06-Mad-99, 20.2/21.6 and 22.6/22.7
201.010
06-0N200K EFIS-0600020447
September 2011

Project Study Report – Project Report

To
Request for Programming
In the 2010 SHOPP
and
Provide Project Approval

On Route 99 in Madera County near Fairmead

From 0.6 mile south of Avenue 21½ Overcrossing to 0.8 mile north of Avenue 21½ Overcrossing

And From 0.1 mile south of Route 152 to Route 152

I have reviewed the right of way information contained in this Project Study Report-Project Report and the R/W Data Sheet attached hereto, and finds the data to be complete, current and accurate:

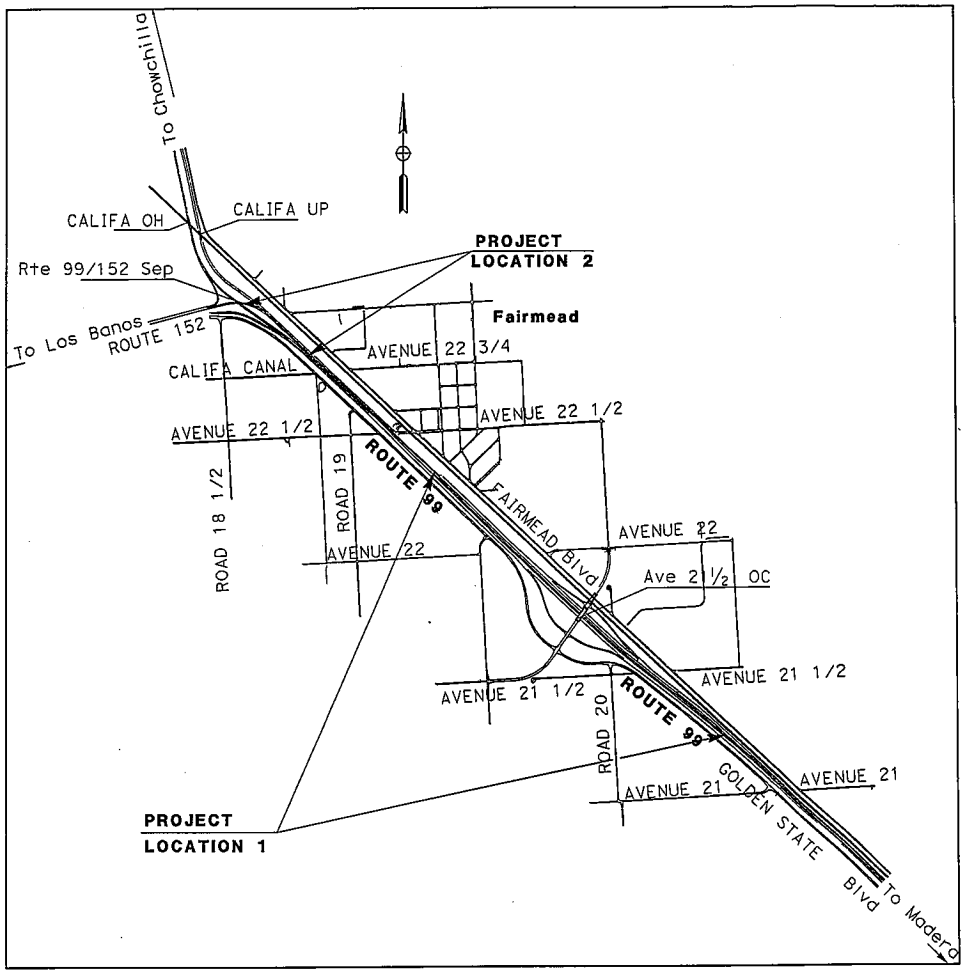
for *SPIROS KARIMBAKAS*
CHIEF- CENTRAL REGION RIGHT OF WAY

APPROVAL RECOMMENDED: Robert F. Hull
ROBERT F. HULL
PROJECT MANAGER

JOEL AGUILAR
SAFETY COORDINATOR

APPROVED: Sharri Bender Ehlert 10/4/2011
SHARRI BENDER EHLERT *DATE*
INTERIM DISTRICT DIRECTOR

PROJECT SCOPE & TECHNICAL DATA ARE VALID THROUGH: 10/2013
COST & WORK PLAN MUST BE UPDATED PRIOR TO USE FOR PROGRAMMING



Vicinity Map

On Route 99 in Madera County near Fairmead

From 0.6 mile south of Avenue 21½ Overcrossing to 0.8 mile north of Avenue 21½ Overcrossing

And From 0.1 mile south of Route 152 to Route 152

This Project Study Report-Project 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.

M. Hashem

MOHAMMAD HASHEM
Registered Civil Engineer

9-7-11

DATE

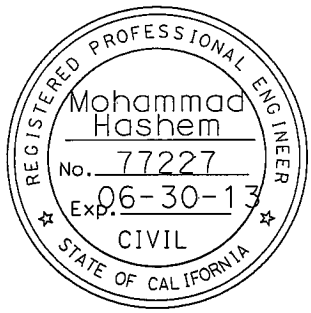


Table of Contents

1. INTRODUCTION

This project proposes to construct median barrier at two locations on State Route (SR) 99 near Fairmead in Madera County. At Location 1, the project proposes to construct approximately 7,400 linear feet of double thrie beam median barrier (DTBMB) in the median of SR 99 from PM 20.2 to PM 21.6. The purpose of constructing the DTBMB is to close a gap between two existing thrie beam median barriers. At Location 2, this project proposes to construct approximately 1,060 linear feet of concrete barrier (Type 60) and widen the inside shoulder along the left hand side of the connector ramp from northbound SR 99 to westbound SR 152, PM 22.6 to PM 22.7. The purpose of constructing the concrete barrier is to close a gap between an existing concrete median barrier and the left side bridge rail on the structure over southbound Route 99. No additional right of way is required for this project. This Project Study Report-Project Report (PSR-PR) proposes two alternatives, the "build alternative" and the "no build alternative". The build alternative would install median barriers at the two above-mentioned locations. The build alternative would also improve the safety for traveling public. The "no-build" alternative would not address the need and purpose of this report at the two above mentioned project locations.

The capital cost is estimated at $1,500,000 and it is proposed to fund the project from the 201.010, safety program, by amending it to the 2010 SHOPP in Fiscal Year 2013/2014.

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

Project Limits Dist., Co., Rte., PM	06-Mad-99 PM 22.2/21.6 PM 22.6/22.7
Capital Costs: (Escalated)	$1,500,000
Right of Way Costs:	$0
Funding Source:	2010 SHOPP
Number of Alternatives:	2
Alternative Recommended for Funding	Alternative 1-Build Alternative
Type of Facility (conventional, expressway, freeway):	Freeway
Number of Structures:	0
Environmental Determination/Document	Categorically Exempt / Categorically Exclusion
Legal Description	Construct Median Barriers

2. RECOMMENDATION

It is recommended that this Project Study Report/Project Report be approved and be amended into the 2010 SHOPP in order to proceed with the build alternative to the Plans, Specifications and Estimate (PS&E) stage.

3. BACKGROUND

Location 1 was identified in the 2008 Median Barrier Monitoring Report as a location to investigate under the Cross Median Collision – Total Study Warrant. A Conceptual Report, prepared by Jeffery Chin, Traffic Investigations, was then approved on November 30, 2010. On March 1, 2011, an Addendum to Conceptual Report was approved adding Location 2.

The segment of Route 99, at Location 1 from post miles 20.2 to 21.6, is a divided six lane freeway traveling south to north. The width of the existing median varies from 60 ft to 84 ft. The existing inside shoulder width is ten feet.

Location 2 is the segment of Route 99 from PM 22.6 to PM 22.7, which includes the connector ramp from northbound Route 99 to westbound Route 152. The width of the existing median varies from 15-ft to 100-ft. The width of the existing inside shoulder varies from 5-ft to 7-ft. The bridge rails located on the connector ramp at PM 22.7 are shielded by MBGR and a crash cushion (Type SCI) on the right side and a standard terminal system (Type SRT) on the left side. An existing overhead guide sign is situated in the median area at approximately PM 22.63 and is shielded by MBGR.

