

At the request of Design and the Project Manager, in January 2009, Environmental began re-scoping the archaeological aspects of this project to identify any potential costs savings.

After extensive research, field review, and record search, archaeologists Ben Broyles with the assistance of architectural historian Chris Kuzak, determined that an Extended Phase I subsurface

investigation would be required. This investigation would address the moderate sensitivity for subsurface cultural deposits which were identified in the Caltrans TEA surveys. However, it would be unlikely to find an eligible archaeological site within the project area. Therefore, it is unlikely that Phase III mitigation would be required.

The anticipated environmental document for the proposed project will remain a Negative Declaration / Finding of no significant impact.

### **Assumptions and Risks**

The assumptions and risks below serve as an update to only the "Cultural" Assumptions and Risks outlined in the Preliminary Environmental Analysis Report issued September 29, 2009.

#### ***Assumptions***

- It is assumed that one historic archaeological site will be discovered during surveys.
- It is assumed that a Historic Resource Evaluation Report will be required to evaluate the site.
- It is assumed that an Extended Phase I, subsurface investigation will be required.
- It is assumed that the historic archaeology site will not be eligible for the National Register.

#### ***Risks***

- There is a risk that a prehistoric archaeological site may be discovered within the project area. This risk of this occurring is low but would have a high impact to project cost and a moderate impact to schedule

The total time allocated for environmental approval will remain at 22 months as outlined in the Preliminary Analysis Report of September 29, 2009.

For questions or concerns regarding this Preliminary Environmental Analysis Report Amendment, please contact Jonathan Schlee by email at [jonathan\\_schlee@dot.ca.gov](mailto:jonathan_schlee@dot.ca.gov) or by phone at (209)942-6011.



## Preliminary Environmental Analysis Report

### Project Information

<b>Project Name: 10-0Q290-MER-165-29.75\30.26-SHOPP; SR165 Curve Correction @ Westside Blvd.</b>			
<b>Project Delivery Team</b>	<b>Name</b>	<b>Contact</b>	
Environmental Manager	Juergen Vespermann	Phone:	559-243-8157
Project Manager:	Ram Naryan Gupta	Phone:	209-948-7972
Project Manager Assistant 1	Virginia Wooding	Phone:	209-941-1920
Design Senior	Jose Huerta	Phone:	209-948-7902
Project Engineer	Hongloan Luong	Phone:	209-948-3999
Hydraulic Engineer	Tony Harmouche	Phone:	559-243-3522
Landscape Architecture	Ed Hibbs	Phone:	559-230-3137

### PSR Summary Statement

The anticipated environmental document for the proposed project is a Negative Declaration/Finding of No Significant Impact. This document level has been selected based on impacts that Caltrans anticipates to be mitigated below the threshold of significance as defined by CEQA. The California Department of Transportation would act as the lead agency in the preparation of a joint NEPA/CEQA (National Environmental Policy Act/California Environmental Quality Act) environmental document. Caltrans will serve as the NEPA lead agency under its assumption of responsibility pursuant to 23 U.S. Code 327. The estimated time to obtain environmental approval is 24 months from the start of environmental studies. Assuming receipt of appropriate mapping for Permits to Enter (PTE's) by July 2010 and a completed "Request for Environmental" memo with appropriate mapping/plans from Design by October 2010, the final environmental document would be anticipated by September 2012.

It is anticipated that multiple environmental compliance surveys, studies and reports would be required:

- o Natural Environment Study
- o Archeological Survey Report, Historical Resource Evaluation Report, Archeological Evaluation Report, Historic Property Survey Report, State Historic Preservation Officer concurrence, Native American Coordination, Finding of Adverse Effect and Memorandum of Agreement, Data Recovery Report, Environmentally Sensitive Areas, and Construction Monitoring
- o Noise Study documentation
- o Water Quality Study documentation
- o Cumulative / Farmland impact report

The total preliminary Mitigation Cost Compliance is: = **\$323,000**

Cultural is the critical path for the delivery of the environmental clearance document.

