

ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017
PROJECT BASELINE AGREEMENT

State Route 46 Expressway Conversion - Antelope Grade Segment

Resolution _____ TCEP-P-2021-07B _____
(will be completed by CTC)

1. FUNDING PROGRAM

- Active Transportation Program
- Local Partnership Program (Competitive)
- Solutions for Congested Corridors Program
- State Highway Operation and Protection Program
- Trade Corridor Enhancement Program

2. PARTIES AND DATE

- 2.1 This Project Baseline Agreement (Agreement) for the *State Route 46 Expressway Conversion - Antelope Grade Segment*, effective on, June 24, 2021 (will be completed by CTC), is made by and between the California Transportation Commission (Commission), the California Department of Transportation (Caltrans), the Project Applicant, *Caltrans*, and the Implementing Agency, *Caltrans*, sometimes collectively referred to as the "Parties".

3. RECITAL

- 3.2 Whereas at its December 2, 2020 meeting the Commission approved the Trade Corridor Enhancement Program, and included in this program of projects the *State Route 46 Expressway Conversion - Antelope Grade Segment*, the parties are entering into this Project Baseline Agreement to document the project cost, schedule, scope and benefits, as detailed on the Project Programming Request Form attached hereto as Exhibit A and the Project Report attached hereto as Exhibit B, as the baseline for project monitoring by the Commission.
- 3.3 The undersigned Project Applicant certifies that the funding sources cited are committed and expected to be available; the estimated costs represent full project funding; and the scope and description of benefits is the best estimate possible.

4. GENERAL PROVISIONS

The Project Applicant, Implementing Agency, and Caltrans agree to abide by the following provisions:

- 4.1 To meet the requirements of the Road Repair and Accountability Act of 2017 (Senate Bill [SB] 1, Chapter 5, Statutes of 2017) which provides the first significant, stable, and on-going increase in state transportation funding in more than two decades.
- 4.2 To adhere, as applicable, to the provisions of the Commission:
- Resolution *Insert Number*, "Adoption of Program of Projects for the Active Transportation Program", dated _____
 - Resolution *Insert Number*, "Adoption of Program of Projects for the Local Partnership Program", dated _____
 - Resolution *Insert Number*, "Adoption of Program of Projects for the Solutions for Congested Corridors Program", dated _____
 - Resolution *Insert Number*, "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated _____
 - Resolution TCEP G-20-77, "Adoption of Program of Projects for the Trade Corridor Enhancement Program", dated December 2, 2020

- 4.3 All signatories agree to adhere to the Commission's Trade Corridor Enhancement Program, Guidelines. Any conflict between the programs will be resolved at the discretion of the Commission.
- 4.4 All signatories agree to adhere to the Commission's SB 1 Accountability and Transparency Guidelines and policies, and program and project amendment processes.
- 4.5 Caltrans agrees to secure funds for any additional costs of the project.
- 4.6 Caltrans agrees to report on a quarterly basis; after July 2019, reports will be on a semi-annual basis on the progress made toward the implementation of the project, including scope, cost, schedule, outcomes, and anticipated benefits.
- 4.7 Caltrans agrees to prepare program progress reports on a quarterly basis; after July 2019, reports will be on a semi-annual basis and include information appropriate to assess the current state of the overall program and the current status of each project identified in the program report.
- 4.8 Caltrans agrees to submit a timely Completion Report and Final Delivery Report as specified in the Commission's SB 1 Accountability and Transparency Guidelines.
- 4.9 All signatories agree to maintain and make available to the Commission and/or its designated representative, all work related documents, including without limitation engineering, financial and other data, and methodologies and assumptions used in the determination of project benefits during the course of the project, and retain those records for four years from the date of the final closeout of the project. Financial records will be maintained in accordance with Generally Accepted Accounting Principles.
- 4.10 The Transportation Inspector General of the Independent Office of Audits and Investigations has the right to audit the project records, including technical and financial data, of the Department of Transportation, the Project Applicant, the Implementing Agency, and any consultant or sub-consultants at any time during the course of the project and for four years from the date of the final closeout of the project, therefore all project records shall be maintained and made available at the time of request. Audits will be conducted in accordance with Generally Accepted Government Auditing Standards.

5. SPECIFIC PROVISIONS AND CONDITIONS

5.1 Project Schedule and Cost

See Project Programming Request Form, attached as Exhibit A.

5.2 Project Scope

See Project Report or equivalent, attached as Exhibit B. At a minimum, the attachment shall include the cover page, evidence of approval, executive summary, and a link to or electronic copy of the full document.

5.3 Other Project Specific Provisions and Conditions

In the event of a cost overrun the state will cover a share proportionate to the state contribution of the TCEP funding identified in the Project Programming Request (PPR) attached to this baseline agreement. (For example, if the state/regional TCEP funding share was a 40/60 ratio, the state may fund no more than 40% of the cost overrun.)

Attachments:

Exhibit A: Project Programming Request Form

Exhibit B: Project Report

SIGNATURE PAGE
TO
PROJECT BASELINE AGREEMENT

State Route 46 Expressway Conversion - Antelope Grade Segment

Resolution _____ TCEP-P-2021-07B



05/13/2021

Timothy M. Gubbins
District Director, California Department of Transportation, District 5
Project Applicant and Implementing Agency

Date

Toks Omishakin
Director, California Department of Transportation

Date

Mitchell Weiss
Executive Director, California Transportation Commission

Date

Amendment (Existing Project) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO					Date	05/13/2021 10:30:49	
Programs <input type="checkbox"/> LPP-C		<input type="checkbox"/> LPP-F	<input type="checkbox"/> SCCP	<input type="checkbox"/> TCEP	<input checked="" type="checkbox"/> STIP	<input type="checkbox"/> Other	
District	EA	Project ID	PPNO	Nominating Agency			
05	3307E	0518000075	0226L	Caltrans District 5			
County	Route	PM Back	PM Ahead	Co-Nominating Agency			
San Luis Obispo	46	57.300	60.800				
VAR	46			MPO		Element	
				SLOCOG		Capital Outlay	
Project Manager/Contact			Phone	Email Address			
David Rasmussen			805-835-6328	david.rasmussen@dot.ca.gov			

Project Title

SR 46 Expressway Conversion - Antelope Grade Segment

Location (Project Limits), Description (Scope of Work)

On State Route 46, in San Luis Obispo County near Cholame from east of State Route 46/41 Intersection east to Kern County Line.

Convert existing 2-lane conventional highway to 4-lane divided expressway.

Component	Implementing Agency
PA&ED	Caltrans District 5
PS&E	Caltrans District 5
Right of Way	Caltrans District 5
Construction	Caltrans District 5

Legislative Districts

Assembly:	33	Senate:	15	Congressional:	24
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Project Milestone	Existing	Proposed
Project Study Report Approved	06/16/2000	
Begin Environmental (PA&ED) Phase		07/02/2003
Circulate Draft Environmental Document	Document Type (ND/MND)/FONSI	01/30/2005
Draft Project Report		01/30/2005
End Environmental Phase (PA&ED Milestone)		06/29/2005
Begin Design (PS&E) Phase		08/01/2018
End Design Phase (Ready to List for Advertisement Milestone)		06/07/2023
Begin Right of Way Phase		07/01/2021
End Right of Way Phase (Right of Way Certification Milestone)		06/05/2023
Begin Construction Phase (Contract Award Milestone)		01/12/2024
End Construction Phase (Construction Contract Acceptance Milestone)		12/18/2026
Begin Closeout Phase		12/18/2026
End Closeout Phase (Closeout Report)		12/13/2028

Date 05/13/2021 10:30:49

Purpose and Need

Purpose: To reduce congestion, enhance safety, reduce driver frustration, provide safe-passing opportunities, facilitate efficient goods movement and enhance mobility for major east/west travel from the Central Coast and US 101 to the San Joaquin Valley and Interstate 5.

Need: This portion of SR 46 traverses rolling to mountainous terrain and includes sustained grades up to 6%. Heavy trucks and recreational vehicles comprise 20 percent of the traffic volume within the project limits. The limited opportunities in this segment to safely pass slower moving trucks or recreational vehicles contribute to driver frustration.

Based on current traffic volumes, the current facility within the project limits exceeds capacity. The projected volumes of traffic, most notably the number of trucks and recreational vehicles traveling the route, are higher than optimum levels recommended for a two-lane conventional highway. In addition, this roadway experiences even greater congestion on weekends when travel demand is the greatest. By providing additional lanes, the proposed project would reduce traffic congestion by improving the capacity of this heavily traveled east-west corridor.

The added lane in each direction would help to eliminate the traffic conflicts associated with vehicular movements on the existing two-lane conventional highway. Generally, four-lane facilities have fewer accidents per mile than two-lane conventional highways.

Lastly, the purpose of this four-lane expressway is to provide route continuity. Four project segments to the west of this project are completed with two more in design. All of these projects will improve SR 46 to a four-lane expressway and provide route continuity from US 101 to Interstate 5.

NHS Improvements <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Roadway Class 1	Reversible Lane Analysis <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Inc. Sustainable Communities Strategy Goals <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Reduce Greenhouse Gas Emissions <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	

Project Outputs

Category	Outputs	Unit	Total
Pavement (lane-miles)	Roadway lane miles	Miles	7.8

Date 05/13/2021 10:30:49

Additional Information

A Supplemental Environmental Document is in process.

