



CAPM Project Scope Summary Report

Palo Cedro CAPM • Preventive Maintenance

02-SHA-44 PM R7.5/R14.5
 20.XX.201.121
 PPNO 3465
 02 0002 0284
 02-4E430
 2011



PROJECT LOCATION

In Shasta County at and near Palo Cedro from 0.1 mile east of Cow Creek Bridge to 0.1 mile east of Bear Creek Bridge



Approval Recommended:

Phil Baker 9-9-11

PHIL BAKER, P.E.
Project Manager, District 2

Date

Ed Lamkin

ED LAMKIN, P.E.
Deputy District Director
Maintenance and Operations, District 2
SHOPP Program Manager

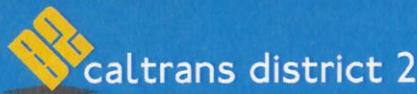
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Approved By:

John Bulinski 9/9/11

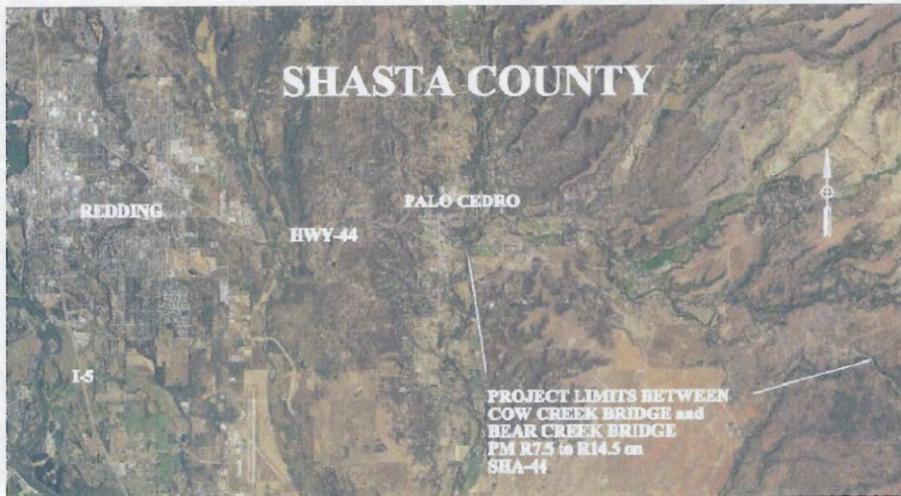
JOHN BULINSKI, P.E.
District Director, District 2

Date



02 – SHA – 44, PM R7.5 to R14.5
20.XX.201.121
EA 02-4E430
PPNO 3465
August/2011

Vicinity Map



On Route

SHA-44

Between

PM R7.5

And

PM R14.5

In Shasta County

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1. INTRODUCTION AND BACKGROUND

This project proposes to overlay the pavement on State Route (SR) 44 in Shasta County from PM R7.5/R14.5 with 0.2' of Terminal Blend Rubberized Hot Mix Asphalt and a 0.1' Open Grade Terminal Blend Rubberized Hot Mix Asphalt friction course. Guardrails and guardrail end treatments will be reconstructed to meet current standards. Shoulder backing, and delineation will be placed as needed. Approximately 45 working days are estimated to complete this project. Traffic control will be required for the same amount of time.

Project Limits:	02-SHA-44-PM R7.5/R14.5
Structures:	No structure work
Capital Costs:	\$5.2 m escalated to \$5.8 m FY 15/16
Right of Way Costs:	\$92,500 escalated to \$111,000
Funding Source & Program Year:	121 Program in the SHOPP Anticipated program year: 2012
Number of Alternatives:	1 plus no build
Recommended Alternative (for programming and scheduling):	Alternative A
Type of Facility:	Two lane conventional highway
Anticipated Environmental Approval Document:	CEQA – Categorically Exempt; NEPA – Categorical Exclusion
Construction Year:	2016
Number of Working Days:	45
Cost/ lane mile:	\$379,000 - \$422,000
Performance Measures:	14 Lane Miles



Eastbound at PM 12.55.



Eastbound at Kirkman Road PM R14.1.

2. RECOMMENDATION

It is recommended that Alternative A be approved for funding purposes.

3. PURPOSE AND NEED STATEMENT

Need:

Pavement within the project limits is exhibiting minor distress and ride quality is deteriorating.

Purpose:

Extend the existing pavement life by 5 to 7 years and improve the ride quality.

4. EXISTING FACILITY, DEFICIENCIES AND TRAFFIC DATA

4A. Condition of Existing Facility:

(1) Traveled Way Data

PMS Category (1-29) 7 Priority Classification (.1-.4) 0.2

International Ride Index 87 to 170

*Flexible Pavement:

* From latest PMS-Pavement Condition Inventory Survey Data.

Alligator B Cracking % 0 - 100

Patching % 0 - 19

Rutting Yes

Locations(s) of subsurface or ponded surface-water:

Remarks:

Some drainage issues were identified in IRDAP # 1998 written on 04/01/2003. Surface water ponds at the intersection of Kirkman Road and Highway 44, PM 14.1.

Pedestrian Facility Data

Remarks:

There are no pedestrian facilities within the project limits.

4B. Structure Information:

No structure work is anticipated.

4C. Vehicle Traffic Data:

The following accident information was obtained for the post mile limits between PM R7.5 and PM R14.5 on SR44 in Shasta county from TSN for the 36-month period between 01/01/07 and 12/31/09.