### Project Description:

Caltrans proposes remove the existing roadway, and realign two curves on State Route 165 from one-tenth -mile south of, then up to the Milliken Bridge (#39-217) at the Westside Boulevard intersection with two standard 12-foot wide lanes, each with 8-foot wide shoulders.

**Purpose and Need:**

The purpose of this project is to reduce the number and severity of vehicle collisions in the project area, needed because this segment of State Route 165 has a higher than average accident rate.

**Description of Work**

State Route 165 is a rural north-south two-lane highway that traverses the region between the Interstate Highway 5 corridor on the West and the Highway 99 corridor on the East for approximately 12 miles from the City of Los Banos (at State Route 152) northward through the community of Hilmar (approximately mid-way) to it's intersection with Highway 99 in the City of Turlock.

Approximately 2.5 miles south of Hilmar, State Route 165 connects with Westside Boulevard between two curves at a T-intersection. Less than one-tenth -mile thereafter, State Route 165 intersects with River Road within 90 feet of its crossing the Merced River over the historic Milliken Bridge.

According to the Conceptual Report, vehicle injury accidents, including run-off-the-road collisions, lead to a Safety Index of 280 for the project area. This is above the threshold of 230 which triggers the need for a safety project, so Caltrans proposed to improve the State Route 165/Westside Boulevard intersection through: 10-0K410 – traffic striping, and 10-0K720 – major curve correction. The major curve correction project 10-0K720 was not programmed because the curve speed on approach to the narrow Milliken Bridge (#39-217) over the Merced River was too fast.

10-0Q290 was proposed as a curve correction with a lower speed on approach to the narrow bridge. It proposes to correct the current two curves on State Route 165 with a single curve from one-tenth -mile south of, then up to the Milliken Bridge (#39-217) at Westside Boulevard intersection, with two standard 12-foot wide lanes, each with 8-foot wide shoulders.

**Alternatives**

The two alternatives for this project are:

- No-build – also known as the “leave as-is” alternative – which is not consistent with Caltrans’ roadway safety policies and the proposed project’s purpose and need;
- Build – also known as the “proposed project” – at an estimated cost of \$2,384,000, is consistent with Caltrans’ roadway safety policies and meets the proposed project’s purpose and need.

**Funding**

State     Federal

Proposed project programming is for 2009 State Highway Operation and Protection Program, Program Code 201.010 – Safety Improvements(including curve corrections) for funding in the 2011/2012 Fiscal Year.

**Anticipated Environmental Approval**

**CEQA**

**NEPA**

Categorical Exemption/Statutory Exemption

Categorical Exclusion ( 6004/ 6005)

Negative/Mitigated Neg. Declaration     Appx. G

Finding of No Significant Impact

Environmental Impact Report

Environmental Impact Statement

**Anticipated Environmental Schedule**

The critical path for Environmental clearance is Cultural, with approximately 16 months required for surveys/studies and documentation.

Total Time for Environmental Approval	22 Months
Start Date (maps, request, PTE's requests)	July 2010
Begin Environmental	October 2010
Draft Environmental Document	May 2012
Final Environmental Document	August 2012
PA&ED	September 2012

**Assumptions and Risks**

Assumptions:

Bio

- It is assumed that this project would not impact the San Joaquin Kit Fox.
- It is assumed that this project would not impact Waters of the United States.
- It is assumed that this project would not impact Swainson's hawk.

Cultural

- It is assumed that only one pre-historic archeological site would be found National Register-eligible and that it would not be possible to avoid impacts to it, so a Finding of Adverse Effect & Memorandum of Agreement would be required.
- It is assumed that one non-eligible historic archeological site would be discovered and that one building and one engineering structure (canal) would require formal evaluation but would not be National Register-eligible.
- It is assumed that an Extended Phase I Survey (XPI), an Archeological Evaluation Report (Phase II Survey report) and a Data Recovery Plan, Study and Report (Phase III) would be required that would cost \$40,000, \$130,000 and \$150,000 respectively; for a total of \$320,000 to complete cultural compliance documentation.

Generalist

- It is assumed that this project would not constitute a "use" of the 4(f) Resource - Hagaman State Park.
- It is assumed that a Public Hearing would be required for this project.

