

## Project Study Report

To

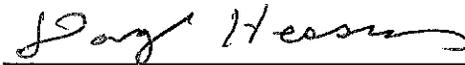
## Request for Programming in the SHOPP

On Route 129

Between 0.1 mile west of Carlton Road

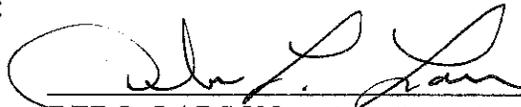
And 0.2 mile east of Carlton Road

APPROVAL RECOMMENDED:



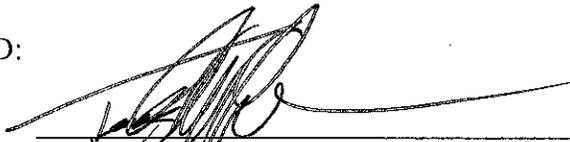
DOUG HESSING, PROJECT MANAGER

APPROVAL RECOMMENDED:



DEB-L. LARSON, DISTRICT PROGRAM ADVISOR

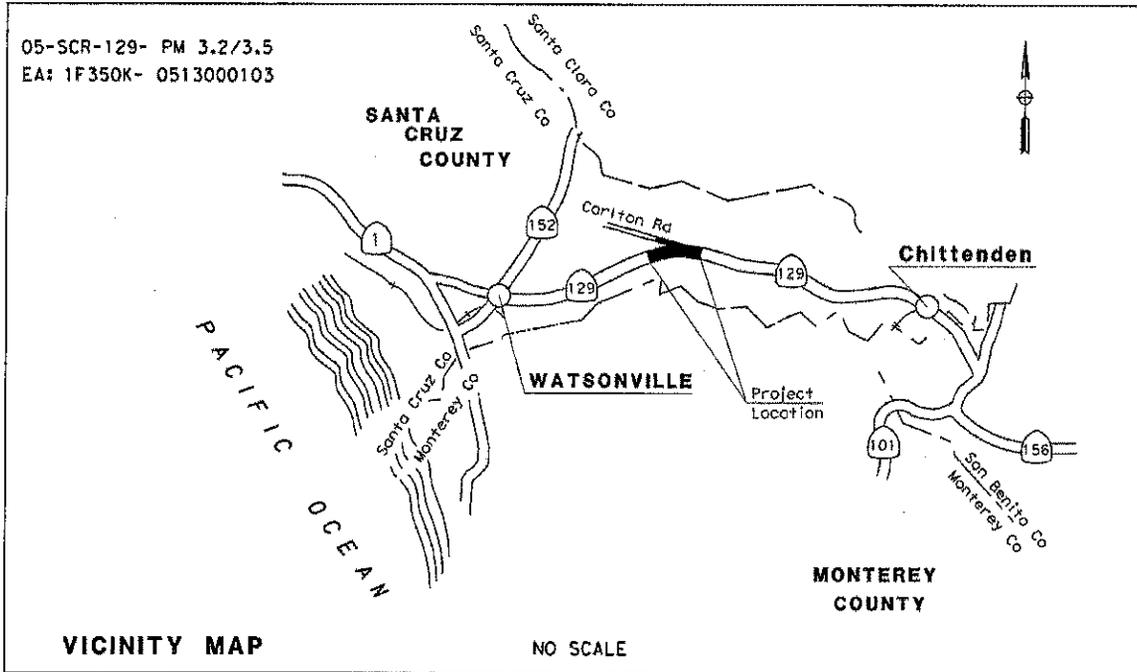
APPROVED:



TIMOTHY M. GUBBINS,  
DISTRICT 5 DIRECTOR

9/15/14  
DATE

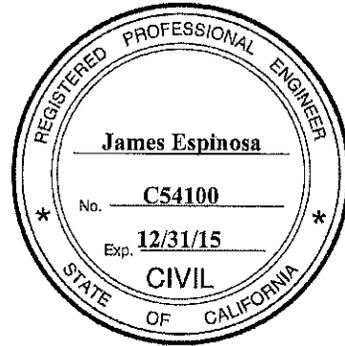
# Vicinity Map



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

  
\_\_\_\_\_  
JAMES ESPINOSA, REGISTERED CIVIL ENGINEER

8/20/14  
\_\_\_\_\_  
DATE



## Table of Contents

1. INTRODUCTION.....	4
2. BACKGROUND.....	4
3. PURPOSE AND NEED.....	5
4. DEFICIENCIES.....	6
5. CORRIDOR AND SYSTEM COORDINATION.....	7
6. ALTERNATIVES.....	7
A. Viable Alternatives.....	7
B. Rejected Alternatives.....	8
C. Analysis of Proposals.....	8
7. COMMUNITY INVOLVEMENT.....	9
8. ENVIRONMENTAL DETERMINATION/DOCUMENT.....	9
9. FUNDING/PROGRAMMING.....	10
10. SCHEDULE.....	10
11. RISKS.....	11
12. FHWA COORDINATION.....	11
13. DISTRICT CONTACTS .....	11
14. PROJECT REVIEWS.....	12
15. ATTACHMENTS.....	12
16. DISTRIBUTION LIST.....	13

## 1. INTRODUCTION

This project is located in Santa Cruz County on State Route 129 (SR-129) from PM 3.2 to PM 3.5. The project proposes to improve the safety of SR-129 by constructing a new intersection at Carlton Road west of the existing intersection and reconfiguring the adjacent private road access to reduce conflict points. A left-turn channelization and storage lane would be constructed on SR-129 at the new intersection. The proposed improvements would reduce the number of collisions at this location. The current estimated project's costs for the two "Build" alternatives are \$218,000 for right of way and \$1,682,000 for construction. This project falls into Project Development Category 4A and will be funded under the 20.10.201.010 SHOPP Safety Improvements Program.

<b>Project Limits</b>	05-SCr-129 PM 3.2/3.6
<b>Number of Alternatives</b>	2
<b>Alternative Recommended for Programming</b>	1
<b>Current Capital Outlay Support Estimate</b>	\$1,905,000
<b>Current Capital Outlay Construction Estimate</b>	\$1,682,000
<b>Current Capital Outlay Right-of-Way Estimate</b>	\$218,000
<b>Funding Source</b>	20.XX.201.010
<b>Funding Year</b>	2017/2018
<b>Type of Facility</b>	2-Lane Conventional highway
<b>Number of Structures</b>	0
<b>SHOPP Project Output</b>	31 collisions reduced over the project life
<b>Anticipated Environmental Determination or Document</b>	Mitigated Negative Declaration/Categorical Exclusion
<b>Legal Description</b>	Construct storage lane and realign intersection.
<b>Project Development Category</b>	Category 4A

## 2. BACKGROUND

This project was initiated by District 5's Traffic Safety Branch. The project location was identified as part of a 'Table C' report having a high collision concentration. A Table C Report is an analysis tool used to identify concentrations of collisions on freeways, expressways, and conventional highways in 0.2 mile increments. Concurrence was received from the Headquarters Division of Traffic Operations, Office of Traffic Safety Program.

The District Multifunctional Safety Review Committee completed an electronic review of the proposed project on November 21, 2012. The Conceptual Report was approved on February 1, 2013.

Santa Cruz County's Department of Public Works was contacted early in the programming process, and was informed that the realignment of Carlton Road would involve their right of way. On September 26, 2013, Caltrans attended a meeting with the Santa Cruz County Department of Public Works to address the project's scope and right of way issues. Plans with the proposed improvements and the proposed right of way were shown to Public Works' officials. It was agreed that a joint meeting would be held with the property owner of the affected parcel to discuss the impact of the project to the parcel. The County representatives showed support for the project. A cooperative agreement would be developed with Santa Cruz County to relinquish the realigned section of Carlton Road to the County.

A Constructability Review meeting was held on April 10, 2014. The Team discussed constructability issues regarding Alternative 1. The Team agreed on considering a second alternative (Alternative 2) to be evaluated along with Alternative 1 during this stage of the project. Alternative 2 would include reconfiguring the adjacent private road access to reduce conflict points present in Alternative 1.

State Route 129 within the project's limits is a 2-lane conventional highway (minor arterial) with 12-foot lanes and 8-foot shoulders. There is a horizontal curve of about 2000 feet at the existing intersection of SR-129 and Carlton Road. There is a private road located just east of the existing intersection. An agricultural well is located south of SR-129 within a close proximity to the proposed right of way at PM 3.25.

There are no existing pedestrian facilities within project limits. The highway survey inventory for design speed designates this segment of SR-129 at 55 mph.

Carlton Road intersects with SR-129 at approximately PM 3.45. It is a county road that is used as an access to State Route 152. The posted speed on Carlton Road is 40 mph.

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

**Purpose:**

The purpose of this project is to reduce the number and severity of collisions at this location.

**Need:**

The proposed project location is experiencing a pattern of left-turn and rear-end collisions.

#### 4. DEFICIENCIES

Carlton Road traffic accesses SR-129 at the intersection in two places approximately 300 feet apart. The private road access to Carlton Road and SR-129 is between these two points creating multiple access points within close proximity.

A Traffic Investigation revealed a pattern of collisions related to left turns to and from Carlton Road or the adjacent private road. The addition of a left turn pocket and median acceleration lane would require widening of SR-129 at this location.

#### Traffic

The Design Hourly Volume (DHV) and the Average Daily Traffic (ADT) values within project limits for SR-129 are shown in the tables below.

Table 1- 05-SCr- 129 - PM 1.4 to PM 3.35

Year	2012
DHV	1,075
AADT	10,000

Trucks in ADT: 15.3%                      10 Years TI: 11  
 Directional Split: 59.7%              20 Years TI: 12  
 Design Speed (V): 55 mph

Table 2- 05-SCr- 129 - PM 3.35 to PM 7.2

<b>Year</b>	<b>2012</b>
<b>DHV</b>	800
<b>AADT</b>	8,800

Trucks in ADT: 17.8%                      10 Years TI: 11  
 Directional Split: 59.7%              20 Years TI: 12.5  
 Design Speed (V): 55 mph

#### Collision Analysis

The summary of the selective collision data from the Traffic Accident Surveillance and Analysis System (TASAS), Table "B", for the 5-year period from January 1, 2006 to December 31, 2010 in Table 3 below reveals that the actual rate of fatalities and injuries in the segment under consideration is significantly higher than the average for similar roadways throughout the State. This collision period was used to calculate the Safety Index for this project.

**TABLE 3 – Collision Rate per Million Vehicle Miles**

Location	Actual			Average		
	Fatal	F+I	Total	Fatal	F+I	Total
Route 129	0.00	0.42	1.19	0.011	0.28	0.62

Over the 5-year period, there were a total of 20 reported collisions, which included 7 injuries. Four occurred under wet conditions and 8 occurred while dark conditions existed. The rate of collisions that have occurred during the time period is higher than the average for similar facilities throughout the State. The proposed improvements would meet the minimum threshold for Safety Index (SI) calculations.

## **5. CORRIDOR AND SYSTEM COORDINATION**

State Route 129 within the project limits is classified as a 2-lane conventional highway. The SR-129 Transportation Concept Report (TCR) divides SR-129 in Santa Cruz County into two segments (A, B). The intersection of State Route 129 and Carlton Road is the point separating segment A and B.

State Route 129 (also called Riverside Drive) within Santa Cruz County starts at Route 1 in Watsonville, and continues east until it reaches the San Benito/Santa Cruz County line. State Route 129 continues in San Benito County until it ends at SR-129/US-101 junction. State Route 129 is a commercial and recreational route. A high percentage of trucks utilize this route as a means to get to Route 101 from the Watsonville area. This is a Surface Transportation Assistance Act (STAA) Terminal Access Route for trucks. The Surface Transportation Assistance Act of 1982 allows large trucks to operate on routes that are part of the National Network.

The proposed safety improvements are compatible with the future concept and strategies and do not in any way preclude any plans to improve or hinder the operation of the facility.

## **6. ALTERNATIVES**

### **A. Viable Alternatives**

#### **Alternative 1:**

This alternative proposes to construct a new intersection approximately 350 feet west of the existing intersection. Carlton Road would be realigned to form a T-intersection with State Route 129, and the old intersection would be removed. The existing portion of Carlton Road from the new intersection to the westbound access from SR-129 would be removed. The new configuration would allow access to SR-129 from the private road.