Sha-44 PM R7.5/R14.5

Accident Rates*	Actual	Average
Total Accident Rate (acc/mvm)	0.51	1.18
F+I Accident Rate (acc/mvm)	0.18	0.58
Fatal Accident Rate (acc/mvm)	0.000	0.032

*acc/mvm accidents per million vehicle miles

5. ALTERNATIVES

5A. CAPM Strategy:

ALTERNATIVE A

This project proposes to dig out areas of localized distressed pavement to a depth of 0.33' and replace them with Hot Mix Asphalt (HMA), seal cracks and overlay the pavement with 0.2' of Dense Grade Type A Terminal Blend Rubberized Hot Mix Asphalt and a 0.1' Open Grade Terminal Blend Rubberized Hot Mix Asphalt friction course. Guardrails and guardrail end treatments will be reconstructed to meet current Standards. Digouts will not exceed 20% of the project cost. A typical section is provided in the appendix.

At the intersection of Kirkman Road and State Route 44 the cut slope will be recessed away from the driveway to provide a 5' gutter, the slope will be laid back at 2:1, curb and gutter will be placed and the driveway will be paved to re-establish the crown.

In addition, 12 culvert locations have been identified as needing varying amounts of work. This work ranges from placing rock at the outlet to complete culvert replacement. If significant issues that will increase cost or cause a delay are discovered at a particular location, this location should be omitted.

If grindings generated from this project cannot be used as shoulder backing, Field Maintenance has indicated that they would like to have them. Grindings should be stockpiled at the southwest corner of the Shasta 44 and Millville Plains Road intersection. Appropriate Best Management Practices should be incorporated.

No-Build ALTERNATIVE

This alternative would allow for continued pavement deterioration and increased maintenance cost.

5B. Environmental Compliance:

It is anticipated that a Categorical Exemption will fulfill CEQA requirements and that a Categorical Exclusion would fulfill the NEPA requirements for this project. We do not have an environmental determination at this time.

5C. Hazardous Waste:

	An Initial Site Assessment (ISA) has been conducted regarding the above referenced project.	
	Treated wood waste, guard rail posts and so on, must be disposed of at an appropriately permitted disposal facility.	

The proposed project is not within or impacting any site on the Cortese List.

5D. Other Agencies Involved (Permits/Approvals from Fish & Game, Corps of Engineers, Coastal Commission, etc.):

The proposed drainage work may require coordination with the Regional Water Quality Control Board, the California Department of Fish and Game, and the United States Army Corps of Engineers.

5E. Right of Way Issues (include utilities):

It will be necessary to acquire approximately 9 parcels of property from private individuals to perfect State's title to highway easement. Permits to Enter will be required to conform the 45 driveways located within the project limits.

One telephone pole will need to be relocated at Kirkman Road.

5F. Railroad Involvement:

None

5G. What are the consequences of not doing this entire project?

Both the condition of pavement and ride quality will continue to deteriorate. Maintenance cost will increase and an expensive pavement rehabilitation project will be required much sooner.

5H. Vehicle Detection Systems:

There are two locations with traffic census loops: PM R10.6 and R10.9, a total of four loops. These loops will likely be damaged by construction and need to be replaced.

In addition, loop detector #210 currently located on the west side of Cow Creek will be relocated to the east side at approximate PM R7.5.

NOTE		CAPITAL & SUPPORT COSTS BY PROGRAM AND PROJECT FUNDING COMPONENT (Palo Cedro CAPM)									
Please provide input to all yellow cells											
Program	Component	"Baseline" (Original Identified Hours and Funding)									
EA 4E430 EFIS 0200020284		Planned (Hours)	Loaded Rate Estimate (\$/Hr.)	Program Funding by Component (x1000)			Support/Capital (%)				
				Prior Allocation	Initial Allocation Expectation	Total Component Funding					
201.121	PA&ED	1,675	\$96.00	\$0	\$107	\$54	\$160	2.71%			
201.121	PS&E	3,680	\$98.00	\$0	\$240	\$121	\$360	6.09%			
201.121	RW	2,606	\$83.00	\$0	\$144	\$72	\$220	3.72%			
201.121	CON	3,490	\$96.00	\$0	\$223	\$112	\$340	5.75%			
SUPPORT SUBTOTAL		11,451		\$0	\$714	\$359	\$1,080	18.27%			
		Baseline	Escalation	Total	PPM Deputy Directors Initials <u>SC</u> <u>9/1/11</u>						
201.121	RW Capital	\$93	\$18.0	\$111							
201.121	Construction	\$5,200	\$600.0	\$5,800							
201.121	Contingencies (20%)	\$0	\$0	\$0							
CAPITAL SUBTOTAL		\$5,293	\$618	\$5,911							
TOTALS				\$6,991							
Rate Information		Input	Historic Program Support/Capital Cost Data (%)								
Capital Contingency Rate %	20.00%	Lowest Similar Project									
ICRP Rate %	33.47%	Highest Similar Project									
Escalation Rate Construction	5.00%	Average Similar Project									
Escalation Rate RW	10.00%	Cumulative 2010 SHOPP Support/Capital									
# of years to escalate	2	24%									

6B. Project Schedule:

Milestones	Delivery Date (Month, Day, Year)
Approved PID	9/1/11
Programmed Project	11/1/11
Begin Environmental	7/1/12
Regular Right of Way	2/1/13
PA ED	3/1/13
Right of Way Certification	9/1/14
P & E	10/15/14
PS & E	2/15/15
Ready to List	6/15/15
Advertise	8/15/15
Award	11/15/15
Approved Contract	12/15/15
CCA	11/1/16
End Contract	11/1/17

It is proposed to program this project in the 2012 SHOPP in the 15/16 fiscal year.