Performance Indicators and Measures						
Measure	Required For	Indicator/Measure	Unit	Build	Future No Build	Change
Congestion Reduction	TCEP	Daily Vehicle Hours of Travel Time Reduction	Hours	523	1,360	-837
	TCEP	Daily Truck Trips	# of Trips	2,556	2,556	0
	TCEP	Daily Truck Miles Traveled	Miles	9,968	9,968	0
Throughput	TCEP	Change in Truck Volume That Can Be Accommodated	# of Trucks	761,025	585,460	175,565
	TCEP	Change in Rail Volume That Can Be Accommodated	# of Trailers	0	0	0
			# of Containers	0	0	0
	TCEP	Change in Cargo Volume That Can Be Accommodated	# of Tons	0	0	0
# of Containers			0	0	0	
System Reliability	TCEP	Truck Travel Time Reliability Index	Index	1.11	1.28	-0.17
	TCEP	Daily Vehicle Hours of Travel Time Reduction	Hours	523	1,360	-837
Velocity	TCEP	Travel Time or Total Cargo Transport Time	Hours	3.6	9.3	-5.7
Air Quality & GHG	LPPF, LPPC, SCCP, TCEP	Particulate Matter	PM 2.5 Tons	14.6	14.6	0
			PM 10 Tons	58.4	58.4	0
	LPPF, LPPC, SCCP, TCEP	Carbon Dioxide (CO2)	Tons	119,377	141,540	-22,163
	LPPF, LPPC, SCCP, TCEP	Volatile Organic Compounds (VOC)	Tons	0	1	-1
	LPPF, LPPC, SCCP, TCEP	Sulphur Dioxides (SOx)	Tons	0	0	0
	LPPF, LPPC, SCCP, TCEP	Carbon Monoxide (CO)	Tons	124	212	-88
LPPF, LPPC, SCCP, TCEP	Nitrogen Oxides (NOx)	Tons	58	168	-110	
Safety	LPPF, LPPC, SCCP, TCEP	Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries	Number	0	0	0
	LPPF, LPPC, SCCP, TCEP	Number of Fatalities	Number	0.73	1	-0.27
	LPPF, LPPC, SCCP, TCEP	Fatalities per 100 Million VMT	Number	1.28	1.75	-0.47
	LPPF, LPPC, SCCP, TCEP	Number of Serious Injuries	Number	2.21	3	-0.79
	LPPF, LPPC, SCCP, TCEP	Number of Serious Injuries per 100 Million VMT	Number	3.78	5.14	-1.36
Economic Development	LPPF, LPPC, SCCP, TCEP	Jobs Created (Direct and Indirect)	Number	1,114	0	1,114
Cost Effectiveness	LPPF, LPPC, SCCP, TCEP	Cost Benefit Ratio	Ratio	0.4	0	0.4

District	County	Route	EA	Project ID	PPNO
05	San Luis Obispo, VAR	46, 46	3307E	0518000075	0226L
Project Title					
SR 46 Expressway Conversion - Antelope Grade Segment					

Existing Total Project Cost (\$1,000s)									Implementing Agency
Component	Prior	20-21	21-22	22-23	23-24	24-25	25-26+	Total	
E&P (PA&ED)									Caltrans District 5
PS&E									Caltrans District 5
R/W SUP (CT)									Caltrans District 5
CON SUP (CT)									Caltrans District 5
R/W									Caltrans District 5
CON									Caltrans District 5
TOTAL									

Proposed Total Project Cost (\$1,000s)									Notes
Component	Prior	20-21	21-22	22-23	23-24	24-25	25-26+	Total	
E&P (PA&ED)									
PS&E			10,300					10,300	
R/W SUP (CT)			1,400					1,400	
CON SUP (CT)					11,900			11,900	
R/W			7,600					7,600	
CON					70,100			70,100	
TOTAL			19,300		82,000			101,300	

Fund #1:	Other Fed - Highway Infrastructure Program (HIP) (Committed)								Program Code
Existing Funding (\$1,000s)									Funding Agency
Component	Prior	20-21	21-22	22-23	23-24	24-25	25-26+	Total	
E&P (PA&ED)									San Luis Obispo Council of Governm
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									

Proposed Funding (\$1,000s)									Notes
Component	Prior	20-21	21-22	22-23	23-24	24-25	25-26+	Total	
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W			1,270					1,270	
CON									
TOTAL			1,270					1,270	

Fund #2:	Future Need - Future Funds (Uncommitted)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	20-21	21-22	22-23	23-24	24-25	25-26+	Total	Funding Agency
E&P (PA&ED)									Caltrans District 5
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)					11,900			11,900	
R/W									
CON					70,100			70,100	
TOTAL					82,000			82,000	
Fund #3:	IIP - National Hwy System (Committed)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	20-21	21-22	22-23	23-24	24-25	25-26+	Total	Funding Agency
E&P (PA&ED)									Caltrans District 5
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									
PS&E			10,300					10,300	
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL			10,300					10,300	

Fund #4:	RSTP - STP Local (Committed)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	20-21	21-22	22-23	23-24	24-25	25-26+	Total	Funding Agency
E&P (PA&ED)									San Luis Obispo Council of Governm
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									

Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W			430					430	
CON									
TOTAL			430					430	

Fund #5:	State SB1 TCEP - Trade Corridors Enhancement Account (Committed)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	20-21	21-22	22-23	23-24	24-25	25-26+	Total	Funding Agency
E&P (PA&ED)									Caltrans HQ
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									

Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									Includes \$7.3 million from the State share of the program.
PS&E									
R/W SUP (CT)			1,400					1,400	
CON SUP (CT)									
R/W			5,900					5,900	
CON									
TOTAL			7,300					7,300	

Memorandum

*Making Conservation
a California Way of Life*

Project: State Route 46 Expressway Conversion -
Antelope Grade Segment
05-3307E, 0518000075
SLO-46 PM 55.1-60.9

Date: May 13, 2021

Subject: Environmental Executive Summary

Original Project Report

The original Project Report was for 05-0C650 and the Initial Study/Updated Environmental Assessment (2005 IS/EA) was combined with two other project's in District 6 (06-35341 and 06-44250) as the San Luis Obispo and Kern Counties State Route 46 4-Lane *Widening Project* which was approved in 2005. The preferred alternative was Alternative 3 to widen State Route 46 to four lanes. The State Route 46 Expressway Conversion - Antelope Grade Segment project 05-3307E was later split from this project.

The purpose of this four-lane expressway is to provide route continuity. Four project segments to the west of this project are completed with two more in design. All of these projects will improve SR 46 to a four-lane expressway and provide route continuity from US 101 to Interstate 5. The *Widening Project* is needed due to current and predicted future traffic capacity problems as well as a higher than average collision rate.

Purpose

The purpose of the *Widening Project* remains the same as what is described in the Initial Study/Updated Environmental Assessment (2005 IS/EA) - to reduce congestion, improve level of service, improve safety, and provide route continuity. The *Widening Project* serves to provide a continuous east-west four-lane expressway corridor through San Luis Obispo County. Route 46 serves as a major corridor for heavy trucks and recreational traffic traveling from the San Joaquin Valley and Interstate 5 to the Central Coast and Route 101. The route supports the annual movement of \$7 billion of goods shipments between the two regions, accounting for an estimated 575,000 jobs, as well as \$5 billion in tourism within the Central Coast region (2019 SLOCOG RTP).

The proposed project would provide route continuity by improving Route 46 to the same standards completed by the other adjoining sections at the Wye, Cholame, Whitley, and Estrella segments in San Luis Obispo County and the Kecks Corner and Lost Hills segments in Kern County. These projects, proposed in

previous environmental documents, along with this proposed project would provide a continuous four-lane expressway from U.S. Highway 101 in San Luis Obispo County to Interstate 5 in Kern County and a new interchange at the existing State Route 46/41 at-grade intersection.

Route 46 Antelope Project

The State Route 46 Expressway Conversion - Antelope Grade Segment project 05-3307E will connect the proposed four-lane expressway and updated interchange at State Route 46 (known as the Route 46/41 Wye project 05-3307C,) with the expanded four-lane expressway already constructed as part of the State Route 46 4-Lane Widening Project (*Widening Project*) from the Kern County boundary to Interstate 5. The proposed project is to widen a 3.9-mile section of State Route 46 at Antelope Grade from a two-lane highway to a four-lane expressway. The project spans from postmile 55.1 in San Luis Obispo County to postmile 0.4 in Kern County. A 62-foot wide median will separate the proposed four-lane highway.

Project Status/Design

A Supplemental Draft Initial Study/Updated Environmental Assessment (*Supplemental IS/EA*) is currently being prepared and the draft is expected to be publicly circulated in December 2021. The *Supplemental IS/EA* evaluates the impacts of the newly proposed Build Alternative as well as analyzes changes in the environmental setting, best management practices, minimization and mitigation measures, and changes in laws, regulations, and guidance since finalization of the 2005 IS/EA. The *Supplemental IS/EA* document is intended to be a supplement to the 2005 IS/EA and subject areas that have not changed will not be discussed further. At this time, the final document is anticipated to be completed and signed by March 1, 2022.

A complete evaluation of the original design layout identified numerous non-standard features that would be inconsistent with a 4-lane expressway conversion. These non-standard features included horizontal and vertical curves and a 6% profile grade. Therefore, Design further investigated alternatives that would meet current expressway standards. This has led to a new alignment alternative routed through a canyon to the north of the previous alignment. The project development team walked the entire footprint of the proposed alignment to determine if any fatal flaws existed. No fatal flaws were identified, and the proposal was advanced for further study. Additional advantages to this alignment include the reduction of impacts to existing underground utilities and avoidance of a known archaeological site. Technical studies are currently underway and expected to be completed by Summer 2021. A draft Project Report will be completed concurrently with the supplemental Environmental Document. When the final Environmental Document is complete, a final Project Report will also be completed.

