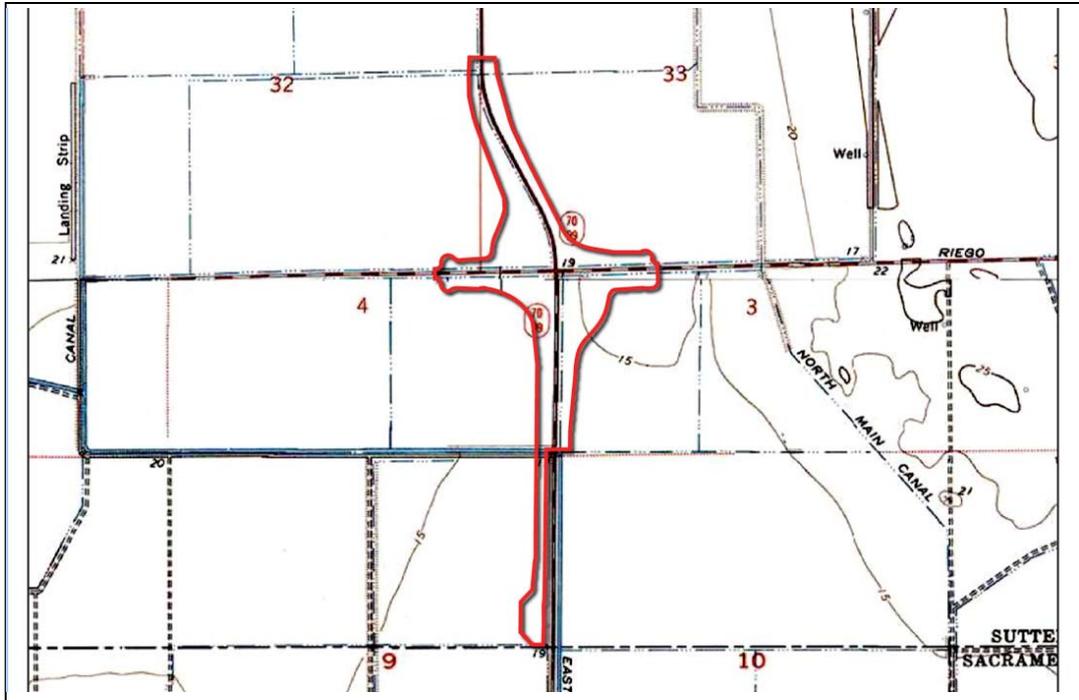


# Riego Road/State Route 99 Interchange Project Sutter County, California



## Clean Water Act Section 404 Nationwide Permit 23 Pre-Construction Notification

*Caltrans District 3 – KP 58.4/59.3, 0.0/2.6*

*EA 03131-406600*

**September 2010**





# Table of Contents

	<b>Page</b>
List of Tables and Figures.....	ii
List of Abbreviated Terms .....	.iii
Nationwide Permit Pre-Construction Notification Form.....	1 to 19
Attachment to Nationwide Permit Pre-Construction Notification Form .....	20
Box 3: Name of Property Owners .....	20
Box 5: Water Bodies .....	20
Nature of Activity .....	22
Project Purpose.....	23
Project Description .....	23
Box 6: Reasons for Discharge into Waters of the U.S. ....	26
Types of Material Being Discharged and Amounts in Cubic Yards.....	26
Total Surface Area in Acres of Wetlands or Other Waters of the U.S. Filled.....	26
Box 10: Threatened and Endangered Species .....	28
Box 11: Historic Properties and Cultural Resources .....	29
Box 12: Measures Taken to Avoid and Minimize Impacts to Waters .....	29
Box 13: Proposed Compensatory Mitigation.....	31
SPK Regional Condition 1a .....	32
Appendix A    Figures	
Appendix B    Layout Sheets	
Appendix C    Drainage Plan Sheets	
Appendix D    Section 7 Consultation	
Appendix E    Section 106 Consultation	
Appendix F    Categorical Exclusion	

## List of Tables and Figures

	<b>Page</b>
Table 1 Wetland and Other Waters Acreages .....	21
Table 2 Summary of Characteristics of the Soils in the Delineation Study Area .....	27
Table 3 Summary of Potentially Jurisdictional Wetlands and Other Waters within the Delineation Area .....	32

### **Appendix A**

Figure 1 Project Location	
Figure 2 Canal Relocation Phasing Concept	
Figure 3 (a through f) Project Plan Showing Impacts to Waters of the U.S. and the Proposed Drainage Plan	
Figure 4 Cross Section Examples	

## List of Abbreviated Terms

BMP	best management practices
Caltrans	California Department of Transportation
CFR	Code of Federal Regulations
CHP	California highway patrol
Corps	U.S. Army Corps of Engineers
CWA	Clean Water Act
CY	cubic yards
FHWA	Federal Highway Administration
HUC	hydrologic unit
OHWM	ordinary high water mark
PCN	pre-construction notification
proposed project	Riego Road/State Route 99 Interchange Project
RD	Reclamation District
RGL	Regulatory Guidance Letter
SHPO	State Historic Preservation Office
SR	State Route
SWPPP	stormwater pollution prevention plan
USFWS	U.S. Fish and Wildlife Service
waters	waters of the U.S.



# U.S. Army Corps of Engineers South Pacific Division



## Nationwide Permit Pre-Construction Notification (PCN) Form

This form integrates requirements of the Nationwide Permit Program within SPD, including General and Regional Conditions. Please consult instructions prior to completing this form.

<b>Box 1 Project Name</b> Riego Road/State Route 99 Interchange Project			
<b>Applicant Name</b> Sue Bauer		<b>Applicant Title</b> Chief, M-1 Branch	
<b>Applicant Company, Agency, etc.</b> CA Dept. of Transportation, District 3		Applicant's internal tracking number (if any)	
Mailing Address P.O. BOX 911, MARYSVILLE, CA 95901			
Work Phone with area code (530) 741-7113	Home Phone with area code NA	Fax # with area code	E-mail Address sue_bauer@dot.ca.gov
Relationship of applicant to property: <input type="checkbox"/> Owner <input type="checkbox"/> Purchaser <input type="checkbox"/> Lessee <input checked="" type="checkbox"/> Other: Dept. of Trans. and Eng. Srvs. Employee			
Application is hereby made for verification that subject regulated activities associated with subject project qualify for authorization under a Corps nationwide permit or permits as described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I hereby grant to the agency to which this application is made, the right to enter the above-described location to inspect the proposed, in-progress or completed work. I agree to start work <u>only</u> after all necessary permits have been received.			
<b>Signature of applicant</b>			Date (m/d/yyyy)

<b>Box 2 Authorized Agent/Operator Name</b> <i>(If an agent is acting for the applicant during the permit process)</i> Suzanne Melim			
<b>Agent/Operator Title</b> Associate Environmental Planner		<b>Agent/Operator Company, Agency, etc.</b> Caltrans	
Mailing Address P.O. BOX 911, MARYSVILLE, CA 95901			
Work Phone with area code (530) 741-4484	Home Phone with area code NA	Fax # with area code (530) 741-4457	E-mail Address suzanne_melim@dot.ca.gov
I hereby authorize the above named authorized agent to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application. I understand that I am bound by the actions of my agent and I understand that if a federal or state permit is issued, I, or my agent, must sign the permit.			
<b>Signature of applicant</b>			Date (m/d/yyyy)
I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete, and accurate.			
<b>Signature of authorized agent</b>			Date (m/d/yyyy)



<b>Box 3 Name of Property Owner(s), if other than Applicant:</b> SEE PCN ATTACHMENT, BOX 3	
<b>Owner Title</b>	<b>Owner Company, Agency, etc.</b>
Mailing Address	
Work Phone with area code	Home Phone with area code

<b>Box 4 Name of Contractor(s) (if known):</b> CONTRACTOR(S) HAVE NOT BEEN RETAINED AT THIS TIME	
<b>Contractor Title</b>	<b>Contractor Company, Agency, etc.</b>
Mailing Address	
Work Phone with area code	Home Phone with area code

<b>Box 5 Site Number <u>1</u> of <u>1</u>. Project location(s), including street address, city, county, state, zip code where proposed activity will occur:</b> THE PROJECT AREA IS AT THE INTERSECTION OF STATE ROUTE 99 (SR-99) AND RIEGO ROAD LOCATED APPROXIMATELY 12 MILES NORTH OF THE CITY OF SACRAMENTO ON SR-99, SUTTER COUNTY, CA. THE PROJECT AREA IS ALSO SHOWN ON FIGURE 1.	
<b>Waterbody</b> (if known, otherwise enter "an unnamed tributary to"): <b>The proposed Riego Road/SR-99 Interchange Project will impact drainage ditches, irrigation canals, seasonal wetlands, and rice fields. The drainages and canals have connections to the Natomas North and East Drainage Canals, which are connected to the Sacramento River via pumps at pump stations. The seasonal wetlands and rice fields are connected to the drainage ditches via culverts.</b>	
Tributary to what known, downstream waterbody: Sacramento River	
Latitude & Longitude (D/M/S, DD, or UTM): 38° 45' 01" N, 121° 32' 20" W	Zoning Designation (no codes or abbreviations):
Assessors Parcel Number:	Section, Township, Range: southwest 1/4 of Section 33, T11N, R4E
USGS Quadrangle map name: Verona	
Watershed and other location descriptions, if known: The project is located in the Lower Sacramento Watershed (HUC 18020109) where SR-99 crosses Riego Road. The irrigation canals provide water to agricultural fields. The drainage ditches carry stormwater and agricultural runoff to pump stations that pump water from from main drainage canals to the Sacramento River.	

Directions to the project location:

From Sacramento, the project can be reached by traveling 12 miles north on SR-99. The Riego Road intersection is currently controlled by a stop light.

**Nature of Activity** (Description of project, include all features, see instructions):

THE PROPOSED PROJECT WILL REPLACE THE SIGNALLED INTERSECTION AT RIEGO ROAD AND SR-99 WITH A GRADE SEPARATED INTERCHANGE THAT WILL PROVIDE UNINTERRUPTED CROSSING FOR VEHICLE TRAVEL ON SR-99 AND RIEGO ROAD. ADDITIONAL WORK WILL INCLUDE INSTALLATION OF A NEW CALIFORNIA HIGHWAY PATROL TURNOUT AND ENFORCEMENT AREA. THE NEW INTERSECTION WILL INCLUDE ON AND OFF RAMPS FOR VEHICLES ENTERING/EXITING SR-99. CONSTRUCTION OF THE NEW INTERCHANGE WILL REQUIRE REALIGNMENT OF RD 1000'S DRAINAGE DITCHES ALONG SR-99, AND THE FILL OF SEASONAL WETLANDS, AND PORTIONS OF IRRIGATED RICE FIELDS AND TWO IRRIGATION CANALS LOCATED WITHIN THE PROJECT BOUNDARY. NEW DRAINAGE DITCHES WILL BE CREATED WITHIN NEW DRAINAGE EASEMENTS LOCATED OUTSIDE THE CALTRANS RIGHT OF WAY. DESCRIPTIONS OF THE GENERAL CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE PROPOSED PROJECT ARE DISCUSSED ON THE ATTACHED SHEETS. SEE ALSO THE ATTACHED FIGURES AND ENGINEERING DRAWINGS.

**Project Purpose** (Description the reason or purpose of the project, see instructions):

THE PURPOSE IS TO PROVIDE A NEW UNINTERRUPTED CROSSING OF SR-99 AT RIEGO ROAD AND REMOVE THE EXISTING SIGNALLED INTERSECTION, IMPROVING SAFTEY AND ACCOMMODATING ANTICIPATED INCREASES IN TRAFFIC LOADS AT THE INTERSECTION.