4. PURPOSE AND NEED

A. Need:

At both locations, a median barrier is needed to fill the gap between two existing barriers to the south and the north to reduce the potential for traffic to cross the median.

B. Purpose:

The purpose of this project is to improve safety by closing existing gaps in the existing median barriers reduce the potential for cross-median collisions.

5. DEFICIENCIES

The Median Barrier Monitoring Report, Section 8, states that gaps in median barrier up to 3 miles in length with median widths up to 75 feet should be closed even when the median width is greater than 75 feet and/or does not meet collision or volume/width study warrants.

At location 1, the existing thrie beam barrier that ends at PM 20.2 and the other existing thrie beam barrier that begins at PM 21.6 create a median barrier gap of 1.4 miles. At Location 2, the existing concrete barrier ends at PM 22.6 and creates a gap of approximately 0.16 mile to an existing bridge rail on the connector ramp to westbound SR 152.

6. CORRIDOR AND SYSTEM COORDINATION

This section of Route 99 is part of the National Network (NN) for larger trucks allowed by the Surface Transportation Assistance Act (STAA) of 1982. Trucks account for about 25% of traffic along this segment. It is a divided, six lane freeway traveling south to north. The 2009 ADT was 53,000. It is in a rural area on flat terrain with a speed limit of 65mph. The ultimate transportation corridor for this portion of SR 99 is an eight-lane freeway. There is no significant work planned at this location in the near term that would affect the project. This project would not affect the ability to implement ultimate corridor improvements.

7. TRAFFIC DATA

Design Periods:

	10 years	20 years
	2013-2023	2013-2033
2013 ADT (Const Year))	64,000	64,000
2023 ADT	92,500	–
2033 ADT	–	134,500
2023 DHV	7,900	–
2033 DHV	–	11,400
D	57 %	57 %
T (DHV)	12 %	12 %
TI	11.0	12.5
DESIGN SPEED, MPH (FREEWAY)		70

Location 1 Accident Data:

Table 1 for the northbound Route 99 segment from PM 20.1 to PM 21.7 indicates that the actual accident rates are lower than the statewide average accident rate. The accident rates shown in Table 1 are indicated in accidents per million-vehicles miles.

Table 1

Actual (MVM)			Average (MVM)		
Fatal	F+I	Total	Fatal	F+I	Total
0.021	0.15	0.30	0.019	0.33	0.78

There were a total of 14 accidents along this northbound highway segment during the 36-month period from October 1, 2006 to September 30, 2009. There was one single-vehicle accident that resulted in one fatality and three people injured. There were two multi-vehicle accidents that resulted in two people injured in each instance. There were two other multi-vehicle accidents that resulted in one person injured in each instance.

Five of the 14 accidents along this northbound segment of Route 99 were rear-end accidents. A further review of the Table B data indicates that two of these five rear-end accidents resulted due to vehicles attempting to turn at the approximate location of former median cross-over roads that were removed when the freeway segment was built. Two of the four hit-object accidents ran into signs as they ran off the road. The other two of the four hit-object accidents ran into barriers as

they were forced to swerve out of the way of other vehicles making an aggressive lane change maneuver.

The accident in which a fatality occurred was the only over-turn accident. Table B indicates that the primary collision factor for this fatal accident was due to a wrong turn; however, the accident report indicates that the accident was actually loss of control due to a blown tire. Table 2 for the southbound Route 99 segment from post mile 20.1 to post mile 21.7 indicates that the actual accident rates are lower than the statewide average accident rate. The accident rates shown in Table 2 are in accidents per million-vehicles

Table 2

Actual (MVM)			Average (MVM)		
Fatal	F+I	Total	Fatal	F+I	Total
0.000	0.11	0.30	0.019	0.33	0.78

There were a total of 14 accidents along this southbound highway segment during the 36-month period from October 1, 2006 to September 30, 2009. There were no fatal accidents along this segment during this period.

There were two single-vehicle accidents that resulted in one person injured in each instance. There were two multi-vehicle accidents that resulted in one person injured in each instance.

Eight of the 14 accidents on the southbound Route 99 segment were hit-object accidents. Five of these 14 accidents were rear-end accidents. A review of the accident reports seem to suggest that a large majority of these accidents were due to driver error (falling asleep, reaching for water bottle, following too close, watching construction, etc.). There does not appear to be any accident patterns that would indicate that there is a correctable accident-causing situation.

Location 2 Accident Data:

Table 3 for the connector ramp from northbound Route 99 to westbound Route 152 indicates that the actual Total Accident Rate and the actual Fatal +Injury Accident Rates are significantly higher than the statewide average accident rates for a similar connector ramp with comparable traffic volumes. The accident rates shown in Table 3 are in accidents per million-vehicle miles.

Table 3

Actual (MV)			Average (MV)		
Fatal	F+I	Total	Fatal	F+I	Total
0.000	0.82	2.19	0.007	0.26	0.80

There were a total of 24 accidents at this connector ramp during the 36-month period from October 1, 2006 to September 30, 2009. None of the 24 accidents

had fatalities; however, five of the 24 accidents had at least one person injured, and two of the 24 accidents had two persons injured.
There was only one multi-vehicle accident. This multi-vehicle accident resulted in four persons being injured.

Twenty of the 24 accidents on the connector ramp from northbound Route 99 to westbound Route 152 were hit-object accidents. A further review of the Table B data indicates that seven of the 20 hit-object accidents (35%) occurred during wet pavement conditions. Vehicles appear to be clipping the end of the approach guardrail (replaced by SCI crash cushion) that is shielding the right hand bridge rail of the structure crossing over the Route 99 southbound lanes. Many of these vehicles then proceeded to leave the pavement and run off into the side slope.

8. ALTERNATIVES

8A. BUILD ALTERNATIVE

1. Build Alternative

At Location 1, the project proposes to construct approximately 7,400 linear feet of double thrie beam median barrier (DTBMB) in the median of Route 99 from PM 20.2 to PM 21.6 and close the gap between 2 existing thrie beam barriers. The Route 99 interchange at Avenue 21½ provides emergency vehicles with adequate access to both sides of this segment of Route 99; therefore, the proposed thrie-beam median barrier will not require an emergency passageway as shown on Standard Plan A78E2.

At Location 2, this project proposes to construct approximately 1,060 linear feet of concrete barrier (Type 60) with scuppers and widen the inside shoulder up to standard along the left hand side of the connector ramp from northbound (NB) Route 99 to westbound SR 152, PM 22.6 to PM 22.7. The project will remove 60 ft of the end of the existing concrete barrier at PM 22.6 and replace it with concrete barrier (Type 60) with scuppers because of an existing drainage issue. MBGR that shields an existing overhead guide sign in the median and MBGR shielding the left bridge rail will be removed in order to connect the new concrete barrier to the existing concrete bridge rail. There are no non-standard features required for this project.

The cost of this alternative is $1,492,000 ($1,500,000 escalated)

2. No Build Alternative

The No Build alternative would maintain the current condition. This alternative would not meet the need and purpose of this project.

8B. REJECTED ALTERNATIVES

None.

9. CONSIDERATIONS REQUIRING DISCUSSION

A. Hazardous Waste

The following databases were searched: State Water Resources Control Board's Geotracker database, the California Integrated Waste Management Board's SWIS database, and the Department of Toxic Substances Control's Envirostor and Cortese database. There were no sites identified within project limits. There are sites listed on the database to the north of the project on Ave 24½ but are not considered a hazardous waste risk to the proposed project.

Aerially Deposited Lead studies have been conducted in the past for these segments of SR-99. Lead is present as a measurable but non-hazardous component of the soils along shoulders and in the median. The BEEs Item 191101 should be included for health and safety plans dealing with lead in soil.

B. Resource Conservation

Existing MBGR, a crash cushion module and three new crash cushion systems (Type CAT) located in the median at Avenue 21 ½ Overcrossing PM 21.6 will be salvaged.

C. Transportation Management Plan (TMP)

Preliminary traffic impacts and mitigation for this project have been outlined in the attached Transportation Management Plan Data Sheet (TMP Data Sheet). Costs associated with the traffic impact mitigation measures listed in the TMP Data Sheet have been included in the project cost estimate.