#### **Alternative 2:**

This alternative proposes to construct a new intersection approximately 350 feet west of the existing intersection and reconfiguring the adjacent private road access to reduce conflict points. Carlton Rd would be realigned to form a T-intersection with SR-129, and the old intersection would be removed. The existing portion of Carlton Road from the private road to the westbound access from SR-129 would be removed. The left turn from SR-129 eastbound to the private road would be eliminated along with the left and right

turn from the private road to SR-129. The new intersection would allow access to SR-129 from the private road north of old Carlton Road.

For Alternatives 1 and 2, the roadbed on the westbound SR-129 would be widened. The project proposes to construct a left-turn channelization and storage lane at the new intersection. There is an existing private agricultural well south of SR-129 that might be impacted by the widening. Also, there are a total of 5 utility poles along SR-129 and Carlton Road that might be in conflict and need to be relocated.

The construction of the new intersection would impact an existing 18" cross-culvert located at PM 3.27, and consequently it would be abandoned. The project proposes to place two 24" alternative pipe culverts (APC) to replace the abandoned culvert and to improve drainage at the intersection. The locations and sizes of the culvert pipes may change as the project progresses and more information becomes available. This project lies within a very large floodplain of known depth of 1 foot. A Location Hydraulic Study would need to be performed.

This project would acquire farmland, and consultation and coordination with the National Conservation Service would be needed. Construction and right of way cost is estimated at \$1,900,000.

## **B. Rejected Alternatives**

### **Alternative 3 – Roundabout:**

This alternative proposed the construction of a new intersection with a roundabout. This intersection would be at approximately 350 feet west of the existing intersection. Carlton Rd would be realigned to intersect with the roundabout, and the old intersection would be removed. The roadbed of SR 129 would be widened to construct a left turn and storage lane at the private road east of the proposed intersection. This alternative was rejected as the cost exceeded the available funding.

### **Alternative 4 – No Build:**

This alternative would not meet the purpose and need.

## **C. Analysis of Proposals**

This project has followed the Traffic Operation Policy Directive 13-02 Intersection Control Evaluation, Step One. The objective of Step One evaluation activities is to identify access solution concepts meriting further consideration. Project Development Team had thorough discussions about the best way to configure this intersection. As a result, two alternatives were developed and considered in this Project Study Report.

Except for the Carlton Road connection, no modifications are proposed on the westbound side of centerline. Michael Janzen, HQ Design Reviewer, concurs that such a design would not be obligated to correct or document nonstandard features on the westbound side. No nonstandard features are proposed on the eastbound side including the left-turn

channelization. The scope and cost of both Alternative 1 and Alternative 2 produce a fundable Safety Index. Rubberized hot mix asphalt is not recommended for this project due to the low quantity.

## **7. COMMUNITY INVOLVEMENT**

A meeting was held with the landowner on 6/11/2014. The main objective of the meeting was to discuss the impacts on the adjacent farmland and its operations, and to identify the best alternative to be recommended for programming. The two Build Alternatives were discussed with the landowner who expressed his concerns and objectives. The landowner wants to keep access to SR-129 at the driveway, and he supports removing part of Carlton Road from SR-129 up to the new intersection. These ideas will be fully evaluated and will be implemented as much as possible. Caltrans will keep the landowner updated with any changes to the scope of work.

## **8. ENVIRONMENTAL DETERMINATION/DOCUMENT**

Based on the Preliminary Environmental Analysis Report (PEAR), the anticipated environmental document for this project will be a Mitigated Negative Declaration/Categorical Exclusion. This document level has been selected based on potential impacts to California Red-legged Frog which is anticipated to be mitigated below the threshold of significance as defined by CEQA. The California Department of Transportation (Caltrans) would act as the lead agency under NEPA/CEQA (National Environmental Policy Act/California Environmental Quality act). Caltrans will serve as the NEPA lead agency under its assumption of responsibility pursuant to 23 U.S. Code 327. The estimated time to obtain environmental approval is 23 months from the start of environmental studies. Final environmental document would be anticipated by June 1, 2016.

It is anticipated that multiple environmental studies and reports will be required for this project including (but not limited to): archeology survey report, natural environmental study, hazardous waste studies and farmland site assessment and evaluation. It is currently estimated that biology will be the critical path for the delivery of the Environmental Document.

### **Biology**

Due to the potential for impacts to Endangered, Threatened or Special Status Species, Plant/wildlife, surveys during the appropriate season will be required. Field studies and additional research will have to be conducted to assess the types of impact and what action would be required.

### **Hazardous Waste**

The proposed project involves soil disturbance and possible soil export. An Initial Site Assessment would be required.

**Water Quality**

The proposed project has the potential of having a short-term water quality impact. To minimize impacts to water quality, proper and accepted engineering practices and Best Management Practices (BMP's) would be incorporated.

**9. FUNDING/PROGRAMMING**

It has been determined that this project is eligible for federal-aid funding.

**Capital Outlay Support and Project Estimates**

Fund Source	Fiscal Year Estimate							
	Prior	2013/14	2014/15	2015/16	2016/17	2017/18	Future	Total
20.XX.201.010								
Component	In thousands of dollars (\$1,000)							
PA&ED Support			\$543					\$543
PS&E Support					\$674			\$674
Right-of-Way Support					\$309			\$309
Construction Support						\$508		\$508
Right-of-Way						\$277		\$277
Construction						\$2,045		\$2,045
<b>Total</b>			\$543		\$983	\$2,830		\$4,356

Construction Capital is escalated at 5% per year.

Support cost is escalated at 3% per year. The support cost ratio is 87%.

**10. SCHEDULE**

Project Milestones	Scheduled Delivery Date (Month/Day/Year)
PROGRAM PROJECT	M015 9/12/2014
BEGIN ENVIRONMENTAL	M020 11/03/2014
BEGIN PROJECT REPORT	M040 09/15/2014
APPROVE DPR	M100 09/25/2015
CIRCULATE DPR & DED EXTERNALLY	M120 12/01/2015
PA & ED	M200 07/01/2016
PS&E TO DOE	M377 11/08/2017
REG R/W	M225 09/27/2016
RIGHT OF WAY CERTIFICATION	M410 03/29/2018
READY TO LIST	M460 03/29/2018
HEADQUARTERS ADVERTISE	M480 04/23/2018
AWARD	M495 06/27/2018
APPROVE CONTRACT	M500 07/11/2018
CONTRACT ACCEPTANCE	M600 11/12/2019
END PROJECT	M800 02/17/2021

## 11. RISKS

A Risk Management Plan (RMP) has been prepared for this project. The RMP is identifies several risks that could possibly delay the completion of the project. These risks vary from moderate to low. All identified risks are given specific risk response plans and assigned to appropriate risk managers to monitor and control the risks.

There are some risks associated with acquiring right of way and relocating utility poles, and the probability of occurring is moderate to low and the impact on schedule is moderate. The unresolved Buy America issues with the utility companies are a risk with low probability of occurring and high impact.

## 12. FHWA COORDINATION

This project is considered to be an Assigned Project in accordance with the current Federal Highway Administration (FHWA) and Department of Transportation (Caltrans) Joint Stewardship and Oversight Agreement.

## 13. DISTRICT CONTACTS

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

**Doug Hessing**..... (805) 549-3386  
Project Manager

**Matt C Fowler**..... (805) 542-4603  
Environmental

**Marshall Garcia**..... (805) 549-3471  
Right of Way

**James Espinosa**..... (559) 243-3537  
Design Manager

**Atif Abdalla**..... (559) 243-3538  
Project Engineer

#### 14. PROJECT REVIEWS

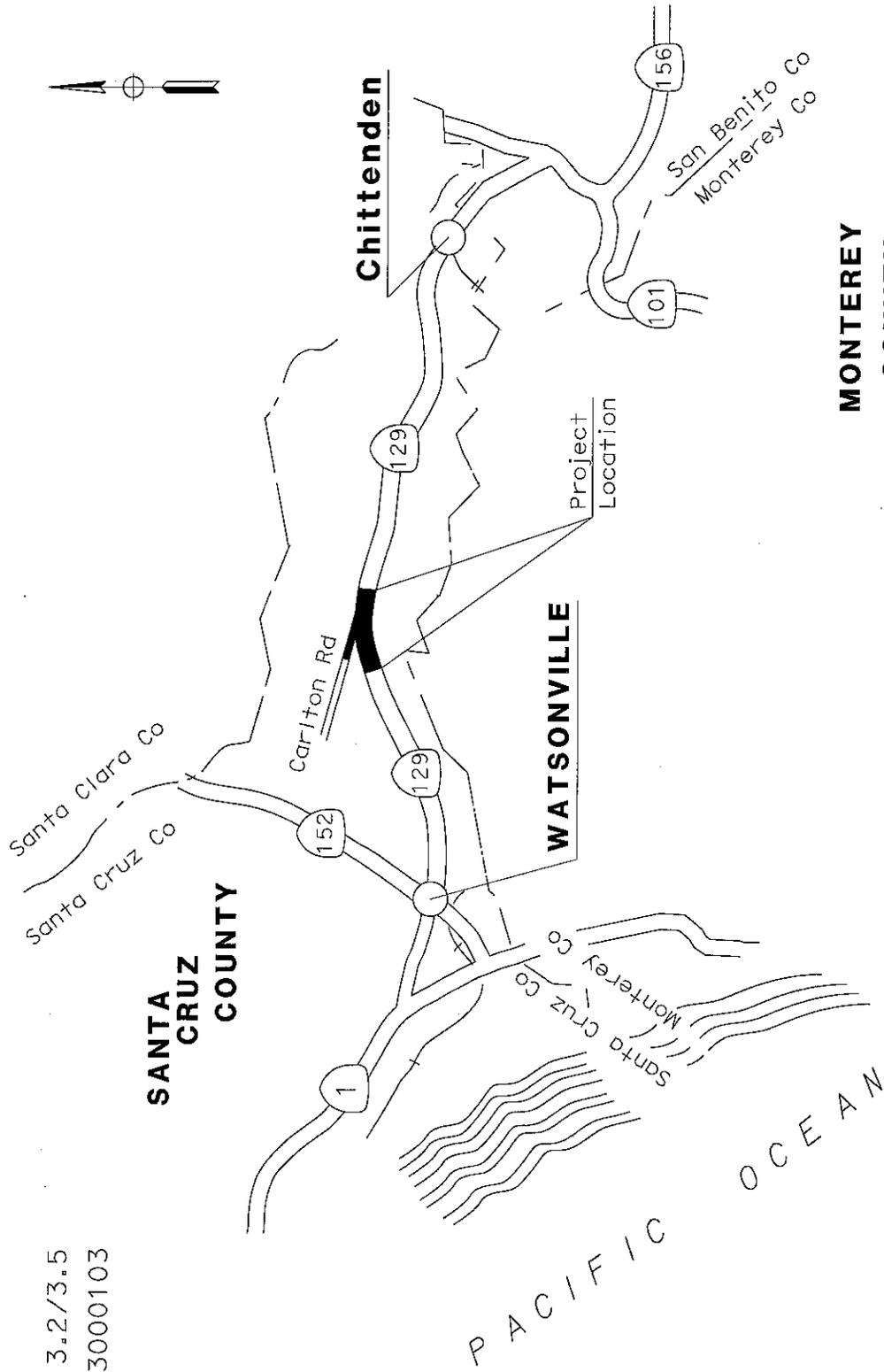
Scoping team field review	_____	Date	_____
District Program Advisor	DEB L. LARSON	Date	02/01/13
Headquarters SHOPP Program Advisor	ROBERT PETERSON	Date	01/03/13
District Maintenance	TOM BARNETT	Date	_____
Headquarters Design Reviewer	MICHAEL JANZEN	Date	9/26/13
Project Manager	DOUG HESSING	Date	9/26/13
FHWA	_____	Date	_____
District Safety Review	MARK BALLENTINE	Date	02/01/13
Constructability Review	_____	Date	4/10/14
Other	MARSHALL GARCIA, Right of Way	Date	5/22/14

#### 15. ATTACHMENTS

- A. Vicinity Map
- B. Layouts/Typical Cross Sections
- C. Preliminary Cost Estimates
- D. Preliminary Environmental Analysis Report
- E. R/W Data Sheet
- F. Traffic Management Plan Checklist
- G. Storm Water Data Report
- H. Risk Management Plan