Use Box 6 if dredged and/or fill material is to be discharged:

**Box 6 Reason(s) for Discharge into waters of the United States:**

PERMANENT FILLS TO WATERS ARE NECESSARY TO: REMOVE ALL DRAINAGE DITCHES AND IRRIGATION CANALS FROM WITHIN CALTRANS RIGHT OF WAY; ESTABLISH NEW DRAINAGE DITCHES OUTSIDE CALTRANS RIGHT OF WAY; GRADE THE PROJECT AREA TO PROVIDE DRAINAGE; AND PROVIDE ROCK SLOPE PROTECTION WITHIN DRAINAGE DITCHES AND IRRIGATION CANALS AT CULVERT INLETS AND OUTLETS.

Type(s) of material being discharged and the amount of each type in cubic yards:

Approximately 46,273 cy of earth will be used to fill drainage ditches and irrigation canals, 260 cy of earth would be used to fill seasonal wetlands, and 20,500 cy to 50,000 cy of earth and 3,500 to 7,000 cy of road base (aggregate) would be placed in rice fields. Approximately 163 cy of rock will be used for rock slope protection at culvert inlets and outlets located in existing drainages and canals. See Table 2 for a summary of impacts to waters of the U.S.

Total surface area in acres of wetlands or other waters of the U.S. filled (see instructions):

The proposed project will permanently impact 0.322 acres of seasonal wetlands, 2.171 acres of drainage ditch wetlands, 0.618 acres of irrigation canals, 1.024 acres of drainage ditches, 0.065 acres of culverts, and 33.1 acres of rice fields. See Figures 3a - 3f showing project impacts to aquatic resources and Table 2 on attached sheet for summary of impacts.

Indicate in ACRES and LINEAR FEET (where appropriate) the proposed impacts to **waters of the United States**, and identify the impact(s) as permanent and/or temporary for each water body type listed below:

Water Body Type	Permanent		Temporary	
	Acres	Linear feet	Acres	Linear feet
Wetland	SEE TABLE 2 ON ATTACHED SHEETS			
Riparian streambed				
Unveg. streambed				
Lake				
Ocean				
Other				
Total:				

Potential indirect and/or cumulative impacts of proposed discharge (if any):  
The Project will accommodate future urban development planned in the Natomas Basin.

Required drawings (see instructions):

Vicinity map:  Attached (or mail copy separately if applying electronically)

To-scale Plan view drawing(s):  Attached (or mail copy separately if applying electronically)

To-scale elevation and/or Cross Section drawing(s):  Attached (or mail copy separately if applying electronically)

Has a wetlands/waters of the U.S. delineation been completed?

Yes, Attached (or mail copy separately if applying electronically)  No

If a delineation has been completed, has it been verified in writing by the Corps?

Yes, Date of approved jurisdictional determination (m/d/yyyy): \_\_\_\_\_ Corps file number:  No

Please attach<sup>1</sup> one or more color photographs of the existing conditions (aerials if possible).

<sup>1</sup>or mail copy separately if applying electronically

Dredge Volume: Indicate in CUBIC YARDS the quantity of material to be dredged or used as fill: Approximately 30,295 CY of soil will be excavated in rice fields to create new drainage ditches and bio-swales. None of the dredged material will be used to fill waters of the U.S.

Indicate type(s) of material proposed to be discharged in waters of the United States:

The earthen fill material discharged to drainages and wetlands will be imported from an approved offsite location. The soils excavated rice fields may be used as fill for other project elements, if acceptable. Otherwise, the rice field soils will be hauled offsite and disposed of to an approved upland location.

For proposed discharges of dredged material into waters of the U.S. (including beach nourishment), please attach<sup>2</sup> a proposed Sampling and Analysis Plan (SAP) prepared according to Inland Testing Manual (ITM) guidelines (including Tier I information, if available).

<sup>2</sup>or mail copy separately if applying electronically

Is any portion of the work already complete?  YES  NO

If yes, describe the work:

**Box 7 Intended NWP number (1<sup>st</sup>)<sup>3</sup>:** 23

**Intended NWP number (2<sup>nd</sup>):**

**Intended NWP number (3<sup>rd</sup>):**

<sup>3</sup>Enter the intended permit type(s). See NWP regulations for permit types and qualification information ([http://www.usace.army.mil/inet/functions/cw/cecwo/reg/nationwide\\_permits.htm](http://www.usace.army.mil/inet/functions/cw/cecwo/reg/nationwide_permits.htm)).

**Box 8 Authority:**

Is Section 10 of the Rivers and Harbors Act applicable?:  YES  NO

Is Section 404 of the Clean Water Act applicable?:  YES  NO

**Box 9** Is the discharge of fill or dredged material for which Section 10/404 authorization is sought part of a larger plan of development?:  YES  NO

If discharge of fill or dredged material is part of development, name and proposed schedule for that larger development (start-up, duration, and completion dates):

Location of larger development (If discharge of fill or dredged material is part of a plan of development, a map of suitable quality and detail of the entire project site should be included):

Total area in acres of entire project area (including larger plan of development, where applicable):  
113.44 acres

**Box 10 Threatened or Endangered Species**

Please list any federally-listed (or proposed) threatened or endangered species or critical habitat within the project area (use scientific names (e.g., Genus species), if known):

- a. giant garter snake (*Thamnophis gigas*) b.
- c. d.
- e. f.

Have surveys, using U.S. Fish and Wildlife Service/NOAA Fisheries protocols, been conducted?

- Yes, Report attached (or mail copy separately if applying electronically)  No

If a federally-listed species would be impacted, please provide a description and a biological evaluation.

- Yes, Report attached (or mail copy separately if applying electronically)  Not attached

Has the USFWS/NOAA Fisheries issued a Biological Opinion?

- Yes, Attached (or mail copy separately if applying electronically)  No

If yes, list date Opinion was issued (m/d/yyyy):

Has Section 7 consultation been initiated by another federal agency?

- Yes, Initiation letter attached (or mail copy separately if applying electronically)  No

Has Section 10 consultation been initiated for the proposed project?

- Yes, Initiation letter attached (or mail copy separately if applying electronically)  No

**Box 11 Historic properties and cultural resources:**

Please list any historic properties listed (or eligible to be listed) on the National Register of Historic Places:

- a. None b.
- c. d.
- e. f.

Are any cultural resources of any type known to exist on-site?

- Yes  No

Has an archaeological records search been conducted?

- Yes, Report attached (or mail copy separately if applying electronically)  No

Has a archaeological pedestrian survey been conducted for the site?

- Yes, Report attached (or mail copy separately if applying electronically)  No

Has a Section 106 MOA been signed by another federal agency and the SHPO?

- Yes, Attached (or mail copy separately if applying electronically)  No

If yes, list date MOA was signed (m/d/yyyy):

Has Section 106 consultation been initiated by another federal agency?

- Yes, Initiation letter attached (or mail copy separately if applying electronically)  No

**Box 12 Measures taken to avoid and minimize impacts to waters of the United States (if any):**

In addition to the measures listed under Box 12 on the attached sheets, the following permits would be obtained prior to project construction:

1. CWA Section 401 water quality certification from the Central Valley RWQCB (all Section 404 permits require a Section 401 water quality certification from RWQCB); and
2. CWA Section 402/National Pollutant Discharge Elimination System (NPDES) permit from State Water Resources Control Board (requiring preparation of a SWPPP)

Include multiple copies of Box 13 for separate sites.

**Box 13 Proposed Compensatory Mitigation** (site 1 of 1) related to fill/excavation and dredge activities. Indicate in ACRES and LINEAR FEET (where appropriate) the total quantity of waters of the United States proposed to be created, restored, enhanced and/or preserved for purposes of providing compensatory mitigation. Indicate water body type (wetland, riparian streambed, unvegetated streambed, lake, ocean, other) or non-jurisdictional (uplands<sup>5</sup>). Indicate mitigation type (on- or off-site by applicant, mitigation bank, in-lieu fee program):

Water Body Type	Created	Restored	Enhanced	Preserved	Mitigation type
See Attached Sheets					
Totals:					

<sup>5</sup> For uplands, please indicate if designed as an upland buffer.

If no mitigation is proposed, provide detailed explanation of why no mitigation would be necessary:

Has a draft/conceptual mitigation plan been prepared in accordance with the Army Corps of Engineers District guidelines?  Yes, Attached (or mail copy separately if applying electronically)  No

Mitigation site Latitude & Longitude (D/M/S, DD, or UTM):

USGS Quadrangle map name:

Assessors Parcel Number:

Section, Township, Range:

Other location descriptions, if known:

Directions to the mitigation location:

**Box 14 Water Quality Certification** (see instructions):

Applying for certification?  Yes, Attached (or mail copy separately if applying electronically)  No

Certification issued?  Yes, Attached (or mail copy separately if applying electronically)  No

Exempt?  Yes  No

If exempt, state why: NA Agency concurrence?  Yes, Attached  No

**Box 15 Coastal Zone Management Act** (see instructions):

Is the project located within the Coastal Zone?  Yes  No

If yes, applying for a coastal commission-approved Coastal Development Permit?

Yes, Attached (or mail copy separately if applying electronically)  No

If no, applying for separate CZMA-consistency certification?

Yes, Attached (or mail copy separately if applying electronically)  No

Permit/Consistency issued?  Yes, Attached (or mail copy separately if applying electronically)  No

Exempt?  Yes  No

If exempt, state why:

**Box 16** List of other certifications or approvals/denials received from other federal, state, or local agencies for work described in this application:

Agency	Type Approval <sup>4</sup>	Identification No.	Date Applied	Date Approved	Date Denied
USFWS,	Biological Opinion,	Service File 1-1-03-F-0225,	Section 7 consultation initiated	10/30/2002,	
USFWS,	Addendum to BO,	Service File 1-1-03-F-0225,	Approved	03/27/2006	
FHWA and Caltrans,	NEPA Categorical Exclusion (CE) Determination	approved	9/6/2006		
SHPO,	Concurrence Letter,	FHWA050408A,	consultation initiated	4/7/2005,	received 5/2/2005

<sup>4</sup>Would include but is not restricted to zoning, building, and flood plain permits

## NWP General Conditions (GC) checklist:

**1. Navigation:**

Project would be in compliance with GC?  Yes  No

Explain: This project would not affect navigation.

**2. Aquatic Life Movements:**

Project would be in compliance with GC?  Yes  No

Explain: Conservation measures described in the Biological Opinion would be implemented to ensure that project activities within the aquatic areas would not substantially disrupt the life cycle movements of giant garter snake or other aquatic life.

**3. Spawning Areas:**

Spawning areas present?  Yes  No

Project would be in compliance with GC?  Yes  No

Explain: No spawning or juvenile rearing fish habitat and no native wildlife nursery sites exist in the immediate project area.

**4. Migratory Bird Breeding Areas:**

Migratory bird breeding areas present?  Yes  No

Project would be in compliance with GC?  Yes  No

Explain: The proposed project activities would avoid migratory bird breeding areas.

**5. Shellfish Beds:**

Shellfish beds present?  Yes  No

Project would be in compliance with GC?  Yes  No

Explain: There are no populations of shellfish in the project area.

**6. Suitable Material:**

Project would be in compliance with GC?  Yes  No

Explain: The proposed project would not discharge any contaminants or toxic materials into drainages or wetlands.

**7. Water Supply Intakes:**

Project would be in compliance with GC?  Yes  No

Explain: There is no public water supply intake near the proposed project.

**8. Adverse Effects From Impoundments:**

Project would be in compliance with GC?  Yes  No

Explain: The proposed project would not create any impoundments.

**9. Management of Water Flows:**

Project would be in compliance with GC?  Yes  No

Explain: The proposed project would maintain the pre-construction course, condition, and capacity of the local canals to the maximum extent practicable.