A TMP for this project is required and should be requested when the design is complete enough to determine specific traffic impacts, but yet early enough to make design changes/additions required for traffic mitigation.

Lane closure charts and detailed TMP will be provided during PS&E stage.

Lane closures are not allowed when the traffic volume is beyond the capacity of the remaining lanes. Nighttime work outside peak hours is anticipated for this project.

D. Right of Way

No additional right of way is required.

E. Hydraulics

At the beginning of Location 2 PM 22.6, where project proposes to construct concrete barrier (Type 60) along the inside shoulder of the NB direction, water ponds exist along the shoulder for approximately 60 ft. Therefore, 60-ft of existing concrete barrier will be removed and replaced with new concrete barrier (Type 60), with scuppers, to allow water to flow across the barrier into drainage inlets and thereby eliminating the ponding water issue.

F. Environmental Issues

Biology: If trimming or removal of any tree is determined to be necessary, it must occur outside of the migratory bird-nesting season to comply with the Migratory Bird Treaty Act. The nesting season is recognized as February 15 through September 1.
A Caltrans biologist should be notified within two weeks of construction to determine the need for a pre-construction migratory bird survey.

Water Quality: 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 Specification Section 7-1.0G, must address all potential water quality impacts that may occur during construction.

Because the project will disturb one acre or more of soil, the following is required:
1. A Notification of Construction (NOC) is to be submitted to the appropriate Regional Water Quality Control Board at least 30 days prior to the start of construction.
2. A Stormwater 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 (NOCC) shall be submitted to the Regional Board upon Completion of Construction and site stabilization. A project will 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 adhere to the requirements set forth in the Caltrans National Pollution Discharge Elimination System (NPDES) permit, the Storm Water Management Plan, the Project Planning and Design Guide, the Construction Site Best Management Practices (BMPs) Manual and Caltrans Standard Specifications.

Visual: If it is later determined that any trees need to be removed, contact Landscape Architecture immediately. Visual impacts will need to be reassessed.

G. Storm Water

This project will create 2.2 acres of soil disturbance. Storm water run-off will remain within State R/W. There are no high-risk areas within the project limits; hence storm water will not discharge to any receiving waters. There are no high-risk water body areas within the project limits and 401 and 404 permits are not required for this project.

H. Vegetation Control

In order to assist Caltrans Maintenance in reaching the Department's goal of reduction of pesticide use, rubber mats will be incorporated under thrie beam median barriers to discourage vegetation growth under the thrie beam barrier section.

I. Electrical Design

At location 1, where project proposes to construct thrie beam barrier in the median, there are three existing underground Caltrans electrical conduits crossing. These conduits shall be shown in the project Layout Sheets or on Utility Plan Sheets during the PS&E stage of the project to protect these electrical facilities "in place" during construction.

At location 2, there are three existing luminaries and one sign lighting that will be affected due to the shoulder widening and installation of the concrete barrier. These luminaries should be upgraded to meet the current Caltrans standards. Also two additional electroliers should be installed along with replacing corresponding conduit and pull boxes.

10. COMMUNITY INVOLVEMENT

There is no community involvement for this project.

11. ENVIRONMENTAL DETERMINATION/DOCUMENT

The project is Categorical Exempt of the State CEAQ guidelines and Categorically Excluded under NEPA. This determination was approved on May 20, 2011.

12. FUNDING

This project is proposed to be amended in the 2010 SHOPP Safety Improvements Program (201.010), with funding in the 2013/2014 fiscal year.

Cost Breakdown: Capital and Support Cost Summary

Project Cost Component	Fiscal Years					Total
	10/11	11/12	12/13	13/14	14/15	
R/W Capital						$0
Const Capital**				$1,500		$1,500
PA&ED*						$ 0
PS&E*		$530				$530
R/W Support*		$10				$10
Const Support*				$315		$315
Total		$540		$1,815		$2,355

All costs X$1000. Support Categories are the same as those identified by SB 45. Construction Capital escalated at 0.27%. Support cost escalated at 3.1%. Support cost ratio: 0.6 [All Support Costs (*) divided by the sum of the escalated Construction Capital (**) and the escalated R/W Capital]

13. SCHEDULE

HQ Milestones	**Delivery Date (Month, Day, Year)**
PS&E to DOE (M377)	4/19/13
Project PS&E (M380)	Processed by AADD
Right of Way Certification (M410)	9/18/12
Ready to List (M460)	7/15/13
Approve Contract(M500)	1/17/14
Contract Acceptance (M600)	5/19/14
End Project (M800)	3/16/16

14. FHWA COORDINATION

Per the Safe, Accountable, Efficient, Transportation Equity Act for Users (SAFETEA-LU), this project would be eligible for federal-aid funding and is considered State Authorized under current FHWA-Caltrans Stewardship Agreements.

15. DISTRICT CONTACT S

The following individuals may be contacted for information pertaining to this PSR-PR:

ROBERT F. HULL. Project Manager	(559)243-3443
ALI ALQATAMI Design Manager	(559)243-3475
MOHAMMAD HASHEM Project Engineer	(559)243-3574
TRAIS NORRIS Environmental Manager	(559) 445-6447

16. PROJECT REVIEWS

Field Review	Mohammad Hashem	Date	3/03/11
District Maintenance	Tim McClurg	Date	3/03/11
District Safety Review	Edward Salazar	Date	8/09/11
HQ Design Coordinator/Reviewer	Mike Janzen	Date	08/08/11
Project Manager Review	Robert F. Hull	Date	6/15/11
Constructability Review	PDT	Date	8/25/11
District SHOPP Program Advisor	Joel Aguilar	Date	11/10/10
HQ SHOPP Program Advisor	Thomas Schriber	Date	11/18/10

17. ATTACHMENTS:

A. Project Title Sheet

B. Typical Cross – Sections

C. Environmental Document

D. TMP Data Sheet

E. R/W Data Sheet

F. PSR-PR Cost Estimate

G. Storm Water Data Report

H. Risk Management Plan

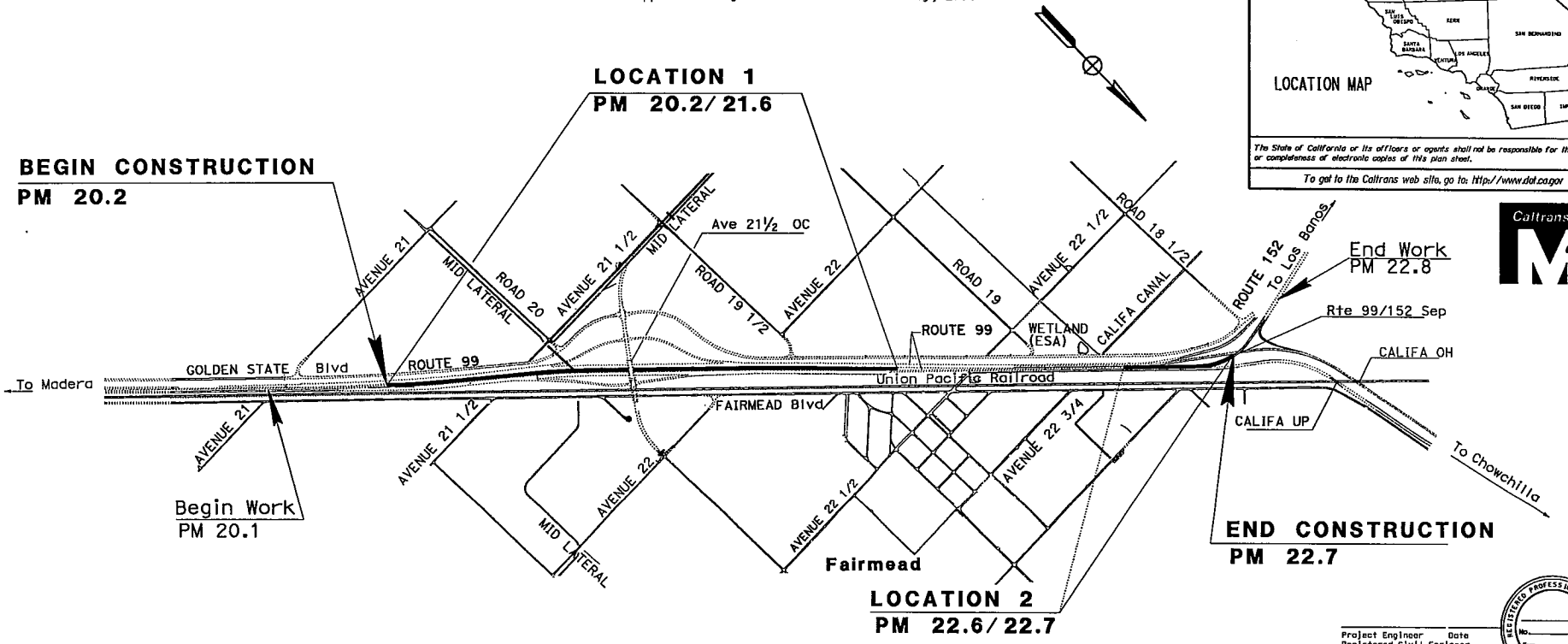
INDEX OF SHEETS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN MADERA COUNTY NEAR FAIRMEAD
FROM 0.6 MILE SOUTH OF AVENUE 21 1/2 OVERCROSSING TO 0.8 MILE NORTH OF AVENUE 21 1/2 OVERCROSSING AND FROM 0.1 MILE SOUTH OF ROUTE 152 TO ROUTE 152