6A. Project Reviewed by:

District Maintenance Lance Brown Date 5/27/2011

District Materials Byron Berger Date 7/27/2011

HQ Pavement Program Advisor Brian Weber Date 5/27/2011

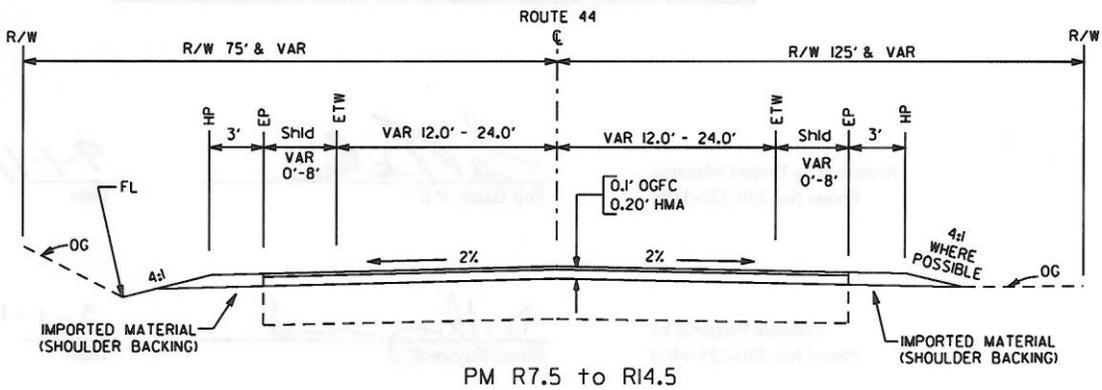
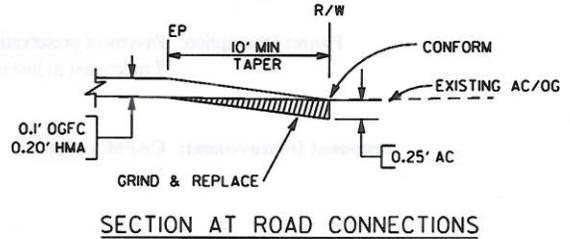
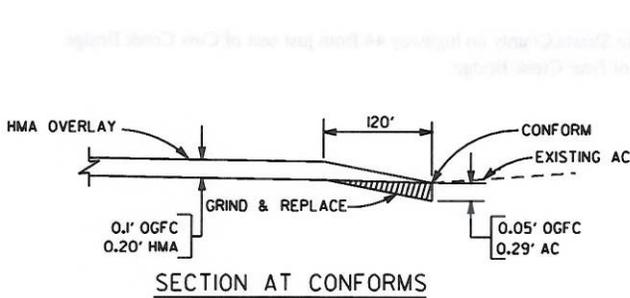
HQ Design Coordinator/Reviewer Heidi Sykes Date 7/22/2011

HQ Design Coordinator/Reviewer Jim DeLuca Date 7/22/2011

Attachments

- A: Typical Cross Section
- B: Preliminary Cost Estimate
- C: Environmental Compliance Document
- D: Right of Way Data Sheet
- E: Project Threat and Opportunity Listing
- F: Transportation Management Plan Data Sheet

OGFC = OPEN GRADED FRICTION COURSE
 HMA = HOT MIX ASPHALT
 AC = ASPHALT CONCRETE



ATTACHMENT A	
TYPICAL CROSS SECTION	
NOT TO SCALE	EA: 4E430K

**PRELIMINARY
PROJECT COST ESTIMATE SUMMARY**

DIST-CO-RTE: 02-SHA-44
PM: R7.5 - R14.5
EA: 02-4E430K

Type of Estimate: CAPM PSSR

Program Code: 20.XX.201.121

Project Description: Pavement preservation in Shasta County on highway 44 from just east of Cow Creek Bridge
7 miles east to just east of Bear Creek Bridge.

Proposed Improvement: CAPM overlay

ALTERNATIVE A: TOTAL CONSTRUCTION COST

ROADWAY ITEMS: \$5,190,000

STRUCTURE ITEMS: \$0

SUBTOTAL CONSTRUCTION: \$5,190,000

RIGHT-OF-WAY: \$92,500

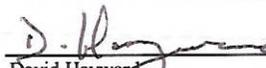
TOTAL PROJECT COST: \$5,300,000

Reviewed by Project Manager
Phone No. 530-225-3180


Phil Baker, P.E.