**10. Fills Within 100-Year Floodplains:**

Project would be within 100-year floodplains?  Yes  No

If yes, project would be in compliance with GC?  Yes  No

Explain: Work currently being constructed on the Natomas Basin levees will provide 200-year flood protection.

**11. Equipment:**

Project would be in compliance with GC?  Yes  No

Explain: Construction equipment would be restricted to the project area. No equipment would be used in wetted canals. The affected canals would be dewatered and dried out prior to filling according to the dewatering plan described on the attached sheets.

**12. Soil Erosion and Sediment Controls:**

Project would be in compliance with GC?  Yes  No

Explain: The overall project would disturb greater than 1 acre, therefore a Storm Water Pollution Prevention Plan (SWPPP) would be prepared that would describe the construction methods and BMPs to be incorporated as part of the proposed project to minimize soil erosion and sedimentation to waters. Work occurring within the canals would be done during the low flow season and in the "dry".

**13. Removal of Temporary Fills:**

Project would be in compliance with GC?  Yes  No

Explain: All temporary fill, if used, within waters would be removed immediately after the activity is complete and the area returned to pre-project contours and conditions.

**14. Proper Maintenance:**

Project would be in compliance with GC?  Yes  No

Explain: Caltrans would maintain the interchange and RD 1000 would maintain the canals after the project is completed.

**15. Wild and Scenic Rivers:**

Project would be within a National Wild and Scenic River System (including proposed system)?

Yes  No

Project would be in compliance with GC?  Yes  No

Explain: Project activities would not occur in any component of the National Wild and Scenic River System, or any river officially designated by Congress as a "study river".

**16. Tribal Rights:**

Project would be in compliance with GC?  Yes  No

Explain: The County is not aware of any tribal rights associated with the project site.

**17. Endangered Species:** see Box 10 above.

**18. Historic Properties:** see Box 11 above.

**19. Designated Critical Waters (check those that apply)**

Includes:

- 1)  NOAA-designated marine sanctuaries,
- 2)  National Estuarine Research Reserves,
- 3)  State natural heritage sites,
- 4)  Officially designated waters

Applicant is aware of the restrictions a) and b) below?  Yes  No

a) NWP 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50: No NWP can be authorized.

b) NWP 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38: Notification is required.

**20. Mitigation:** see Box 13 above.

**21. Water Quality (401 Certification):** see Box 14 above.

22. **Coastal Zone Permit:** see Box 15 above.

23. **Regional and Case-By-Case Conditions:**

Complete the Regional Conditions checklist below.

Project would be in compliance with any Case-by-case conditions?  Yes  No

Explain: This project would comply with the regional conditions for the NWP's requested by this PCN.

24. **Use of Multiple Nationwide Permits:**

Applicant is aware that if total proposed acreage of impact exceeds acreage limit of NWP with highest specified acreage, no NWP can be issued?  Yes  No

25. **Transfer of Nationwide Permit Verifications:**

Applicant is aware of this permit transfer requirement?  Yes  No

26. **Compliance Certification:**

Applicant is aware of this post-construction requirement?  Yes  No

27. **Pre-Construction Notification:**

If a PCN is required, the PCN includes: *(check those that apply)*

Delineation of wetlands and other waters of the U.S.

If project results in the loss of greater than 1/10 acre of wetlands, a compensatory mitigation plan or statement describing how the mitigation requirement will be satisfied

For non-Federal applicants, a list of threatened or endangered species or designated critical habitat that might be affected by the proposed work

For Federal applicants, documentation demonstrating compliance with the Endangered Species Act

For non-Federal applicants, a list of historic properties listed on, or determined eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places that may be affected by the proposed work; or a vicinity map indicating the location of the historic property

For Federal applicants, documentation demonstrating compliance with the National Historic Preservation Act

28. **Single and Complete Project:**

Project would be in compliance with GC?  Yes  No

Explain: This PCN describes the activities of a single and complete project.

## **NWP Regional Conditions (RC) checklist:**

## **II. Sacramento District (SPK) in California, Nevada, and Utah:**

### **SPK Regional conditions to be applied across the entire Sacramento District including California, Nevada, and Utah (except Colorado):**

1. Is pre-construction notification (PCN) required?  Yes  No

If yes, notification pursuant to General Condition 27 is required using either the South Pacific Division Preconstruction Notification (PCN) Checklist or a completed application form (ENG Form 4345). In addition, the PCN shall include:

- a. A written statement explaining how the activity has been designed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States;

- b. Drawings, including plan and cross-section views, clearly depicting the location, size and dimensions of the proposed activity. The drawings shall contain a title block, legend and scale, amount (in cubic yards) and size (in acreage) of fill in Corps jurisdiction, including both permanent and temporary fills/structures. The ordinary high water mark or, if tidal waters, the high tide line should be shown (in feet), based on National Geodetic Vertical Datum (NGVD) or other appropriate referenced elevation; and
- c. Pre-project color photographs of the project site taken from designated locations documented on the plan drawing.

2. Will mitigation be completed before or concurrent with construction of the project?  Yes  No

Compensatory mitigation shall be completed as required by special conditions of the NWP verification before or concurrent with construction of the authorized activity, except when specifically determined to be impracticable by the Sacramento District. When project mitigation involves use of a mitigation bank or in-lieu fee program, payment shall be made before commencing construction.

3. Does the project have property which will be preserved as part of mitigation for authorized impacts?  
 Yes  No

If yes, the NWP verification shall be recorded against the preserved property with the Registrar of Deeds or other appropriate official charged with the responsibility for maintaining records of title to or interest in real property.

Will structures, including boat ramps or docks, marinas, piers, and permanently moored vessels, be constructed in or adjacent to navigable waters?  Yes  No

If yes, the NWP verification shall be recorded against the area with the Registrar of Deeds or other appropriate official charged with the responsibility for maintaining records of title to or interest in real property. The recordation shall also include a map showing the surveyed location of the authorized structure and any associated areas preserved to minimize or compensate for project impacts.

4. Will any wetlands, other aquatic areas, and/or any vegetative buffers be preserved as part of mitigation for impacts?  Yes  No

If yes, these areas shall be placed into a separate "preserve" parcel prior to discharging dredged or fill material into waters of the United States, except where specifically determined to be impracticable by the Sacramento District. Permanent legal protection shall be established for all preserve parcels, following Sacramento District approval of the legal instrument.

5. The permittee shall allow Corps representatives to inspect the authorized activity and any mitigation areas at any time deemed necessary to determine compliance with the terms and conditions of the NWP verification. The permittee will be notified in advance of an inspection.

6. Is a waiver of the 300 linear foot limitation for intermittent and ephemeral streams requested?  Yes  No

If yes, an analysis of the impacts to the stream environment, measures taken to avoid and minimize losses, other project alternatives that were considered (but were found not to be practicable), and a mitigation plan describing how the unavoidable losses will be offset, must be included.

7. Is a road crossing proposed?  Yes  No

If yes, road crossings shall be designed to ensure fish passage, especially for anadromous fish. Bridge designs that span the stream or river, utilize pier or pile supported structures, or involve large bottomless culverts with a natural streambed, where the substrate and streamflow conditions approximate existing channel conditions shall be employed.

Is an approach fill proposed?  Yes  No

Approach fills in waters of the United States below the ordinary high water mark are not authorized under the NWPs, except where avoidance has specifically been determined to be impracticable by the Sacramento District.

8. Are trenching activities proposed under NWP 12?  Yes  No

If yes, clay blocks, bentonite, or other suitable material shall be used to seal the trench to prevent the utility line from draining waters of the United States, including wetlands.

9. Are activities involving hard-armoring of the bank toe or slope proposed under NWP 13?  Yes  No

If yes, notification pursuant to General Condition 27 is required. Bank stabilization shall include the use of vegetation or other biotechnical design to the maximum extent practicable.

10. Is the activity proposed under NWP 23?  Yes  No

If yes, notification pursuant to General Condition 27 is required. The PCN shall include a copy of the signed Categorical Exclusion document and final agency determinations regarding compliance with Section 7 of the Endangered Species Act, Essential Fish Habitat under the Magnussen-Stevens Act, and Section 106 of the National Historic Preservation Act.

11. Are activities which will result in the loss of greater than 300 linear feet of streambed proposed under NWP 44?  Yes  No

If yes, the discharge shall not cause the loss of more than 300 linear feet of streambed unless the 300 linear foot limit is waived in writing by the Sacramento District for intermittent and ephemeral streams only. Loss of more than 300 linear feet of perennial streambed is not authorized.

Is the activity proposed within a water of the United States supporting anadromous fisheries?  Yes  No

This NWP does not authorize discharges in waters of the United States supporting anadromous fisheries.

12. Is channelization or relocation of an intermittent or perennial drainage proposed under NWPs 29 and/or 39?  Yes  No

If yes, channelization or relocation of intermittent or perennial drainage is not authorized, except when, as determined by the Sacramento District, the relocation would result in a net increase in functions of the aquatic ecosystem within the watershed.

13. Are temporary fills for construction access in waters of the United States supporting fisheries proposed under NWP 33?  Yes  No

If yes, temporary fills for construction access in waters of the United States supporting fisheries shall be accomplished with clean, washed spawning quality gravels where practicable as determined by the Sacramento District, in consultation with appropriate federal and state wildlife agencies.

14. Are activities which will result in the loss of greater than 0.5 acre of waters of the United States or the loss of more than 300 linear feet of ditch proposed under NWP 46?  Yes  No

If yes, the loss of greater than 0.5 acre of waters of the United States is not authorized. The discharge shall not cause the loss of more than 300 linear feet of ditch, unless the 300 foot linear foot limit is waived in writing by the Sacramento District.

15. Are any waters of the United States, including created, restored, or enhanced waters of the United States proposed for preservation under NWPs 29, 39, 40, 42, and/or 43?  Yes  No

If yes, upland vegetated buffers shall be established and maintained in perpetuity, to the maximum extent practicable, adjacent to all preserved open waters, streams and wetlands including created, restored, enhanced or

preserved waters of the U.S., consistent with General Condition 20. Except in unusual circumstances, vegetated buffers shall be at least 50 feet in width.

16. Is the proposed project located with a histosol, fen, or wetland contiguous with a fen?  Yes  No

If yes, all NWP's except 3, 6, 20, 27, 32, 38, and 47, are revoked. Fens are defined as slope wetlands with a histic epipedon that are hydrologically supported by groundwater. Fens are normally saturated throughout the growing season, although they may not be during drought conditions. For NWP's 3, 6, 20, 27, 32, and 38, notification pursuant to General Condition 27 is required.

17. Are activities proposed within 100 feet of the point of groundwater discharge of a natural spring?  Yes  No

If yes, notification pursuant to General Condition 27 is required. A spring source is defined as any location where ground water emanates from a point in the ground. For purposes of this condition, springs do not include seeps or other discharges which lack a defined channel.

### **SPK Regional conditions to be applied only in California:**

1. Is the project located within Lake Tahoe Basin?  Yes  No

All NWP's within the Lake Tahoe Basin are revoked. Activities in this area shall be authorized under Regional General Permit 16 or through an individual permit.

2. Is the project located within the Primary and Secondary Zones of the Legal Delta?  Yes  No

NWP's 29 and 39 within the Primary and Secondary Zones of the Legal Delta are revoked. New development activities in this area will be reviewed through the Corps' standard permit process.

### **SPK Regional conditions to be applied only in Nevada:**

1. Is the project located within Lake Tahoe Basin?  Yes  No

All NWP's within the Lake Tahoe Basin are revoked. Activities in this area shall be authorized under Regional General Permit 16 or through an individual permit.

### **SPK Regional conditions to be applied only in Utah:**

1. Is the project located below 4217 feet mean sea level (msl) adjacent to the Great Salt Lake or below 4500 feet msl adjacent to Utah Lake?  Yes  No

For all NWP's in this area, except NWP 47, notification pursuant to General Condition 27 is required.