Link to 2005 IS/EA

<https://documentcloud.adobe.com/link/track?uri=urn:aaid:scds:US:de667336-c552-438f-b9af-486a89f79615>

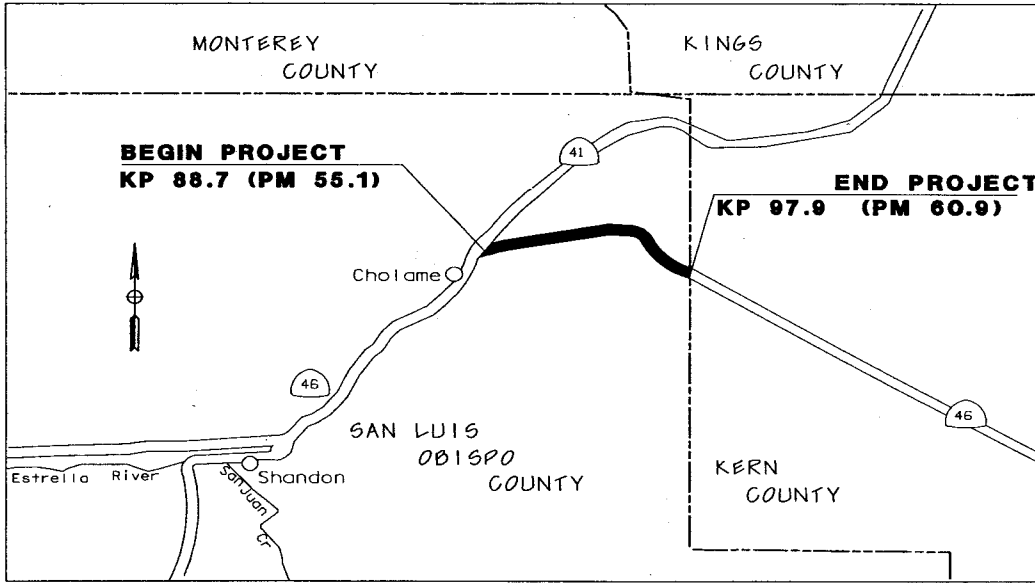
Link to 2005 Project Report

<https://documentcloud.adobe.com/link/track?uri=urn:aaid:scds:US:54ade4dd-7385-4f4a-9cec-16255166702d>



05-SLO-46 KP 88.7/97.9
 (PM 55.1/60.9)
 06258-0C6500
 HE13 (20.10.025.700 &
 20.10.075.600)

PROJECT REPORT



**On State Route 46, in San Luis Obispo County near Cholame
 from State Route 46/41 Intersection east to Kern County Line**

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

Janie Lupo

 for SPIROS KARIMBAKAS
 CENTRAL REGION, ACTING CHIEF - RIGHT OF WAY

APPROVAL RECOMMENDED BY: *Thomas E. Houston*

 THOMAS E. HOUSTON
 PROJECT MANAGER

APPROVED BY: *[Signature]*

 R. GREGG ALBRIGHT
 DISTRICT DIRECTOR, DISTRICT 5

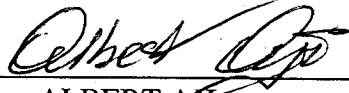
6/29/05

 DATE

CONCURRENCE BY: *[Signature]*

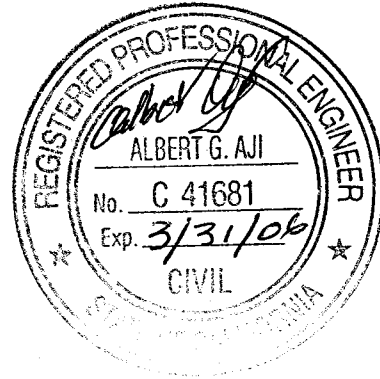
 J. MIKE LEONARDO
 DISTRICT DIRECTOR, DISTRICT 6-CENTRAL REGION

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



ALBERT AJI
REGISTERED CIVIL ENGINEER

5/9/05
DATE



PROJECT REPORT

1. INTRODUCTION

It is proposed to improve an existing two-lane segment of State Route 46 (SR 46) by reducing the conflicts between slow and fast moving traffic, improving traffic safety, and accommodating existing and future interregional travel. The project limits extend from the junction of State Routes 41 and 46 (referred to as the "Wye") east to the Kern County Line, KP 88.7 to KP 97.9. The Project Initiation Document (PID) signed on June 16, 2000 proposed four alternatives including the "No-Build" alternative. The preferred alternative (Alternative 3) in this Project Report (PR) proposes to construct two westbound lanes north of the existing alignment with an 18.6-meter median and overlay the existing lanes for use as eastbound lanes. The current estimated total project cost is \$48,563,000, which includes \$1,678,000 for right of way and \$46,885,000 for cost of construction. The project is currently funded through PA&ED only. It is proposed to fund the project from the 20.xx.025.700 Interregional Improvement Program and the 20.xx.075.600 Regional Improvement Program in the 2008 STIP cycle. The right of way estimate should be revised prior to programming Right of Way Capital. This project has been assigned Project Development Processing Category 4A because it requires substantial new right of way and increases traffic capacity.

2. RECOMMENDATION

It is recommended that this Project Report be approved using the preferred alternative (Alternative 3) and that the project proceed to the Design (PS&E) phase.

3. BACKGROUND

A. Project History

On a year-round basis, SR 46 functions as a significant interregional route for recreational traffic to and from the Central Coast/Central Valley. SR 46 serves as a major corridor for heavy trucks, particularly for agricultural products, and is essential for interstate and regional commerce, tourism travel, intermodal transfer facilities, and trade.

On December 8, 1999, the SLOCOG Board approved the four-lane expressway concept for SR 46 as part of their plan to upgrade the corridor in San Luis Obispo County.

In July 2000, a PSR was completed and approved for this project. The PSR contains three build alternatives and a "No-Build" alternative. Two of the proposed build alternatives propose to convert the existing two-lane conventional highway to a four-lane expressway. Currently, this project is funded through PA&ED only.

B. Community Interaction

There has been considerable media attention given to what some perceive as San Luis Obispo County's "blood alley". Several high profile, multi-vehicle, multiple-fatality accidents have occurred within the corridor. Since late 1995, safety improvement projects have been proposed and implemented in attempts to decrease the accidents within the corridor. In January 1996, concerned citizens established a grassroots committee (FIX 46) to facilitate the construction of safety projects and convert the facility from the two-lane highway to a four-lane divided expressway. Caltrans and the committee's efforts included obtaining grants for increased law enforcement along the route, increasing fines for motorists caught driving in an unsafe manner, installation of temporary k-rail in areas of high accident concentrations, designation of the project area as a daytime headlight zone, and installation of soft median barrier with shoulder rumble strips.

Public support of the project is very high among residents of not only San Luis Obispo County, but the Central Valley as well. Much of the weekend traffic consists of families who live in the metropolitan areas of Fresno and Bakersfield vacationing along the Central Coast. For this portion of the public, SR 46 offers the only feasible corridor to travel to the coast. On holiday and summertime weekends, travelers coming from these metropolitan areas converge on SR 46 causing congestion and significant traffic delays.

C. Existing Facility

State Route 46 is a major interregional route that connects the Central Valley of California with the Central Coast area. State Route 46 runs east/west starting at the junction of State Routes 1 and 46 in San Luis Obispo County and extending east through Caltrans Districts 5 and 6, ending at State Route 99 in Kern County.

Within the proposed project limits, the existing SR 46 is a two-lane conventional highway consisting of 3.6-meter wide lanes and outside shoulder widths that vary from 1.0 to 2.4 m. The right of way width throughout the project limits varies from 50 to 140 m. The existing alignment of State Route 46 was originally constructed in 1959 and included widened sections for passing from KP 92.1 to KP 92.8 (PM 57.2 to 57.6) and from KP 94.6 to KP 95.5 (PM 58.8 to PM 59.3). A subsequent widening project constructed in 1992 (EA 05-363001) provided a westbound passing lane from KP 95.4 to KP 97.0 (PM 59.3 to PM 60.3).

A 2002 traffic analysis showed an average annual daily traffic (AADT) of 6,700 vehicles, with an average of 21% trucks.

4. **NEED & PURPOSE**

A. Problems, Deficiencies, Justification

This portion of SR 46 traverses rolling to mountainous terrain and includes sustained grades up to 6%. Heavy trucks and recreational vehicles in both directions comprise 14 percent of the design hourly volume within the project limits. The limited opportunities in this segment to safely pass slower moving truck or recreational vehicles contribute to driver frustration.

Based on projected traffic volumes (see Table 1) the current facility within the project limits will exceed capacity by the year 2007. The projected volumes of traffic, most notably the number of trucks and recreational vehicles traveling the route, are higher than optimum levels recommended for a two-lane conventional highway. In addition, this roadway experiences even greater congestion on weekends when travel demand is the greatest. By providing additional lanes, the proposed project would reduce traffic congestion by improving the capacity of this heavily traveled east-west corridor.

The added lane in each direction would help to eliminate the traffic conflicts associated with vehicular movements on the existing two-lane conventional highway. Generally, four-lane facilities have fewer accidents per mile than two-lane conventional highways.

Lastly, the purpose of this four-lane expressway is to provide route continuity. Five projects east and west of this project are currently programmed either through construction or Project Approval & Environmental Document. All of these projects will improve SR 46 to a four-lane expressway and provide route continuity from SR 101 to U.S. Route 5.

B. Regional and System Planning

State Route 46 was adopted into the California Highway System in 1915 and is part of the California Freeway and Expressway System. Under the Federal Surface Transportation Act of 1982 (STAA) SR 46, from SR 101 to Interstate 5, is designated as a State Highway Terminal Access Route for trucks up to 32 m (105 feet) in length. It is also designated for the transport of explosives and hazardous materials (including rocket fuels). It is a State Highway Extra Legal Load (SHELL) Route and is included in the National Highway System (NHS). This portion of SR 46 is designated as a High Emphasis East-West Focus Route in the Caltrans Interregional Transportation Strategic Plan (ITSP).

In San Luis Obispo County, SR 46 was designated for expansion to a four-lane facility from U.S. 101 to Interstate 5 in Kern County per the Caltrans Interregional Transportation Strategic Plan (ITSP), dated June 1998. According to the San Luis Obispo Council of Governments staff (SLOCOG) report dated July 1999, "Traffic volumes along the Route 1, 101, 41/46 corridor are expected to continue to grow faster than the rate of local growth as a result of the State's population and economy". On

December 8, 1999, the SLOCOG Board approved the four-lane expressway concept for SR 46 as part of their plan to upgrade the corridor in San Luis Obispo County. The Transportation Concept Report for SR 46 (dated July 2001), which describes the current and projected operation of a State Highway corridor over a 20-year period, plans for a four-lane expressway with a 65.5-meter wide right of way for this route.