Risks:

Bio

- If biology surveys show that the project may impact to San Joaquin Kit Fox, there is a risk that mitigation will be required at a cost of \$45,000/acre. Probability of occurrence is a 2 and the impact to project cost, scope and schedule would be low.
- If studies reveal that the project would impact Waters of the United States, a Nation Wide 404 permit from the United States Army Corps of Engineers could be required. Probability of occurrence is a 2, impact to project cost, scope and schedule is low.
- If biology surveys show that Swainson's Hawk are nesting in the project area, then there is a risk that the California Department of Fish and Game will issue a "no-work window" of mid-February to mid-September. Probability of occurrence is a 2, impact to project schedule is moderate.

Cultural

- If more than one pre-historic archeological site would be found National Register-eligible and that it would not be possible to avoid impacts to it, there is a risk that these sites would require evaluation. Probability of occurrence is a 2, impact to the project cost, scope and schedule would be moderate.

- If more than one non-eligible archeological site or more than one building and one engineering structure (canal) would require formal evaluation, or if any of these resources are later found to be National Register-eligible, there is a risk that these would require evaluation. Probability of occurrence is a 2, impact to the project cost and schedule would be moderate.
- If additional resources are found to require evaluation, there is a risk that the costs for Cultural cost, scope and schedule estimates proposed would not be achievable. Probability of occurrence is a 3, impact to cost, scope and schedule low.

**Generalist**

- If the project is later found to impact the Haganan State Park, there is a risk that a 4(f) evaluation would be required for the project to proceed. Probability of occurrence is a 3 and the impact to the cost, scope and schedule of the project would be high – depending on the timing of the discovery.
- If it is decided later that a Public Hearing is no longer needed, then there is an Opportunity that a decrease in the project's cost and schedule would happen. Probability is a 3 and the impact to the project cost, scope and schedule would be low.

Risk Probability Ranking	
5	60-99%
4	40-59%
3	20-39%
2	10-19%
1	1-9%

Evaluating Impact of a Threat on Project Objectives						
<b>Objectives</b>	Time	Insignificant Schedule Slippage	Delivery Plan Milestone Delay within quarter	Delivery Plan milestone delay of one quarter	Delivery Plan milestone delay of more than 1 quarter	Delivery Plan milestone delay outside fiscal year
	Cost	Insignificant Cost Increase	<5% Cost Increase	5-10% Cost Increase	10-20% Cost Increase	>20% Cost Increase
	Scope	Scope decrease is barely noticeable	Changes in project limits or features with <5% Cost Increase	Changes in project limits or features with 5-10% Cost Increase	Sponsor does not agree that Scope meets the purpose and need	Scope does not meet purpose and need

**Mitigation:** All mitigation requirements shown are in May 2009 dollars, unless stated otherwise. Further studies may reveal the need for additional mitigation, which would be added to the cost of the project and included in an updated Mitigation Cost Compliance Estimate Form.

**Right of Way Capital (050): \$0.00**

**Construction Capital (042): \$ 320,000 + \$3,000 = \$323,000**

Cultural Mitigation: \$40,000 + \$130,000 + \$150,000 = \$320,000

Extended Phase I (XPI) – Study: \$40,000

Phase II – Study: \$130,000

Phase III – Study (Data Recovery) and Archeological Excavation: \$150,000 consultant dollars.

Hazardous Waste: Lead Compliance Plan (\$3,000 )

**Environmental Technical Reports or Studies Required**

*Required* – requires analysis including field surveys, database searches, report, or memo to file and brief explanation in the environmental document.

*Not Required* – Issue is not applicable to the proposed project.

*Possible Critical Path* – Major issue that has the potential to drive the schedule and determine the length of time to reach PA&ED (can be more than one major issue).