To be supplemented by Standard Plans dated July, 2004

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
06	Mad	99	31.5/36.4		



NO SCALE

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

REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

ATTACHMENT-A

Contract No.

PROJECT ENGINEER	DATE	PROJECT MANAGER	DATE
N. SANTOS	11/05	J. BANE	11/05

FORM DC-DE-93-PF (REV. 3/88)

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s128757
DGN FILE => 060n200a0001.dgn

CU 06224

EA 0N200K

LAST REVISION 03-08-11

DATE PLOTTED => 07-SEP-2011 12:19

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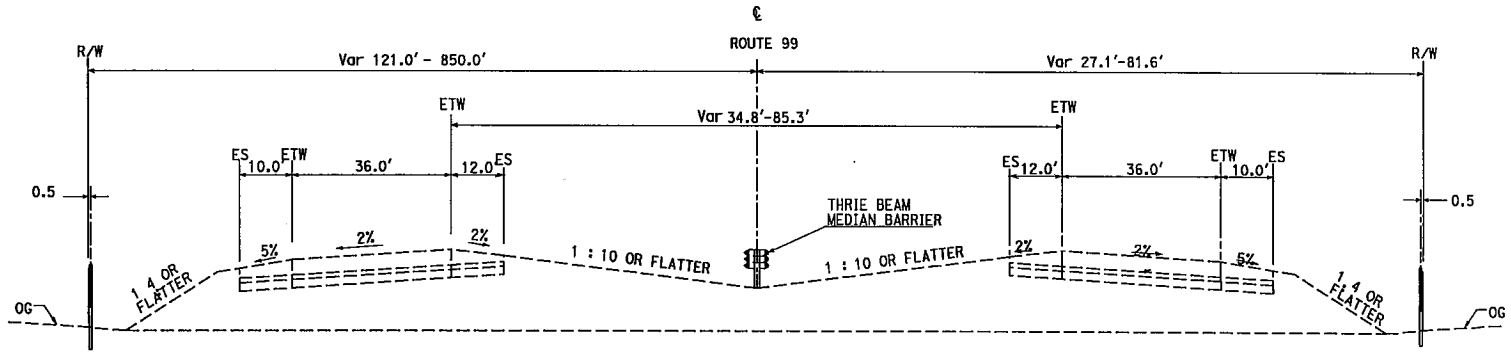
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Mad	99	20.2/21.6 & 22.6/22.7		

LICENSED LANDSCAPE ARCHITECT

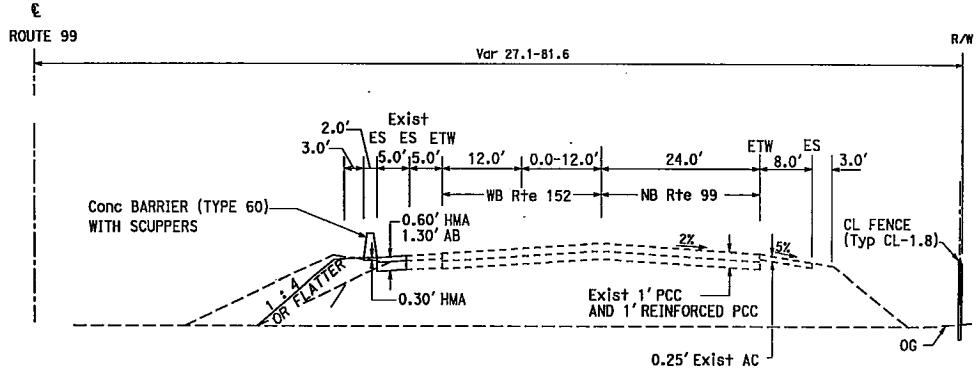
PLANS APPROVAL DATE

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

LICENSED LANDSCAPE ARCHITECT — Signature — Renewal Date — Date — STATE OF CALIFORNIA



LOCATION 1
PM 20.2 /21.6



LOCATION 2
PM 22.5/22.7

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

NO SCALE

TYPICAL CROSS SECTIONS

X-1

ATTACHMENT-B

REVISED BY	DATE REVISED
MOHAMMAD HASHEMI	
ALI R. ALQATANI	

CALCULATED-DESIGNED BY

CHECKED BY

SENIOR LANDSCAPE ARCHITECT
ALI R. ALQATANI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN

LAST REVISION 07-18-11
DATE PLOTTED => 03-AUG-2011
TIME PLOTTED => 13:37

BORDER LAST REVISED 7/2/2010

USERNAME => s128757
DGN FILE => TypicalXs.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 1458

PROJECT NUMBER & PHASE 06000204471

CATEGORICAL EXEMPTION/ CATEGORICAL EXCLUSION DETERMINATION FORM

06-MAD-99	20.2-21.6 and 22.5-22.7	06-0N200K	06-0002-0447
Dist.-Co.-Rte. (or Local Agency)	P.M/P.M.	E.A. (State project)	Federal-Aid Project No. (Local project)/ Proj. No.

PROJECT DESCRIPTION:

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

Enter project description in this box. Use Continuation Sheet, if necessary

This project would install median barriers at two locations on SR99 in Madera County. All work would be in the median within Caltrans right-of-way. This is a safety project. The purpose of this project is to prevent cross-median collisions.

Location 1: A double thrie beam barrier is proposed to fill in the gap between existing thrie beam barriers to the north and south. The barrier would be installed in the middle of the 84-foot-wide median from PM 20.2 to 21.6. This location is entirely within the constructed Fairmead Freeway project.

Location 2: This location is along the ramp to westbound SR 152 approaching the overcrossing over SR99. Concrete barrier (Type 60) would be installed along the inside edge of shoulder from PM 22.6 to 26.7 along the top of the embankment. This would require paving 3 feet out from the paved shoulder to place the barrier on; some grading and slope stabilization will be needed.

CEQA COMPLIANCE *(for State Projects only)*

Based on an examination of this proposal, supporting information, and the following statements (See 14 CCR 15300 et seq.):

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

CALTRANS CEQA DETERMINATION (Check one)

☐ **Exempt by Statute.** (PRC 21080[b]; 14 CCR 15260 et seq.)

Based on an examination of this proposal, supporting information, and the above statements, the project is:

☐ **Categorically Exempt. Class ____.** (PRC 21084; 14 CCR 15300 et seq.)

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

G. William 'Trais' Norris, III		Bob Hull	
Print Name: Environmental Branch Chief		Print Name: Project Manager/DLA Engineer	
Signature	Date 5/20/11	Signature Bob Hull	Date 5/20/11

NEPA COMPLIANCE

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

- does not individually or cumulatively have a significant impact on the environment as defined by NEPA and is excluded from the requirements to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS), and
- has considered unusual circumstances pursuant to 23 CFR 771.117(b) (http://www.fhwa.dot.gov/hep/23cfr771.htm - sec.771.117).