2. Will the project include bank stabilization activities that will affect more than 100 linear feet of perennial stream?  Yes  No

If yes, notification pursuant to General Condition 27 is required.

3. Will the project require NWP 27 authorization?  Yes  No

If yes, facilities for controlling stormwater runoff, construction of water parks such as kayak courses, and use of grout or concrete to construct in-stream structures are not authorized.

Will the project exceed 1500 linear feet (as measured on the stream thalweg), use in stream structures exceeding 50 cubic yards per structure, and/or incorporate grade control structures exceeding 1 foot vertical drop?

Yes  No

If yes, notification pursuant to General Condition 27 is required.

Will the project involve stream restoration?  Yes  No

If yes, the post project stream sinuosity shall be appropriate to the geomorphology of the surrounding area and shall be equal to, or greater than, pre-project sinuosity. Sinuosity is defined as the ratio of stream length to project reach length. Structures shall allow the passage of aquatic organisms, recreational water craft or other navigational activities unless specifically waived in writing by the District Engineer.



# **Attachment to Nationwide Permit Pre-Construction Notification (PCN) Form Riego Road/State Route 99 Interchange Project**

---

## **Box 3**

*Name of Property Owner(s)*

The Riego Road/State Route 99 Interchange Project will occur mostly within Caltrans Right of Way and State Route 99 (SR-99):

California Department of Transportation (Caltrans)  
P.O. Box 911  
Marysville, CA 95901  
Contact: Sue Bauer  
(530) 741-7113

The main drainage ditches within the project area are owned and maintained by:

Reclamation District 1000 (RD 1000)  
1633 Garden Highway  
Sacramento, CA 95833  
Contact: Paul Devereau, General Manager  
(916) 922-1449

The irrigation canals area owned and maintained by:

Natomas Central Mutual Water Company  
2601 West Elkhorn Blvd.  
Rio Linda, CA 95673  
(916) 419-5936

The rice fields are privately owned.

## **Box 5**

### **Water Bodies**

Approximately 38.968 acres of potential waters of the U.S. (waters), including 3.996 acres of wetlands and 33.100 acres of rice fields were delineated within the Riego Road/State Route 99 Interchange Project (proposed project) area (Figure 1). A preliminary jurisdictional determination of the wetland delineation report prepared for the project is being requested pursuant the Regulatory Guidance Letter 08-02.

Water bodies impacted by the proposed project include wetlands (seven drainage ditch wetlands, eight seasonal wetlands, and rice fields); and other waters (two irrigation canals, two drainage ditches, and thirty-one culverts). Table 1 provides a summary of all waters occurring within the project area, including culverts, and identifies those impacted by the proposed project.

**Table 1. Summary of Potentially Jurisdictional Water of the U.S., including Wetlands**

<b>Water Body Designation</b>	<b>Water Body Type</b>	<b>Affected by Proposed Project</b>	<b>Acreage Within Delineation Area</b>	<b>Linear Feet Within Delineation Area</b>
SW-1	Seasonal Wetland	yes	0.093	-
SW -2	Seasonal Wetland	yes	0.078	-
SW -3	Seasonal Wetland	yes	0.015	-
SW -4	Seasonal Wetland	yes	0.078	-
SW -5	Seasonal Wetland	yes	0.025	-
SW -6	Seasonal Wetland	yes	0.012	-
SW -7	Seasonal Wetland	yes	0.004	-
SW-8	Seasonal Wetland	yes	0.017	-
<i>Seasonal Wetland Total</i>			<i>0.322</i>	<i>-</i>
DDW-1	Drainage Ditch Wetland	yes	0.642	2,664
DDW-2	Drainage Ditch Wetland	yes	0.224	862
DDW-3	Drainage Ditch Wetland	yes	0.024	1,030
DDW-4	Drainage Ditch Wetland	yes	1.304	2,370
DDW-5	Drainage Ditch Wetland	yes	0.675	2,450
DDW-6	Drainage Ditch Wetland	yes	0.249	603
DDW-7	Drainage Ditch Wetland	yes	0.556	1,486
<i>Drainage Ditch Wetland Total</i>			<i>3.674</i>	<i>11,466</i>
IC-1	Irrigation Canal	yes	0.303	880
IC-2	Irrigation Canal	yes	0.347	840
<i>Irrigation Canal Total</i>			<i>0.650</i>	<i>1,720</i>
DD-1	Drainage Ditch	yes	0.956	2,279
DD-2	Drainage Ditch	yes	0.093	227
<i>Drainage Ditch Total</i>			<i>1.049</i>	<i>2,506</i>
C-1	24" Culvert	no	0.001	28
C-2	24" Culvert	no	0.003	70
C-3	18" Culvert	no	0.002	63
C-4	42" Culvert	no	0.027	342
C-5	42" Culvert	no	0.031	381
C-6	24" Culvert	yes	0.001	31
C-7	24" Culvert	no	0.003	72
C-8	18" Culvert	no	0.002	65
C-9	24" Culvert	yes	0.004	79
C-10	18" Culvert	yes	0.001	29
C-11	12" Culvert	yes	0.001	42
C-12	24" Culvert	no	0.005	102
C-13	24" Culvert	yes	0.001	31
C-14	24" Culvert	yes	0.004	79
C-15	18" Culvert	yes	0.001	38
C-16	24" Culvert	yes	0.005	100

Water Body Designation	Water Body Type	Affected by Proposed Project	Acreage Within Delineation Area	Linear Feet Within Delineation Area
C-17	18" Culvert	yes	0.001	21
C-18	18" Culvert	yes	0.001	23
C-19	18" Culvert	yes	0.001	24
C-20	18" Culvert	yes	0.001	29
C-21	24" Culvert	yes	0.004	81
C-22	24" Culvert	yes	0.001	28
C-23	24" Culvert	no	0.005	103
C-24	18" Culvert	yes	0.001	30
C-25	42" Culvert	yes	0.014	176
C-26	30" Culvert	yes	0.005	82
C-27	24" Culvert	yes	0.003	66
C-28	18" Culvert	yes	0.001	36
C-29	18" Culvert	yes	0.001	21
C-30	18" Culvert	yes	0.001	21
C-31	18" Culvert	yes	0.005	139
C-32	24" Culvert	yes	0.004	82
C-33	18" Culvert	no	0.003	73
C-34	18" Culvert	yes	0.001	30
C-35	18" Culvert	no	0.003	75
C-36	18" Culvert	no	0.003	74
C-37	18" Culvert	no	0.001	28
C-38	30" Culvert	no	0.008	144
C-39	42" Culvert	no	0.011	135
C-40	18" Culvert	no	0.001	30
C-41	18" Culvert	no	0.001	36
C-42	24" Culvert	yes	0.002	34
<i>Culvert Total</i>			<i>0.173</i>	<i>3,173</i>
Rice Fields		yes	33.1	-
<b>Grand Total</b>			<b>38.968</b>	<b>18,865</b>

## Nature of Activity

The proposed project is limited to:

- Relocation of RD 1000 drainage ditches and PG&E utility line outside Caltrans right of way
- Construction of Riego Road overcrossing with on and off ramps to SR-99
- Construction of California Highway Patrol (CHP) enforcement area
- Construction of bio-swales and other site drainage facilities

## Project Purpose

The purpose of the proposed project is to replace the existing signalized intersection of SR-99 and Riego Road with a new interchange that allows uninterrupted passage on SR-99 and Riego Road through the area and reducing the potential for vehicle conflicts.

## **Project Description**

### **Project Construction Schedule**

Drainage ditch relocation will take place between May 1 and October 1, 2011 per condition of the biological opinion issued by U.S. Fish and Wildlife Service (USFWS). Following drainage ditch relocation, construction of the new overcrossing and ramps will begin. All impacts to waters, including ditch relocation, will occur during the first season. Completion of the interchange is expected in 2012.

### **Access and Staging**

Equipment access to the work areas will be accomplished via the existing roadway network (i.e., Riego Road and/or SR-99). From these roads, equipment can access the construction zones and improvement areas. Sufficient right-of-way currently exists along the highway shoulders and within the highway corridor to provide safe and convenient access without interrupting existing traffic flow. Staging and equipment storage will occur within each of the interchange quadrants/ramp areas, as necessary. Upon completion of the project, all areas temporarily disturbed by equipment or staging will be seeded with a Caltrans approved seed mixture to control erosion and provide water quality benefit.

### **Drainage Ditch and Utility Relocation**

The project occurs in un-incorporated Sutter County. Minor utility relocations, including moving several wooden power line poles along Riego Road will be completed as part of the project. No major utility relocations requiring additional permitting will be required.

Necessary right of way will be acquired for the project at least several months prior to commencement of construction and in advance of the rice planting season. The rice farmers will manage their fields accordingly and establish a new dike system with the new property lines so that their normal farming practices are not interrupted. All dike relocation, perimeter road construction, adjustments to irrigation facilities, etc., as part of their continued, normal farming practices, will be completed before the interchange project construction begins. Construction of the ditch relocations will have no further effect on the rice fields adjacent to the project.

Relocation of the RD 100 drainage ditches will be done in four phases as shown on Figure 2: Canal Relocation Phasing Concept drawing taken from the Supplemental Biological Assessment sent to USFWS.

1. Phase 1: The new drainage ditches are excavated in dry rice fields.
2. Phase 2: The new ditches are opened and connected to the existing ditches. Water is allowed to flow through the new ditch as well as the existing ditch. The new ditch banks are planted according to the planting plan prepared for the project.
3. Phase 3: Water is cut off from the old ditch using sheet piles or other similar method and the old ditches are pumped free of standing water and allowed to dry out for a minimum of 15 days allowing any snakes and wildlife opportunity to relocate to the new ditch.
4. Phase 4: The old ditches are permanently filled, the sheet piles are removed and the remaining ditch banks are vegetated.

## **Interchange Construction**

The existing signalized interchange at the intersection of SR-99 and Riego Road will be replaced with a Type L-9 (partial cloverleaf) interchange. Riego Road will be improved so that it crosses SR-99 by way of an overcrossing. It will be expanded to five lanes on the overcrossing (three westbound lanes and two eastbound lanes), with four lanes approaching both sides of the overcrossing. Improvements to Riego Road associated with the new interchange will occur out to approximately 0.4 km from the proposed interchange. As part of the proposed project, SR-99 will be expanded in the vicinity of the proposed interchange so that it may be eventually expanded from a four to six-lane freeway. The improved roadway will also accommodate possible future expansion to include two high occupancy vehicle lanes. The distance of roadwork on SR-99 from the proposed intersection to the north will be approximately 1.1 km. This will result in expansion of the SR-99 roadway area by approximately 2.1 acres. The distance of roadwork on the SR-99 from the proposed intersection to the south will be approximately 2.4 km. This will result in expansion of the SR-99 roadway by approximately 4.3 acres. Fill material, concrete, and steel will be imported to the site and used for construction of the new interchange. Figures 3a to 3f show the plan view of the new interchange and the new drainage features to be constructed as part of the proposed project.

## **California Highway Patrol Enforcement Area**

At the southern end of the project area, a new CHP enforcement area will be constructed to allow CHP vehicles the ability to pull off and park at the side of SR-99. Construction of this facility will require the removal of one existing 24" culvert and the installation of a new drainage culvert with flared end section into the adjacent drainage ditch.

## **Site Drainage Plan**

Sources of water to the project area come from precipitation events, irrigation canals, and agricultural runoff from rice fields. Generally flows travel north to south or east to west through the project area through the drainage ditches and ultimately to the East Drainage Canal, which connects to a pump station at the Sacramento River. When necessary, the pump station pumps water from the East Drainage Canal to the Sacramento River.