C. Traffic

SLOCOG has established Level Of Service (LOS) C as the acceptable level for SR 46. The current LOS within the project limits is C. As indicted in Table 1, the projected LOS for the year 2027 will fall to D with the increase in the average daily traffic. Weekends will experience even lower levels of service and higher volumes of traffic.

The projected Average Daily Traffic (ADT) and Operational Level of Service for this project are as follows:

TABLE 1

<u>DESIGN PERIOD</u>	<u>YEAR 2001</u>	<u>YEAR 2007</u>	<u>YEAR 2027</u>
ADT	6700	7300	9600
LOS without project	C	D	D
LOS with project	---	A	A

Collision data was obtained from TASAS Table B (see Attachment G) for the three-year period beginning 01-04-01 to 31-03-04 and is summarized in Table 2. The average collision rate for a segment of highway or an intersection is based on the highway characteristics (i.e., number of lanes and geometrics) and vehicle miles. The collision rates per million vehicle kilometers (ACCS/MVKm) within the project limits are as follows:

TABLE 2

<u>NUMBER OF ACCIDENTS</u>			<u>RATE (ACCS/MVKm)</u>					
			Actual			State Average		
Total	Fatal	F&I	Total	Fatal	F&I	Total	Fatal	F&I
18	1	9	0.47	0.026	0.26	0.60	0.022	0.28

In addition to low LOS, the observed accident rates for the actual fatal accident rate are slightly higher within the project limits compared to similar roadways throughout the state. (See Attachment G for TASAS Table B data)

5. ALTERNATIVES

A. Preferred Alternative

Alternative 3 would provide a 110 km/h design speed throughout the project limits. This alternative would widen SR 46 to four lanes by constructing an 11.7-meter

westbound roadbed to the north of the existing roadbed and upgrading the existing roadbed for eastbound traffic. All existing horizontal and vertical curves that do not meet the current design standards for a 110-km/h design speed would be upgraded to standard. The existing roadway would be rehabilitated to meet all current design standards for a four-lane expressway. A standard 18.6-meter median between the opposing lanes would be provided. The following would be incorporated on all slopes: slope rounding, eliminating or minimizing slope benching, and contour grading on highly visible slope modifications to create more natural landscape forms. Where feasible, excessive cuts would be avoided through changes to the horizontal alignment or vertical profile.

Two adjacent projects, 05-330800 (SLO-50.2/55.9) and 06-442500 (KER-0.0/7.3), are scheduled to be constructed before this section of Route 46. Coordination with these two projects would be required during PS&E. Project 05-330800 will determine the location and type of interchange between Routes 46 and 41. The project limits of this project will be adjusted accordingly.

A Preliminary Geotechnical Report has been completed and is included in the project files. The proposed alternative will mostly impact slopes to the north of the existing alignment. Rock-fall potential and level of maintenance required for the proposed cut slopes would be taken into consideration during the design of the project. A Geotechnical Design Report would be required to provide final design recommendations and specifications.

Construction of Alternative 3 would increase the LOS to A for the years 2007 and 2027. There are no mandatory or advisory design exceptions anticipated for this alternative. The San Luis Obispo Council of Governments concurs with the decision to use this alternative as the preferred alternative. The current estimated total project cost is \$48,563,000.

Project Features

1. Nonstandard Mandatory and Advisory Design Features
None.
2. Interim Features
None.
3. High Occupancy Vehicle (HOV)
None.
4. Ramp Metering
None.
5. CHP Enforcement Areas
None.

6. Park and Ride Facilities

None.

7. Utility and Other Owner Involvement

There is a concentration of utilities at the beginning of the project. Most of these utilities (gas, water, jet fuel, and oil) are perpendicular to the existing alignment. The construction of new lanes will match the existing profile and will not require excavation in this location.

There are two oil lines south of the existing highway. These lines generally run parallel to the highway for the entire length of the project. These oil lines cross over to the north side of the highway further east of the beginning of the project. The oil lines will have to be relocated in this location due to excavation for the new lanes.

8. Railroad Involvement

None.

9. Highway Planting

Slopes would be 1:2 or flatter for cut slopes and 1:4 or flatter for fill slopes. If steeper slopes are necessary due to physical constraints they must be approved individually. The impact on existing vegetation would also be minimized or mitigated for using replacement planting.

10. Erosion Control

Erosion control will be required along the entire length of the project. The cost is included in the estimate.

11. Noise Barriers

None.

12. Non-Motorized and Pedestrian Features

All viable alternatives include shoulders with adequate width to accommodate touring bicyclists.

13. Needed Roadway Rehabilitation and Upgrading

Alternative 3 would correct the crown of the existing lanes to a standard lane slope. The project would also correct all existing horizontal and vertical

curves that do not currently meet the requirements for a 110 km/h design speed.

14. Current Cost Estimates

Alternative 3	
Roadway	\$46,885,000
Structures	\$0.0
Total Construction	\$46,885,000
Right of Way	<u>\$ 1,678,000</u>
Total Project	\$48,563,000

B. Rejected Alternatives

Alternative 1: This alternative was rejected because it would require a design exception for a nonstandard stopping sight distance for the vertical curve between KP 94.5 to 95.8. This alternative was proposed in order to reduce the amount of excavation required for the construction of the median and two lanes. It was determined that the savings in excavation (300,000 m³) would reduce the construction cost of the project by \$4,620,000. The Project Development Team determined that these savings did not offset the need for the required design exception and reduction in stopping sight distance.

Alternative 2: This alternative was rejected due to the construction of the climbing lane proposed by the programmed project 05-453700 that is within the limits of this proposed project.

Alternative 4 the “No-Build” alternative: This alternative was rejected because it would leave this stretch of SR 46 as the only 2-lane conventional section from US 101 in Paso Robles to Interstate 5 near Lost Hills when all programmed projects on this corridor are constructed. This alternative also does not address the conflicts between slow and fast moving traffic.

6. **CONSIDERATIONS REQUIRING DISCUSSION**

A. HAZARDOUS WASTE

One site has been identified within the project limits, Polonio Pass Pumping Plant (KP 96.5), as having potential hazardous waste. IT Corporation completed an initial site assessment (ISA) for Caltrans on properties adjacent to Caltrans right-of-way between KP 90.0 through 98.0. It was recommended that prior to purchasing or developing land near the sites identified as having recognized environmental concerns, Caltrans conduct a Phase II assessment of the subsurface soil and groundwater, if appropriate.

An aerially-deposited lead investigation was also conducted within the unpaved outside shoulders of SR 46 within the project limits. Statistical analysis of data developed from the aerially-deposited lead investigation indicates that overall lead concentration in the soil within the project limits does not exceed the regulatory threshold for lead outlined in Title 22, California Code of Regulations (CCR).

B. VALUE ANALYSIS

Value Analysis will be required for this project. Since the earliest expected date for PS&E would be 2008, formal Value Engineering for this project will not be required for Fiscal Year 04/05 and should be delayed until PS&E funding is programmed by the CTC in 2008 (at the earliest).

C. RESOURCE CONSERVATION

Large sections of the existing traffic lanes would be overlaid and used for the eastbound traffic. Where feasible, existing material would be salvaged and incorporated into the final design.

D. RIGHT OF WAY ISSUES

Alternative 3 would require 30 hectares (12 parcels) of new right of way to be purchased. The displacement of residents or businesses would not be required. The right of way estimate should be revised prior to programming Right of Way Capital.

E. ENVIRONMENTAL ISSUES

The Environmental Assessment/Initial Study has been prepared in accordance with Caltrans' environmental procedures as well as State and Federal environmental regulations. This Environmental Assessment/Initial Study examines the potential environmental impacts for three proposed projects within San Luis Obispo and Kern Counties. The Environmental Assessment/Initial Study (Finding of No Significant impact/Negative Declaration) is the appropriate document for the proposal.

The proposed project would impact approximately 0.56 acres of prehistoric archaeological site, (CA-SLO-1355) that was determined eligible for listing in the National Register for Historic Places. The project also encroaches upon a flood plain described by the Federal Emergency Management Administration. Due to the rural nature of the area there are no risks associated with the encroachment. The roadway would be designed in such a way as to minimize floodplain impacts and preserve natural and beneficial floodplain values.

Jurisdictional wetlands and other waters of the United States would be impacted by this project. There are two areas of concern approximately located between KP 95.0 and KP 96.3. These areas are protected under Section 404 of the Clean Water Act and the California Department of Fish and Game 1601 Streambed Alteration Permit. The impact to these wetlands fall under the minor impact category, less than 0.029

hectares (0.071 acres), and would be mitigated via wetland creation or purchase of wetland areas.

The Findings of No Significant (FONSI) Negative Declaration was approved on May 12, 2005. (See Attachment A)

F. AIR QUALITY CONFORMITY

The project would not interfere with the implementation of TCXs contained in the applicable State Implementation Plan (SIP), regional plans and programs. The proposed project would improve LOS, resulting in an improvement of air quality.

G. TITLE VI CONSIDERATIONS

There are no specific Title VI considerations for this project.

7. OTHER CONSIDERATIONS AS APPROPRIATE

A. PUBLIC HEARING PROCESS

A Public Hearing was held on May 7, 2003 at the Lost Hills Elementary School in conjunction with the two Kern County segments. Few comments for the San Luis Obispo portion of the document were received.

B. ROUTE MATTERS

An update to the route adoption would not be required. Freeway agreements and relinquishments would not be required for this project.

C. PERMITS

The following permits would be required for this project: A 1602 Streambed Alteration Agreement from the California Department of Fish and Game, U.S. Army Corps of Engineers 404 permit, a 401 certification from the Regional Water Quality Control Board, and a Notice of Intent filed with the State Water Resources Control Board.

D. COOPERATIVE AGREEMENTS

No cooperative agreement(s) are required for this project.