	Required	Clearance Memo Received	Not Required	Possible Critical Path
<b>Biology</b>		<input type="checkbox"/>		<input checked="" type="checkbox"/>
Endangered Species (Federal)	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Endangered Species (State)	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Species of Concern (CNPS, USFS, BLM, S, F)	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Wetland Delineation	<input type="checkbox"/>		<input type="checkbox"/>	
Natural Environment Study	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Biological Assessment (USFWS, NMFS, State)	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
<b>Cultural Resources</b>				<input checked="" type="checkbox"/>
ASR	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
HRER	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
HPSR/HRCR	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Screening Memo	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
SHPO Concurrence	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Native American Coordination	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Finding of Effect Document	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Treatment Plan & MOA	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
<b>Hazardous Waste</b>		<input type="checkbox"/>		<input type="checkbox"/>
ISA	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
PSI	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Lead Compliance Plan&Thermo-Plastic Paint in PS&E	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
<b>Air Quality Analysis</b>		<input checked="" type="checkbox"/>		<input type="checkbox"/>
Hot Spot Analysis	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
MSAT	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
<b>Noise Study</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Water Quality</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Community Impact Assessment</b>				<input type="checkbox"/>
Environmental Justice	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Growth Related Impacts	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
<b>Cumulative Impacts</b>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<b>Farmland</b>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<b>Visual Resources</b>		<input type="checkbox"/>		<input type="checkbox"/>
Scenic Resource Evaluation	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Visual Impact Assessment	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
<b>Floodplain Evaluation</b>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Paleontology</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Section 4(f) Evaluation</b>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Wild and Scenic River Consistency</b>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Greenhouse Gas Emissions</b>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Permits Anticipated for Construction**

	<b><u>Required</u></b>	<b><u>Not Required</u></b>
401 Permit Coordination (discharge into navigable waters)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
404 Permit Coordination (discharge into waters of the US including Wetlands)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> - Nationwide		
<input type="checkbox"/> - Individual		
1600 Permit (Streambed Alteration)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
City/County Coastal Permit Coordination – N/A	<input type="checkbox"/>	<input checked="" type="checkbox"/>
State Coastal Permit Coordination – N/A	<input type="checkbox"/>	<input checked="" type="checkbox"/>
NPDES Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>
US Coast Guard (Section 10) – N/A	<input type="checkbox"/>	<input checked="" type="checkbox"/>
State 2081 Permit (State only incidental take of threatened or endangered species)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion of Technical Review**

**Biology:** The proposed project area is rural, mostly undeveloped land with vineyards nearby. A Natural Environment Study will be completed to document whether the proposed project would impact San Joaquin Kit Fox, Waters of the United States, or Swainson's hawk. Biology survey windows extend from February through September for project area species. It is anticipated that approximately 7 months would be required to complete required Biology compliance documentation.

**Cultural Resources:** This project is found on a river terrace area that is sensitive for archeological deposits. Several identified cultural resources, including a Native American Burial Site have been identified through previous cultural surveys. Consultation with Native American groups would be ongoing throughout the process. An Extended Phase I Archeological study will be necessary to inventory the project area. Project Maps that depict the total project limits, construction easements and specific construction activities (e.g. excavation, vegetation removal, and drainage and culverts, utilities relocation, equipment storage areas, borrow areas etc.) are required prior to the initiation of the Extended Phase I archeological study. It is anticipated that six months are required to complete the inventory phase of this project. It is assumed that impacts to one known National Register-eligible pre-historic archeology site are unavoidable and that a Phase II study will be necessary for documentation required to support concurrence on the assumption that the site is National Register-eligible from the State Historic Preservation Officer (SHPO). Because SHPO concurrence on the National Register-eligibility of one known pre-historic archeology site is assumed, a Data Recover Plan for a Phase III Excavation Study is anticipated concurrent with project construction, and the monetary resources to complete this have been identified in the bulleted points below. It may be appropriate to submit an Archeological Evaluation Report (AER) prior to completion of the Phase II Study if sufficient documentation can be submitted to SHPO for a National Register Determination of Eligibility (DOE) Letter. However, the Phase II study and eligibility determination must be reviewed and approved prior to circulation of the environmental document. An Historic Property Survey Report (HPSR), that includes the Archeological Survey Report (ARS) would be prepared for Submittal to the State Historic Preservation Officer (SHPO) asking for concurrence Area of Potential Effect (APE), the inventory effort, and an eligibility determination. Evidence of consultation with SHPO must be completed prior to circulation.