During the wet season (October 15 to May 1), stormwater runoff from SR-99 is collected in roadside bio-swales constructed alongside and between the north and south bound lanes. Water retained in the bio-swales percolates into the groundwater or is directed through culverts equipped with one way flap gates to the RD 1000 drainage ditches that parallel SR-99 on the east and west. The eastern drainage ditches (drainage ditch wetland 1 [DDW-1] and drainage ditch 1 [DD-1]) accept stormwater runoff in the winter months and agricultural runoff, including irrigation canal overflow in the summer months. DD-1 flows through C-39 to the East Drainage Canal. DD-1 is the largest drainage ditch in the project area and receives water from DDW-1, DDW-2, irrigation canal, and rice field runoff. The drainage ditches along the west side of SR-99 (DDW-7 and DDW-5) receive only rice field and stormwater runoff. These ditches do not flow during the summer months, but they do remain partially filled with irrigation runoff from the rice adjacent rice fields. During the wet season, DDW-7 can fill and drain through C-16 to DD-2, which becomes DDW-6 and flows west along Riego Road; and DDW-5 can fill and drain through C-38 to either DDW-4 or other lateral drainage ditch. Irrigation Canals 1 and 2 (IC-1 and IC-2) run east/west along Riego Road. During the irrigation season, the canals are full of water originating from the Sacramento River and groundwater sources. When full, C-1

overflows through a flashboard riser and through C-31 to DD-1. C-2 overflows through a flashboard riser and C-21 to DD-2. All the drainages and canals within the project area are routinely inspected and maintained by RD1000 or the Natomas Mutual Water Company. RD1000 clears their drainage ditches of vegetation and sediment deposits approximately every 5 years.

### **Post-Project Site Drainage**

The proposed project will re-establish existing drainage/irrigation patterns and treat for additional impervious surfaces by creating new ditches to replace DDW-1 and DD-1 and bio-swales to replace all other affected drainages. New culverts will be installed to connect new drainage features to existing drainages where necessary. New drainage ditches will conform to existing drainage ditches where they meet. Figure 4 shows sectional views of the drainage ditches and bio-swales to be constructed. The banks of drainage ditches and bio-swales will be vegetated to provide water quality benefit and control erosion.

### **Drainage Ditches**

On the east side of SR-99, the majority of DDW-1 will be realigned and replaced with a new trapezoidal ditch thirty feet-wide, five feet-deep, and with a five feet-wide bottom. Approximately 1,765 feet of the new ditch will be constructed in rice fields that have been dried out to allow excavation. The majority of DD-1 will be replaced with a fifty feet-wide, 8 feet-deep channel with 10 feet-wide bottom. Approximately 1,970 feet of the new ditch will be constructed in rice fields that have been dried out to allow excavation. Both new drainage ditches will have 2.5:1 side slopes.

### **Bio-swales**

The proposed project will replace drainage functions of DDW-7 and DDW-5 and provide stormwater treatment for the entire project with bio-swales. A typical bio-swale will be 19 feet-wide, two feet-deep, and with three feet-wide bottom. The bank slopes will have 4 to 1 side slopes. Approximately 7,740 linear feet of bio-swales will be constructed in rice fields that have been dried out to allow excavation. The bio-swales will facilitate stormwater infiltration to the ground water. During heavy precipitation events, or under saturated conditions, surface flows in the bio-swales will drain to drainage ditches via new 24-inch culverts equipped with automatic flap gates to prevent back flow.

### **Culverts**

New culverts will be constructed to connect drainage ditches and bio-swales to existing drainages that carry stormwater offsite. Culverts will be equipped with rock slope protection (riprap) or concrete flared end sections at either end to protect against erosion. New culverts with rock slope protection at the inlets and outlets will carry flows under Riego Road. New flash board risers attached to new culverts will be installed in the irrigation canals along Riego Road to allow overflow from the canal to the drainage ditches along SR-99 or Riego Road.

## Box 6

### Reason(s) for Discharge into Waters of the United States

1. Soil will be discharged to all or portions of six drainage ditches and two irrigation canals to remove them from the Caltrans right of way.
2. Soil will be discharged to eight seasonal wetlands during site grading to allow construction of the new interchange roadways
3. Rock (riprap) will be placed in four drainage ditches and one irrigation canal for erosion control at culvert outlets and/or inlets
4. Soil, road base and asphalt concrete will be discharged to 4 rice fields to create new vehicle on-ramps and off-ramps to SR-99.

### Types(s) of Material Being Discharged and the Amount of each Type in Cubic Yards

Approximately 46,273 cubic yards (CY) of the earth fill imported to the site will be used to fill the dewatered portions of DD-1, DD-2, DDW-1, DDW-2, DDW-3, DDW-5, DDW-6, DDW-7, IC-1, and IC-2.

Approximately 260 CY of earth will be required to fill seasonal wetlands SW-1 to SW-8 during site grading.

Approximately 20,500 to 50,000 CY of earth and 3,500 to 7,000 CY of road aggregate will be used to fill rice fields and create new SR-99 on/off ramps.

Table 2 provides the estimated quantity of fill materials discharged to delineated waters of the U.S.

### Total Surface Area in Acres of Wetlands or Other Waters of the U.S. Filled

#### Permanent Impacts

Permanent impacts will occur where fill material (earthen fill and riprap) will be permanently discharged to drainage ditches, irrigation canals, seasonal wetlands, and rice fields. Additional permanent impacts will occur to waters within culverts that will be removed.

#### Temporary Impacts

Temporary impacts will occur within drainage ditches and irrigation canals where work will be required to join in new ditch alignments or where new culvert inlets/outfalls will be constructed within existing channels and where new flash board risers will be constructed in existing irrigation ditches. For each location within exiting ditches where work will occur, twelve linear feet was considered temporarily impacted to allow for equipment use, land disturbance, or the

installation of a cofferdam or check dam to dewater the immediate work area. Temporarily impacted areas within ditches will be graded to conform to the existing channel upon completion of work. All temporary fills, if used, will be removed entirely.

In summary, a total of 0.127 acres will be temporarily impacted and 37.300 acres will be permanently impacted by implementation of the proposed project. Table 2 lists each water body impacted by the project, provides the estimated amount and type of fill material, and gives the acreage of water surface area impacted permanently or temporarily.

**Table 2. Summary of Impacts to Potential Waters of the U.S., Including Wetlands**

Water Body Designation	Activity in Water Body	Acreage Impacted (P)=Permanent (T)=Temporary	Linear Feet Impacted	Cubic Yards of Earth Fill	Cubic Yards of Riprap Fill	Cubic Yards of Aggregate Road Base
SW-1	Site Grading	0.093 (P)	-	75	0	
SW -2	Site Grading	0.078 (P)	-	63	0	
SW -3	Site Grading	0.015 (P)	-	12	0	
SW -4	Site Grading	0.078 (P)	-	63	0	
SW -5	Site Grading	0.025 (P)	-	20	0	
SW -6	Site Grading	0.012 (P)	-	10	0	
SW -7	Site Grading	0.004 (P)	-	3	0	
SW-8	Site Grading	0.017 (P)	-	14	0	
<b>Seasonal Wetland Totals</b>		<b>0.322(P)</b>	<b>-</b>	<b>260</b>	<b>0</b>	
DDW-1	Fill most of ditch. Install new culvert outfall with RSP at new north end	0.003 (T) 0.524 (P)	24(T) 2,285 (P)	7,405	30	
DDW-2	Shorten ditch and install new culvert outfall with RSP at new west end	0.003 (T) 0.214(P)	12 (T) 824 (P)	2,670	28	
DDW-3	Fill ditch entirely	0.024 (P)	1,030 (P)	37	0	
DDW-4	Remove culvert 42. Install new culvert outfall with RSP	0.099 (T) 0.005 (P)	229 (T) 10 (P)	0	30	
DDW-5	Fill most of ditch. conform to new ditch at south end	0.003 (T) 0.631 (P)	12 (T) 2,290 (P)	7,421	0	
DDW-6	Shorten ditch and install new culvert outfall with RSP at new east end	0.005 (T) 0.217 (P)	12 (T) 525 (P)	1,701	15	
DDW-7	Fill ditch entirely	0.556 (P)	2,413 (P)	7,820	0	
<b>Drainage Ditch Wetland Totals</b>		<b>0.113 (T) 2.171 (P)</b>	<b>289 (T) 9,377 (P)</b>	<b>27,054</b>	<b>103</b>	
IC-1	Shorten canal and install new flash board riser with RSP at new west end	0.004 (T) 0.303(P)	12(T) 880 (P)	2,851	15	

Water Body Designation	Activity in Water Body	Acreage Impacted (P)=Permanent (T)=Temporary	Linear Feet Impacted	Cubic Yards of Earth Fill	Cubic Yards of Riprap Fill	Cubic Yards of Aggregate Road Base
IC-2	Shorten canal and install new culvert outfall and flash board riser with RSP at new east end	0.005 (T) 0.315 (P)	12(T) 764 (P)	2,476	15	
<b>Irrigation Canal Totals</b>		<b>0.009 (T) 0.618 (P)</b>	<b>24 (T) 1,644 (P)</b>	<b>5,327</b>	<b>30</b>	
DD-1	Fill most of ditch. Conform to new ditch at south end	0.005 (T) 0.931 (P)	12 (T) 2220 (P)	13,156	30	
DD-2	Fill ditch entirely	0.093 (P)	227 (P)	736	0	
<b>Drainage Ditch Totals</b>		<b>0.005 (T) 1.024 (P)</b>	<b>12 (T) 2,447 (P)</b>	<b>13,892</b>	<b>30</b>	
Culverts	Remove 25 culverts entirely	0.065 (P)	1,352 (P)	0	0	
<b>Culvert Totals</b>		<b>0.065 (P)</b>	<b>1,352 (P)</b>	<b>0</b>	<b>0</b>	
Rice Fields	Excavate new drainage ditches/bio swales. Fill to allow new roadway construction.	33.10 (P)	-	20,500 to 50,000 (4,100 linear feet of road)		3,500 to 7,000
<b>Rice Field Totals</b>		<b>33.10 (P)</b>		<b>20,500 to 50,000</b>		<b>3,500 to 7,000</b>
<b>Grand Total</b>		<b>0.127 (T) 37.300 (P)</b>	<b>325 (T) 14,820 (P)</b>	<b>67,033 CY to 96,533 CY</b>	<b>163 CY</b>	<b>3,500 CY to 7,000 CY</b>

## Box10

### Threatened and Endangered Species

An official U.S. Fish and Wildlife Service species list was received on October 10, 2001 for the Verona and Taylor Monument U.S. Geological Survey 7.5 minute quads. The list identified the following 12 fish and wildlife species and two critical habitats as endangered, threatened, or proposed for listing:

- Bald eagle, (*Haliaeetus leucocephalus*) (T)
- Giant garter snake, (*Thamnophis gigas*) (T)
- California red-legged frog, (*Rana aurora draytonii*) (T)
- Delta smelt, (*Hypomesus transpacificus*) (T)
- Central Valley steelhead, (*Oncorhynchus mykiss*) (T)
- Winter-run Chinook salmon, (*Oncorhynchus tshawytscha*) (E)
- Critical Habitat, winter-run Chinook, (*Oncorhynchus tshawytscha*) (E)
- Central Valley spring-run Chinook, (*Oncorhynchus tshawytscha*) (T)

- Critical Habitat, Central Valley spring-run chinook, (*Oncorhynchus tshawytscha*) (T)
- Sacramento splittail, (*Pogonichthys macrolepidotus*) (T)
- Vernal pool fairy shrimp, (*Branchinecta lynchi*) (T)
- Valley elderberry longhorn beetle, (*Desmocerus californicus dimorphus*) (T)
- Vernal pool tadpole shrimp, (*Lepidurus packardii*) (E)
- Mountain plover, (*Charadrius montanus*) (PT)

Key:

(E) Endangered: Listed (in the Federal Register) as being in danger of extinction

(T) Threatened: Listed as likely to become endangered within the foreseeable future

(P) Proposed: Officially proposed (in the Federal Register) for listing as endangered or threatened.