E. TRAFFIC MANAGEMENT PLAN

A Traffic Management Plan is necessary for this project. The staging plans and traffic handling plans should be developed to allow one lane in each direction open to traffic as much as possible. The new lanes should be completed and opened to traffic prior to construction on existing lanes. Safe haul truck ingress/egress between the construction site and highway should also be implemented into the plans.

A Public Awareness Campaign shall be incorporated into the project in order to make the traveling public aware of any closures or delays. COZEEP should also be used to assist in the maintaining of safe traffic flow within the construction zone.

F. STAGE CONSTRUCTION

This project would be constructed in four stages with two temporary detours to shift traffic during construction. The first stage would be done where the horizontal and vertical curve corrections will be the most significant. This location is at the crest, or middle of the project, where large cuts and excavations would provide material for the fill sections.

The second stage would construct the new lanes at the beginning and end of the project up to the middle section. The third stage would construct temporary detours to shift traffic onto the new lanes. The fourth stage would overlay and correct the crown of the existing lanes and match the design profile at the middle section.

G. ACCOMMODATION OF OVERSIZE LOADS

State Route 46 is a SHELL route (extra legal permit loads). This project would not affect oversize loads.

H. GRAFFITI CONTROL

This project is not located in a graffiti prone area. Provisions will not be made.

I. DESIGN EXCEPTIONS

The preferred alternative, Alt 3, does not require design exceptions.

8. PROGRAMMING

This Project Report is for a closure project between the SR 46 Corridor Improvements (Wye) project (EA 05-330800) and the Rte 46 Expressway Conversion Projects (EA 06-442500 & 06-353410). More than \$100 million in future funds will be needed to fund those projects through construction. The schedule shown in this Project Report assumes funding for PS&E, R/W and R/W support will be programmed in the 2008 STIP Cycle. If the project is not able to successfully compete for funding in the 2008 STIP cycle, the schedule for the project will have to be further delayed. A Supplemental Project Report will be prepared to update the estimate, scope, and schedule of this project prior to actual programming of any future phases.

COST BREAKDOWN: (Capital Cost Estimate provided by Design and R/W Functions. Support Cost Estimate from XPM.)

Capital and Support Cost Summary

Project Cost			Fiscal	Years			Total
Component	Prior	2003/04	2004/05	2005/06	2006/07	Future	
R/W Capital						\$ 1,700	\$ 1,700
Construction Capital						\$50,400	\$50,400
PA&ED	\$1,370						\$ 1,370
PS&E						\$ 7,560	\$ 7,560
R/W Support						\$ 1,220	\$ 1,220
Construction Support						\$ 2,500	\$ 2,500
Total	\$1,370					\$63,380	\$64,750

Note: (1) All costs X\$1,000. Construction Capital is escalated at 3.4% per year and Support costs escalated 2.7% per year. Right of Way Capital costs escalated at 3% per year for Acquisition and 5% for utilities.
 (2) Support Categories are the same as those identified by SB 45.

Project Schedule:

	Month/Year
PA&ED	3/2005
Begin PS&E	7/2008
ROW Cert.	7/2011
Ready To List	9/2011
Approve Contract	3/2012
Job Complete	7/2013

9. REVIEWS

Bob Chapman, HQ Geometrician reviewed this project at a meeting on 9/25/01.

10. PROJECT PERSONNEL

Project Manager: Tom Houston (805) 549-3016
 Design Manager: Foad Al-Hamdani (559) 243-3546
 Project Engineer: Albert Aji (559) 243-3547
 Deputy District Director-Planning: Rich Krumholz (805) 549-3161
 District 5
 Environmental Branch: Judith Lopez (559) 243-8297
 Right Of Way: John Maddux (805) 549-3352

11. ATTACHMENTS

ATTACHMENT A

Environmental Document

ATTACHMENT B

Location Map

ATTACHMENT C

Typical Cross Section

ATTACHMENT D

Cost Estimate

ATTACHMENT E

R/W Data Sheet

ATTACHMENT F

TMP Data Sheet

ATTACHMENT G

TASAS Table B

ATTACHMENT H

Storm Water Data Report



U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

CALIFORNIA DIVISION

650 Capitol Mall, Suite 4-100

Sacramento, CA. 95814

May 12, 2005

IN REPLY REFER TO

HDA-CA

File #: 05-SLO-46 PM 55.1/60.9

06-KER-46 PM 0.0/33.5

Document #: P52462

Mr. J. Mike Leonardo, District Director
California Department of Transportation
District 6
P. O. Box 12616
Fresno, CA 93778-2616

Attention: Mr. Mike Donahue

Dear Mr. Leonardo:

SUBJECT: State Route 46 Four-Lane Widening Project in San Luis Obispo and Kern Counties,
Finding of No Significant Impact

The Federal Highway Administration has completed its review of the Environmental Assessment, dated April 2005, for the proposed State Route 46 Four-Lane Widening Project in San Luis Obispo and Kern Counties, California. It is determined that the Finding of No Significant Impact (FONSI) is applicable for this project. Enclosed, for your use and distribution, is a signed FONSI.

If needed, please contact Dominic Hoang at (916) 498-5002, or Joseph Vaughn at (916) 498-5346.

Sincerely,

/s/ Dominic Hoang

For
Gene K. Fong
Division Administrator

Enclosure

ATTACHMENT A

cc: w/Enclosure (by E-mail)
Jay Norvell, Caltrans HQ
Kelly Dunlap, Caltrans HQ
Carrie Bowen, Caltrans D-6
Paul Gennaro, Caltrans D-6
Mike Donahue, Caltrans D-6
Maiser Khaled, FHWA
Mahfoud Licha, FHWA
Joseph Vaughn, FHWA
Dominic Hoang, FHWA

DHoang/kmo

**FEDERAL HIGHWAY ADMINISTRATION
FINDING OF NO SIGNIFICANT IMPACT
For
State Route 46 Four-Lane Widening Project
(From State Routes 46/41 Junction to
Interstate 5/State Route 46 Interchange)
San Luis Obispo and Kern Counties, California**

The Federal Highway Administration (FHWA) has determined that this project will not have any significant impact on the human environment. This finding of no significant impact is based on the attached Environmental Assessment, which has been independently evaluated by the FHWA and determined to adequately and accurately discuss the environmental issues and impacts of the proposed project. It provides sufficient evidence and analysis for determining that an environmental impact statement is not required. The FHWA takes full responsibility for the accuracy, scope, and content of the environmental assessment.

5/12/2005
DATE

Gene K. Fong
For
Gene K. Fong
Division Administrator
Federal Highway Administration

Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to widen a 63.2-kilometer (39.3-mile) portion of State Route 46 located in San Luis Obispo and Kern counties. The project would widen the existing two-lane conventional highway to a four-lane expressway with an 18.6-meter-wide (61-foot-wide) median. A four-lane conventional highway with a 5.4-meter-wide (18-foot-wide median) is proposed through the community of Lost Hills and ending just east of the West Side Canal in Kern County.

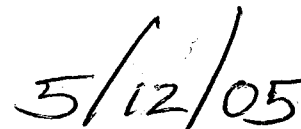
Determination

Caltrans has prepared an Initial Study, and determines from this study that the proposed project would not have a significant effect on the environment for the following reasons:

- The project would not increase floodplain or seismic hazards. Impacts to cultural resources would be mitigated under the provisions of the Federal Highway Administration, State Historic Preservation Office, and California Department of Transportation Memorandum of Agreement. There would be no significant effects on recreational facilities or to any park.
- There would be no change in the planned land use, or in the character and composition of local traffic.
- Impacts to threatened or endangered animal species, or riparian habitat would be mitigated by implementation of the measures specified in the Biological Opinions rendered by the U.S. Fish and Wildlife Service and the California Department of Fish and Game. Impacts to wetlands would be mitigated by measures specified by the U.S. Army Corps of Engineers. Impacts to "other waters of the U.S." would be mitigated under Nationwide Permit #14 issued by the Army Corps of Engineers.
- Air and water quality would not be affected, and noise levels would not increase near sensitive receptors. There would be no effects upon hazardous waste sites. Impacts to farmland would be considered less than significant.



Mike Donahue
Branch Chief
Southern Sierra Environmental Analysis Branch
California Department of Transportation

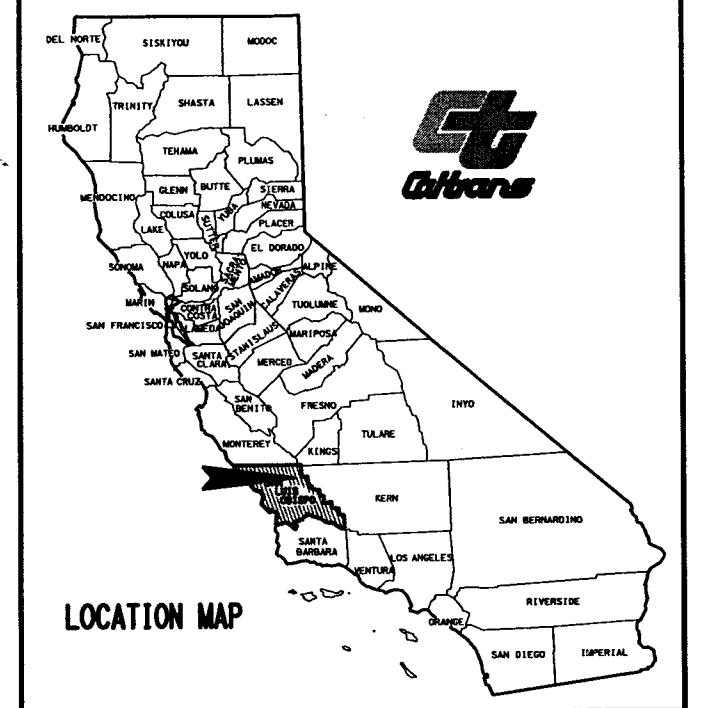


Date

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**PROJECT PLANS FOR CONSTRUCTION ON
 STATE HIGHWAY**
 IN SAN LUIS OBISPO COUNTY NEAR CHOLAME
 FROM ROUTE 41 INTERSECTION
 TO THE KERN COUNTY LINE