It is anticipated that 16 months would be required to complete Cultural compliance documentation. Cultural is currently the critical path for environmental compliance for this project.

Hazardous Waste: Per the Hazardous Waste Scoping Memo dated 07May09, a Lead Compliance Plan NSSP (which should also address Thermo-Plastic Paint removal – depending on the manner of removal) would be required to be included in the project Plans, Specifications and Estimate at a 042 cost of \$3,000 in April 2009 dollars. No further analysis necessary at this time.

Air Quality Analysis: Per the Air, Noise and Water Scoping Memo dated May 11, 2009, this project is exempted per Table 2 of 40 CFR Section 93.126 from all emissions analysis. An air quality hot spot analysis requirement is not anticipated. It is not anticipated that Green House Gas Emissions documentation would require a study. No further analysis necessary at this time.

Noise: Per the Air, Noise and Water Scoping Memo dated May 11, 2009, this project is considered Type 1 under NEPA and further analysis is anticipated.

Estimated time to complete the documentation to address Noise issues would be 1 week.

Water Quality: Per the Air, Noise and Water Scoping Memo dated May 11, 2009, this project is located within in the 50 mile stretch of the Lower Merced River between McSwain Reservoir and its confluence with the San Joaquin River near Hills Ferry, which is within hydrologic sub-area 535.70 under the jurisdiction of the Regional Water Quality Control Board's (Central Valley) Region 5. Note: the proposed project is located within a segment of the Lower Merced River that is Clean Water Act section 303(d) listed - impaired by the following Pollutants/Stressors - Chlorpyrifos, Diazinon, Group A Pesticides, and Mercury),

All short-term water quality impacts need to be addressed in the Design and Construction phase of the project. In order to address any potential impacts, Best Management Practices need to be selected and implemented in accordance with the Project Planning and Design Guide.

The contractor, as required in Caltrans Standard Specifications Section 7-1.01G, must address all potential water quality impacts that may occur during construction.

The proposed project is expected to disturb more than one acre of soil, so the Water Quality Specialists would consult Caltrans' Stormwater Unit to identify the appropriate management practices for all stormwater concerns. Because the project is expected to disturb more than one acre of soil, the following will be required:

1. A Notification of Construction (NOC) is to be submitted to the Central Valley Regional Water Quality Control Board (RWQCB) at least 30 days before the start of construction.
2. A Storm Water Pollution Prevention Plan (SWPPP) is to be prepared and implemented during construction to the satisfaction of the resident engineer.
3. A Notice of Construction Completion is to be submitted to the Central Valley Regional Water Quality Control Board upon completion of the construction and stabilization of the site. A project would be considered complete when the criterion for final stabilization in the Construction General Permit is met.

The design and construction of the proposed project must comply with the requirement set forth in the 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 (BMP's) Manual and the Caltrans Standard Specifications.

By incorporating proper and accepted engineering practices and BMP's, the proposed project would not produce significant impacts to water quality during construction or its operation.

However, further investigation concerning water quality is needed to proceed with the project.

Community Impact Assessment: Because no business or residential relocations are anticipated, a Community Impact Assessment is not specified for environmental clearance of this project.

Cumulative Impacts: A Cumulative Impacts Report is anticipated for this project to determine the cumulative, direct and indirect effects that this project, in conjunction with other projects in the area may have on environmental resources within the project vicinity.

Farmland: A Farmland Impact Report is proposed to determine the impact this project could have on farmland - particularly to Williamson Act properties in the project area - because 7 acres of additional right of way have been proposed that would be taken from vineyards adjacent to the current roadway. Caltrans would complete an AD 1006 "Farmland Conversion Impact Rating" form to evaluate unavoidable impacts to Farmlands and submit its findings to the California Department of Conservation and the U.S. Natural Resource Conservation Service for comment as required.