In non-attainment or maintenance areas for Federal air quality standards, the project is either exempt from all conformity requirements, or conformity analysis has been completed pursuant to 42 USC 7506(c) and 40 CFR 93.

(continued on next page)

ATTACHMENT-C

CATEGORICAL EXEMPTION/CATEGORICAL EXCLUSION DETERMINATION FORM
Continuation Sheet

CALTRANS NEPA DETERMINATION (Check one)

☒ **Section 6004:** The State has been assigned, and hereby certifies that it has carried out, the responsibility to make this determination pursuant to Chapter 3 of Title 23, United States Code, Section 326 and a Memorandum of Understanding (MOU) dated June 7, 2010, executed between the FHWA and the State. The State has determined that the project is a Categorical Exclusion under:

- ☐ **23 CFR 771.117(c): activity (c)(___)**
- X **23 CFR 771.117(d): activity (d)(2)**
- ☐ **Activity ___ listed in the MOU between FHWA and the State**

☐ **Section 6005:** Based on an examination of this proposal and supporting information, the State has determined that the project is a CE under Section 6005 of 23 U.S.C. 327.

G. William 'Trais' Norris, III	Bob Hull
Print Name: Environmental Branch Chief	Print Name: Project Manager/DLA Engineer
Signature 5/20/11 Date	Signature 5/20/11 Date

Briefly list environmental commitments on continuation sheet. Reference additional information, as appropriate (e.g., air quality studies, documentation of conformity exemption, FHWA conformity determination if Section 6005 project; §106 commitments; §4(f); §7 results; Wetlands Finding; Floodplain Finding; additional studies; and design conditions). **Revised June 7, 2010**

CATEGORICAL EXEMPTION/CATEGORICAL EXCLUSION DETERMINATION FORM
Continuation Sheet

06-MAD-99	20.2-21.6 and 22.5-22.7	06-0N200K	06-0002-0447
Dist.-Co.-Rte. (or Local Agency)	P.M/P.M.	E.A. (State project)	Federal-Aid Project No. (Local project)/ Proj. No.

Environmental Commitments:

Biology: If trimming or removal of any tree is determined to be necessary, it must occur outside of the migratory bird nesting season to be in compliance with the Migratory Bird Treaty Act. The nesting season is recognized as February 15 through September 1.
A Caltrans biologist should be notified within two weeks of construction to determine the need for a pre-construction migratory bird survey.

Hazardous Waste: Aerially Deposited Lead studies have been conducted in the past for these segments of SR-99. Lead is present as a measurable but non-hazardous component of the soils along shoulders and in the median. The BEEs Item 191101 should be included for health and safety plans dealing with lead in soil.

Water Quality: 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 Specification Section 7-1.0G, must address all potential water quality impacts that may occur during construction.

Because the project will disturb one acre or more of soil, the following is required:

1. A Notification of Construction (NOC) is to be submitted to the appropriate Regional Water Quality Control Board at least 30 days prior to the start of construction.
2. A Stormwater 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 (NOCC) shall be submitted to the Regional Board upon Completion of Construction and site stabilization. A project will be considered complete whan the criteria for final stabilization in the Construction General Permit is met.

The design and construction of the proposed project must adhere to the requirements set forth in the Caltrans National Pollution Discharge Elimination System (NPDES) permit, the Storm Water Management Plan, the Project Planning and Design Guide, the Construction Site Best Management Practices (BMPs) Manual and Caltrans Standard Specifications.

Visual: If it is later determined that any trees need to be removed, contact Landscape Architecture immediately. Visual impacts will need to be reassessed.

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: WENDY KRONMAN,
Associate Environmental Planner
Sierra Pacific Environmental
Analysis Branch

Date: April 7, 2011
Job No.: 06-0002-0447
File: 06-0N200_
Project: Fairmead Median Barriers

From: JUERGEN VESPERMANN,
Chief, Hazardous Waste and Paleontology Branch

Subject: Request for Hazardous Waste PA&ED/Compliance Studies for the MAD-99 Median Barriers Project.

The Hazardous Waste and Paleontology Branch was requested to provide environmental compliance studies for the proposed project. The project would install median barriers at two locations on SR99 in Madera County. All the work would be in the median along Caltrans right-of-way.

At location 1, (PM 20.2/21.6) a double thrie beam barrier is proposed to fill in the gap between existing thrie beam barriers to the north and south. The barrier would be installed in the middle of the 84-foot-wide median. The project is within the newly constructed Fairmead Freeway Project.

Location 2, (PM 22.6/26.7) is along the ramp to westbound SR-152 approaching the overcrossing over SR-99. Concrete barrier (Type 60) would be installed along the inside edge of shoulder along the top of the embankment. This would require paving 3 feet out from the paved shoulder to support the barrier. Some grading and slope stabilization will be needed.

The following databases were searched: State Water Resources Control Board's Geotracker database, the California Integrated Waste Management Board's SWIS database and the Department of Toxic Substances Control's Envirostor and Cortese database. There are sites listed on the database to the north of the project on Ave. 24 1/2, but are not considered a hazardous waste risk to the proposed project.

Aerially Deposited Lead studies have been conducted in the past for these segments of SR-99. Lead is present as a measurable but non hazardous component of the soils along shoulders and in the median. The BEEs Item 191101 should be included for health and safety plans dealing with lead in soil.

If there are any questions or you would like to review the collected Hazardous Waste information, contact Ken Doran at (559) 243-8276.

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: JUERGEN VESPERMANN
Hazardous Waste and Paleontology Branch
Branch District 6

Date: March 30, 2011

File: EA 06-0N200 K
Project ID: 06-0002-0447

From: WENDY KRONMAN
Associate Environmental Planner
Sierra Pacific Environmental Analysis Branch

Subject: Please initiate: X PID/Scoping X PA&ED/Compliance Studies ☐ Oversight

☐ Archaeology	☐ Biology	☐ Water	☐ Visual Assessment
☐ Architectural History	☐ Air	X Hazardous Waste	☐ Other
☐ Native American Coordination	☐ Noise	☐ Paleontology	☐

District:	6			EA:	06-0N200
County:	Madera	Route:	99	Post mile:	20.2/21.6and 22.6/22.7
Project Name:	Fairmead Median Barriers				
Env. Manager:	Trais Norris			Phone:	243-8178
Project Manager:	Bob Hull			Phone:	243-3443
Design Senior	Ali R. Alqatami			Phone:	243-3475
Project Engineer:	Mohammad Hashem			Phone:	243-3574

Location: In Madera County near Fairmead from 0.7 mile south of Avenue 21½ Overcrossing to 0.8 mile north of Avenue 21½ Overcrossing; and from 0.2 mile south of Route 152 to Route 152.

Project Description: This project would install median barriers at two locations on SR99 in Madera County. All work would be in the median within Caltrans right-of-way. This is a safety project.

Location 1: A double thrie beam barrier is proposed to fill in the gap between existing thrie beam barriers to the north and south. The barrier would be installed in the middle of the 84-foot-wide median from PM 20.2 to 21.6. This location is entirely within the constructed Fairmead Freeway project.

Location 2: This location is along the ramp to westbound SR 152 approaching the overcrossing over SR99. Concrete barrier (Type 60) would be installed along the inside edge of shoulder from PM 22.6 to 26.7 along the top of the embankment. This would require paving 3 feet out from the paved shoulder to place the barrier on; some grading and slope stabilization will be needed.

Purpose and Need: The purpose of this project is to prevent cross-median collisions.

Anticipated Document Type:

NEPA: ☐ EIS ☐ FONSI ☐ CE (6005) ☐ CE (6004) X N/A
CEQA: ☐ EIR ☐ ND X CE ☐ N/A

X No Federal Involvement ☐FHWA funded ☐Other Federal agency involvement _____

Mapping:

X A project area map, cross-sections, and an aerial showing proposed work are attached. The aerial depicts the as-built plans for the constructed Fairmead freeway project because the existing freeway is not shown on DHIPP yet.

Schedule: Not yet known.