To be supplemented by Standard Plans dated July, 1999

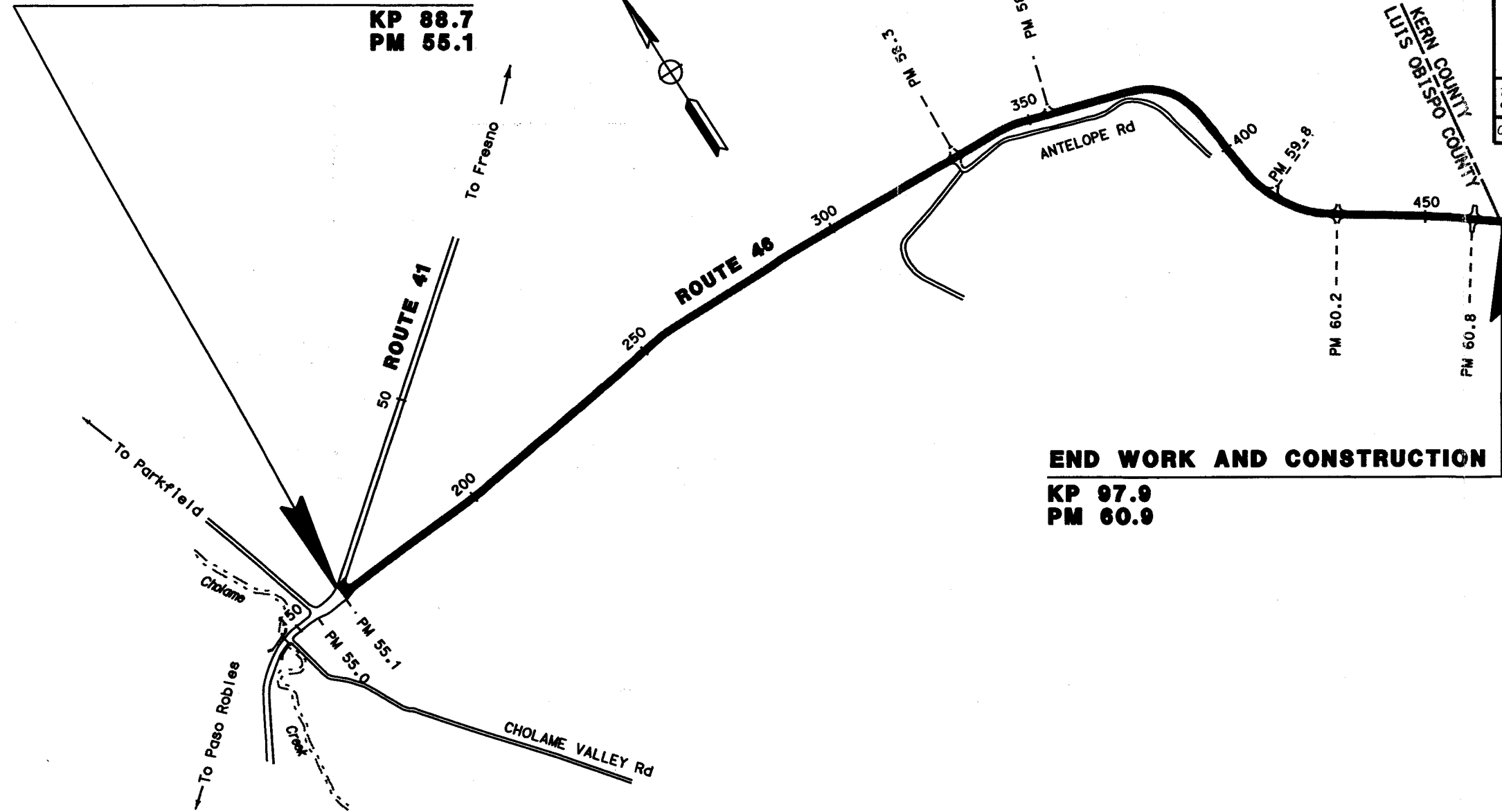
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
05	SLO	46	88.7/97.9	1	



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

BEGIN WORK AND CONSTRUCTION

KP 88.7
PM 55.1



END WORK AND CONSTRUCTION

KP 97.9
PM 60.9



PROJECT ENGINEER	DATE
PROJECT MANAGER	DATE

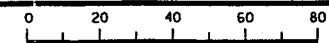
The Contractor shall possess the Class (or Classes) of license as specified in the "Notice to Contractors".

Project Engineer Date
 Registered Civil Engineer
 Plans Approval Date



ATTACHMENT B

Contract No.



DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
05	SLO	46	88.7/97.9	2	

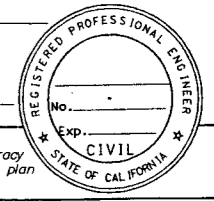


REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

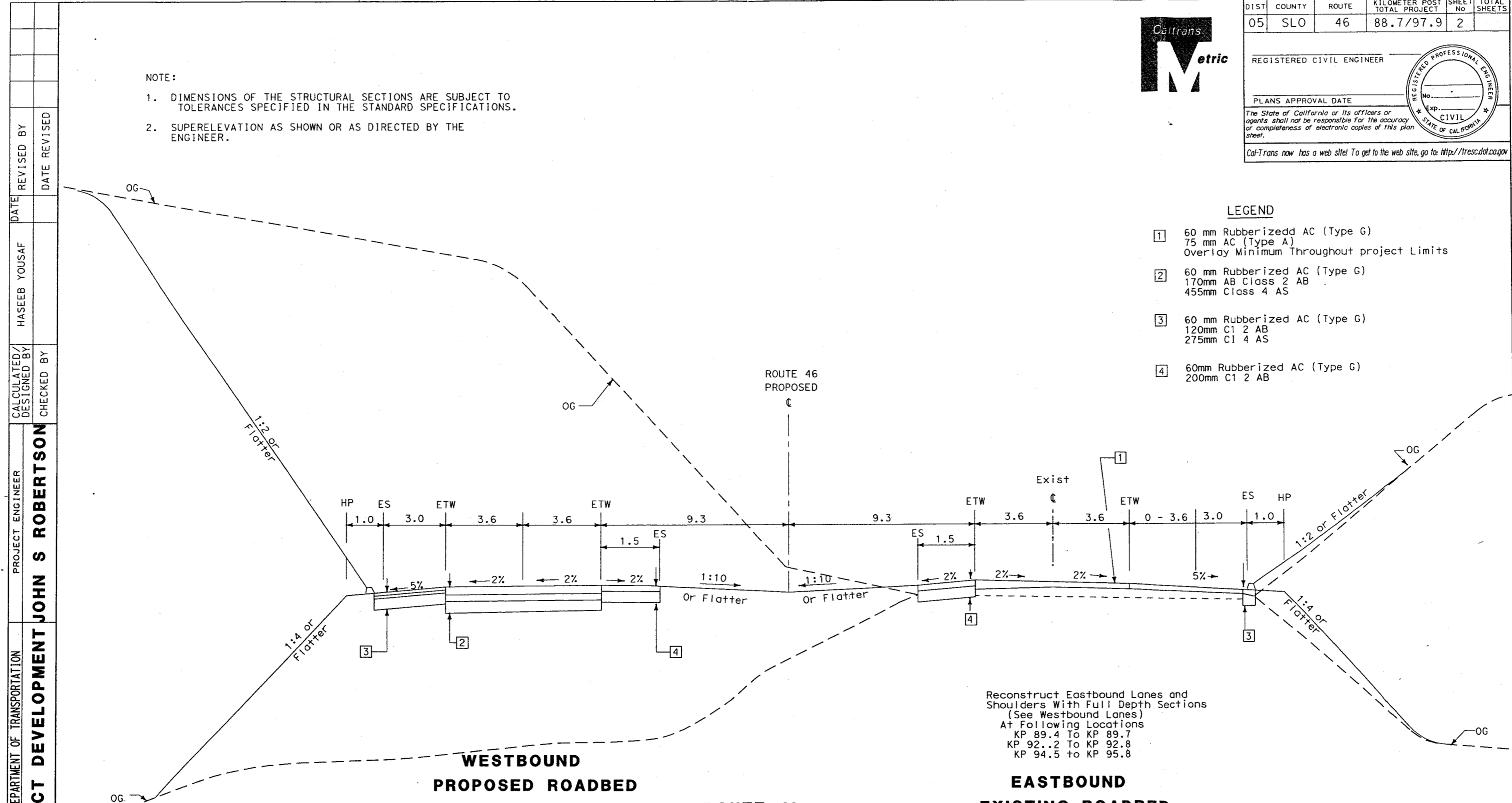
Cal-Trans now has a web site! To get to the web site, go to: <http://trsc.dot.ca.gov>



NOTE:

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

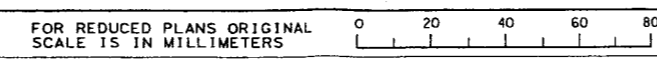
- LEGEND**
- 1 60 mm Rubberized AC (Type G)
75 mm AC (Type A)
Overlay Minimum Throughout project Limits
 - 2 60 mm Rubberized AC (Type G)
170mm AB Class 2 AB
455mm Class 4 AS
 - 3 60 mm Rubberized AC (Type G)
120mm C1 2 AB
275mm C1 4 AS
 - 4 60mm Rubberized AC (Type G)
200mm C1 2 AB



ROUTE 46 ALTERNATIVE 3 WIDEN 2-LANE HIGHWAY TO 4-LANE HIGHWAY

TYPICAL CROSS SECTION ATTACHMENT C

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN NO SCALE



USERNAME => #USER
DGN FILE => #REQUEST

CU 06258

EA 06500

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DEVELOPMENT JOHN S ROBERTSON
PROJECT ENGINEER
CALCULATED/DESIGNED BY
CHECKED BY
HASEEB YOUSAF
DATE REVISOR
DATE REVISOR

LAST REVISION
DATE PLOTTED => #DATE
05-20-05
TIME PLOTTED => #TIME

PRELIMINARY PROJECT COST ESTIMATE



Dist-Co-Rte 05-SLO-46
KP (PM) 88.7/97.9 (55.1/60.9)
EA 05-0C6500
Program Code H E13(20.10.025.700&20.10.075.600)

Project Description:

Limits: On Route 46 in San Luis Obispo County, from 41/46 "Wye" separation to SLO/Kern County Line.