Visual Resources: The Landscape Architecture Scoping memo completed May 4, 2009 stated no Scenic Resource Evaluation / Visual Impact Assessment surveys or documentation are anticipated unless the project description changes to include previously unidentified impacts to Scenic or Visual resources - including, but not necessarily limited to native Oak trees that would be protected with Environmentally Sensitive Area fencing or require mitigation should the project description/scope change to include their removal. Approximately \$42,000 has been estimated (7 acres at \$6,000/acre) for erosion control and \$1,200 for Environmentally Sensitive Area (Type ESA) fencing (240 linear feet at \$5/foot) to protect existing Native oak trees to be included in the PS&E package prior to RTL.

Floodplain/Hydraulics Evaluation: The Preliminary Floodplain/Hydraulics clearance memo dated May, 1, 2009 determined that the project is not in the 100-year floodplain and that further studies are required in the PS&E phase.

Paleontology. The negative Paleontological Identification Report of July 23, 2008 stated that the project's short length and anticipated shallow depths of excavation are unlikely to encounter paleontological resources. No further paleontology studies would be recommended, unless the project description changes.

Section 4(f) Evaluation: One known 4(f) resource is found in the project area: Haganan State Park is adjacent to the project area and meets the 4(f) criteria for Parks & Recreation, but the scope of this project is not anticipated to constitute its "use" of this resource.

Wild and Scenic River Consistency: There is no Wild and Scenic Rivers in the proposed project area.

Permits.

No permits were identified for environmental clearance.

List of Preparers

Air, Noise and Water Review: Vladimir Timofet	11May09
Biological Review: Sarah Paulson	07May09
Community Impact Review: Michael Crisco	04May09
Cultural Review: Bill Ray	30Apr09
Hazardous Waste Review: Shawn Ogletree	07May09
Native American Coordination: Tina Fulton	30Apr09
Paleontology Identification Report: Richard Steward	23Jul08
Preliminary Environmental Analysis Report: Michael Crisco	08May09
Preliminary Floodplain/Hydraulics Review: Tony Harmouche	01May09
Scenic Resource Evaluation/Visual Impact Assessment: Ed Hibbs	04May09

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 Initiation Document. Changes in project scope, alternatives, or environmental laws will require a reevaluation of this report.

Approved by:

Lloyd J. for Juerge Nespermann  
Environmental Manager

Date: 5-26-09

[Signature]  
Environmental Office Chief

Date: 5-26-09

[Signature]  
Project Manager

Date: 5-29-09

Long Form - Stormwater Data Report



Dist-County-Route: 10-Mer-165

Post Mile (PM) Limits: 29.8/30.3

Project Type: Curve correction

EA: 10-0Q290K

RU: 06-243

Program Identification: HB1-201-010

Phase: [X]PID [ ]PA/ED [ ]PS&E

Regional Water Quality Control Board: Region 5, Central Valley, Sacramento

Is the project required to consider incorporating Treatment BMPs? [ ]Yes [X]No

If yes, can Treatment BMPs be incorporated into the project? [ ]Yes [ ]No

If No, a Technical Data Report must be submitted to the RWQCB at least 60 days prior to PS&E Submittal. List submittal date: \_\_\_\_\_

Total Disturbed Soil Area: 4.21 acres

Estimated Construction Start Date: 04/01/2014 Construction Completion Date: 9/1/2014

Notification of Construction (NOC) Date to be submitted: Not available

Notification of ADL reuse (if Yes, provide date) [ ]Yes Date: \_\_\_\_\_ [X]No

Separate Dewatering Permit (if Yes, permit number) [ ]Yes Permit #: \_\_\_\_\_ [X]No

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.