Other Information: Please include Workplan Estimates (WBS) and resources needed with your scoping memo. Please let me know if you cannot get this information to me by **April 18.**

Attachments- 9 pp.

c: Trais Norris

Department of Transportation
District 6

TRANSPORTATION MANAGEMENT PLAN DATA SHEET

06-Mad 99-PM 20.2/21.6 & 22.6/22.7
FAIRMEAD MEDIAN BARRIER
PROJ NO: 0600020447
March 29, 2011

Prepared For: ALI ALQATAMI, Design Senior
Office of Design I, Branch Z

Prepared By: FLORENCIA ALLENGER

Concurred By:

BENJAMIN C. CAMARENA
District 6 – District Traffic Manager

Approved By:

BILL QUAN LE, P.E.
District 6 – TMP Manager

This Transportation Management Plan (TMP) data sheet is prepared in response to a request from Office of Design I, Branch Z dated March 21, 2011.

Attached is the TMP Data Sheet for the above referenced project. Per Deputy Directive 60, TMP must be considered at the early stage of all projects and activities performed on the State Highway System. The following items shall be included in the project initiation document (PID):

1) The TMP Data Sheet shall be attached to the project initiation document (PID).
2) Any costs associated with the traffic impact mitigation measures listed in the TMP Data Sheet shall be included in the PID estimate.
3) The following statements shall be included in the body of the PID:

   "Preliminary traffic impacts and mitigation for this project have been outlined in the attached Transportation Management Plan Data Sheet (TMP Data Sheet). Costs associated with the traffic impact mitigation measures listed in the TMP Data Sheet have been included in this documents estimate."

ATTACHMENT-D

"A TMP for this project is required and should be requested when the design is complete enough to determine specific traffic impacts, but yet early enough to make design changes/additions required for traffic mitigation."

"Lane closure charts and detailed TMP will be provided during PS&E stage."

"Lane closures are not allowed when the traffic volume is beyond the capacity of the remaining lanes. Nighttime work outside peak hours is anticipated for this project."

If you have any questions, please contact me at 559-444-2492.

Attachments:
- TMP Data Sheet

DISTRICT 6 - TRANSPORTATION MANAGEMENT PLAN

DATA SHEET

(TMP Elements and Costs)

CO/RTE/PM	MAD	99	*PM*	VAR	*PROJ#*	0600020447
PROJECT NAME	Fairmead Median Barrier					
PROJECT LIMIT	In Madera County near Fairmead from 0.7 mi s/o Ave 21 1/2 OC to 0.8 mi n/o Ave 21 1/2 OC and from 0.2 mi s/o of Rte 152 to Rte 152					
PROJECT DESCRIPTION	Construct Median Barrier					

A) ***The project includes the following:***
(Check all that applicable type of facility closures.)

- ☑ Highway or Freeway Lanes
- ☑ Highway or Freeway Shoulders
- ☑ Freeway Connectors
- ☐ Freeway Off-ramps
- ☐ Freeway On-ramps
- ☐ Local Streets

B) ***Are there any construction strategies that can restore existing number of lanes?***
☑ No ☐ Yes *(Check all applicable strategies.)*

- ☐ Temporary Roadway Widening
  Structure Involvement? ☐ Yes ☑ No (If yes, notify Project Manager)
- ☐ Lane Restriping (Temporary narrow lane widths)
- ☐ Roadway Realignment (Detour around work area)
- ☐ Median and/or Right Shoulder Utilization
- ☐ Use of HOV lane as Temporary Mixed Flow Lane
- ☐ Staging Alternatives (Explain Below)

C) ***Calculated Delay***
(To be performed if construction strategies in Item B do not mitigate congestion resulting from Item A or on all projects along Interstate 5 and Route 99)

1. Estimated Maximum Individual delay _____ minutes
2. Existing or Acceptable Individual Vehicle Delay _____ minutes
3. Estimated Individual Vehicle Delay Requiring Mitigation _____ minutes
4. Estimate Delay Cost (Most Applicable)
   - ☐ Extended Weekend Closure
   - ☐ Weekly (7 days)
5. Estimated Duration of Project Related Delays _____ # of Days
6. Cost of Construction Related delays _____

TMP Estimates based on X-Number of Working Days
requiring Lane/Shoulder/Ramp/Freeway/Highway Closures: 70 Working Days

TMP DATASHEET

Date: March 29, 2011
Design Senior: Ali Alqatami
Branch: Z *Office of Design:*

Cnty/Rte: MAD 99
PM VAR
EA 0600020447

D) ***Preliminary TMP Elements and cost:*** (Identify all elements and estimated costs that will be used to mitigate congestion resulting from the proposed construction activities.)

1. Public Information - Bees # **066063**

☐	Brochures & Mailers	
☑	Press Release/Media Alerts	$4,000
☐	Paid Advertisements	
☐	Public Information Center/Kiosks	
☐	Telephone Hotline	
☑	Planned Lane Closure Website	$0
☐	Project Website	
☐	Pubic Meetings	
☑	Freight Travel Information	$0

2. Motorist Information Strategies

☑	Traffic Radio Announcements	$0
☐	Fixed CMS	
☑	Portable CMS BEES **128650**	$27,000
☐	Temporary Motorist Information Signs	
☐	Ground Mounte Signs (Detour)	
☐	Dynamic Speed Message Sign	
☐	Highway Advisory Radio	
☑	CT Hwy Infom. Network (CHIN)	$0

3. Incident Management

☑	Transportation Management Center	$0
☐	Traffic Management Team (TMT)	
☐	Intelligent Transportation Systems	
☐	Traff. Surveillance (Loop & CCTV)	
☐	Helicopter Surveillance	
☐	Tow/Freeway	
☑	COZEEP BEES **066062**	$112,000

4. Construction Strategies (In Addition to Elements Identified on Item B)

☑	Lane Requirement Chart	$0
☐	Construction Staging	
☐	Traffic Handling Plans	
☐	Full Facility Closures	
☐	Local Road Closures	
☐	Lane Modifications	
☐	One-Way Reversing Operation	

4. Construction Strategies (In Addition to Elements Identified on Item B)

☐	Two-way Traffic On One Side	
☐	Reversible Lanes	
☑	Ramp/Connector Closure	$0
☑	Night Work	$0
☐	Extended Weekend Work	
☐	Ped/Bicycle Access Improvements	
☐	Maintain Business Access	
☐	A + B Bidding	
☐	Innovative Const. Techniques	
☐	Coordination w/ Adj. Const. Site	
☐	Speed Limit Reduction	
☐	Traffic Screens	

5. Demand Management

☐	HOV Lane/Ramps
☐	Variable Work Hours
☐	Telecommuting
☐	Truck/Heavy Vehicle Restrictions
☐	Rideshare Promotions
☐	Ramp Metering
☐	Transit Incentives
☐	Shuttle Services
☐	Ridesharing/Carpooling Incentives
☐	Park & Ride Promotion

6. Alternative Route Strategies

☐	Off-site Detours/Use of Alt. Rtes
☐	Signal Timing/Coord. Improvements
☐	Temporary Traffic Signals
☐	Signal Retiming
☐	Street/Intersection Improvements
☐	Turn Restrictions
☐	Parking Restrictions

7. Other Considerations

☐	Application of New Technologies
☐	Other

TOTAL ESTIMATED COST OF TMP	$143,000

PROJECT NOTES:

1. Current dollar values used. Inflation was not factored into the estimate.
2. There are no noise restrictions / moratoriums for night work.
3. Traffic Control/Maintain Traffic costs was not provided. Please consult with the OE or construction office for this estimate.
4. Portable CMS specified for this project by this estimate is designed for congestion relief as outlined by DD-60. Portable CMS required for other purposes should be included under other specifications.
5. COZEEP specified for this project by this estimate is designated for congestion relief as outlined by DD-60. COZEEP required for other purposes should be included under other specifications.
6. The TMP is a living document that is subject to change if material changes take place in the final version of the project phase or if changes are required during construction to respond to excessive levels of congestion.
7. This revised TMP Data Sheet supersedes the previous TMP Data Sheet dated "date".

PREPARED BY:	OFFICE OF TRAFFIC MANAGEMENT	DATE:
Florencia Allenger		March 29, 2011

State of California Business, Transportation and Housing Agency

Memorandum

To: Bob Hull

Attn Mohammed Hashem

Date: 7/7/2011

File: CD 06 EA 0N200K Alt NA
Co MAD RTE 99

DESCRIPTION:
Install Median Barrier

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 5/2/2011

The following assumptions and limiting conditions were identified:

Appraisal

Utility
As per data sheet request, no utility permit search was completed for this estimate. Also no utility involvement and potholing is anticipated.