Proposed Improvement (Scope): The project proposes to widen Route 46 in San Luis Obispo County from 2-lane to 4-lane and rehabilitate of the existing two-lane roadway. A design speed of 110km/h will be used throughout the project.

Alternative: Alternative 3

SUMMARY OF PROJECT COST ESTIMATE

Table with 2 columns: Item Name and Amount. Rows include: TOTAL ROADWAY ITEMS (\$46,885,463), TOTAL STRUCTURE ITEMS (\$0), SUBTOTAL CONSTRUCTION COSTS (\$46,885,463), TOTAL RIGHT OF WAY ITEMS (\$1,677,303), TOTAL PROJECT CAPITAL OUTLAY COSTS (\$48,562,766).

Reviewed by Project Engineer Albert Aji

Handwritten signature of Albert Aji

June 7, 2005 (Date)

Approved by Project Manager Tom Houston

Handwritten signature of Tom Houston

6-7-05 (Date)

PRELIMINARY PROJECT COST ESTIMATE

Dist-Co-Rte 05-SLO-46

I. ROADWAY ITEMS

<u>Section 1 Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>	<u>Section Cost</u>
Roadway Excavation	<u>1,200,000</u>	<u>m³</u>	<u>\$ 10</u>	<u>\$ 12,000,000</u>	
Imported Borrow			<u>\$</u>	<u>\$ 0</u>	
Clearing & Grubbing	<u>1</u>	<u>LS</u>	<u>\$ 100,000</u>	<u>\$ 100,000</u>	
Develop Water Supply	<u>1</u>	<u>LS</u>	<u>\$ 300,000</u>	<u>\$ 300,000</u>	
Total Earthwork					\$ <u>12,400,000</u>

<u>Section 2 Struc. Section</u>					
Ruberized (AC)	<u>32,000</u>	<u>tonne</u>	<u>\$ 87</u>	<u>\$ 2,784,000</u>	Bees# 390126
Asphalt Concrete(AC)	<u>43,000</u>	<u>tonne</u>	<u>\$ 71</u>	<u>\$ 3,053,000</u>	Bees# 390102
CI 2 Aggregate Base	<u>18,000</u>	<u>m³</u>	<u>\$ 45</u>	<u>\$ 810,000</u>	Bees# 260201
ATPB/ Edge Drains	<u>5,800</u>	<u>m³</u>	<u>\$ 100</u>	<u>\$ 580,000</u>	
CI 4 Agg. Subbase	<u>50,000</u>	<u>m³</u>	<u>\$ 32</u>	<u>\$ 1,600,000</u>	Bees# 250401
Place AC Dike Type "E"	<u>1,850</u>	<u>m</u>	<u>\$ 15</u>	<u>\$ 27,750</u>	Bees# 394048
Total Structural Items					\$ <u>8,854,750</u>

<u>Section 3 Drainage</u>					
Modify Drainage Systems	<u>1</u>	<u>LS</u>	<u>\$ 2,600,000</u>	<u>\$ 2,600,000</u>	
Total Drainage					\$ <u>2,600,000</u>

PRELIMINARY PROJECT COST ESTIMATE

<u>Section 4 Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>	<u>Section Cost</u>
RE Office Space	1	LS	\$ 175,000	\$ 175,000	
Erosion Control	1	LS	\$ 2,205,000	\$ 2,205,000	
SWPPP Report	1	LS	\$ 10,000	\$ 10,000	
Public Awareness Campaign	1	LS	\$ 75,000	\$ 75,000	
Water Pollution Control	1	LS	\$ 714,000	\$ 714,000	
Landscape Mitigation	1	LS	\$ 200,000	\$ 200,000	
Environmental Mitigation	1	LS	\$ 400,000	\$ 400,000	
Treatment BMP	1	LS	\$ 2,320,000	\$ 2,320,000	
Supplemental Fund	1	LS	\$ 731,750	\$ 731,750	
COZEEP	1	LS	\$ 120,000	\$ 120,000	

Total Specialty Items

\$ 6,950,750

Section 5 Traffic Items

Closed Circuit Camera	1	LS	\$ 100,000	\$ 100,000	
Surveillance Stations	1	LS	\$ 110,000	\$ 110,000	
Traffic Management Plan	1	LS	\$ 100,000	\$ 100,000	
Relocate Flash Beacon	1	LS	\$ 20,000	\$ 20,000	
Roadside Signs	1	LS	\$ 30,000	\$ 30,000	
Const. Area Signs	1	LS	\$ 25,000	\$ 25,000	
Traffic Handling / Maintain					
Traffic	1	LS	\$ 112,000	\$ 112,000	\$
Traffic Control Systems	1	LS	\$ 50,000	\$ 50,000	
Pavement Delination	1	LS	\$ 200,000	\$ 200,000	

Total Traffic Items

747,000

SUBTOTAL SECTIONS 1 thru 5 \$ 31,552,500

PRELIMINARY PROJECT COST ESTIMATE

Dist-Co-Rte 05-SLO-46
 KP (PM) 88.7/97.9 (55.1/60.9)
 EA 05-0C6500

Section 6 Minor Items

Unit Cost

Section Cost

Subtotal Sections 1 thru 5	\$ <u>31,552,500</u>	x	0.1	\$ <u>3,155,250</u>
			(5 to 10%)	
				Total Minor Items \$ <u>3,155,250</u>

Section 7 Roadway Mobilization

Subtotal Sections 1-5	\$ <u>31,552,500</u>			
Minor Items	\$ <u>3,155,250</u>			
Sum	\$ <u>34,707,750</u>	x	0.1	\$ <u>3,470,775</u>
			x (5-10%)	
				Total Roadway Mobilization \$ <u>3,470,775</u>

Section 8 Roadway Additions

I. Supplemental

Subtotal Sections 1-5	\$ <u>31,552,500</u>			
Minor Items	\$ <u>3,155,250</u>			
50/50 BMP Maint. Cost Sharing	\$ <u>270,000</u>			
Storm Water Sampling and Analysis	\$ <u>30,000</u>			
Sum	\$ <u>35,007,750</u>	x	0.1	\$ <u>3,500,775</u>
			x (5-10%)	

II. Contingencies

Subtotal Sections 1-5	\$ <u>31,552,500</u>			
Minor Items	\$ <u>3,155,250</u>			
Sum	\$ <u>34,707,750</u>	x	0.15	\$ <u>5,206,163</u>
			(*%)	
				Total Roadway Additions \$ <u>8,706,938</u>
				TOTAL ROADWAY ITEMS \$ <u>46,885,463</u> (Total of Sections 1-8)

Estimate Prepared by : _____ Phone _____ Date _____
 (Print Name)

*Use 15% at the DPR stage or a higher or lower rate if justified

PRELIMINARY PROJECT COST ESTIMATE

Dist-Co-Rte	<u>05-SLO-46</u>
KP (PM)	<u>88.7/97.9 (55.1/60.9)</u>
EA	<u>05-0C6500</u>

II. STRUCTURE ITEMS

	STRUCTURE			
	No. 1	No. 2	No. 3	
Bridge Name	_____	_____	_____	
Structure Type	_____	_____	_____	
Width m (out to out)	_____	_____	_____	
Span Lengths m.	_____	_____	_____	
Total Area Sq. m.	_____	_____	_____	
Footing Type (pile/spread)	_____	_____	_____	
Cost Per Sq. m. (incl. 10% mobilization and 25% contingency)	_____	_____	_____	
Total Cost for Structure	_____	_____	_____	
Other	_____	_____	_____	
				SUBTOTAL STRUCTURES ITEMS
				\$ _____ 0
Railroad Related Costs	_____	_____	_____	\$ _____
				TOTAL STRUCTURES ITEMS
				\$ _____ 0

Estimate Prepared by :

PRELIMINARY PROJECT COST ESTIMATE

Dist-Co-Rte	<u>05-SLO-46</u>
KP (PM)	<u>88.7/97.9 (55.1/60.9)</u>
EA	<u>05-0C6500</u>

III. RIGHT OF WAY

	<u>Current Values</u> <u>(Future Use)</u>	<u>Escalation</u> <u>Rates</u>	<u>Escalated</u> <u>Values*</u>
Acquisition, including excess lands and damages to remainder(s) -	\$ 1,218,138	3%	\$ 1,371,024
Utility Relocation (State share)	\$ 195,000	5%	\$ 237,024
Clearance/Demolition	\$ -	%	\$ 0
RAP	\$ -	%	\$ 0
Title and Escrow Fees	\$ 61,532	3%	\$ 69,255
CONSTRUCTION CONTRACT WORK	\$ -	%	\$ -
 TOTAL RIGHT OF WAY (CURRENT VALUE)**	 \$ 1,474,670	 TOT. R/W	 \$ 1,677,303

* Escalated to assumed year of advertising of 2007.

** Current total value for use on Sheet 1 of 6

Estimate Prepared by :

Memorandum

To: M. AKHAVAN
06

Date: 4/6/00

File: EA 0C650K ALT 3REV

Attn: BRIAN DUNCAN
05- DESIGN BR II

DESCRIPTION:
FOUR LANE WIDENING

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

3/13/00

The following assumptions and limiting conditions were identified:

Additional information includes the following:

THIS IS A REVISED ESTIMATE FOR ALTERNATE 3. R/W LEADTIME HAS INCREASED TO 17 MONTHS. THERE IS CONSTRUCTION CONTRACT WORK TO RECREATE 4 DRIVEWAYS; IMPROVEMENTS ARE 4 GATES.