05-SCR-129- PM 3.2/3.5  
EA: 1F350K- 0513000103



**VICINITY MAP**

NO SCALE

ATTACHMENT A

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**

FUNCTIONAL SUPERVISOR  
 CALCULATED-DESIGNED BY  
 CHECKED BY  
 REVISOR BY  
 DATE REVISOR

**LEGEND:**  
 1- Remove existing pavement

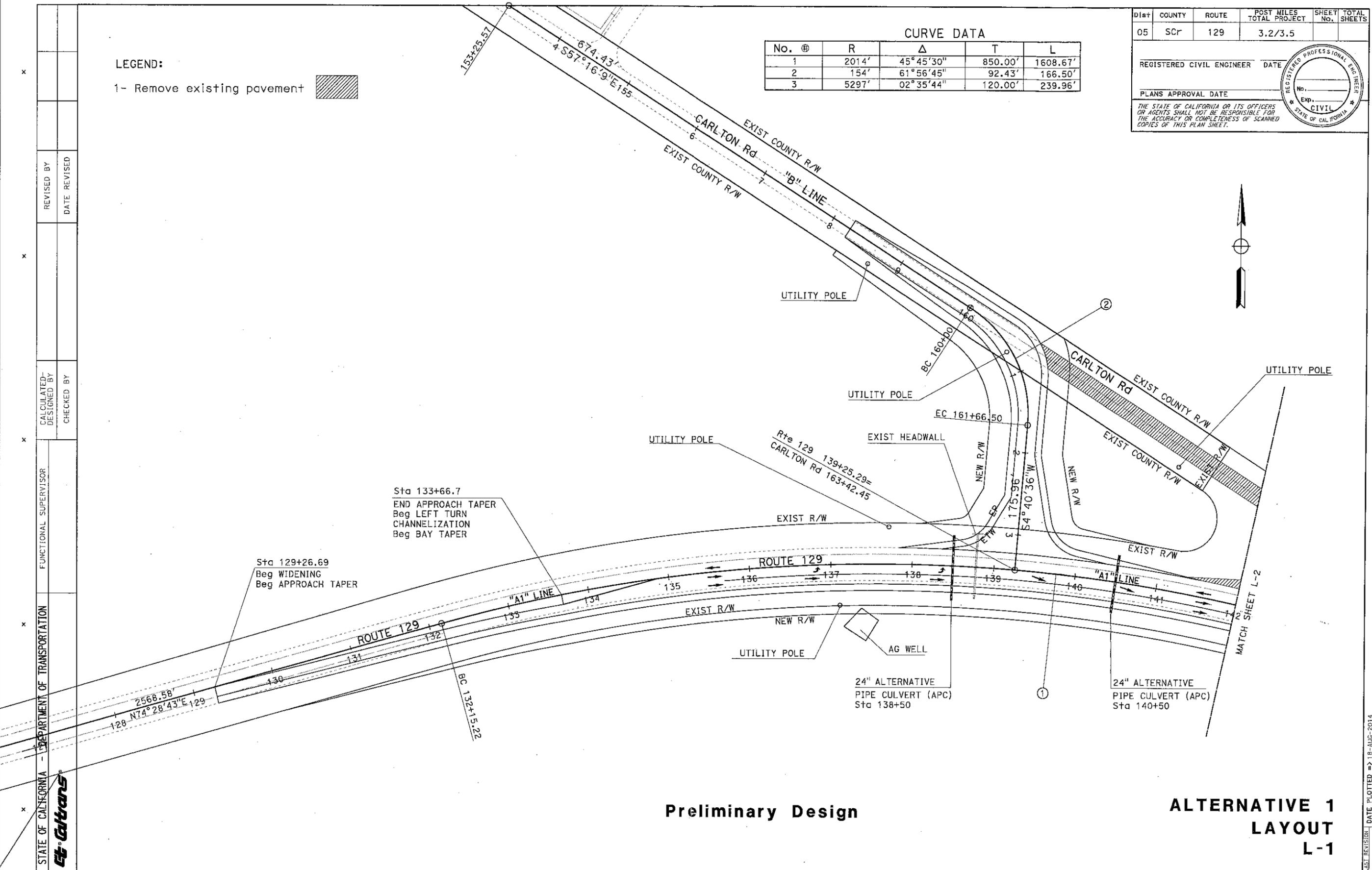
**CURVE DATA**

No.	R	Δ	T	L
1	2014'	45°45'30"	850.00'	1608.67'
2	154'	61°56'45"	92.43'	166.50'
3	5297'	02°35'44"	120.00'	239.96'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	129	3.2/3.5		

REGISTERED CIVIL ENGINEER DATE \_\_\_\_\_  
 PLANS APPROVAL DATE \_\_\_\_\_

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



**Preliminary Design**

**ALTERNATIVE 1  
 LAYOUT  
 L-1**

BORDER LAST REVISED 7/2/2010

USERNAME => s134449  
 DGN FILE => Layout 1.dgn

RELATIVE BORDER SCALE  
 15 IN INCHES

UNIT 0000

PROJECT NUMBER & PHASE

0000000001

LAST REVISION DATE PLOTTED => 18-AUG-2014  
 00-00-00 TIME PLOTTED => 14:51

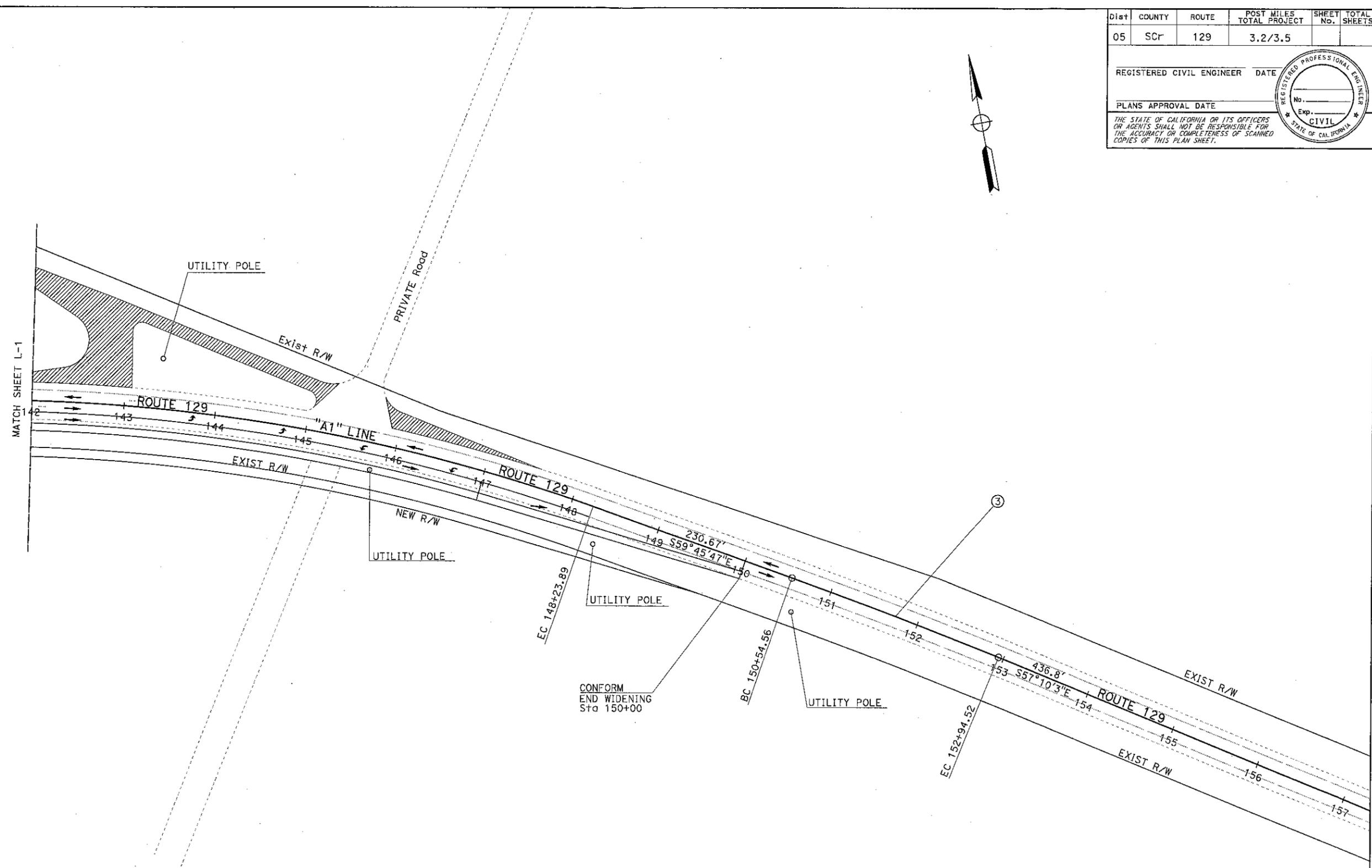
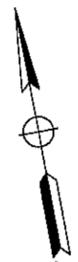
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	129	3.2/3.5		

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CHECKED BY	DESIGNED BY	REVISOR
ST. Gibbons				

**ALTERNATIVE 1  
LAYOUT  
L-2**

LAST REVISION DATE PLOTTED => 18-AUG-2014  
00-00-00 TIME PLOTTED => 14:11

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**St. Gibbons**

REVISOR'S NAME  
 REVISOR'S DATE  
 CALCULATED BY  
 DESIGNED BY  
 CHECKED BY

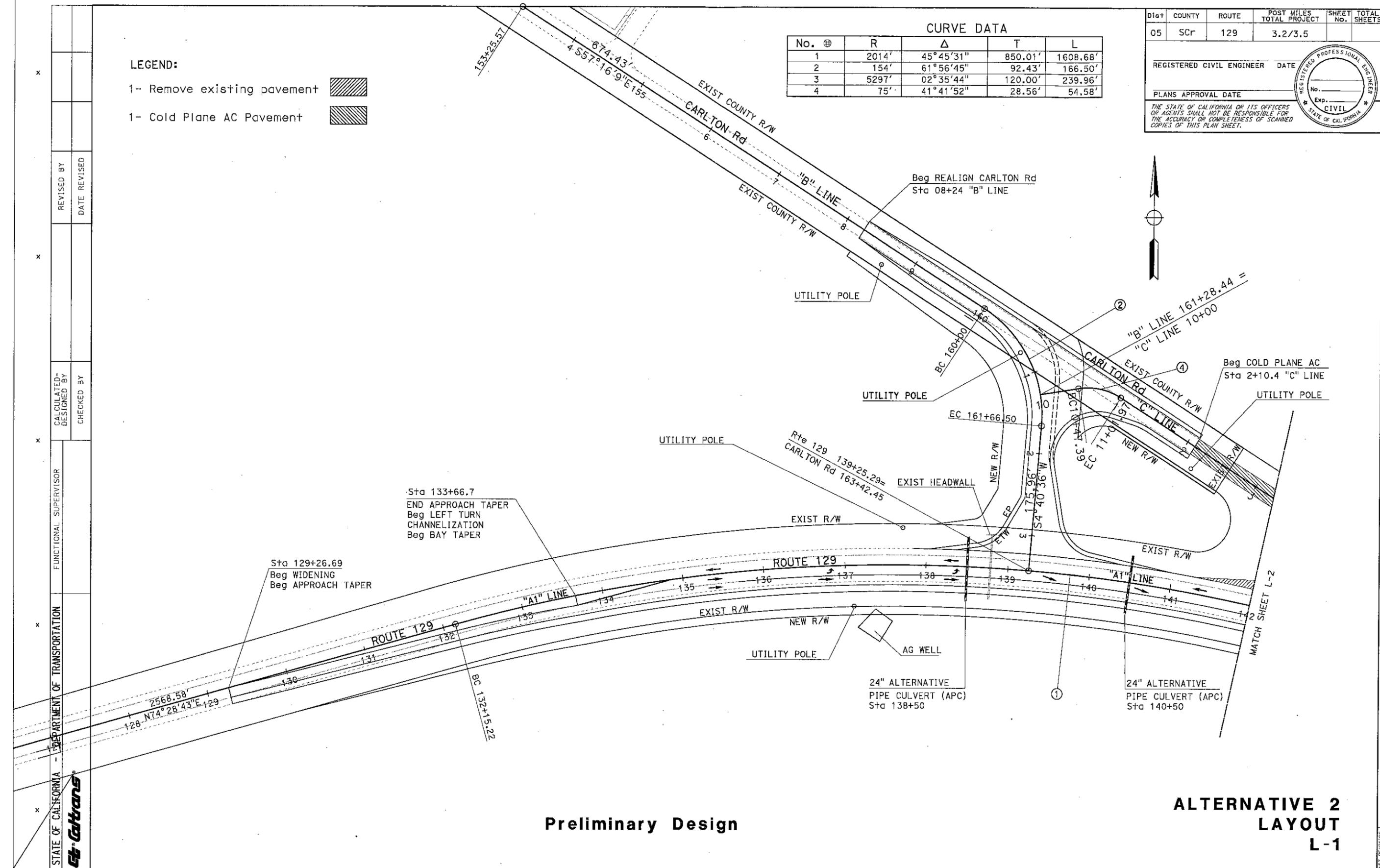
**LEGEND:**

- 1- Remove existing pavement
- 1- Cold Plane AC Pavement

CURVE DATA				
No. Ⓢ	R	Δ	T	L
1	2014'	45°45'31"	850.01'	1608.68'
2	154'	61°56'45"	92.43'	166.50'
3	5297'	02°35'44"	120.00'	239.96'
4	75'	41°41'52"	28.56'	54.58'