9-1-11
Date

Estimate Prepared by
Phone No. 530-225-4402


David Hayward

9-1-11
Date

**PRELIMINARY
PROJECT COST ESTIMATE SUMMARY**

DIST-CO-RTE: 02-SHA-44
PM: R7.5 - R14.5
EA: 02-4E430K

I ROADWAY ITEMS

Section 1: Earthwork

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>
Roadway Excavation	270	CY	\$50	\$13,500
Imported Borrow	0	CY	\$40	\$0
Imported Material (Shoulder Backing)	5,390	TON	\$35	\$188,700

Total Earthwork (Section 1): \$202,200

Section 2: Structural Section

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>
Class 2 Aggregate Base	0	TON	\$40	\$0
Rubberized Asphalt Concrete (Open Graded)	9,200	TON	\$100	\$920,000
Rubberized Asphalt Concrete (Type D)	20,750	TON	\$95	\$1,971,300
Replace Asphalt Concrete Surfacing	2,000	CY	\$300	\$600,000
Tack Coat	120	TON	\$300	\$36,000
Cold Foam In-Place Recycling	0	SQYD	\$0	\$0
Stabilizing Agent (Foamed Asphalt)	0	TON	\$550	\$0
Stabilizing Agent (Cementitious Material)	0	TON	\$150	\$0
Cold Plane Asphalt Concrete Pavement	1,220	SQYD	\$10	\$12,200
Remove Asphalt Concrete Dike	290	LF	\$5	\$1,500
Place HMA Dike (Type A)	230	LF	\$10	\$2,300
Place HMA Dike (Type F)	290	LF	\$6	\$1,700
Rumble Strip (AC, ground-in indentations)	0	STA	\$35	\$0

Total Structural Section (Section 2): \$3,545,000

Section 3: Drainage

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>
	1	LS	\$100,000	\$100,000

Total Drainage (Section 3): \$100,000

Section 4: Specialty Items

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>
Progress Schedule (CPM)	1	LS	\$0	\$0
Construction Site Management	1	LS	\$5,000	\$5,000
Time Related Overhead	45	WKDAY	\$300	\$13,500
Prepare Water Pollution Control Program	1	LS	\$1,000	\$1,000
Lead Compliance Plan	1	LS	\$2,000	\$2,000

Total Specialty Items (Section 4): \$21,500

**PRELIMINARY
PROJECT COST ESTIMATE SUMMARY**

DIST-CO-RTE: 02-SHA-44
PM: R7.5 - R14.5
EA: 02-4E430K

Section 5: Traffic Items:

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>
Traffic Control System	1	LS	\$80,000	\$80,000
Construction Area Signs	1	LS	\$10,000	\$10,000
Portable Changeable Message Sign	2	EA	\$2,000	\$4,000
Reconstruct MBGR (wood posts)	1,050	FT	\$15	\$15,750
End Treatments	6	EA	\$3,500	\$21,000
Metal Beam Guard Railing	75	LF	\$80	\$6,000
Remove Pavement Marking	630	SQFT	\$5	\$3,150
Thermoplastic Pavement Marking	630	SQFT	\$10	\$6,300
4" Two-Component Paint Traffic Stripe	150,000	LF	\$0.50	\$75,000
Pavement Marker (Retroreflective Recessed)	660	EA	\$10	\$6,600
Pavement Marker (Retroreflective)	1,960	EA	\$4	\$7,840
Deliniators	0	EA	\$100.00	\$0
Traffic Monitoring Station Detector Loops	5	EA	\$3,000	\$15,000
State Furnished Materials	1	LS	\$1,000	\$1,000

Total Traffic Items (Section 5) : \$251,640

SUBTOTAL (Sections 1-5) : \$4,120,340

Section 6: Minor Items:

Subtotal of sections 1-5= \$0 1% (0%-10%)

Total Minor Items (Section 6): \$0

Section 7: Roadway Mobilization:

Subtotal of sections 1-5=
Minor Items=
Sum= \$0 10% (0%-10%)

Total Roadway Mobilization (Section 7): \$0

**Section 8: Roadway Additions:
Supplemental**

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>
Maintain Traffic	1	LS	\$40,000	\$40,000

Subtotal of sections 1-5=
Minor Items= \$40,000
Sum= \$40,000 (0%-10%)

Total Supplemental Funds (Section 8): \$40,000

Contingencies

Subtotal of sections 1-5=
Minor Items=
Sum= \$4,119,340 25% \$1,030,000

Total Roadway Additions (Section 8): \$1,030,000

TOTAL ROADWAY ITEMS (Total of Sections 1-8): \$5,190,000

**PRELIMINARY
PROJECT COST ESTIMATE SUMMARY**

DIST-CO-RTE: 02-SHA-44
PM: R7.5 - R14.5
EA: 02-4E430K

II STRUCTURES ITEMS

	STRUCTURES		
	No. 1	No. 2	No. 3
Bridge Name	XXXXXXXXXX	-	-
Structure Type	-	-	-
Width (new or width addition)	0 ft	0 ft	0 ft
Span Lengths	0 ft	0 ft	0 ft
Total Area	0 sq ft	0 sq ft	0 sq ft
Footing Type (Pile/Spread)	-	-	-
Cost per square foot	0 \$/sqft	0 \$/sqft	0 \$/sqft
	(Include 10% Mobilization & 25% Contingency)		
Total Cost for Structure	\$0	\$0	\$0
Bridge Removal	\$0	\$0	\$0
	Subtotal Structure Items:		\$0