General surveys of the project area were conducted on May 1 and October 25, 2001, by LSA. All habitats in the project area were inspected to determine whether any special status species might occur. Based on the habitats observed, only the giant garter snake was determined to have the potential to occur in the area. Caltrans initiated Section 7 consultation with USFWS on October 30, 2002 and USFWS issued their biological opinion on March 27, 2006 (attached).

## Box 11

### Historic Properties and Cultural Resources

On May 2, 2005, the State Historic Preservation Office (SHPO) issued a concurrence letter to FHWA agreeing with the finding of no adverse effect (attached).

## Box 12

### Measures Taken to Avoid and Minimize Impacts to Waters:

Riego Road and SR-99 within the project area are confined by drainage ditches or irrigation canals, which run along the borders of adjacent rice fields. In order to make the necessary improvements to the intersection and widen the roadways, impacts to the ditches, canals, and rice fields are necessary and unavoidable.

- The following minimization measures have been incorporated into the project design:
  - Movement of heavy equipment will be limited to existing roadways and designated staging areas to minimize habitat disturbance.
  - Work within waters will be conducted between May 1 and October 1.
  - Clearing will be confined to the minimal areas necessary for construction activities.

- Following completion of construction activities, all construction debris will be removed and temporarily disturbed areas will be restored to pre-project conditions.
- Contract specifications will include the following Best Management Practices, where applicable, to reduce erosion during construction:
  - Scheduling. A specific work schedule will be implemented to coordinate the timing of land disturbing activities and the installation of erosion and sedimentation controls.
  - Preservation of Existing Vegetation. Existing vegetation will be protected in place where feasible to provide effective erosion and sediment control, as well as watershed protection, landscape beautification, dust control, and water pollution control.
  - Mulching. Loose bulk materials will be applied to the soil surface as a temporary cover to reduce erosion by protecting bare soil from rainfall impact, increasing infiltration, and reducing runoff.
  - Soil Stabilizers. Water or other stabilizing materials will be applied, as necessary, to disturbed soil surfaces to prevent dust from moving offsite as a result of wind, traffic, and grading activities.
  - Slope Roughening/Terracing/Rounding. Roughening and terracing will be implemented to create unevenness on bare soil through the construction of furrows running across a slope, creation of stair steps, or by utilization of construction equipment to track the soil surface. Surface roughening or terracing reduces erosion potential by decreasing runoff velocities, trapping sediment, and increasing infiltration of water into the soil, aiding in the establishment of vegetative cover from seed.
  - Stormwater will be directed through vegetated bio-swales and culverts will include riprap at inlets and outlets to control erosion and sedimentation after construction.
  - Following construction, all trash and construction debris will be removed from work areas.
  - All fueling and maintenance of vehicles and other equipment and staging areas will occur at least 66 feet from any water body.
  - All work will be accomplished in accordance with the most current Caltrans Construction Site Best Management Practices (BMPs) Manual, including the Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program Manuals ([http://www.dot.ca.gov/hq/construc/Construction\\_Site\\_BMPs.pdf](http://www.dot.ca.gov/hq/construc/Construction_Site_BMPs.pdf)).
  - Work in irrigation ditches will be conducted when the channels are dry. In the event of sudden thunderstorms or other unusual rain events, temporary dewatering may be used to avoid siltation of the channel.

## **Box 13**

### **Proposed Compensatory Mitigation**

#### **Temporary Impacts**

All temporarily affected ditches and canals will be returned to pre-project condition or better upon completion of the project. The banks of the restored areas will be revegetated to provide erosion protection and reduce sedimentation to the waters.

#### **Seasonal Wetland Impact Compensation**

Impacts to seasonal wetlands will be compensated for by purchasing wetland mitigation credits from a Corps' approved mitigation bank or approved in-lieu-fee program. Preference would be to pay into Natomas Basin Conservancy through the National Fish and Wildlife Fund in-lieu-fee program, if possible.

#### **Drainage Ditch/Irrigation Canal Impact Compensation**

Compensation for drainage ditch, irrigation canal, and culvert function will be fully mitigated for onsite through implementation of the drainage plan prepared for the project. The drainage plan will construct approximately 5,736 linear feet of new drainage ditches (within dedicated drainage easements held by RD 1000), 25,162 linear feet of new bio-swales within Caltrans right of way, and 2,738 linear feet of new culverts within Caltrans right of way, that will provide water quality treatment for all existing and new impervious surfaces, as well as irrigation and stormwater drainage for the project area.

The new onsite drainage features will amount to approximately 3.634 acres of new surface waters (1.901 acres of drainage ditch and 1.733 acres of bio-swales, which will partially compensate for the 3.813 acres filled as a result of the project (2.171 acres of drainage ditch wetlands, 0.093 acres of drainage ditches, and 0.618 acres of canals).

#### **Culvert Impact Compensation**

Impacts to 0.065 acres of culverted waters would be compensated through purchase of 0.065 acres of open water credits at an approved mitigation bank or through in-lieu-fee payment.

#### **Rice Field Impact Compensation Measures**

Impacts to 33.1 acres of rice fields considered giant garter snake habitat, are being compensated through purchase of 30.3 acres of snake habitat within the Natomas Basin Conservancy per USFWS Biological Opinion.

#### **Other Proposed Compensation Measures**

Since there will be a net loss of 0.179 acres of drainage features onsite and 1.733 acres of the new onsite drainages will be shallow bio-swales, additional offsite mitigation for drainage ditch impacts is anticipated to be necessary. Additionally, since there will be loss of 33.10 acres of rice fields, Caltrans anticipates that additional offsite mitigation for rice fields will be required.

When considering the appropriate offsite compensatory mitigation for 33.10 acres of rice fields, Caltrans considers the 30.3 acres of giant garter snake habitat purchased from the Natomas Basin Conservancy as having greater functions and values than those that will be impacted by the

project. Therefore, in deciding the appropriate compensatory mitigation requirement for this project, Caltrans requests that the 30.3 acres be considered as appropriate compensation for rice field impacts.

**Table 3. Proposed Compensatory Mitigation Plan Summary for Permanent Losses to Wetlands and Other Waters of the U.S.**

Aquatic Resource	Permanent Impact Acreage	Linear Feet Impacted	Compensatory Mitigation
Seasonal Wetland Totals	0.322	-	<ul style="list-style-type: none"> <li>Purchase 0.322 acres of mitigation credit from an approved mitigation bank or National Fish and Wildlife In-Lieu-Fee Fund</li> </ul>
Drainage Ditch Totals	3.195 (2.171 wetland, 1.024 other waters)	11,824 (9,377 wetland, 2,447 other waters)	<ul style="list-style-type: none"> <li>Create 1.901 acres/5,736 linear feet of new onsite drainage ditches</li> <li>Create 1.733 acres/25,162 linear feet of new onsite bio-swales</li> </ul>
Irrigation Canal Totals	0.618 (P)	1,644 (P)	Install 0.148 acres/2,738 linear feet of new culverts
Culvert Totals	0.065 (P)	1,352 (P)	<ul style="list-style-type: none"> <li>Purchase 0.244 acres of mitigation credit from an approved mitigation bank or National Fish and Wildlife In-Lieu-Fee Fund</li> </ul>
Rice Field Totals	33.10 (P)		<ul style="list-style-type: none"> <li>Purchase 30.3 acres of giant garter snake habitat credits from the Natomas Basin Conservancy</li> <li>Purchase 2.8 acres of wetland mitigation credit from an approved mitigation bank or National Fish and Wildlife In-Lieu-Fee Fund</li> </ul>

### SPK Regional Condition 1a

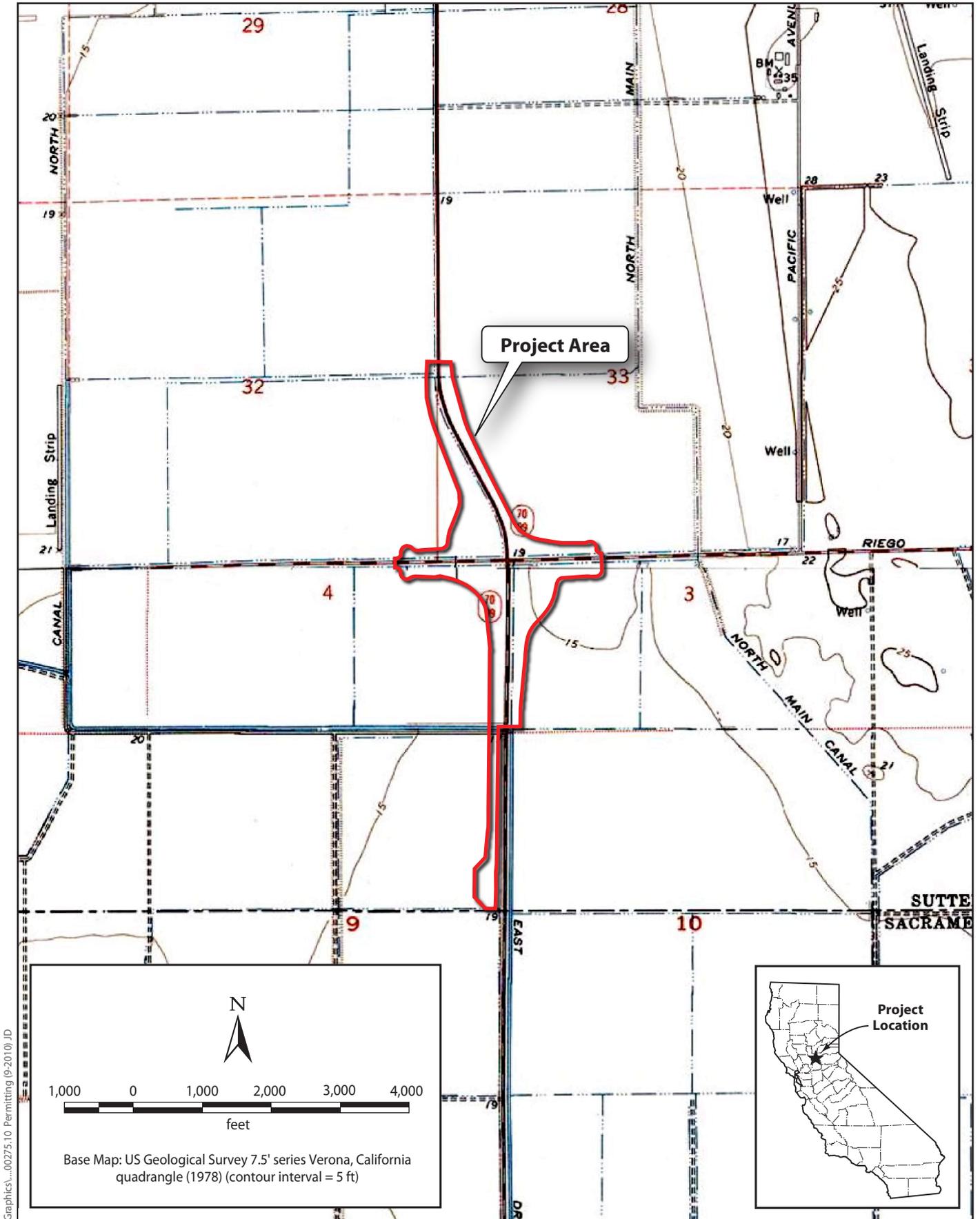
The proposed project has been designed to minimize unavoidable adverse effects both temporary and permanent, to waters of the U.S. to the maximum extent practicable: to minimize erosion and associated water quality impacts, all work in irrigation ditches will be conducted when the channels are dry. To avoid excessive impacts, the project area will be confined to the smallest area practicable. Additionally, all road work including construction area dewatering will be accomplished in accordance with the most current Caltrans Construction Site BMPs Manual, including the SWPPP and Water Pollution Control Program Manuals ([http://www.dot.ca.gov/hq/construc/Construction\\_Site\\_BMPs.pdf](http://www.dot.ca.gov/hq/construc/Construction_Site_BMPs.pdf)).