Hongloan Luong, Registered Project Engineer Date

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

Subhash Johar, Project Manager Date

Brad Cole, Maintenance Representative Date

Allan Shaffer, Central Region Landscape Architect Representative Date

Marissa Nishikawa, Central Region NPDES Stormwater Coordinator Date



## D-10 TRANSPORTATION MANAGEMENT PLAN CHECKLIST

District - EA: 10-0Q290K  
 Date Prepared: August 26, 2009  
 Prepared By: Nabeel Burhan  
 Requested By: Allen Lao

Co.-Rte.-P.M. MER-165-PM29.8/30.3  
 Location: North of SR 140 at SR 165/Westside Blvd. intersection

Stage of Project (X box)  PID  PSR  PR  PS&E

Description: SR 165/Westside Blvd. intersection improvements and curve correction

Date Signed  
 \_\_\_\_\_  
 Date Signed  
 \_\_\_\_\_  
 Date Signed  
 \_\_\_\_\_  
 Date Signed  
 \_\_\_\_\_

REQUIRED	RECOMMENDED	NOT APPLICABLE	BEEES Item No.	COMMENTS	ITEM COST	REQUIRED IN SPEC.
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### 1.0 Public Information Strategies

- 1.1 Brochures and Mailers
- 1.2 Media Releases (& minority media sources)
- 1.3 Paid Advertising
- 1.4 Public Information Center
- 1.5 Public Meetings/Speakers Bureau
- 1.6 Project Telephone Hotline
- 1.7 Internet, E-Mail
- 1.8 Local cable TV and News
- 1.9 Notification to Impacted groups  
(i.e. bicycle users, pedestrians with disabilities, others)
- 1.10 Project Web Page
- 1.11 Caltrans Public Information Office
- 1.12 Consultant Public Information Office
- 1.13 Other items

<input checked="" type="checkbox"/>				RE to hand-deliver to business/residences.		
<input checked="" type="checkbox"/>						
	<input checked="" type="checkbox"/>					
<input checked="" type="checkbox"/>			066063	See comments below.		
<input checked="" type="checkbox"/>				Designer to add to budget if public meeting is added.		
	<input checked="" type="checkbox"/>					
	<input checked="" type="checkbox"/>					
<input checked="" type="checkbox"/>				Designer to verify impacted groups.		
	<input checked="" type="checkbox"/>					
<input checked="" type="checkbox"/>			066063	Web page could be linked to local City pg. Items 1.1 to 1.11 to be handled by CT PIO.	\$8K	
	<input checked="" type="checkbox"/>					
		<input checked="" type="checkbox"/>				
		<input checked="" type="checkbox"/>				

### 2.0 Traveler Information Strategies

- 2.1 Changeable Message Signs (permanent)
- 2.2 Changeable Message Signs (portable)
- 2.3 Special Construction Signs
- 2.4 Traveler Information Systems (CHIN/Internet)
- 2.5 Highway Advisory Radio "HAR" (fixed or mobile)
- 2.6 Radar Speed Sign
- 2.7 Traffic Management Team
- 2.8 Revised Transit Schedules/ Maps
- 2.9 Bicycle community information
- 2.10 Other item

		<input checked="" type="checkbox"/>				
<input checked="" type="checkbox"/>			128850	1 pair cms (2 mo.) (5.4k/mo.) = \$10.8k	\$11K	<input checked="" type="checkbox"/>
		<input checked="" type="checkbox"/>	120690			
<input checked="" type="checkbox"/>			861985	As required.		<input checked="" type="checkbox"/>
		<input checked="" type="checkbox"/>	860520			
		<input checked="" type="checkbox"/>	066054			
		<input checked="" type="checkbox"/>				
		<input checked="" type="checkbox"/>				
<input checked="" type="checkbox"/>				Same as Item 1.9.		
		<input checked="" type="checkbox"/>				

### 3.0 Incident Management

- 3.1 COZEEP
- 3.2 Freeway Service Patrol (tow truck service patrol)
- 3.3 Traffic Surveillance Stations (loops or CCTV)
- 3.4 Transportation Management Center
- 3.5 Traffic Control Inspector (Caltrans)
- 3.6 Traffic Management Team
- 3.7 On-site Traffic Advisor (contractor)
- 3.8 Other Items

		<input checked="" type="checkbox"/>	066062			
		<input checked="" type="checkbox"/>	066065			
<input checked="" type="checkbox"/>			066876	Existing to remain &/or provide new stations.		
<input checked="" type="checkbox"/>				RE to notify for incident & status closure.		
		<input checked="" type="checkbox"/>				
<input checked="" type="checkbox"/>				TMC will contact TMT as needed.		
		<input checked="" type="checkbox"/>				
		<input checked="" type="checkbox"/>				