Right of Way Lead Time will require a minimum of 1 months after we receive Certified Appraisal Maps and/or Utility Conflict Plans, obtained necessary environmental clearance and applicable freeway agreements have been approved.

NICHOLAS G DUMAS
Assistant Region Division Chief, Right of Way
(559)445-6195

ATTACHMENT-E

EA: 06-0N200K CO/RTE/PM-PM (Rte 1 and Rte 2) : MAD/99/20.2-21.6 & MAD/99/22.6-22.7 Request Date: 5/2/2011
ALT: NA Revised Date:

Right Of Way Cost Estimate

	Current Year 2011	Contingency Rate	Right of Way Escalation Rate	Escalated Year 2013
Acquisition:	$0	25%	5%	$0
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:	$0	25%	5%	$0
Title and Escrow:	$0	25%	5%	$0
Ad Signs:	$0	25%	5%	$0
Total Current Value: If RW Cost Est fields are blank, Costs = $0	$0			$0

Estimated Construction Contract Work (CCW): R/W LEAD TIME/Mo. 1

Cost Break Down

Pot Hole

Mitigation

Land

Bank

Permit Fees

RR Involvement

Railroad Facilities or Right of Way Affected?	
Const/Maint Agreement:	
Service Contract:	
Right of Entry:	
Clauses:	
Estimated Lead-time:	

Parcel Data

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

# of Excess Parcels:

Utilities

U4-1: Owner Expense	0
U4-2: State Expense, Conventional no Fed Aid	0
U4-3: State Expense, Freeway no Fed Aid	0
U4-4: State Expense, both with 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	0

Misc R/W Work

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

EA: 06-0N200K ALT: NA

Parcel Area

Total R/W Required:
Total Excess Area:

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

General Description of Utility Involvement:

This project proposes two location. At location one, they will install a metal beam guard railing to fill the gap between two existing metal beam barriers. The second location will construct a concrete barrier and widen the inside shoulder up to standard along the left side of the northbound State Route 99 to westbound State Route 152 overcrossing bridge rail.

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 muliti-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:

Railroad Liaison Agent:

Utiltiy Relocation Coordinator: Minerva Aceves 7/6/2011

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.

Date

ENTERED PMCS

BY:

NICHOLAS G DUMAS
Assistant Region Division Chief, Right of Way

PLANNING COST ESTIMATE

Dist-Co-Rte: 06-Mad-99
PM: PM 20.2/21.6
PM: PM 22.6/22.7
EA: 06-0N200K
Program Code: 201.010

PROJECT DESCRIPTION:

Limits: POSTMILE 20.2/21.6 and 22.6/22.7

Proposed Improvement: (Scope of Work)

This project cosist of two location. Location No. 1 propose to install median thrie beam barrier between two existing median thrie beam barrir (PM 20.2/21.6). Location No. 2 propose to construct concrete barrier in NB direction along the inside edge of shoulder SR 99 and SR 152 overcrossing (PM 22.6/22.7). This project eliminate the Cross Median Collision and improve the safety

Alternative: VIABLE ALTERNATIVES

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	Total of Sections 1 - 10 shown above	$ 1,491,716
TOTAL STRUCTURES ITEMS		$ 0
	SUBTOTAL CONSTRUCTION COSTS	$ 1,491,716
TOTAL RIGHT OF WAY ITEMS (Not Escalated)		$ 0
	TOTAL PROJECT CAPITAL OUTLAY COSTS	$ 1,491,716

Reviewed by District Program Manager: _____ (Signature) _____ (Date)

Approved by Project Manager: Robert F. Hall (Signature) 9/1/11 (Date)

Phone Number: 559-243-3443

Form revised 12/01/09

I. ROADWAY ITEMS

Section 1 - Earthwork	Quantity	Unit	Unit Price	Item Cost	Section Cost
Excavation Contaminated Soil	215	CY	$200	$43,000	
Imported Borrow	150	CY	$70	$10,500	
Clearing & Grubbing	1	LS	$15,000	$15,000	
Develop Water Supply	1	LS	$0	$0	
Top Soil Reapplication			$0	$0	
Stepped Slopes and Slope			$0	$0	
Rounding (Contour Grading)			$0	$0	
			$0	$0	
				Subtotal Earthwork:	$68,500
Section 2 - Pavement Structural Section*					
PCC Pvmt Depth	0	CY	$0	$0	
PCC Pvmt Depth	0	CY	$0	$0	

ATTACHMENT-F

Caltrans

Dist-Co-Rte: 06-Mad-99
PM: PM 20.2/21.6
PM: PM 22.6/22.7
EA: 06-0N200K
Program Code: 201.010

Hot Mix Asphalt Concrete	140	Ton	$150	$21,000	
Lean Concrete Base	0	CY	$0	$0	
Cement-Treated Base	0	CY	$0	$0	
Aggregate Base	60	CY	$140	$8,400	
Treated Permeable Base	0	CY	$0	$0	
Aggregate Subbase	0	CY	$0	$0	
Pavement Reinforcing Fabric	0	SF	$0	$0	
Edge Drains	0	FT	$0	$0	
				$0	
			Subtotal Pavement Structural Section:		$29,400
Section 3 - Drainage					
Large Drainage Facilities	0	LS	$0	$0	
Storm Drains	0	LS	$0	$0	
Pumping Plants	0	LS	$0	$0	
Project Drainage	0	LS	$0	$0	
				$0	
			Subtotal Drainage:		$0

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

Section 4 - Specialty Items	Quantity	Unit	Unit Price	Item Cost	Section Cost
Concrete Barrier	1,000	LF	$45	$45,000	
Remove Concrete Barrier	60	LF	$250	$15,000	
Double Thrie Beam Barrier	8,000	LF	$45	$360,000	
Remove Crash Cushion (Type Cat)	2	EA	$1,200	$2,400	
Remove MBGR	590	LF	$15	$8,850	
Water Pollution Control	1	LS	$26,000	$26,000	
Hazardous Waste Investigation and/or Mitigation Work	0	LS	$0	$0	
Environmental Compliance	0	LS	$0	$0	
Resident Engineer Office Space	0	LS	$0	$0	
				$0	
			Subtotal Specialty Items:		$457,250
Section 5 - Traffic Items					
Lighting	1	LS	$53,000	$53,000	
Traffic Delineation Items	0	LS	$0	$0	
Construction Area Signs	1	LS	$4,500	$4,500	
Overhead Sign Structures	0	EA	$0	$0	
Roadside Signs	0	EA	$0	$0	
Traffic Control Systems	0	LS	$0	$0	
Transportation Management Plan	1	LS	$143,000	$143,000	
Temporary Detection System	0	LS	$0	$0	
Staging	0	LS	$0	$0	
				$0	
			Subtotal Traffic Items:		$200,500

Dist-Co-Rte: 06-Mad-99
PM: PM 20.2/21.6
PM: PM 22.6/22.7
EA: 06-0N200K
Program Code: 201.010

II. ROADSIDE ITEMS

Section 6 Planting and Irrigation	Quantity	Unit	Unit Price	Item Cost	Section Cost
Highway Planting	0	LS	$0	$0	
Replacement Planting	0	LS	$0	$0	
Irrigation Modification	0	LS	$0	$0	
Relocate Existing Irrigation	0	LS	$0	$0	
Facilities	0	LS	$0	$0	
Irrigation Crossovers	0	LS	$0	$0	
				$0	
			Subtotal Planting and Irrigation Section:		$0

Section 7: Roadside Management and Safety Section	Quantity	Unit	Unit Price	Item Cost	Section Cost
Vegetation Control Treatments	3,285	SQY	$47	$154,395	
Gore Area Pavement	0	LS	$0	$0	
Pavement beyond the gore area	0	LS	$0	$0	
Miscellaneous Paving	0	LS	$0	$0	
Erosion Control	4	LS	$7,000	$25,200	
Slope Protection	0	LS	$0	$0	
Side Slopes/Embankment Slopes	0	LS	$0	$0	
Maintenance Vehicle Pull outs Off-freeway Access (gates, stairways, etc.) Roadside Facilities (Vista Points, Transit, Park & Ride, etc)	0	LS	$0	$0	
Relocating roadsice facilities/features	0	LS	$0	$0	
				$0	
			Subtotal Roadside Management and Safety Section:		$179,595

TOTAL SECTIONS 1 thru 7 $935,245

NOTE:Extra lines are provided for items not listed; use additional lines as appropriate.