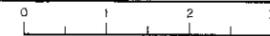
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	129	3.2/3.5		

REGISTERED CIVIL ENGINEER DATE \_\_\_\_\_  
 PLANS APPROVAL DATE \_\_\_\_\_  
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**Preliminary Design**

**ALTERNATIVE 2  
 LAYOUT  
 L-1**





STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 FUNCTIONAL SUPERVISOR  
 CALCULATED BY  
 CHECKED BY  
 REVISOR BY  
 DATE REVISOR

DESIGN DESIGNATION (Route 129)  
 PM 1.4 to PM 3.35

	2012	2039
AAVT	10,000	15,158
DHV	1,075	1,545
D= 59.7%		
T= 15.3%		
V= 55 MPH		

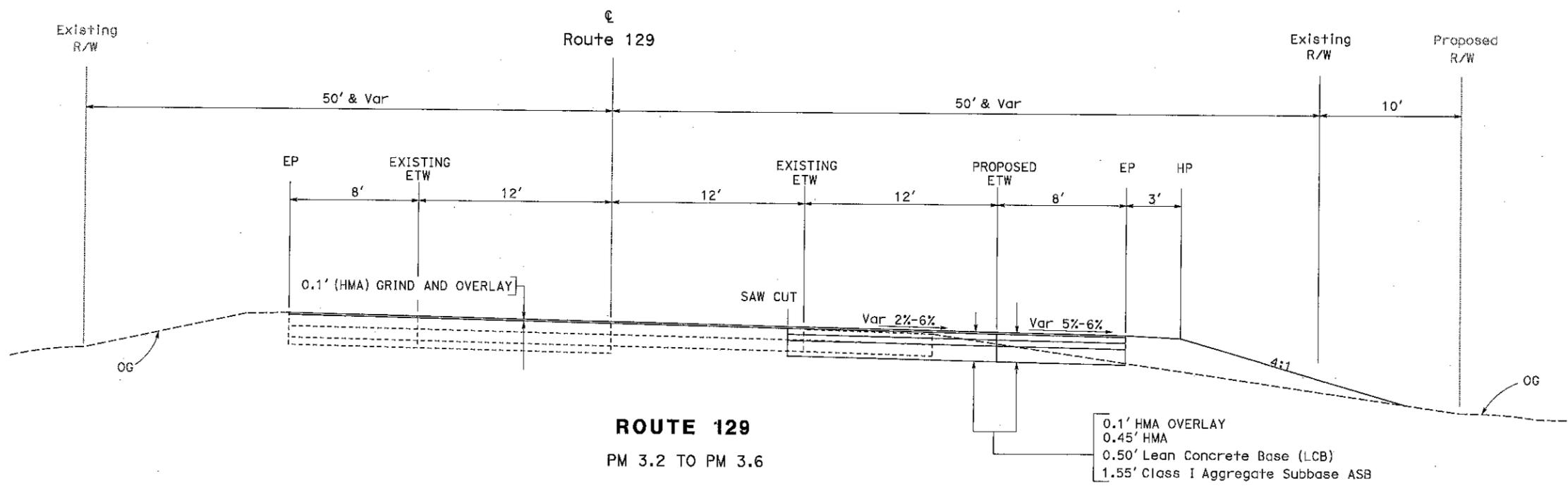
DESIGN DESIGNATION (Route 129)  
 PM 3.35 to PM 7.2

	2012	2039
AAVT	8,800	13,842
DHV	800	1,237
D= 59.7%		
T= 17.8%		
V= 55 MPH		

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	129	PM 3.2/3.5		

REGISTERED CIVIL ENGINEER DATE \_\_\_\_\_  
 PLANS APPROVAL DATE \_\_\_\_\_

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ROUTE 129  
 PM 3.2 TO PM 3.6

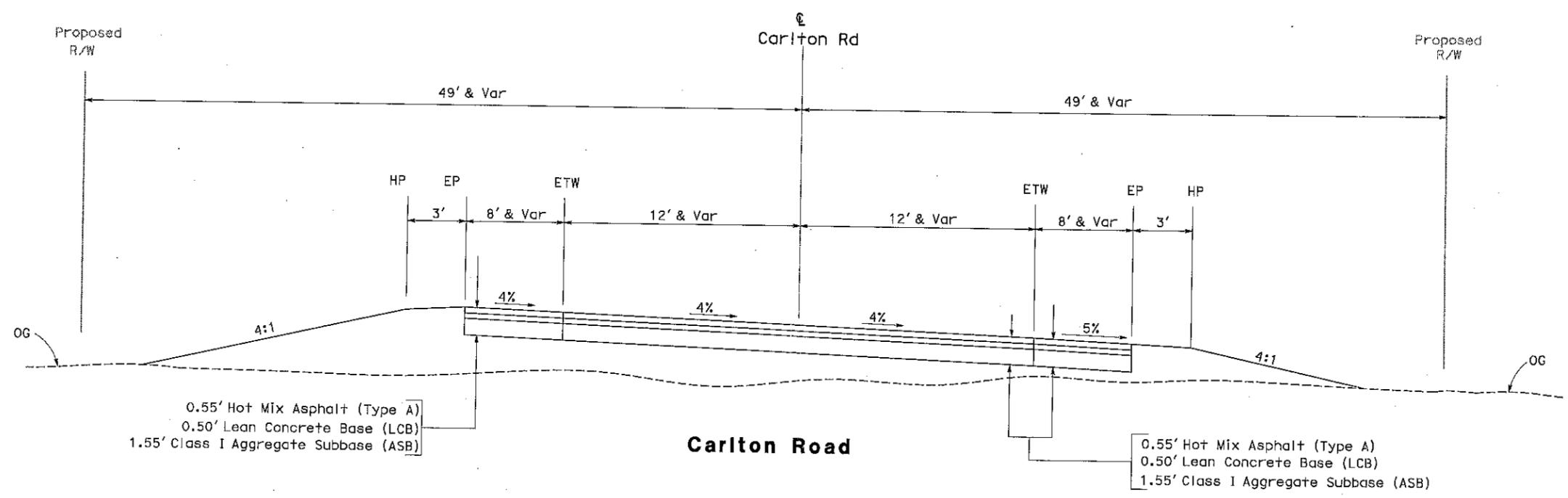
TYPICAL CROSS SECTIONS  
 X-1

NO SCALE

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 TIME PLOTTED => 10:18  
 LAST REVISION 00-00-00

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	129	PM 3.2/3.5		
REGISTERED CIVIL ENGINEER					DATE
PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 FUNCTIONAL SUPERVISOR  
 CALCULATED-DESIGNED BY  
 CHECKED BY  
 REVISED BY  
 DATE REVISED



**TYPICAL CROSS SECTIONS**  
**X-2**

NO SCALE

DATE PLOTTED => 18-JUL-2014  
 TIME PLOTTED => 10:18  
 00-00-00

**PLANNING COST ESTIMATE**



Dist-Co-Rte: 05-SCr-129  
 PM: PM 3.2/3.5  
 EA: 05-1F350K  
 Program Code: 20.10.201.010

**PROJECT DESCRIPTION: Alternative 1**

Limits: PM 3.2 to PM 3.5

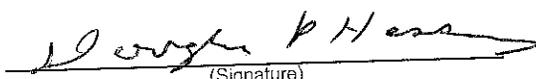
Proposed Improvement: Move Carlton intersection approximately 360 feet west of current location. Construct a left-turn channelization and storage lane on SR-129 at the new intersection. Remove part of Carlton Road from SR-129 up to the new intersection.  
 (Scope of Work)

Alternative: 1

**SUMMARY OF PROJECT COST ESTIMATE**

TOTAL ROADWAY ITEMS	Total of Sections 1 - 10 shown above	\$ <u>1,719,000</u>
TOTAL STRUCTURES ITEMS		\$ <u>0</u>
	SUBTOTAL CONSTRUCTION COSTS	\$ <u>1,719,000</u>
	TOTAL RIGHT OF WAY ITEMS (Not Escalated)	\$ <u>217,000</u>
	TOTAL PROJECT CAPITAL OUTLAY COSTS	\$ <u>1,900,000</u>

Reviewed by District Program Manager:  9/5/2014  
 (Signature) (Date)

Approved by Project Manager:  9/4/14  
 (Signature) (Date)

Phone Number: 805 549 3386

Form revised 12/01/09

ATTACHMENT C

**PLANNING COST ESTIMATE**



Dist-Co-Rte: 05-SCR-129  
 PM: PM 3.2/3.5  
 EA: 05-1F350K  
 Program Code: 20.10.201.010

**I. ROADWAY ITEMS**

<u>Section 1 - Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Roadway Excavation	2,000	CY	\$40	\$80,000	
Roadway Excavation, Haz Waste	575	CY	\$200	\$115,000	
Imported Borrow	4,000	CY	\$13	\$52,000	
Clearing & Grubbing	1	LS	\$5,000	\$5,000	
Develop Water Supply	1	LS	\$0	\$0	
Cold Plane Asphalt Concrete	7,000	SQYD	\$4	\$24,500	
Stepped Slopes and Slope			\$0	\$0	
Remove Asphalt Concrete Pavement	500	CY	\$15	\$7,500	
			\$0	\$0	
			<b>Subtotal Earthwork:</b>		<b>\$284,000</b>
<u>Section 2 - Pavement Structural Section*</u>					
PCC Pvmt <b>Depth</b>	0	CY	\$0	\$0	
PCC Pvmt <b>Depth</b>	0	CY	\$0	\$0	
Asphalt Concrete	3,000	Ton	\$100	\$300,000	
Lean Concrete Base	1,200	CY	\$158	\$189,600	
Cement-Treated Base	0	CY	\$0	\$0	
Class I Aggregate Subbase (ASB)	3,700	CY	\$30	\$111,000	
Treated Permeable Base	0	CY	\$0	\$0	
Aggregate Subbase	0	CY	\$0	\$0	
Pavement Reinforcing Fabric	0	SF	\$0	\$0	
Edge Drains	0	FT	\$0	\$0	
				\$0	
			<b>Subtotal Pavement Structural Section:</b>		<b>\$600,600</b>
<u>Section 3 - Drainage</u>					
24" Alternative Pipe Culvert	2	LS	\$12,000	\$24,000	
Storm Drains	0	LS	\$0	\$0	
Pumping Plants	0	LS	\$0	\$0	
Project Drainage	0	LS	\$0	\$0	
Minor Concrete (Minor Structure)	5	CY	\$3,200	\$16,000	
			<b>Subtotal Drainage:</b>		<b>\$40,000</b>

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

**PLANNING COST ESTIMATE**



Dist-Co-Rte: 05-SCr-129  
 PM: PM 3.2/3.5  
 EA: 05-1F350K  
 Program Code: 20.10.201.010