## Appendix A Figures

---

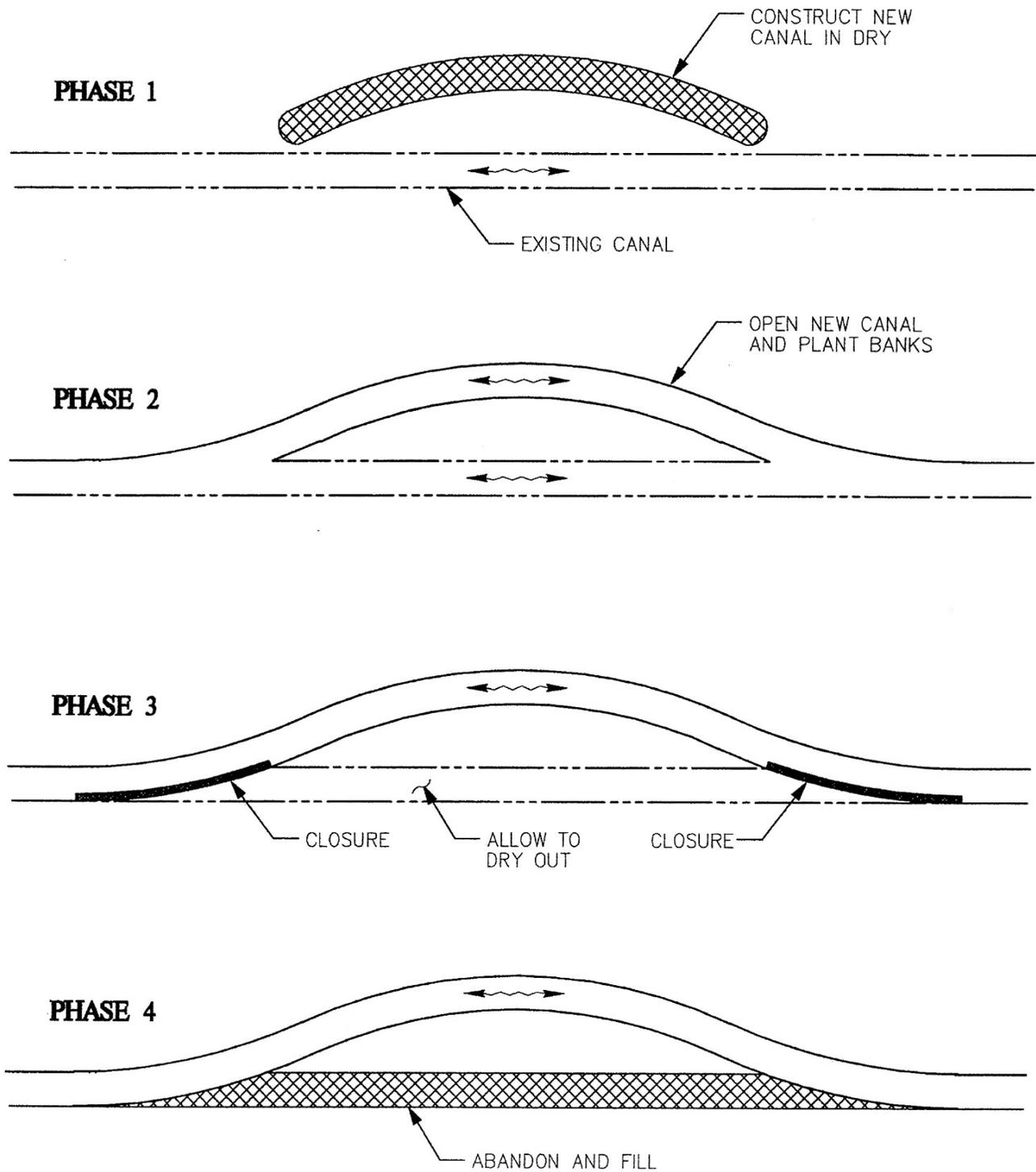




Graphics\...00275.10 Permitting (9-2010) JD

**Figure 1**  
**Project Location**

# CANAL RELOCATION PHASING CONCEPT



Source: Wood Rodgers

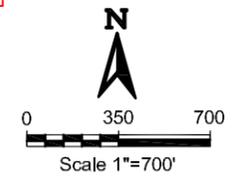
Graphics\...00275.10 Permitting (9-2010).JD

Figure 2  
Canal Relocation Phasing Concept

**LEGEND**

 Project Area Boundary  
(113.44 acres)

 Sheet Boundary



September 2010

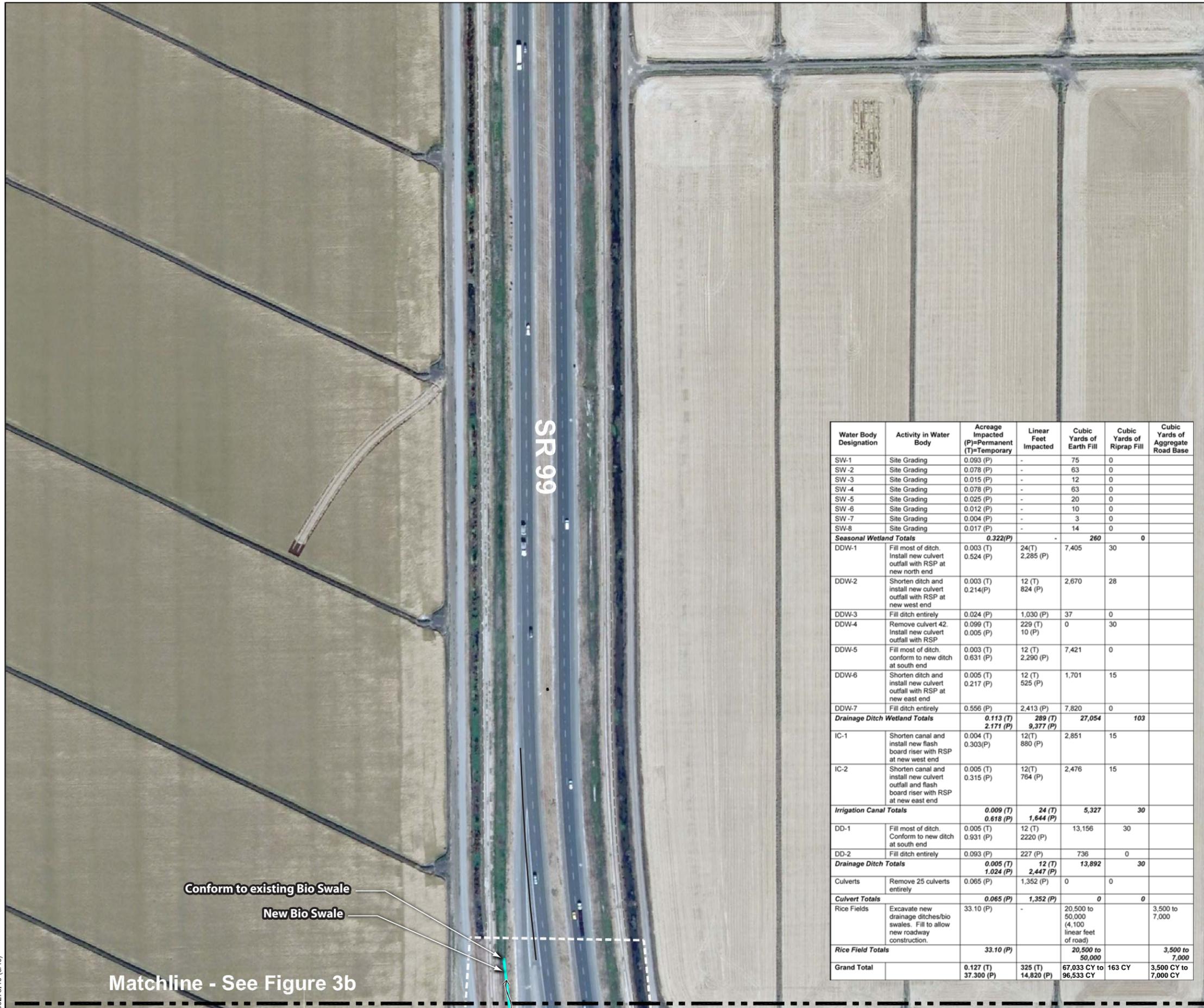


00275.10 (9/10)

**Figure 3  
Index Sheet**

**Figure 3a**  
**Project Plan Showing Impacts to Waters**  
**Of The U.S. And the Proposed Drainage Plan**

EA 03131-406600, KP 58.4/59.3, 0.0/2.6  
 SUTTER COUNTY, CA  
 SEPTEMBER 2010



Water Body Designation	Activity in Water Body	Acres Impacted (P)=Permanent (T)=Temporary	Linear Feet Impacted	Cubic Yards of Earth Fill	Cubic Yards of Riprap Fill	Cubic Yards of Aggregate Road Base
SW-1	Site Grading	0.093 (P)	-	75	0	
SW-2	Site Grading	0.078 (P)	-	63	0	
SW-3	Site Grading	0.015 (P)	-	12	0	
SW-4	Site Grading	0.078 (P)	-	63	0	
SW-5	Site Grading	0.025 (P)	-	20	0	
SW-6	Site Grading	0.012 (P)	-	10	0	
SW-7	Site Grading	0.004 (P)	-	3	0	
SW-8	Site Grading	0.017 (P)	-	14	0	
<b>Seasonal Wetland Totals</b>		<b>0.322(P)</b>	<b>-</b>	<b>260</b>	<b>0</b>	
DDW-1	Fill most of ditch. Install new culvert outfall with RSP at new north end	0.003 (T) 0.524 (P)	24(T) 2,285 (P)	7,405	30	
DDW-2	Shorten ditch and install new culvert outfall with RSP at new west end	0.003 (T) 0.214(P)	12 (T) 824 (P)	2,670	28	
DDW-3	Fill ditch entirely	0.024 (P)	1,030 (P)	37	0	
DDW-4	Remove culvert 42. Install new culvert outfall with RSP	0.099 (T) 0.005 (P)	229 (T) 10 (P)	0	30	
DDW-5	Fill most of ditch conform to new ditch at south end	0.003 (T) 0.631 (P)	12 (T) 2,290 (P)	7,421	0	
DDW-6	Shorten ditch and install new culvert outfall with RSP at new east end	0.005 (T) 0.217 (P)	12 (T) 525 (P)	1,701	15	
DDW-7	Fill ditch entirely	0.556 (P)	2,413 (P)	7,820	0	
<b>Drainage Ditch Wetland Totals</b>		<b>0.113 (T) 2.171 (P)</b>	<b>289 (T) 9,377 (P)</b>	<b>27,054</b>	<b>103</b>	
IC-1	Shorten canal and install new flash board riser with RSP at new west end	0.004 (T) 0.303(P)	12(T) 880 (P)	2,851	15	
IC-2	Shorten canal and install new culvert outfall and flash board riser with RSP at new east end	0.005 (T) 0.315 (P)	12(T) 764 (P)	2,476	15	
<b>Irrigation Canal Totals</b>		<b>0.009 (T) 0.618 (P)</b>	<b>24 (T) 1,644 (P)</b>	<b>5,327</b>	<b>30</b>	
DD-1	Fill most of ditch. Conform to new ditch at south end	0.005 (T) 0.931 (P)	12 (T) 2220 (P)	13,156	30	
DD-2	Fill ditch entirely	0.093 (P)	227 (P)	736	0	
<b>Drainage Ditch Totals</b>		<b>0.005 (T) 1.024 (P)</b>	<b>12 (T) 2,447 (P)</b>	<b>13,892</b>	<b>30</b>	
Culverts	Remove 25 culverts entirely	0.065 (P)	1,352 (P)	0	0	
<b>Culvert Totals</b>		<b>0.065 (P)</b>	<b>1,352 (P)</b>	<b>0</b>	<b>0</b>	
Rice Fields	Excavate new drainage ditches/bio swales. Fill to allow new roadway construction.	33.10 (P)	-	20,500 to 50,000 (4,100 linear feet of road)		3,500 to 7,000
<b>Rice Field Totals</b>		<b>33.10 (P)</b>		<b>20,500 to 50,000</b>		<b>3,500 to 7,000</b>
<b>Grand Total</b>		<b>0.127 (T) 37.300 (P)</b>	<b>325 (T) 14,820 (P)</b>	<b>67,033 CY to 96,533 CY</b>	<b>163 CY</b>	<b>3,500 CY to 7,000 CY</b>