Caltrans

Dist-Co-Rte: 06-Mad-99
PM: PM 20.2/21.6
PM: PM 22.6/22.7
EA: 06-0N200K
Program Code: 201.010

III. ROADWAY ADDITIONS

Section 8 - Minor Items

					Item Cost	Section Cost
(Subtotal Sections 1 thru 7)	$935,245	x	0.10 (5 to 10%)	=	$93,525	
				TOTAL Minor Items:		$93,525

Section 9 - Roadway Mobilization

(Subtotal Sections 1 thru 8)	$1,028,770	x	0.10 (10%)	=	$102,877	
				TOTAL Roadway Mobilization:		$102,877

Section 10 - Supplemental Work & Contingencies

Supplemental Work

(Subtotal Sections 1 thru 8)	$1,028,770	x	0.10 (5 to 10%)	=	$102,877	

Contingencies

(Subtotal Sections 1 thru 8)	$1,028,770	x	0.25 (**%)	=	$257,192	
				Supplemental Work & Contingencies:		$360,069
				TOTAL ROADWAY ADDITIONS Sections 8 thru 10:		$556,471
				TOTAL ROADWAY ITEMS:		$1,491,716
				(Subtotal Sections 1 thru 10)		

Estimate Prepared by: Mohammd Hashem (Print or Type Name) Phone: (559) 243-3574 0/0/00 (Date)

Estimate Checked by: Ritchie Ferrer (Print or Type Name) Phone: (559) 343-3475 0/0/00 (Date)

PLANNING COST ESTIMATE

Dist-Co-Rte: 06-Mad-99
PM: PM 20.2/21.6
PM: PM 22.6/22.7
EA: 06-0N200K
Program Code: 201.010

**Use appropriate percentage per PDPM, Part 3 Chapter 20.
http://www.dot.ca.gov/hq/oppd/pdpm/pdpm.htm -pdpm

II. STRUCTURE ITEMS

	STRUCTURE No. 1	No. 2	No. 3	
Bridge Name				
Structure Type				
Width (out to out) - (ft)				
Span Length - (ft)	0	0	0	
Total Area - ft^2	0	0	0	
Footing Type (pile/spread)	0	0	0	
Cost per ft^2	0	0	0	
(incl. 10 % mobilization and 20 % contingency)				
Total Cost for Structure	$0	$0	$0	

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

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

SUBTOTAL RAILROAD ITEMS $0

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

COMMENTS:

Estimate Prepared by: Geo Leyva (Print or Type Name) Phone: 243-3571 0/0/00 (Date)

(If appropriate, attach additional pages as backup)

III. RIGHT OF WAY ITEMS

PLANNING COST ESTIMATE

Dist-Co-Rte: 06-Mad-99
PM: PM 20.2/21.6
PM: PM 22.6/22.7
EA: 06-0N200K
Program Code: 201.010

No. of years for Escalation = 0

	Current Values	Rate (%)	Escalation Factor		Escalated Values
A. Acquisition, including excess lands, damages to remainder(s) and Goodwill	$0	5.0	1.00	-	$0
B. Utility Relocation (State Share)	$0	5.0	1.00	-	$0
C. Relocation Assistance	$0	5.0	1.00	-	$0
D. Clearance/Demolition	$0	7.0	1.00	-	$0
E. Title and Escrow Fees	$0	4.0	1.00	-	$0
TOTAL RIGHT OF WAY** ITEMS=	$0				$0
					(Escalated Value)

Anticipated Date of Right of Way Certification: 0/0/00
(Date to which Values are Escalated)

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: Mohammad Hashem (Print or Type Name) Phone: 243-3574 0/0/00 (Date)

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

APPENDIX E

Long Form - Storm Water Data Report

Dist-County-Route: 06 – Mad - 99

Post Mile Limits: PM 20.2/21.6 & PM 22.6/22.7

Project Type: Median Thrie Beam Barrier

Project ID (or EA): ID #0600020447 (06-0N200K)

Program Identification: 201.010

Phase: ☒ PID ☐ PA/ED ☐ PS&E

Regional Water Quality Control Board(s): **Central Valley Region (5F)**

Is the Project required to consider Treatment BMPs? Yes ☐ 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 30 days prior to the projects RTL date. List RTL Date:_____

Total Disturbed Soil Area: 2.2 ac Risk Level: 1

Estimated: Construction Start Date: 1/17/2014 Construction Completion Date: 5/19/2014

Notification of Construction (NOC) Date to be submitted:_____

Erosivity Waiver	Yes ☐	Date:_____	No ☒
Notification of ADL reuse (if Yes, provide date)	Yes ☐	Date:_____	No ☒
Separate Dewatering Permit (if yes, permit number)	Yes ☐	Permit #_____	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 date upon which recommendations, conclusions, and decisions are based. Professional Engineer or Landscape Architect stamp required at PS&E.

M. Hashem — 8/03/11

Mohammad Hashem, Registered Project Engineer — Date

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

Robert F. Hull, Project Manager — 8/03/11 — *Date*

for (AKMAL MOSTAFA) — 8/3/11

Bill Moses, Designated Maintenance Representative — *Date*

8/3/11

Brad Cole, Designated Landscape Architect Representative — *Date*

8-03-11

Marissa Nishikawa, Regional Design SW Coordinator or Designee — *Date*

[Stamp Required for PS&E only)

ATTACHMENT-G

Risk Input Sheet

DIST- EA 06-0N200_				Project Name: Fairmead Median Barrier										Project Manager: Robert F. Hull				Date Register Created: 09/01/11				Date Register Last Updated:			
				CO - RTE - PM 06-MAD-99 – PM 20.2/21.6 and 22.6/22.7										Telephone: 559-243-3443											
Item	Risk ID	Status of Risk	Opportunity or Threat	RBS Risk Category	Date Risk Identified	Risk Description	Root Cause(s)	Objective	Probability (P)	L/H/L	Cost/Time Impact Value	Impact (I)	Overall Risk Rating	Risk Owner	Risk Owner Phone	Risk Owner Mobile Phone	Risk Owner Email Address	Risk Trigger(s)	Strategy	Response Actions	Adjusted Cost/Time Impact Value	Primary WBS	Additional WBS	Status Date & Review Comments	Next Review Date
AUTO	AUTO	DROP	DROP	DROP	POP UP on DBL CLICK	MANUAL ENTRY	MANUAL ENTRY	DROP	DROP			DROP	AUTO	MANUAL ENTRY	MANUAL ENTRY	MANUAL ENTRY	MANUAL ENTRY	MANUAL ENTRY	DROP	MANUAL ENTRY			MANUAL ENTRY	MANUAL ENTRY	POP UP on DBL CLICK
1	06-0N200_-01	Active	Threat	DESIGN	09/01/11	Traffic Operations may want to add a sign structure to alert motorists of left side connector	??	SCOPE	5=Very High (60-99%)			3 =Med		Mohammad Hashem	243-3574		Mohammad.Hashem@dot.ca.gov	Request from Traffic Ops	ACCEPT						
2	06-0N200_-02	Active	Threat	DESIGN	09/01/11	Canal crossing in Location 1 may need to be designed around a too shallow	??	COST	1=Very Low (1-9%)		??	2 =Low		Mohammad Hashem	243-3574		Mohammad.Hashem@dot.ca.gov		ACCEPT					
3	06-0N200_-03	Active	Threat	DESIGN	09/01/11	Change in economy may cause sharp rise in escalation rates, greater than assumed		COST	2=Low (10-19%)		$150,000 max	2 =Low		Mohammad Hashem	243-3574		Mohammad.Hashem@dot.ca.gov		ACCEPT					
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5																		ATTACHMENT-H							
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