<u>Section 4 - Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Retaining Walls	0	SF	\$0	\$0	
Noise Barriers	0	EA	\$0	\$0	
Barriers and Guardrails	0	LF	\$0	\$0	
Equipment/Animal Passes	0	EA	\$0	\$0	
Water Pollution Control	1	LS	\$20,000	\$20,000	
Hazardous Waste Investigation and/or Mitigation Work	0	LS		\$0	
Environmental Compliance Plan	1	LS	\$2,000	\$2,000	
Resident Engineer Office Space	1	LS	\$12,000	\$12,000	
				\$0	
			<u>Subtotal Specialty Items:</u>		<u>\$34,000</u>
<u>Section 5 - Traffic Items</u>					
Lighting	0	LS	\$0	\$0	
Thermoplastic Traffic Stripe	5,000	LS	\$2	\$10,000	
Remove Thermoplastic Traffic Stripe	0	LS	\$0	\$0	
Construction Area Signs	1	LS	\$6,000	\$6,000	
Overhead Sign Structures	0	EA	\$0	\$0	
Roadside Signs	5	EA	\$2,500	\$12,500	
Traffic Control Systems	1	LS	\$25,000	\$25,000	
Transportation Management Plan	1	LS	\$4,000	\$4,000	
Changeable Portable Message Sign	2	EA	\$12,000	\$24,000	
Temporary Traffic Stripe	7,500	LF	\$1	\$7,500	
Maintain Traffic	1	LS	\$15,000	\$15,000	
Staging	0	LS	\$0	\$0	
				\$0	
			<u>Subtotal Traffic Items:</u>		<u>\$104,000</u>

**PLANNING COST ESTIMATE**



Dist-Co-Rte: 05-SCR-129  
 PM: PM 3.2/3.5  
 EA: 05-1F350K  
 Program Code: 20.10.201.010

**II. ROADSIDE ITEMS**

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

<u>Section 7: Roadside Management and Safety Section</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Vegetation Control Treatments	0	LS	\$0	\$0	
Gore Area Pavement	0	LS	\$0	\$0	
Pavement beyond the gore area	0	LS	\$0	\$0	
Miscellaneous Paving	0	LS	\$0	\$0	
Erosion Control	1	LS	\$15,000	\$15,000	
Slope Protection	0	LS	\$0	\$0	
Side Slopes/Embankment Slopes	0	LS	\$0	\$0	
Maintenance Vehicle Pull outs Off-freeway Access (gates, stairways, etc.) Roadside Facilities (Vista Points, Transit, Park & Ride, etc)	0	LS	\$0	\$0	
Relocating roadside facilities/features	0	LS	\$0	\$0	
				\$0	
Subtotal Roadside Management and Safety Section:					\$15,000

TOTAL SECTIONS 1 thru 7 \$1,077,600

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

**PLANNING COST ESTIMATE**



Dist-Co-Rte: 05-SCr-129  
 PM: PM 3.2/3.5  
 EA: 05-1F350K  
 Program Code: 20.10.201.010

**III. ROADWAY ADDITIONS**

Section 8 - Minor Items

				<u>Item Cost</u>	<u>Section Cost</u>
(Subtotal Sections 1 thru 7)	<u>\$1,077,600</u>	x	<u>0.10</u> (5 to 10%)	=	<u>\$107,760</u>

TOTAL Minor Items: \$107,760

Section 9 - Roadway Mobilization

(Subtotal Sections 1 thru 8)	<u>\$1,185,360</u>	x	<u>0.10</u> (10%)	=	<u>\$118,536</u>
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TOTAL Roadway Mobilization: \$118,536

Section 10 - Supplemental Work & Contingencies

Supplemental Work

(Subtotal Sections 1 thru 8)	<u>\$1,185,360</u>	x	<u>0.10</u> (5 to 10%)	=	<u>\$118,536</u>
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Contingencies

(Subtotal Sections 1 thru 8)	<u>\$1,185,360</u>	x	<u>0.25</u> (**%)	=	<u>\$296,340</u>
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Supplemental Work & Contingencies: \$414,876

TOTAL ROADWAY ADDITIONS Sections 8 thru 10: \$641,172

TOTAL ROADWAY ITEMS: \$1,718,772

(Subtotal Sections 1 thru 10)

Estimate Prepared by: Atif Abdalla  
 (Print or Type Name)

Phone: 559-243-3538

6/9/14  
(Date)

Estimate Checked by: Jim Espinosa  
 (Print or Type Name)

Phone: 559-243-3537

6/16/14  
(Date)

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

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

**PLANNING COST ESTIMATE**



Dist-Co-Rte: 05-SCR-129  
 PM: PM 3.2/3.5  
 EA: 05-1F350K  
 Program Code: 20.10.201.010

**II. STRUCTURE ITEMS**

	STRUCTURE			
	No. 1	No. 2	No. 3	
Bridge Name	_____	_____	_____	
Structure Type	_____	_____	_____	
Width (out to out) - (ft)	_____	_____	_____	
Span Length - (ft)	0	0	0	
Total Area - ft <sup>2</sup>	0	0	0	
Footing Type (pile/spread)	0	0	0	
Cost per ft <sup>2</sup>	0	0	0	
(incl. 10 % mobilization and 20 % contingency)				
Total Cost for Structure	\$0	\$0	\$0	
SUBTOTAL STRUCTURES ITEMS				\$0
(Sum of Total Cost for Structures)				
Railroad Related Costs (Not incl. in R/W Est)	_____	_____	_____	\$0
	_____	_____	_____	\$0
SUBTOTAL RAILROAD ITEMS				\$0
TOTAL STRUCTURES ITEMS				\$0
(Sum of Structures items plus Railroad Items)				

**COMMENTS:**

Estimate Prepared by: Atif Abdalla Phone: 559-243-3538 6/9/14  
 (Print or Type Name) (Date)

(If appropriate, attach additional pages as backup)

**PLANNING COST ESTIMATE**



Dist-Co-Rte: 05-SCr-129  
 PM: PM 3.2/3.5  
 EA: 05-1F350K  
 Program Code: 20.10.201.010

**III. RIGHT OF WAY ITEMS**

No. of years for Escalation = ██████████

	Current Values	Rate (%)	Escalation Factor		Escalated Values
A. Acquisition, including excess lands, damages to remainder(s) and Goodwill	\$134,813	5.0	1.00	-	\$134,813
B. Utility Relocation (State Share)	\$75,000	5.0	1.00	-	\$75,000
C. Relocation Assistance	\$0	5.0	1.00	-	\$0
D. Clearance/Demolition	\$2,750	7.0	1.00	-	\$2,750
E. Title and Escrow Fees	\$4,629	4.0	1.00	-	\$4,629
<b>TOTAL RIGHT OF WAY** ITEMS=</b>	<b>\$217,192</b>				<b>\$217,192</b>

(Escalated Value)

Anticipated Date of Right of Way Certification: 3/15/18  
 (Date to which Values are Escalated)

**F. Construction Contract Work**

Brief Description of Work

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

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

**COMMENTS:**

Estimate Prepared by: Atif Abdalla Phone: 559-243-3538 6/9/14  
(Print or Type Name) (Date)

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

PLANNING COST ESTIMATE



Dist-Co-Rte: 05-SCR-129  
 PM: PM 3.2/3.5  
 EA: 05-1F350K  
 Program Code: 20.10.201.010

PROJECT DESCRIPTION: Alternative 2

Limits: PM 3.2 to PM 3.5

Proposed Improvement:  
 (Scope of Work)

Move Carlton intersection approximately 360 feet west of current location. Construct a left-turn channelization and storage lane on SR-129 at the new intersection.

Alternative: 2

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	Total of Sections 1 - 10 shown above	\$ 1,733,000
TOTAL STRUCTURES ITEMS		\$ 0
	SUBTOTAL CONSTRUCTION COSTS	\$ 1,733,000
	TOTAL RIGHT OF WAY ITEMS (Not Escalated)	\$ 211,000
	TOTAL PROJECT CAPITAL OUTLAY COSTS	\$ 1,900,000

Reviewed by  
 District Program Manager:

(Signature)

9/5/2014  
 (Date)

Approved by Project Manager:

(Signature)

9/15/14  
 (Date)

Phone Number:

805 549 3368

Form revised 12/01/09



**PLANNING COST ESTIMATE**



Dist-Co-Rte: 05-SCr-129  
 PM: PM 3.2/3.5  
 EA: 05-1F350K  
 Program Code: 20.10.201.010

<u>Section 4 - Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Retaining Walls	0	SF	\$0	\$0	
Noise Barriers	0	EA	\$0	\$0	
Barriers and Guardrails	0	LF	\$0	\$0	
Equipment/Animal Passes	0	EA	\$0	\$0	
Water Pollution Control	1	LS	\$20,000	\$20,000	
Hazardous Waste Investigation and/or Mitigation Work		LS		\$0	
Environmental Compliance Plan	1	LS	\$2,000	\$2,000	
Resident Engineer Office Space	1	LS	\$12,000	\$12,000	
				\$0	
			Subtotal Specialty Items:		\$34,000
<u>Section 5 - Traffic Items</u>					
Lighting	0	LS	\$0	\$0	
Thermoplastic Traffic Stripe	5,000	LS	\$2	\$10,000	
Remove Thermoplastic Traffic Stripe	0	LS	\$0	\$0	
Construction Area Signs	1	LS	\$6,000	\$6,000	
Overhead Sign Structures	0	EA	\$0	\$0	
Roadside Signs	5	EA	\$2,500	\$12,500	
Traffic Control Systems	1	LS	\$25,000	\$25,000	
Transportation Management Plan	1	LS	\$4,000	\$4,000	
Changeable Portable Message Sign	2	EA	\$12,000	\$24,000	
Temporary Traffic Stripe	7,500	LF	\$1	\$7,500	
Maintain Traffic	1	LS	\$15,000	\$15,000	
Staging	0	LS	\$0	\$0	
				\$0	
			Subtotal Traffic Items:		\$104,000

**PLANNING COST ESTIMATE**



Dist-Co-Rte: 05-SCr-129  
 PM: PM 3.2/3.5  
 EA: 05-1F350K  
 Program Code: 20.10.201.010

**II. ROADSIDE ITEMS**

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

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
<u>Section 7: Roadside Management and Safety Section</u>					
Vegetation Control Treatments	0	LS	\$0	\$0	
Gore Area Pavement	0	LS	\$0	\$0	
Pavement beyond the gore area	0	LS	\$0	\$0	
Miscellaneous Paving	0	LS	\$0	\$0	
Erosion Control	1	LS	\$15,000	\$15,000	
Slope Protection	0	LS	\$0	\$0	
Side Slopes/Embankment Slopes	0	LS	\$0	\$0	
Maintenance Vehicle Pull outs					
Off-freeway Access (gates, stairways, etc.)					
Roadside Facilities (Vista Points, Transit, Park & Ride, etc)	0	LS	\$0	\$0	
Relocating roadside facilities/features	0	LS	\$0	\$0	
					Subtotal Roadside Management and Safety Section: \$15,000

TOTAL SECTIONS 1 thru 7 \$1,086,750

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



**PLANNING COST ESTIMATE**



Dist-Co-Rte: 05-SCR-129  
 PM: PM 3.2/3.5  
 EA: 05-1F350K  
 Program Code: 20.10.201.010

**II. STRUCTURE ITEMS**

	STRUCTURE			
	No. 1	No. 2	No. 3	
Bridge Name	_____	_____	_____	
Structure Type	_____	_____	_____	
Width (out to out) - (ft)	_____	_____	_____	
Span Length - (ft)	<u>0</u>	<u>0</u>	<u>0</u>	
Total Area - ft <sup>2</sup>	<u>0</u>	<u>0</u>	<u>0</u>	
Footing Type (pile/spread)	<u>0</u>	<u>0</u>	<u>0</u>	
Cost per ft <sup>2</sup>	<u>0</u>	<u>0</u>	<u>0</u>	
(incl. 10 % mobilization and 20 % contingency)				
Total Cost for Structure	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	
SUBTOTAL STRUCTURES ITEMS				<u>\$0</u>
(Sum of Total Cost for Structures)				
Railroad Related Costs (Not incl. in R/W Est)	_____	_____	_____	<u>\$0</u>
	_____	_____	_____	<u>\$0</u>
SUBTOTAL RAILROAD ITEMS				<u>\$0</u>
TOTAL STRUCTURES ITEMS				<u>\$0</u>
(Sum of Structures items plus Railroad Items)				

COMMENTS:

Estimate Prepared by: Atif Abdalla Phone: 559-243-3538 6/9/14  
 (Print or Type Name) (Date)