Right of Way Lead Time will require a minimum of 17 months after we receive certified Appraisal Maps, the necessary environmental clearance has been obtained, and freeway agreements have been approved.

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

REQUEST DATE 3/13/00

EA 0C650K ALT 3REV

REVISED DATE 4/6/00 CO/RTE/KP-KP[route 1_route 2] SLO/46/90.0-98.0 & /0/0.0-0.0

RIGHT OF WAY COST ESTIMATE	CURRENT YR 2000	CONTINGENCY RATE	RIGHT OF WAY ESCALATION RATE	ESCALATED YEAR 2004
ACQUISITION	\$1,218,138	25.00%	3.00%	\$1,371,024
STATE SHARE OF UTILITIES	\$195,000	25.00%	5.00%	\$237,024
RAP	\$0	25.00%	3.00%	\$0
CLEARANCE/DEMO	\$0	25.00%	3.00%	\$0
TITLE AND ESCROW	\$61,532	25.00%	3.00%	\$69,255
PROPERTY MANAGEMENT				
SUPPORT HOURS				
TOTAL CURRENT VALUE *				\$1,677,303

ESTIMATED CONSTRUCTION CONTRACT WORK

R/W LEAD TIME/MONTHS

PARCEL DATA			
# OF PCL TYPE X	0	# OF DUAL APPR X	0
# OF PCL TYPE A	2	# OF DUAL APPR A	0
# OF PCL TYPE B	12	# OF DUAL APPR B	0
# OF PCL TYPE C	0	# OF DUAL APPR C	0
# OF PCL TYPE D	0	# OF DUAL APPR D	0
TOTALS	14	TOTALS	0
# OF EXCESS PARCELS		<input type="text" value="0"/>	

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

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

MISC R/W WORK	
# OF RAP DISPLACEMENT	0
# OF CLEARANCE/DEMOS	0
# OF CONST PERMITS	4
# OF CONDEMNATIONS	0

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

ARE UTILITY FACILITIES OR RIGHTS OF WAY AFFECTED

YES

RAILROAD LEADTIME REQUIRED

0

PARCEL AREA

UNIT: ACRE

TOTAL R/W TAKE 54

TOTAL EXCESS AREA 0

TOTAL R/W FEE \$967,420

TOTAL EXCESS COST \$0

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

zoned ag; smaller pcls (40 ac or less) highest & best use rural homesites; THIS IS A REVISION OF ALT. 3 SINCE ENTIRE PREVIOUS ONLY A PORTION OF ENTIRE ALTERNATIVE. Construction contract work to recreate 4 driveways; improvements are gates.

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

0

OF MULTI FAMILY

0

OF BUSINESS/NONPROFIT

0

OF FARMS

0

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?

Yes

DATA FOR EVALUATION PROVIDED BY

ESTIMATOR REQUIRED

PAULA L. WIDRIN

4/6/00

RAILROAD LIAISON AGENT

SALLY A. HOPKINS

3/22/00

UTILITY RELOCATION COORDINATOR

PAMELA G. DEAN

3/23/00

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

John W. Maddux

JOHN W. MADDUX

Field Office Chief, Right of Way

DATE ENTERED PMCS 4/6/00

BY JAMES H. AMBERG

Memorandum

to: Foad Al-Hamdani, P.E.
06 Branch Y

Date: June 27, 2002
File: EA 0C6500
SLO-46-PM 55.1/60.9

From : Kim Romano, District 05 TMP Coordinator
DEPARTMENT OF TRANSPORTATION
Traffic Management, 05

Subject : Transportation Management Plan (TMP) for EA 0C6500

This memo is in response to your request of May 29 for a TMP for EA 0C6500, SLO-46 PM 55.1/60.9 (KP 88.7/97.9) – major widening.

Please find attached the TMP data sheet. It is my understanding that two lanes will be constructed on new alignment north of the existing highway, with the existing highway receiving an overlay after completion of the new lanes. There will be an estimated 1,340,000 m³ of excavation.

Staging plans and traffic handling plans should be developed that will allow one lane in each direction open to traffic as much as possible. For times when it is required to implement traffic control, there are daytime hours available. The new lanes should be completed and open to traffic prior to construction on existing lanes.

Additionally, please incorporate into the plans safe haul truck ingress/egress between the construction site and the highway. A flagger may be needed for this operation. If soil is to be transported from one area of the construction site to another area, is it possible to keep trucks off the existing alignment? Please consider this when developing the contract documents.

If you have any questions, I can be reached at (805) 594-6196 or Calnet 629-6196.

Attachment

c: Jacques Van Zeverter
Mike Galizio

ATTACHMENT F

DISTRICT 5 TRAFFIC MANAGEMENT PLAN CHECK LIST

Note: This TMP is subject to change as new information becomes available.

District / EA: 05-0C6500
 Project Engineer: Foad Al-Hamdani
 Date Prepared: 6/27/02

Co.-Rte-KP: SLO-46-KP 88.7/97.9 (PM 55.1/60.9)
 Description: Major widening w/ 2 lanes on new alignment
 Working Days: 570

Check each box and reference your attachments to the item(s) number(s) shown on the list.

1.0 Public Information

- 1.1 Public Awareness Campaign
- 1.2 Other Strategies

2.0 Motorist Information Strategies

- 2.1 Changeable Message Signs
- 2.2 Construction Area Signs
- 2.3 Highway Advisory Radio (fixed and mobile)
- 2.4 Planned Lane Closure Web Site
- 2.5 Caltrans Highway Information Network (CHIN)

3.0 Incident Management

- 3.1 COZEEP
- 3.2 Freeway Service Patrol

4.0 Traffic Management Strategies

- 4.1 Lane/Ramp Closures Charts
- 4.2 Total Facility Closure
- 4.3 Coordination with adjacent construction
- 4.4 Contingency Plan
 - 4.4.1 Material/Equipment Standby
 - 4.4.2 Emergency Detour Plan
 - 4.4.3 Emergency Notification Plan
- 4.5 SSP 12-220 and Others
- 4.6 Other Strategies:

Monitor queue length during daytime lane closures

Max. queue length of 1.5 miles.

Traffic control (flagger) may be needed for haul trucks accessing the highway.

Most traffic impacts appear to be due to haul truck access to hwy. w/ 1.34M m³ soil moved. Plan earthwork behind k-rail, clear of traffic.

Include in 066070 (Maintain Traffic) -

may fund portion of CMS's or COZEEP in Maintain Traffic, as appropriate.

Construction staging/traffic handling plans needed.

Required	Not required	Not Applicable	COMMENTS
----------	--------------	----------------	----------

x			Include in 066063 (TMP) - \$75,000
x			Fliers/mailings to truck groups, Hwy. 46 committee, others; press releases, possible paid ads.

x			Min. 2 CMS's for lane closures and haul truck access
x			
	x		
x			Construction to provide information to TMC
	x		Construction to provide information to TMC

x			Fund \$1100/night, \$550/day w/ lane closures
	x		

x			daytime lane closures - 8 hr window; see below
	x		
	x		
x			for early pick-up if queue more than 1.5 miles
	x		Construction/Contractor to provide - as needed
x			Construction/Contractor to provide - as needed
x			Construction/Contractor to provide - as needed
x			
x			
x			
x			Include funding where appropriate.
x			Explore alt. earth moving strategies where appropriate.
			examples: conveyor belt, culvert or bailey bridge
x			\$200/working day min. (or \$112,000 for 560 days)
			Include additional funds as needed for additional
			CMS's or COZEEP
x			Keep 2 lanes/dir. open as much as possible.

	x		
	x		

yes no If no, explain additional measures on attached sheet.

Kim Romano
 District TMP Coordinator

6/27/02
 Date:

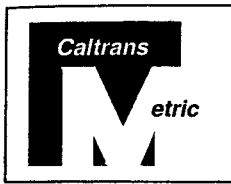
TASAS TABLE B DISTRICT 05
 SELECTIVE ACCIDENT RATE CALCULATION
 ROUTE SEQUENCE

LOCATION		DESCRIPTION				RA	*-NUMBER OF ACCIDENTS/SIGNIFICANCE*							PER	*ADT*	TOTAL	*-ACCIDENT RATE ACCS/MV+ OR MVM-*					
						GRP	MULTI							KLD	MAIN	MV+ OR	ACTUAL			AVERAGE		
						(RUS)	TOT	FAT	INJ	F+I	VEH	WET	DARK	INJ	X-ST	MVM	FAT	F+I	TOT	FAT	F+I	TOT
0046	SLO	55.100	THRU	SLO	060.099	H	18	1	9	10	11	3	7	3	7.0	38.12	.026	.26	.47	.022	.28	.60
05-0001		5.000M	01-04-01	04-03-31	36 MO (R)										22							

ATTACHMENT G

APPENDIX E

Storm Water Data Report



Dist-County-Route 05-SLO-46
Kilometer Post (Post Mile) 88.7/97.9 (55.1/60.9)
Project Type Widen SR-46 from 2 lanes to 4 lanes
EA: 05-0C6500
RU: 06-258
Program Identification: HE13
Phases: PID PA/ED PS&E

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

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

Are new Treatment BMPs incorporated into the Project? Yes No

Estimated Construction Start Date: 05/2010

Notification of Construction (NOC) Date to be Submitted: 4/01/07

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

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

This Report has been prepared under the direction of the following Licensed Person. The Licensed Person attests to the technical information contained herein and the data upon which recommendations, conclusions, and decisions are based. Professional Engineer or Landscape Architect stamp required at PS&E.

John S Robertson 12-3-03
John S Robertson, Registered Project Engineer Date

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

Tom Houston 12-8-03
Tom Houston, Project Manager Date

Jon Wood 12-12-03
Jon Wood, Designated Maintenance Representative Date

Dennis Reeves 12/15/03
Dennis Reeves, Designated Landscape Architect Representative Date

[Signature] 12/18/03
Design District/Regional Storm Water Coordinator or Designee Date