III RIGHT OF WAY

	<u>Current Values</u> (Future Values)	<u>Escalation Rates</u>	<u>Escalated Values</u>
Acquisition, including excess lands and damages to remainder(s)	\$67,500	1.05 %	\$80,957
Mitigation acquisition & credits	\$15,000	1.05 %	\$17,990
Project Development Permit Fees	\$10,000	1.05 %	\$11,941
Utility Relocation (State share)	\$0	1.0 %	\$0
Clearance Demolition	\$0	0.0 %	\$0
Relocation Assistance	\$0	0.0 %	\$0
Title and Escrow fees	\$0	1.0 %	\$0
Construction Contract work	\$0	0.0 %	\$0
	Total right of Way (Current Cost)=		\$92,500
	Total right of Way (Escalated Cost)=		\$111,000

Mini-Preliminary Environmental Analysis Report

Project Information

District 02 County SHA Route 44 Post Mile R7.5/R14.5 EA 02-4E430K

Project Title: Palo Cedro Capital Maintenance

Project Manager Phil Baker Phone # (530) 225-3180

Project Engineer Dave Hayward Phone # (530) 225-4402

Environmental Branch Chief Ed Espinoza Phone # (530) 225-3308

Project Description

Purpose and Need: The pavement in this segment of highway has deteriorated and is showing localized areas of distress. The purpose of the project is to improve the ride quality and extend the service life of the pavement.

Description and Work: This Cap M project proposes to provide an overlay of 0.20' with a 0.10' open graded friction course from edge of pavement to edge of pavement. Work also includes placement of shoulder backing, culvert replacement, installation and perpetuation of AC dike, and upgrading the metal beam guard rail to meet current design standards.

Anticipated Environmental Approval:

CEQA

Categorical Exemption

NEPA

Categorical Exclusion

Summary Statement:

Environmental clearance will require approximately 16 months and 0.55 PYs to complete. It is anticipated that a Categorical Exemption will fulfill CEQA requirements, and that a Categorical Exclusion would fulfill the NEPA requirements for this project. The proposed drainage work may require the following permits and certifications: a 401 Water Quality Certification from the Regional Water Quality Control Board, and a 404 Nationwide Permit from the United States Army Corp of Engineers.

Special Considerations:

In order to identify environmental issues, constraints, costs and resource needs a mini-PEAR (Preliminary Environmental Analysis Report) was prepared for the project. It is important to note that all technical studies will be deferred to the Capital phases of the project. In addition, during project development, proposed staging areas, disposal sites, utility relocation plans, and construction site access requirements will be need to be included as part of this project. The cultural and biological studies for this report were limited to database searches and windshield surveys.

Biology: The majority of culverts appear to be roadside drainages that convey storm water away from the highway, however, one location, PM 11.76, does appear to be jurisdictional. Field studies will be required at all of the drainages to confirm the preliminary findings. A tree and vegetation removal window is not likely, as there does not appear to be a high potential for nesting within the environmental study limits.

Based on the location of this project, it is unlikely that any special status species or habitats will be affected.

Archaeology: The project area is considered to be located within an area of moderately high sensitivity for historical resources and moderate sensitivity for task specific locations such as prehistoric sites and camps. Previous surveys on a portion of the project right of way indicate two known resources. Additional surveys will need to be conducted. If impacts to resources cannot be avoided, a higher level of study and documentation would be required. Additional resources would be required for higher level studies.

Section 4(f): There are no 4(f) properties within the project limits.

Hazardous Waste: An Initial Site Assessment will need to be completed.

Water Quality: A water quality analysis will be needed for this project.

Air Quality: An air quality assessment will not be required.

Noise: A noise study will not be required.

Hydrology: A hydrology study will not be required, unless drainage patterns are altered.

Visual Resources: A visual impact analysis will not be required.

Cumulative Impacts: A cumulative impact analysis will not be required.

Permits:

If work is conducted within the OH WM of any jurisdictional feature, the following permits/certifications will be required: a 401 Water Quality Certification from the Regional Water Quality Control Board, and a 404 Nationwide Permit from the United States Army Corp of Engineers. If fish resources are found within jurisdictional waters a 1602 Streambed Alteration Agreement from the California Department of Fish and Game would also be required.

Mitigation:

Estimated mitigation costs will be developed as preliminary environmental analysis sheds light on potential values that might be impacted. Impacts to sensitive values will need to be quantified and cost estimates generated, based on current industry practices.

Disclaimer:

This report is not an environmental document. Due to resource constraints, only minimal information was provided from specialists. The above recommendations are based on the project description provided in this report. The discussion and conclusions provided by this mini-PEAR are approximate and are based on an in-house review of records to estimate the potential for probable effects. The purpose of this report is to provide a preliminary level of environmental analysis to supplement the PSRPR. Changes in project scope, alternatives, or environmental law will require a reevaluation of this report.

Reviewed by:



Environmental Office Chief

Date: 6/28/11



Project Manager

Date: 7/1/11

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY DATA SHEET

REVISED



Date: August 10, 2011

02-Sha-44 PM R7.5/R14.5
 E.A. 4E430
 Palo Cedro CapM

1. Right of Way Cost Estimate:

	Current Value Future Use	Escalation Rate	Escalated Value
A. Total Acquisition Cost	\$67,500	5%	\$80,957
B. Mitigation acquisition & credits	\$15,000	5%	\$17,990
C. Project Development Permit Fees	\$10,000	5%	\$11,994
Subtotal	\$92,500		\$110,941
D. Utility Relocation (State Share) (Owner's share: \$20,000)	\$0		\$0
E. Relocation Assistance (RAP)	\$0		\$0
F. Clearance/Demolition	\$0		\$0
H. Title & Escrow	\$0		\$0
I. Total Estimated Right of Way Cost	\$92,500	Rounded	\$111,000
J. Construction Contract Work	\$0		