(If appropriate, attach additional pages as backup)

**PLANNING COST ESTIMATE**



Dist-Co-Rte: 05-SCr-129  
 PM: PM 3.2/3.5  
 EA: 05-1F350K  
 Program Code: 20.10.201.010

**III. RIGHT OF WAY ITEMS**

No. of years for Escalation = ██████████

	Current Values	Rate (%)	Escalation Factor		Escalated Values
A. Acquisition, including excess lands, damages to remainder(s) and Goodwill	\$129,813	5.0	1.00	-	\$129,813
B. Utility Relocation (State Share)	\$75,000	5.0	1.00	-	\$75,000
C. Relocation Assistance	\$0	5.0	1.00	-	\$0
D. Clearance/Demolition	\$2,750	7.0	1.00	-	\$2,750
E. Title and Escrow Fees	\$3,486	4.0	1.00	-	\$3,486
<b>TOTAL RIGHT OF WAY** ITEMS=</b>	<u>\$211,049</u>				<u>\$211,049</u> (Escalated Value)

Anticipated Date of Right of Way Certification: 3/15/18

(Date to which Values are Escalated)

**F. Construction Contract Work**

Brief Description of Work

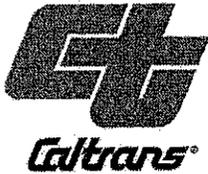
Right of Way Branch Cost Estimate for Work \$0

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

**COMMENTS:**

Estimate Prepared by: Atif Abdalla Phone: 559-243-3538 6/9/14  
(Date)  
(Print or Type Name)

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



## Preliminary Environmental Analysis Report

### Project Information

District	5	County	SCR	Route	129	Post Mile	3.2/3.6	EA	1F350K
Project ID#:	05130000103								
Project Title:	129 Carlton Rd.								
Project Manager:	Doug Hessing					Phone #:	805-549-3386		
Design Manager:	Jim Espinosa					Phone #:	559-243-3537		
Design Engineer:	Atif Abdalla					Phone #:	559-243-3538		
Environmental Manager:	Matt Fowler					Phone #:	805-542-4603		
Environmental Planner:	Michael H. Thomas					Phone #:	805-549-3023		

### PSR Summary Statement

The anticipated environmental document for this project will be a Mitigated Negative Declaration/Categorical Exclusion. This document level has been selected based on potential impacts to California Red-legged Frog which is anticipated to be mitigated below the threshold of significance as defined by CEQA. The California Department of Transportation (Caltrans) would act as the lead agency under NEPA/CEQA (National Environmental Policy Act/California Environmental Quality Act). Caltrans will serve as the NEPA lead agency under its assumption of responsibility pursuant to 23 U.S. Code 327. The estimated time to obtain environmental approval is 23 months from the start of environmental studies. Assuming a start date of July 1, 2014 environmental studies would begin October 2014 after project preliminary maps and permits to enter are completed. Final environmental document would be anticipated by May 1, 2016.

It is anticipated multiple environmental studies and reports will be required for this project including (but not limited to): archaeology survey report, natural environment study, hazardous waste studies and farmland site assessment and evaluation. It is currently estimated that biology will be the critical path for the delivery of the environmental document.

### Project Description

The California Department of Transportation (Caltrans), proposes to improve the safety of State Route 129 at Carlton Rd, from PM 3.2 to PM 3.6. Project proposes to construct a new intersection at Carlton Rd and construct a left turn and storage lane on SR 129 west of the intersection

### Purpose and Need

#### **Purpose**

The proposed project would improve the safety and reduce the number of collisions on this section of Route 129.

**Need**

This location of SR-129 was identified in a 'Table C Report', as having a concentration of collisions. A pattern of 'Left Turn' and 'Rear End' collisions exist at this location

**Description of Work**

From PM 3.2 to PM 3.6 the project proposes to realign Carlton Rd. and construct a new intersection at Carlton Rd and construct a left turn and storage lane on SR 129 west of the intersection.

**Alternatives**

**Alt 1**

Carlton Rd will be realigned to form a T-intersection with Highway 129, approximately 350 feet west of the existing intersection and the old intersection will be removed. State Route 129 will also be widened to construct a left turn and storage lane at the new intersection.

**Alt 2**

This alternative proposes to construct a new intersection approximately 350 feet west of the existing intersection and reconfiguring the adjacent private road access to reduce conflict points. Carlton Rd would be realigned to form a T-intersection with State Route 129, and the old intersection would be removed. The left turn from SR-129 southbound to the private road would be eliminated along with the right turn from the private road to SR-129. The new intersection would allow access to SR-129 for the private road north of old Carlton Road.

**No Build**

The No Build project would not accomplish the Purpose and Need. The unsafe conditions would still exist at this location.

**Funding**

State     Federal

This project is proposed to be programmed into 2014 SHOPP with funding from the 20.XX.201.010 Safety Improvements Program in the 2017/2018 fiscal year.

**Anticipated Environmental Approval**

**CEQA**

- Categorical Exemption/Statutory Exemption
- Negative Declaration/Mitigated ND( Appendix G)
- Environmental Impact Report

**NEPA**

- Categorical Exclusion (6004/6005)
- Finding of No Significant Impact
- Environmental Impact Statement

**Anticipated Environmental Schedule**

Total Time for Environmental Approval	23 Months
Start Date	July 1, 2014
Begin Environmental	10/1/2014
Draft Environmental Document	11/1/2015
Final Environmental Document	5/1/2016
PA&ED*	7/1/2016

*\*PA&ED is generally 1 month following the FED date*

**Assumptions and Risks**

Risks to the project have been defined in accordance with the Project Risk Management Handbook, May 2, 2007, Second Edition, Rev 0:

Assumptions:

- No Archeological, Paleontological or Historic Resources are discovered
- No presence of Hazardous Waste
- There are no significant impacts to Endangered, Threatened or Special Status species
- Approved and Adequate Mapping is submitted by October 1<sup>st</sup>, 2014
- Permits to Enter are granted for any Private Property, Construction Easement or R/W Acquisition for Environmental Studies to capture any constrained survey windows
- Impacts to Farmland will not be significant

Risks:

- Archeological, Paleontological or Historic Resources are discovered requiring further studies extending project schedule by 12-24 months
- Presence of Hazardous Waste requiring mitigation and notification to the public increasing costs by \$200 per cubic yd of export
- Presence and/or impacts to Endangered, Threatened or Special Status Species requiring consultation with resource agencies extending project schedule by 12 months and/or additional mitigation costs
- Permits to Enter are not granted in time to capture survey windows extending schedule up to 12 months
- Approved and Adequate Mapping is not submitted to capture survey windows extending schedule up to 12 months
- Impacts to Farmland will be significant requiring additional resources and mitigation measures. Schedule impacts can be 6-12 months

**Mitigation**

Known mitigation costs, which were determined during the creation of this document, are listed in the respective categories below. Further studies may reveal the need for additional mitigation, which would be added to the cost of the project and included in an updated Mitigation Cost Compliance Estimate Form.

**Right of Way Capital (050)**

- Fish and Wildlife Doc Review Fee \$2,200

**Construction Capital (042)**

- Lead Compliance Plan \$ 2,000
- Disposal Fee-ADL export @ \$200 per yd

**Disclaimer**

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

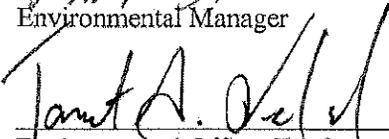
**Review and Approval**

I confirm that environmental cost, scope, and schedule have been satisfactorily completed and that the PEAR meets all Caltrans requirements. Also, if the project is scoped as a routine EA, complex EA, or EIS, I verify that the HQ DEA Coordinator has concurred in the Class of Action.

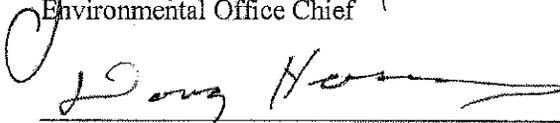
**Approved by:**

  
\_\_\_\_\_  
Environmental Manager

Date: 06/19/14

  
\_\_\_\_\_  
Environmental Office Chief

Date: 6-24-14

  
\_\_\_\_\_  
Project Manager

Date: 6-24-14

**Environmental Technical Reports or Studies Required**

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

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

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

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

**Permits Anticipated for Construction**

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

## Discussion of Technical Review

### Biology

Due to the potential for impacts to Endangered, Threatened or Special Status Species, plant/wildlife surveys during the appropriate season will be required. Field studies and additional research will have to be conducted to assess the types of impact and what action would be required. A Natural Environment Study will be required.

### Cultural Resources

Cultural resources studies supporting the project will be conducted in accordance with the January 1, 2004 *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council for Historic Preservation, the California State Historic Preservation Officer and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (hereafter, the Programmatic Agreement). There are not any known cultural resources and Phase I and Phase II studies and not foreseen

### Hazardous Waste

The proposed project involves soil disturbance and possible export. A Initial Site Assessment will be required

### Air Quality Analysis

The proposed project is located within the North Central Coast Air Basin. According to 40 CFR Section 93.126 Table 2, this project is exempt from the requirement that a conformity determination be made. No further study is needed

### Noise Study

The proposed project would not increase traffic, there are not any sensitive receptors in the area. It is not considered a Type 1 project. No further study is required.

### Water Quality

The proposed project has the potential of having short-term water quality impact, however by incorporating proper and accepted engineering practices and BMP's the proposed project will not have significant impacts to water quality. No further study is required

### Community Impact Assessment

The Right of Way acquisition will need to be discussed due to the impact to farmland.

### Cumulative Impacts

A Cumulative Impacts analysis will be required for this project

### Farmland

The project will be acquiring Farmland and a Site Assessment/Land Evaluation will be needed. Coordination and consultation will be needed with the Natural Resource Conservation Service

Visual Resources

The project would not affect the existing visual character, scenic views, or introduce new light or glare into the setting. Not adverse visual impacts are expected as a result of the project. A memo to the project file stating no visual impacts would occur is recommended.

Floodplain Evaluation

The project is located in a 100 year floodplain based on FEMA Floodplain Mapping. A Location Hydraulic Study will be required.

Paleontology

The project has little potential for encountering paleontological resources since the area of construction has been previously disturbed by farming. Additionally, the soils are of recent Quaternary deposits. Therefore, there are no expected impacts anticipated to paleontological resources from the above-mentioned project.

Section 4(f) Evaluation

There are no Section 4(f) resources within the project limits

Wild and Scenic River Consistency

There are no Wild and Scenic Rivers within the project limits

Geology

A geotechnical investigation will be required at the site to determine engineering properties of local soil and rock, including depth of soil profile, hydraulic conductivity, and relative density

Topology

A geotechnical investigation will be required at the site to determine engineering properties of local soil and rock, including depth of soil profile, hydraulic conductivity, and relative density

Soils

A geotechnical investigation will be required at the site to determine engineering properties of local soil and rock, including depth of soil profile, hydraulic conductivity, and relative density

Greenhouse Emissions

A Greenhouse Emissions analysis is required for this project

Permits.

No permits are anticipated at this time

**List of Preparers**

Biology by Jennifer Moonjian	9/23/13
Visual by Bob Carr	9/8/13
Paleontology by Isaac Leyva	9/13/13
Hazardous Waste by Jim Tkach	9/13/13
Cultural by Krista Kiaha	9/13/13
Air, Noise, Water by Rajeev Dwivedi	9/12/13
Preliminary Environmental Analysis Report by Michael H. Thomas	10/12/13

**Memorandum**

To: Doug Hessing

Date: 12/12/2013

Attn: Alif Abdalla

File: CD 05 EA 1F350K Alt 1  
Co SCR RTE 129

Jim Espinosa

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

This project proposes to construct a new intersection approximately 350 feet from the existing intersection. Carlton Road will be realigned to form a T-intersection with

**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 7/19/2013

The following assumptions and limiting conditions were identified:**Appraisal**

The area of the excess parcel was estimated. It could be more or less, but not significantly so.