### 4.0 Construction Strategies

- 4.1 Delay damage clause
- 4.2 Night work
- 4.3 Weekend Work
- 4.4 Extended Weekend Closures
- 4.5 Planned Lane Closures
- 4.6 Planned Ramp Closures/Connector Closure
- 4.7 Total Facility Closure
- 4.8 Project Phasing
- 4.9 Truck Traffic Restrictions
- 4.10 Reduced Lane Widths
- 4.11 Temporary K-Rail
- 4.12 Temporary Traffic Screens
- 4.13 Reduced Speed Zones
- 4.14 Traffic Control Improvements

		<input checked="" type="checkbox"/>				
		<input checked="" type="checkbox"/>				
		<input checked="" type="checkbox"/>				
		<input checked="" type="checkbox"/>				
<input checked="" type="checkbox"/>				Per Lane Closure Charts		<input checked="" type="checkbox"/>
		<input checked="" type="checkbox"/>				
<input checked="" type="checkbox"/>				As per stage construction if any.		
		<input checked="" type="checkbox"/>				
<input checked="" type="checkbox"/>				Per drawings/data sheet if any.		
		<input checked="" type="checkbox"/>	129000			
		<input checked="" type="checkbox"/>	129150			
		<input checked="" type="checkbox"/>				
<input checked="" type="checkbox"/>				As necessary.		

**4.0 Construction Strategies (Continued)**

	REQUIRED	RECOMMENDED	NOT APPLICABLE	BEES Item No.	COMMENTS	ITEM COST	REQUIRED IN SPEC.
4.15 Contingency Plans	X						X
4.15.1 Material Plant on standby			X				
4.15.2 Extra Critical Equipment on site	X						
4.15.3 Material Testing Plan			X				
4.15.4 Alternate Material on site (In case of failure or major delays)			X				
4.15.5 Emergency Detour Plan	X						
4.15.6 Emergency Notification Plan	X						
4.15.7 Weather Conditions Plan	X						
4.15.8 Delay Timing and Documentation Plan			X				
4.15.9 Late Closure Reopening Notification	X						
4.16 Signal timing modification			X				
4.17 Coordination with adjacent construction	X			07950	RE to confirm prior to scheduling of closures.		X
4.18 Double Fine Zone (signs)			X				
4.19 Right of Way Delay	X			066022	Designer to determine costs for maintaining traffic	TBD	X
4.20 Other Items	X				See comments below.		X

**5.0 Demand Management**

5.1 HOV Lanes/Ramps			X				
5.2 Ramp metering			X				
5.3 Park-and-Ride Lots			X				
5.4 Parking Management/Pricing			X				
5.5 Rideshare Incentives			X				
5.6 Rideshare Marketing			X	066069			
5.7 Transit, Train, or Light-Rail Incentives			X	068066			
5.8 Transit Service Modification			X				
5.9 Variable Work Hours			X				
5.10 Telecommute			X				
5.11 Other Items			X				

**6.0 Alternate Route Strategies**

6.1 Ramp Closures			X				
6.2 Street Improvements			X				
6.3 Reversible Lanes			X				
6.4 Temporary Lanes or Shoulders Use			X				
6.5 Freeway to freeway connector closures			X				

**7.0 Other Strategies**

7.1 Application of new technology			X				
7.2 Other Items			X				

**Comments:**

- 1.4 Plan, progress/completion information should be available at Local Public Works, Chamber of Commerce Offices, and CT Maintenance Offices.
- 1.9 Impacted groups need to be notified and informed about upcoming construction. During construction, access across job site will be needed.
- 1.11 PIO estimated at \$2k/mo. Or per stage construction or per major milestone.
- 4.20 RE/Inspector shall maintain access to all business & residences at all times.

Approved by:



NABEEL BURHAN

DISTRICT TRAFFIC MANAGER

8/26/2009

DATE