2. Current Date of Right of Way Certification

May 1, 2015

3. Parcel Data:

Type	Dual/Appr	Utilities	RR Involvements
X 0		U4 - 1 1	None X
A 9		- 2 0	C&M Agrmt
B 0		- 3 0	Svc Contract
C 0	0	- 4 0	Easements
D 0	0	U5 - 7 2	Rights of Entry
		- 8 0	Clauses
Total 9		- 9 1	
Areas:			Misc. R/W Work
R/W: Unknown at this time			RAP Displ N/A
Excess: N/A	No. Excess Pcls: 0		Clear/Demo N/A
Mitigation: N/A			Const Permits 45
			Condemnation 0
			USA Involvement No

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY DATA SHEET

4. Are there any major items of construction contract work?

Yes _____ No X

5. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.).

Information provided to right of way engineering from district design is preliminary. The information provided allowed for an estimate of the number of parcels, but no areas. The properties are zoned agriculture and residential. The rights needed consist of temporary construction easements and permits to enter and construct. This data sheet accounts for only the minimum cost to acquire these parcels. Areas, parcel count, and dollars are all subject to change.

6. Are any properties acquired for this project expected to be rented, leased, or sold?

Yes _____ No X

7. Is there an effect on assessed valuation?

No X

Yes _____ Not Significant _____

8. Are utility facilities or rights of way affected?

Yes X No _____

9. Are railroad facilities or rights of way affected?

Yes _____ No X

10. Were any previously unidentified sites with hazardous waste and/or material found?

Yes _____ None Evident X

11. Are RAP displacements required?

Yes _____ No X

No. of single family _____ No. of business/nonprofit _____
 No. of multi-family _____ No. of farms _____

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

12. Are there material borrow and/or disposal sites required?

Yes _____ No X

13. Are there potential relinquishments and/or abandonments?

Yes _____ No X

14. Are there any existing and/or potential airspace sites?

Yes _____ No X

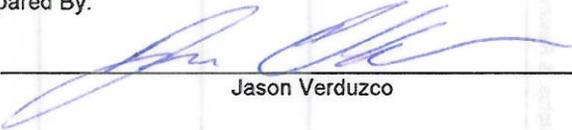
15. Indicate the anticipated Right of Way schedule and lead time requirements. (Discuss if district proposes less than PMCS lead time and/or if significant pressures for project advancement are anticipated.)

Right of Way Lead Time will require a minimum of 12 months after we receive first appraisal maps, utility conflict maps, and the necessary environmental clearance and freeway agreements have been approved and obtained. Additionally a minimum of 12 months will be required after receiving the last appraisal map to Right of way for certification.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY DATA SHEET

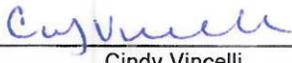
16. Is it anticipated that Caltrans will perform all Right of Way work?
 Yes X No _____

Evaluation Prepared By:

Right of Way: 
 Jason Verduzco

Date 8/19/11

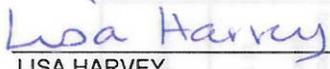
Reviewed By:

RW Project Coordinator: 
 Cindy Vincelli

Date 8-10-11

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

RECOMMENDED FOR APPROVAL


 LISA HARVEY,
 Senior Right of Way Agent
 Project Delivery Branch
 Redding

8-18-2011
 Date

APPROVED:


 KAREN HAWKINS
 North Region Right of Way Manager
 Eureka/Redding

8/19/11
 Date

PROJECT THREAT AND OPPORTUNITY LISTING									
Identificaton		Qualification / Quantification			Response Strategy			Control	
ID #	Threat / Opportunity Event	(P)robability	(I)mpact	(E)xposure	Strategy (4)	Risk Response Actions including Advantages & Disadvantages of the action	Risk Manager Responsibility	Status Interval or Milestone Checks	Date, Status, & Review Comments
	(X) Refers to ESI Risk Management Tool Number (1) & (2)	(H)igh	(M)edium	(L)ow	(5)				
		(P) % or H/M/L	(I) \$1000 or H/M/L	(E) (P) x (I) or P / I		+Accept +Minimize Probability +Minimize Impact +Deflect +Avoid			
1	There are 12 culvert locations with unknown levels of R/W and environmental involvement.	M	H	MH	Minimize	Evaluate the culvert locations in the zero phase and possibly eliminate locations requiring environmental permits or difficult RW acquisition. Sufficient support and capital resources will be budgeted for to address this risk.	Phil Baker/Tom Balkow and Lisa Harvey		
2	W-beam work is needed at a few project locations. It is not sure as to whether adequate backing exists at each of these locations.	M	M	MM	Minimize	Each location is being field reviewed prior to PID approval to ensure proper backing exists.	Mark Miller/Dave Hayward		
3	There are approximately 50 driveways over the length of the project. Conforming the proposed overlay at each driveway can require surveys and design along with additional construction capital.	H	M	HM	Accept	Each driveway will be evaluated and properly scoped in the zero phase. Sufficient support and capital resources will be budgeted for to address this risk.	John Martin		
4	There is a localized flooding issue near the intersection of Route 44 and Kirkman Road.	M	L	ML	Accept	This location is being field reviewed prior to PID approval to ensure proper scoping is done.	Mark Miller/Dave Hayward		