**Utility**

The datasheet request indicates that utility relocation (electric poles) will be required. The request also indicates that 4 potholes will be required. A Caltrans permit search indicates that no UG facilities have been permitted in this area. It is not clear which facilities are to be potholed. There is a private agriculture well on the south side of 129. This suggests the presence of private UG irrigation lines, however, it is not known where the lines travel. Moreover these potential lines are assumed to be privately owned and not subject to Caltrans' pos-loc contract. There are two electric poles and one anchor pole on Carlton Road which appear to be in conflict. It is assumed (at this time and for purposes of this estimate) that these are in easement and would be 100% state expense. These poles may also carry a communication fiber optic line. Telephone lines adjacent to Carlton Rd appear to be not in conflict. There are two electric service poles (on either side of 129) which serve the water well. The pole on the northside is in conflict; the pole on the southside is assumed to be in conflict given widening of 129 and CR2 requirements. These are typically 100% utility. It is strongly advised that design request utility verification to determine whether or not UG facilities exist adjacent to Carlton Road, or along 129, which may not be reflected in the permit record. If the project anticipates removal of the raised island at the existing intersection coordination with PGE should be required to determine how best to protect the pole inside the island. Avoid and/or protect in place all existing UG and aerial utility facilities in the project area. Comply with USA alert requirements, including at construction sign locations. It is assumed that no UG facilities exist and that no additional poles will require relocation - I.e., that the increased length of distance between poles will not require added stresses requiring additional poles. This could increase the time required for utility engineering and relocation. 18 months is estimated for planning and implementation of utility relocation AFTER conflict plans are provided to the utility owners.

Right of Way Lead Time will require a minimum of 18 months after we receive Certified Appraisal Maps and/or Utility Conflict Plans, obtained necessary environmental clearance and applicable freeway agreements have been approved.



CONNIE SHELLOOE, Sr. Right of Way Agent  
San Luis Obispo Field Office  
(805) 549-3471

**Right Of Way Cost Estimate**

	Current Year 2013	Contingency Rate	Right of Way Escalation Rate	Escalated Year 2015
Acquisition:	\$134,813	25%	5%	\$148,631
Mitigation:	\$2,750	25%	5%	\$3,032
State Share of Utilities:	\$75,000	25%	5%	\$82,688
Expert Witness:	\$0	25%	5%	\$0
Relocation Assistance:	\$0	25%	5%	\$0
Demolition and Clearance:	\$0	25%	5%	\$0
Title and Escrow:	\$4,629	25%	5%	\$5,104
Ad Signs:	\$0	25%	5%	\$0
<b>Total Current Value:</b>	<b>\$217,192</b>			<b>\$239,454</b>

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

Estimated Construction Contract Work (CCW): 0 R/W LEAD TIME/Mo. 18

Pot Hole	2,000
Mitigation	
Land	0
Bank	0
Permit Fees	2,200

**RR Involvement**

Railroad Facilities or Right of Way Affected?	no
Const/Maint Agreement.	no
Service Contract:	no
Right of Entry:	no
Clauses:	no
Estimated Lead-time	0 mon

**Parcel Data**

# of Parcel Type X:	0	
# of Parcel Type A:	3	
less than \$10,000 non-complex		
# of Parcel Type B:	0	
more than \$10,000 non-complex		
# of Parcel Type C:	0	
complex, special valuation		
# of Parcel Type D:	0	# of Duals Needed: 0
most complex and time consuming		
<b>Totals:</b>	<b>3</b>	<b>Totals: 0</b>

# of Excess Parcels: 1

**Misc R/W Work**

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

**Utilities**

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

EA: 05-1F350K ALT: 1

Parcel Area

Total R/W Required: 2.01

Total Excess Area: 1

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

Three agricultural parcels with minimal impact to two of them. One smaller parcel is effected significantly and likely results in excess land. More than likely some impact to underground irrigation.

**General Description of Utility Involvement:**

SR 129 is a two lane undivided conventional highway in the project limits. This safety project alternative proposes to re-align a local road and form a T-intersection with SR129. SR129 will be widened to include an eastbound left turn and vehicle storage lane. The existing intersection will be removed. The existing intersection includes a raised island "pork chop" which contains an electric pole with multiple anchor guys.

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: N/A

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:	Jim Gentry	12/12/2013
Railroad Liaison Agent:	sah	9/6/2013
Utility Relocation Coordinator:	Chris Shaeffer	9/4/2013

*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.*

CONNIE SHELLOOE  
Sr. Right of Way Agent, Right of Way

Date  
ENTERED PMCS 12/12/2013  
BY: Patrick Mason

**Memorandum**

To: Doug Hessing

Date: 5/22/2014

Attn: Atif Abdalla

File: CD 05 EA 1F350K Alt 2  
Co SCR RTE 129

Jim Espinosa

**DESCRIPTION:**

Improve safety of SR-129 by constructing a new intersection at Carlton Road west of existing intersection. Adjacent private road access will be reconfigured to reduce conflict

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 4/23/2014

The following assumptions and limiting conditions were identified:

## Appraisal

## Utility

The datasheet request indicates that utility relocation (electric poles) will be required. The request also indicates that 4 potholes will be required. A Caltrans permit search indicates that no UG facilities have been permitted in this area. It is not clear which facilities are to be potholed. There is a private agriculture well on the south side of 129. This suggests the presence of private UG irrigation lines, however, it is not known where the lines travel. Moreover these potential lines are assumed to be privately owned and not subject to Caltrans' pos-loc contract. There are two electric poles and one anchor pole on Carlton Road which appear to be in conflict. It is assumed (at this time and for purposes of this estimate) that these are in easement and would be 100% state expense. These poles may also carry a communication fiber optic line. Telephone lines adjacent to Carlton Rd appear to be not in conflict. There are two electric service poles (on either side of 129) which serve the water well. The pole on the northside is in conflict; the pole on the southside is assumed to be in conflict given widening of 129 and CRZ requirements. These are typically 100% utility. It is strongly advised that design request utility verification to determine whether or not UG facilities exist adjacent to Carlton Road, or along 129, which may not be reflected in the permit record. If the project anticipates removal of the raised island at the existing intersection coordination with PGE should be required to determine how best to protect the pole inside the island. Avoid and/or protect in place all existing UG and aerial utility facilities in the project area. Comply with USA alert requirements, including at construction sign locations. It is assumed that no UG facilities exist and that no additional poles will require relocation - I.e., that the increased length of distance between poles will not require added stresses requiring additional poles. This could increase the time required for utility engineering and relocation. 18 months is estimated for planning and implementation of utility relocation after conflict plans are provided to the utility owners.

Right of Way Lead Time will require a minimum of 18 months after we receive Certified Appraisal Maps and/or Utility Conflict Plans, obtained necessary environmental clearance and applicable freeway agreements have been approved.

  
Marshall Garcia, Sr. Right of Way Agent  
San Luis Obispo Field Office  
(805) 549-3471

**Right Of Way Cost Estimate**

	Current Year 2014	Contingency Rate	Right of Way Escalation Rate	Escalated Year 2017
Acquisition:	\$129,813	25%	5%	\$150,274
Mitigation:	\$2,750	25%	5%	\$3,183
State Share of Utilities:	\$75,000	25%	5%	\$86,822
Expert Witness:	\$0	25%	5%	\$0
Relocation Assistance:	\$0	25%	5%	\$0
Demolition and Clearance:	\$0	25%	5%	\$0
Title and Escrow:	\$3,486	25%	5%	\$4,035
Ad Signs:	\$0	25%	5%	\$0
<b>Total Current Value:</b>	<b>\$211,048</b>			<b>\$244,315</b>

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

Estimated Construction Contract Work (CCW): 0 R/W LEAD TIME/Mo. 18

Pol Hole	2,000
Mitigation	
Land	0
Bank	0
Permit Fees	2,200

**RR Involvement**

Railroad Facilities or Right of Way Affected?	no
Const/Maint Agreement:	no
Service Contract:	no
Right of Entry:	no
Clauses:	no
Estimated Lead-time	0 mon

**Parcel Data**

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

# of Excess Parcels: 1

**Misc R/W Work**

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

**Utilities**

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

EA: 05-1F350K ALT: 2

Parcel Area

Total RW Required: 1.91

Total Excess Area: 1

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

Two irrigated row crop parcels with one excess parcel. There will likely be cost to cure damages for the irrigation systems.

**General Description of Utility Involvement:**

SR 129 is a two lane undivided conventional highway in the project limits. This safety project proposes to re-align a local road and form a T-intersection with SR129. SR129 will be widened to include an eastbound left turn and vehicle storage lane. Adjacent private road access will be reconfigured to reduce conflict points. The existing intersection will be removed. The existing intersection includes a raised island "pork chop" which contains an electric pole with multiple anchor guys.

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 fast resort housing: N/A

Are material borrow or disposal sites required: No

Are there potential relinquishments or abandonments: No

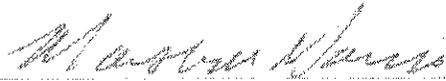
Are there any existing or potential airspace sites: No

Are environmental mitigation parcels required: Yes

**Data for evaluation provided by:**

Estimator:	Jim Gentry	5/21/2014
Railroad Liaison Agent:	sah	5/5/2014
Utility Relocation Coordinator:	John T. Magorian	5/13/2014

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



Date  
ENTERED PMCS 5/22/2014  
BY: Danny Millsap

Marshall Garcia  
Sr. Right of Way Agent, Right of Way

## DISTRICT 5

### TRAFFIC MANAGEMENT PLAN CHECK LIST

District / EA: 05-1F350K  
 Project Engineer: Jim Espinosa  
 Date Prepared: 7/23/2013

Co.-Rte-PM: SCR-129-3.2/3.6  
 Description: Construct Intersection  
 Working Days: 60 days

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

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

**1.0 Public Information**

- 1.1 Public Awareness Campaign
- 1.2 Other Strategies

<input checked="" type="checkbox"/>			Include \$4,000 in 066063 (TMP - Public Info.)
	<input checked="" type="checkbox"/>		

**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)

<input checked="" type="checkbox"/>			Estimate \$200/day per sign.
<input checked="" type="checkbox"/>			
	<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>			Construction to provide information to TMC
	<input checked="" type="checkbox"/>		Construction to provide information to TMC

**3.0 Incident Management**

- 3.1 COZEEP
- 3.2 Freeway Service Patrol

		<input checked="" type="checkbox"/>	
		<input checked="" type="checkbox"/>	

**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:

<input checked="" type="checkbox"/>			Provided during PS&E
	<input checked="" type="checkbox"/>		
	<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>			Pick up lane closure if queue exceeds 1.5 mi.
<input checked="" type="checkbox"/>			Construction/Contractor to provide - as needed
<input checked="" type="checkbox"/>			Construction/Contractor to provide - as needed
<input checked="" type="checkbox"/>			Construction/Contractor to provide - as needed
<input checked="" type="checkbox"/>			Standard
<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>			This is in addition to any other Maintain Traffic funds.
<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>			Coordinate with County for closures on Carlton Rd, if necessary.

\*Include \$250/day in Supplemental Items 066070  
\*Monitor delays and queue length. If queue length exceeds 1.5 miles or delay exceeds 15 minutes, modify operations.  
\* Address bicycle issues during construction.  
\*Use CMS to notify of lane closures 5 working days prior to construction.

**5.0 Anticipate Delays**

- 5.1 Lane Closure Review Committee (for anticipated delays over 30 minutes)
- 5.2 Planned freeway closures

	<input checked="" type="checkbox"/>		
	<input checked="" type="checkbox"/>		

- 5.3 Minimal delay anticipated - no further action required provided above strategies are implemented

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

Shayne Sandeman  
 District TMP Coordinator

**APPENDIX E**

**Short Form - Storm Water Data Report**



Dist-County-Route: 05-SCr- 129  
 Post Mile Limits: 3.2/3.6  
 Project Type: Construct Deceleration and left turn lane  
 Project ID (or EA): 05-1300-0103-K (05-1F350K)  
 Program Identification: SHOPP 201.010  
 Phase:  PID  
 PA/ED  
 PS&E

Regional Water Quality Control Board(s): CENTRAL COAST RWQCB, REGION 3

- 1. Is the project required to consider incorporating Treatment BMPs? Yes  No
- 2. Does the project disturb 5 or more acres of soil? Yes  No
- 3. Does the project disturb more than 1 acre of soil and not qualify for the Rainfall Erosivity Waiver? Yes  No
- 4. Does the project potentially create permanent water quality impacts? Yes  No
- 5. Does the project require a notification of ADL reuse Yes  No

If the answer to any of the preceding questions is "Yes", prepare a Long Form – Storm Water Data Report.