TRANSPORTATION MANAGEMENT PLAN DATA SHEET

To: Dave Hayward
Project Engineer
D2 Advance Planning, Redding, MS-4

Date: July 29, 2011
EFIS: 02000202842
EA: 02-4E430

From: Department of Transportation
District 2 - Office of Traffic Management

Loc: SHA-44-PM R7.5/R14.5
Work: Palo Cedro to Millville CAPM

1. POLICY

The Caltrans Deputy Directive titled "Transportation Management Plans" (DD-60) establishes the current policy for mitigating traffic impacts resulting from construction, maintenance, encroachment permit, planned emergency restoration, locally or specially funded, or other activities. The directive states that Transportation Management Plans (TMPs) and contingency plans shall be completed for all work activities on the State highway system. The purpose of this Transportation Management Plan Data Sheet is to ensure all anticipated TMP costs are included in the Project Initiation Document (PID).

2. SCOPE OF WORK

On 7.0 CL miles of SR 44 from just east of the Deschutes interchange to just east of the Bear Creek Bridge, this SHOPP project includes the following operations:

- Dig-Outs - Replace localized areas of pavement failure up to 0.33 ft deep
- Seal cracks wider than 0.24 in
- Paving - Place 0.2 ft of HMA and 0.1 ft open graded friction course (EP to EP)
- Place shoulder backing
- Upgrade/replace MBGR and end treatments to meet current standards
- Upgrade/replace existing culverts as needed
- Modify slope and driveway at Kirkman Rd/SR 44 intersection
- Replace signs, markers, and delineation
- Structures (Bear Creek Br) - Maintenance needs are yet to be determined
- Census - Replace loops at two locations and install 1 new station

Approx. 45 working days is estimated to complete this project, with the same number of days requiring traffic control. Construction is scheduled to occur between June 1 and September 30, 2015

3. FACILITY

ROADWAY: SR 44 is designated as a 2-lane conventional highway that serves as the primary route between Redding and Susanville. Alignment consists of long tangents connected by long sweeping curves through rolling terrain. Within the project limits, land use is primarily rangeland populated with ranchettes. Two 12-ft wide paved lanes with 8-ft wide paved shoulders are provided. The regulatory speed limit at the beginning of the project is 65 mph, however at PM 10.7 speed is reduced to 55 mph (and remains at 55 through the end of the project). There are no passing lane segments within the project.

TRAFFIC VOLUMES: The 2009 AADT for this location is 4,200 vehicles (both directions). Traffic volumes for SR 44 east of the Deschutes I/C indicate a strong commute pattern during weekdays. Counts taken in August 2009 from TMS #210 located at PM 7.37 (just west of the Cow Creek Br) indicate 556 vph WB 7-8 a.m. and 549 vph EB 5-6 p.m. Weekend peak volume for either direction is approx. 350 vph.

STRUCTURES: The project limits only include the following structure. At this time it is not known if the bridge deck will be subject to work (i.e., place polyester overlay on deck).

CO-RTE-PM	STRUCT NO	NAME	LENGTH (ft)	WIDTH (ft)
SHA-44-PM R14.45	06-0080	Bear Creek Bridge	232	44

3. FACILITY (Cont.)

CENSUS LOOPS: The following table shows census loops existing within the project limits that will need be replaced by the project. Note that a new station is requested for inclusion in the project scope. Further information regarding this equipment can be obtained from Karen Carmo, Traffic Census, at 530-225-3042.

ID	ACTUAL LOCATION CO-RTE-PM	TYPE	DESCRIPTION	ACTION
New	SHA-44-PM R7.XX	Control	TBD	Install new perm station east of Cow Creek Bridge (2 loops, cabinet, PB)
#P14	SHA-44-PM R10.602	Profile	886 ft west of Millville Plains Rd (2 loops)	Will be damaged by project - Replace
#P15	SHA-44-PM R10.924	Profile	815 ft east of Millville Plains Rd (2 loops)	Will be damaged by project - Replace

ITS FIELD ELEMENTS: The following ITS field elements exist within the project limits. No new elements are being requested for inclusion in the project scope. Further information can be obtained from Ian Turnbull, Chief of the Office of ITS Engineering & Support at 530-225-3320.

ELEMENT	LOCATION CO-RTE-PM	DESCRIPTION	ACTION
HAR FLASHER	SHA-44-PM R8.0	Located near Silver Bridge Road (For WB traffic)	Outside of Roadway Prism - not likely to be damaged Protect In-Place

4. TRAFFIC IMPACTS

TRAFFIC: Operations will be carried out under reversing, one-way traffic control with a pilot car and flaggers (Std Plan T-13). Based on current scope, all operations can be carried out during typical 10-12 hour work shifts; no 24-hour traffic control is anticipated for this project. Traffic will always be on a paved surface. Based on the traffic volumes for this location, a 1.0 mile long or 2.0 mile long closure would create a 9 minute or 17 minute delay, respectively. Depending on the length of the closure allowed, daytime lane closures could be accommodated without significant impacts.

ROAD CONNECTIONS & DRIVEWAY ACCESS: This segment of SR 44 has a few local arterial roads and numerous driveways with direct access to the highway. When active operations are at the road connections and/or a driveway, access may be temporarily blocked for up to 30 minutes one or two times during a 10-12 hour work shift.