Estimate Construction Start Date: TBD ~ 2014 Construction Completion Date: TBD  
 Separate Dewatering Permit (if yes, permit number) Yes  Permit # \_\_\_\_\_ No   
 Erosivity Waiver Yes  Date: \_\_\_\_\_ No

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

  
 \_\_\_\_\_  
 JAMES ESPINOSA, Registered Project Engineer Date 8/5/13  
 I have reviewed the stormwater quality design issues and find this report to be complete, current and accurate:

*(Stamp Required for PS&E only)* FOR   
 \_\_\_\_\_  
 MARISSA NISHIKAWA, Regional SW Coordinator or Designee Date 8/6/2013

**1. Project Description**

- This project is located in Santa Cruz County on State Route (SR) 129 from PM 3.2 to PM 3.6. The project proposes to improve the safety and reduce the number of collisions on SR 129 at Carlton Road by constructing a new intersection approximately 350 feet west of the existing intersection. Carlton Road will be realigned to form a T-intersection with SR 129 and the old intersection will be removed. The roadbed of SR 129 will be widened to construct a left turn and storage lane at the new intersection.
- Total Disturbed Soil Area (DSA) for this project is 0.95 acres and the Net New Impervious (NNI) Area is 0.73 acres. Attached are the calculations for the DSA and the NNI Area.
- This project is located within the Pajaro River Hydrologic Unit, Watsonville Hydrologic Area, and an undefined Hydrologic Sub-Area (HSA). The HSA number is 305.10.
- The Pajaro River is the receiving water body within the project limits. The Pajaro River is on the 2010 303(d) list and is impaired by the following pollutants of concern: Boron, Chlordane, Chloride, Chlorpyrifos, DDD (Dichlorodiphenyldichloroethane), Fecal Coliform, Dieldrin, Escherichia coli (E. coli), Low Dissolved Oxygen, PCBs (Polychlorinated biphenyls), pH, Sodium and Turbidity. The Pajaro River has TMDLS set for Nitrate, Nutrients, and Sedimentation/Siltation. Caltrans is not a named stakeholder in these TMDLs.
- A 401 certification is not required for this project.
- Project is not located within a MS4 area.
- There are no drinking water reservoirs or ground water recharge facilities near this project.
- There are no existing permanent treatment BMPs or maintenance facilities located within or adjacent to this project.

**2. Construction Site BMPs**

- This project will require a Water Pollution Control (WPCP). A WPCP will be developed and implemented for water pollution control during construction. The WPCP will be developed by the contractor and submitted to the Resident Engineer for approval prior to the start of construction. Equipments, material storage and equipments refueling shall occur within existing un-vegetated areas in the state right-of-way as follows; If within a floodplain, at least 100 feet from concentrated flows of storm water, drainage courses, and inlets; if outside the floodplain, at least 50 feet from concentrated flow of storm water, drainage courses, and inlets, unless approved.
- Design will coordinate with Construction during PS&E to determine the appropriate selection of Construction Site BMPs to be implemented into the contract documents (e.g. separate line items and/or lump sum).
- It is anticipated that contract bid items for this project will include:
  - 130200-Prepare WPCP
  - 130100- Job Site Management.
  - 066596- Additional Water pollution Control (supplemental item)
- Approximately 1.5 % of the total project cost is being estimated for Temporary Construction Site BMPs.
- Coordination to get concurrence from Construction regarding the Construction Site BMP implementation strategy and associated quantities will occur during PS&E.



### 3. Required Attachments<sup>1</sup>

- Vicinity Map.
- Evaluation Documentation Form.
- DSA and NNI calculations.

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<sup>1</sup> Additional attachments may be required as applicable or directed by the District/Regional Design Storm Water Coordinator (e.g. BMP line item estimate, DPP, CS checklists, etc).

**Project: 0513000103-K (05-1F350K)**

- Disturbed Soil Area (DSA) calculations are as follows:

For Route 129, the East Bound shoulder will be removed to build a new lane and a shoulder.  
The widening will be from Sta 129+26 to Sta 150+00.

$$\text{DSA} = ((15000 - 12926) \text{ feet} \times 8 \text{ feet}) / 43,560 \text{ ft}^2/\text{Acre} = 0.381 \text{ Acre}$$

For Carlton Road The Disturbed Soil Area is taken from Microstation file to be 0.565 Acre

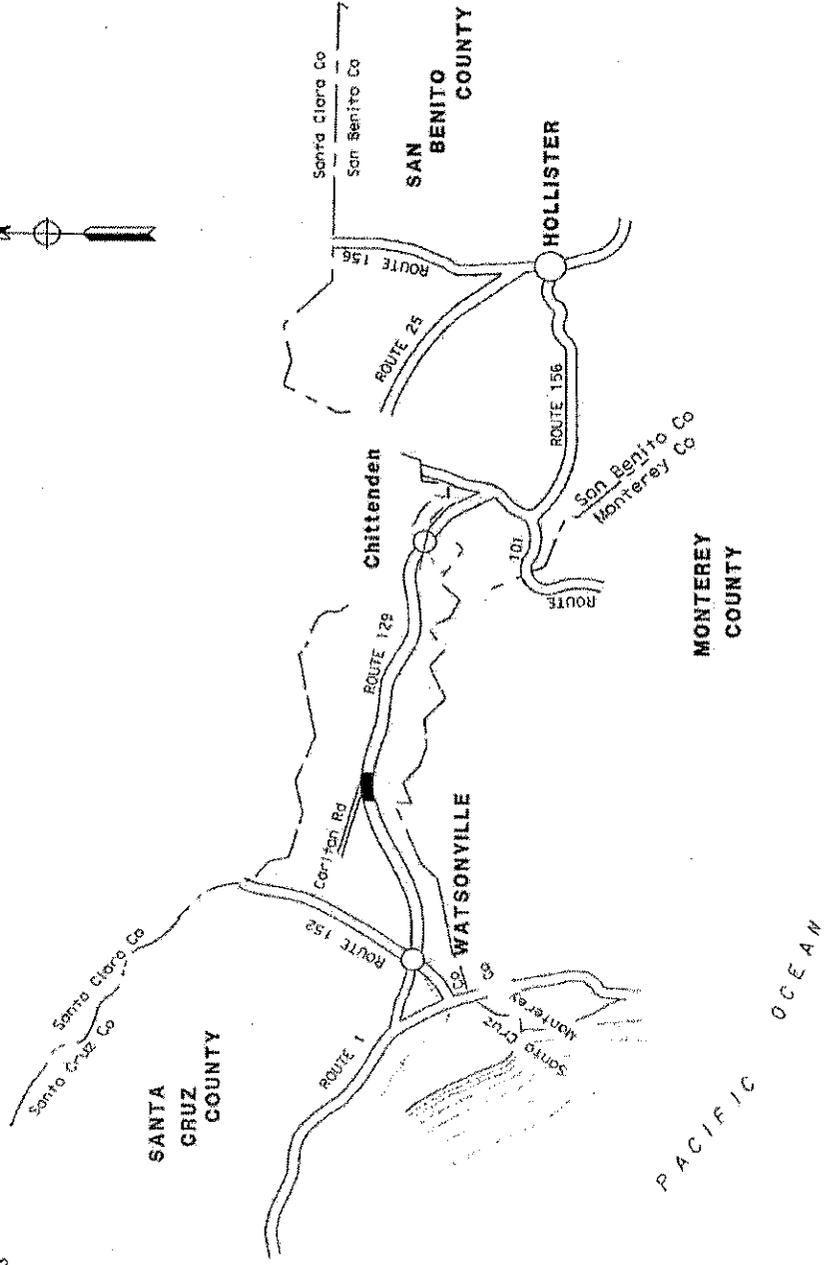
Then the total DSA = 0.381 Acre + 0.565 Acre = 0.9456 Acre

- The Net new Impervious area (NNI) is taken from Microstation.  
The NNI for Highway 129 is 0.48 Acre  
The NNI for Carlton Road is 0.25 Acre  
The total NNI is 0.73 Acre.

05-SCR-129- PM 3.25/3.5

EA: 3F358K- 0313000103

April 2013



VICINITY MAP

NO SCALE

# APPENDIX E

## Evaluation Documentation Form

DATE: 7/25/2013

Project ID: 05-1300-0103-K

NO.	CRITERIA	YES ✓	NO ✓	SUPPLEMENTAL INFORMATION FOR EVALUATION
1.	Begin Project Evaluation regarding requirement for consideration of Treatment BMPs	✓		See Figure 4-1, Project Evaluation Process for Consideration of Permanent Treatment BMPs. Go to 2
2.	Is this an emergency project?		✓	If Yes, go to 10. If No, continue to 3.
3.	Have TMDLs or other Pollution Control Requirements been established for surface waters within the project limits? Information provided in the water quality assessment or equivalent document. The Pajaro River is 303(d) listed and has TMDLs. Per DNC, go to question 4.	✓		If Yes, contact the District/Regional NPDES Coordinator to discuss the Department's obligations under the TMDL (if Applicable) or Pollution Control Requirements, go to 9 or 4. <u>PSR</u> (Dist./Reg. SW Coordinator initials) If No, continue to 4.
4.	Is the project located within an area of a local MS4 Permittee?		✓	If Yes, (write the MS4 Area here), go to 5. If No, document in SWDR go to 5.
5.	Is the project directly or indirectly discharging to surface waters?	✓		If Yes, continue to 6. If No, go to 10.
6.	Is it a new facility or major reconstruction?		✓	If Yes, continue to 8. If No, go to 7.
7.	Will there be a change in line/grade or hydraulic capacity?		✓	If Yes, continue to 8. If No, go to 10.
8.	Does the project result in a <u>net increase of one acre or more of new impervious surface?</u>			If Yes, continue to 9. If No, go to 10.  <u>0.73 Acre (Net Increase New Impervious Surface)</u>
9.	Project is required to consider approved Treatment BMPs.			See Sections 2.4 and either Section 5.5 or 6.5 for BMP Evaluation and Selection Process. Complete Checklist T-1 in this Appendix E.
10.	Project is not required to consider Treatment BMPs. <u>PSR</u> (Dist./Reg. Design SW Coord. Initials) <u>JZ</u> (Project Engineer Initials) <u>8/5/13</u> (Date)	✓		Document for Project Files by completing this form, and attaching it to the SWDR.

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

**PROJECT RISK MANAGEMENT PLAN**

Priority	PROJECT RISK MANAGEMENT PLAN																	
	Identification					Qualitative Analysis				OPTIONAL Quantitative Analysis			Response Strategy		Monitoring and Control			
	Status	ID #	Date Identified	Functional Assignment	Threat/Opportunity Event	Risk Trigger	Type	Probability	Impact	Risk Matrix	Probability (%)	Impact (\$ or days)	Effect (\$ or days)	Strategy	Response Actions including advantages and disadvantages	Responsible (Task Manager)	Last date changes made to risk and Comments	
	Active	1		Right of Way	Delay in RTL or construction due to not having utilities relocated.	Unresolved Buy American Issues with the Utility Companies	Schedule	Low	High					Acceptance	This is a state wide issue that will be monitored by the RAW Utility Unit.	John Magorian	Utilities, up to 5 poles will need to be moved	
				Right of Way	Fiber optics included on utility poles	complications									John Magorian			
				Environmental	Delays due to Williamson Act Complications.										Matt Fowler			
				Environmental	Potential public meeting effects on both cost and schedule										Matt Fowler			
				Environmental	County willingness to relinquish right of way		Scope	Low	Low					Early often communication with the County to determine what concerns they might have and way this project can benefit the county. El Safer Roads	Matt Fowler	Put as an Environmental Risk Because It may be associated with are ability to mitigate based on the Williamson Act.		
				Right of Way	Delays due to the property owner not cooperating in the project.		Moderate	Low						Communicate with the property owner to determine what concerns he might have. Depending on the position the county takes this project could be a benefit to the Area of AG land.	Connie Shelton	Condemnation would be an option		
				Environmental	Delay to the project due to Seasonal Surveys not started in the first year.		Moderate	Moderate							Matt Fowler	Work with PM to insure the schedule allows for time or update the Risk plan to discuss State only funding possibilities and implications.		
				Environmental	Potential habitat for frogs, Kit Foxes and Burrowing Owls										Matt Fowler			
					Culvert													