CORRIDOR: The corridor for this project is considered to be between Redding and Susanville, for which the D2 DTM has established a maximum corridor delay limit of 45 minutes. Based on current information, there are no other projects scheduled for construction in 2015. Thus, at this time the maximum corridor limit should not be exceed, nor are any other direct traffic control conflicts noted.

TRUCKS: Between SHA-44-PM 0.0 and PM 10.8, SR 44 is part of the STAA national network. Between SHA-44-PM 10.8 and the SR 44 Jct, SR 44 is approved only for California Legal Trucks (CLTs) up to 8.5 ft wide. During operations trucks will be subject to the same traffic control as passenger vehicles (Std Plan lane closures). This project does not include use of K-rail that could reduce horizontal clearance; thus no truck restrictions are expected.

PEDESTRIANS & BICYCLISTS: An occasional pedestrian or bicyclist can be expected on this part of SR 44. During operations, pedestrians can travel past the work zone using the unpaved shoulder. Bicyclists will be subject to the same traffic control and vehicles and will be subject to stop and delay and to travel through the closure with the vehicle queue. No significant impact to these user groups are expected.

5. TRAFFIC IMPACT MITIGATION

MAINLINE TRAFFIC: Experience has shown that when peak volumes exceed 450 vph, one-way traffic control can be quickly overwhelmed unless the length of the closure and stop times are tightly controlled. For this reason, Std Plan T-13 lane closures will likely be subject to some restrictions so that peak commute times are avoided. Lane Closure Charts may be required by the TMP. Also, the length of the closure will be specified to keep motorist delays reasonable. During operations, a minimum 12-ft lane shall be provided (same as existing conditions), with the full width of the roadway provided when operations are not in progress. As the construction season approaches and corridor impacts further determined, the D2 DTM may allow a longer closure to maximize production.

PCMSs & ADVANCE FLAGGERS: During peak hour traffic, there is the potential for queues to build up beyond the limits of traffic control. To alert motorists of the potential for stopped traffic ahead, PCMSs and advance flaggers are recommended for inclusion in this project.

ROAD CONNECTIONS: A minimum 12-ft wide lane shall be maintained at each public road connection during operations. Delays to motorists on local roads will be kept to the same as mainline delays.

CORRIDOR: Per the D2 DTM, lane closures on a 2-lane conventional highway are not allowed within 5.0 miles of each other to allow traffic queues to disperse between closures and to avoid traffic control conflicts between projects. As needed, the TMP for any conflicting project will include the Cooperation, Order of Work, and additional traffic control restrictions to avoid direct traffic control conflicts and minimize cumulative delays on the corridor.

TMP PUBLIC INFORMATION CAMPAIGN: Outreach campaigns are generally focused on reducing traffic volumes through the closure; for this project the primary objective is to inform the local commuters of the construction schedule, traffic control, and anticipated delays.

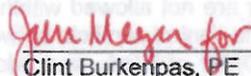
WORKER SAFETY MEDIA CAMPAIGNS: Worker safety media campaigns have been shown to reduce work zone vehicle collisions. Reducing work zone collisions will increase public and worker safety and reduce incident related congestion. With safety and reliability being the Departments number 1 and 2 goals respectively, it is appropriate for construction funding be set aside for worker safety media advertisements.

COSTS: In addition to costs for Std Plan traffic control, the following should be included in the PID estimate:

- **ADVANCE FLAGGERS:** Due to the potential for queues to build up past the limits of traffic control, advance flaggers are recommended.
- **PCMSs:** Include 2 PCMSs (one unit for each approach direction).
- **CENSUS LOOPS:** Include replacement costs for existing loops (#P154 & #P15), and for relocation of station #210. (Contact Karen Carmo, Traffic Census, at 530-225-3042 for costs).
- **WORKER SAFETY CAMPAIGN:** Include \$500 in item #066063-Transportation Management Plan Public Information for worker safety media campaigns.
- **TMP PUBLIC INFORMATION:** Include \$1,000 in item #066063 – TMP Information to allow development of a press release the D2 PIO can distribute to local media.

TMP: A TMP is required for this project and should be requested at a time when the design is complete enough to determine specific traffic impacts, but is early enough to make design changes/additions required for traffic mitigation. The TMP for this project will summarize the traditional traffic handling practices and other traffic mitigation strategies that will be implemented during construction that will include, but is not limited to: 2 week pre-notification of closures (Lane Closure Schedule), DTM evaluation of cumulative traffic corridor delays for multiple projects, California Highway Information Network (CHIN), Road Work Information Bulletin (RIB), Local Agency contacts, Permanent Changeable Message Sign (CMS) locations, permanent and portable Highway Advisory Radio (HAR) locations, CHP Commander contacts, incident response (accident, natural event) contacts, contingency plans, and maintenance contacts.

This TMP Data Sheet was prepared by Jan Meyer, ATP. I have personally reviewed this TMP Data Sheet and all supporting information. I certify that the assumptions are reasonable and proper subject to the limiting conditions set forth and I find the Data Sheet complete and current.



Clint Burkenpas, PE
Chief, Office of Traffic Management
District 2
530-225-3245

8-1-11
Date



Ian Turnbull
Chief, Office of ITS Engineering & Support
District 2
530-225-3320

8-1-11
Date