**LEGEND**

Project Area Boundary (113.44 acres)

Avoided Waters

**PROJECT IMPACTS**

**Temporary Impacts**

All Waters

**Permanent Impacts**

(DDW) Drainage Ditch Wetland

Irrigated Rice Field

(SW) Seasonal Wetland

(DD) Drainage Ditch

(IC) Irrigation Canal

Culvert

**NEW DRAINAGE FEATURES**

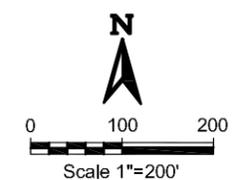
Drainage Ditch (1.901 acres / 5,736 linear feet)

Bio Swale (1.733 acres / 25,162 linear feet)

Culvert (0.148 acres / 2,738 linear feet)

Rock Slope Protection (RSP)

Flow Direction



Matchline - See Figure 3a

**Figure 3b**  
**Project Plan Showing Impacts to Waters**  
**Of The U.S. And the Proposed Drainage Plan**

EA 03131-406600, KP 58.4/59.3, 0.0/2.6  
 SUTTER COUNTY, CA  
 SEPTEMBER 2010

**LEGEND**

- Project Area Boundary (113.44 acres)
- Avoided Waters

**PROJECT IMPACTS**

**Temporary Impacts**

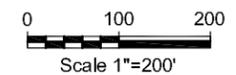
- All Waters

**Permanent Impacts**

- (DDW) Drainage Ditch Wetland
- Irrigated Rice Field
- (SW) Seasonal Wetland
- (DD) Drainage Ditch
- (IC) Irrigation Canal
- Culvert

**NEW DRAINAGE FEATURES**

- Drainage Ditch (1.901 acres / 5,736 linear feet)
- Bio Swale (1.733 acres / 25,162 linear feet)
- Culvert (0.148 acres / 2,738 linear feet)
- Rock Slope Protection (RSP)
- Flow Direction



Water Body Designation	Activity in Water Body	Acres Impacted (P)=Permanent (T)=Temporary	Linear Feet Impacted	Cubic Yards of Earth Fill	Cubic Yards of Riprap Fill	Cubic Yards of Aggregate Road Base
SW-1	Site Grading	0.093 (P)	-	75	0	
SW-2	Site Grading	0.078 (P)	-	63	0	
SW-3	Site Grading	0.015 (P)	-	12	0	
SW-4	Site Grading	0.078 (P)	-	63	0	
SW-5	Site Grading	0.025 (P)	-	20	0	
SW-6	Site Grading	0.012 (P)	-	10	0	
SW-7	Site Grading	0.004 (P)	-	3	0	
SW-8	Site Grading	0.017 (P)	-	14	0	
<b>Seasonal Wetland Totals</b>		<b>0.322(P)</b>		<b>260</b>	<b>0</b>	
DDW-1	Fill most of ditch. Install new culvert outfall with RSP at new north end	0.003 (T) 0.524 (P)	24(T) 2,285 (P)	7,405	30	
DDW-2	Shorten ditch and install new culvert outfall with RSP at new west end	0.003 (T) 0.214(P)	12 (T) 824 (P)	2,670	28	
DDW-3	Fill ditch entirely	0.024 (P)	1,030 (P)	37	0	
DDW-4	Remove culvert 42. Install new culvert outfall with RSP	0.099 (T) 0.005 (P)	229 (T) 10 (P)	0	30	
DDW-5	Fill most of ditch. conform to new ditch at south end	0.003 (T) 0.631 (P)	12 (T) 2,290 (P)	7,421	0	
DDW-6	Shorten ditch and install new culvert outfall with RSP at new east end	0.005 (T) 0.217 (P)	12 (T) 525 (P)	1,701	15	
DDW-7	Fill ditch entirely	0.556 (P)	2,413 (P)	7,820	0	
<b>Drainage Ditch Wetland Totals</b>		<b>0.113 (T) 2.171 (P)</b>	<b>289 (T) 9,377 (P)</b>	<b>27,054</b>	<b>103</b>	
IC-1	Shorten canal and install new flash board riser with RSP at new west end	0.004 (T) 0.303(P)	12(T) 880 (P)	2,851	15	
IC-2	Shorten canal and install new culvert outfall and flash board riser with RSP at new east end	0.005 (T) 0.315 (P)	12(T) 764 (P)	2,476	15	
<b>Irrigation Canal Totals</b>		<b>0.009 (T) 0.618 (P)</b>	<b>24 (T) 1,644 (P)</b>	<b>5,327</b>	<b>30</b>	
DD-1	Fill most of ditch. Conform to new ditch at south end	0.005 (T) 0.931 (P)	12 (T) 2,220 (P)	13,156	30	
DD-2	Fill ditch entirely	0.093 (P)	227 (P)	736	0	
<b>Drainage Ditch Totals</b>		<b>0.005 (T) 1.024 (P)</b>	<b>12 (T) 2,447 (P)</b>	<b>13,892</b>	<b>30</b>	
Culverts	Remove 25 culverts entirely	0.065 (P)	1,352 (P)	0	0	
<b>Culvert Totals</b>		<b>0.065 (P)</b>	<b>1,352 (P)</b>	<b>0</b>	<b>0</b>	
Rice Fields	Excavate new drainage ditches/bio swales. Fill to allow new roadway construction.	33.10 (P)	-	20,500 to 50,000 (4,100 linear feet of road)		3,500 to 7,000
<b>Rice Field Totals</b>		<b>33.10 (P)</b>		<b>20,500 to 50,000</b>		<b>3,500 to 7,000</b>
<b>Grand Total</b>		<b>0.127 (T) 37.300 (P)</b>	<b>325 (T) 14,820 (P)</b>	<b>67,033 CY to 96,533 CY</b>	<b>163 CY</b>	<b>3,500 CY to 7,000 CY</b>

Matchline - See Figure 3c

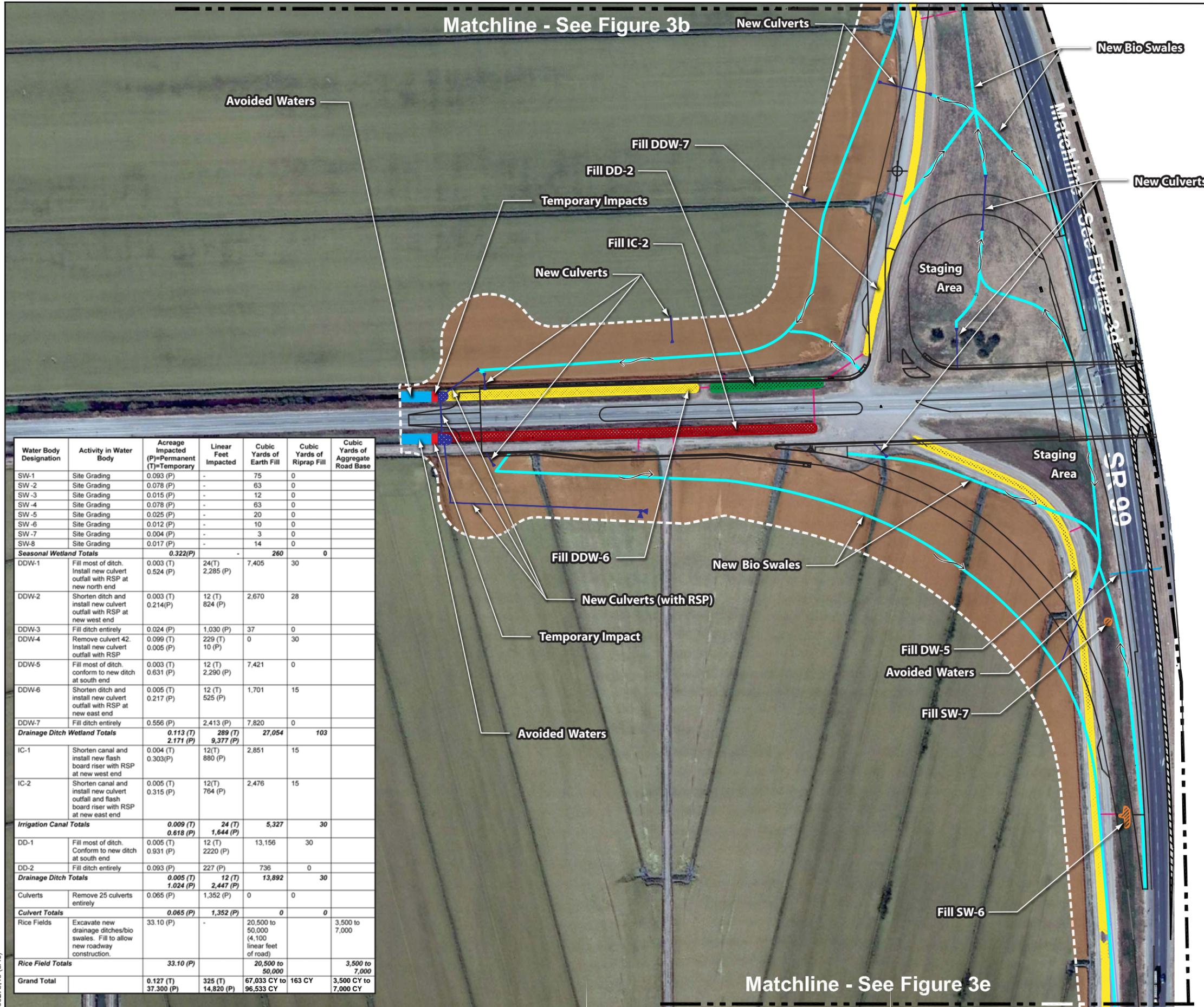
Matchline - See Figure 3d

Matchline - See Figure 3b

Figure 3c

**Project Plan Showing Impacts to Waters Of The U.S. And the Proposed Drainage Plan**

EA 03131-406600, KP 58.4/59.3, 0.0/2.6  
SUTTER COUNTY, CA  
SEPTEMBER 2010



**LEGEND**

Project Area Boundary (113.44 acres)

Avoided Waters

**PROJECT IMPACTS**

**Temporary Impacts**

All Waters

**Permanent Impacts**

(DDW) Drainage Ditch Wetland

Irrigated Rice Field

(SW) Seasonal Wetland

(DD) Drainage Ditch

(IC) Irrigation Canal

Culvert

**NEW DRAINAGE FEATURES**

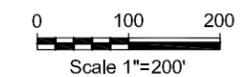
Drainage Ditch (1.901 acres / 5,736 linear feet)

Bio Swale (1.733 acres / 25,162 linear feet)

Culvert (0.148 acres / 2,738 linear feet)

Rock Slope Protection (RSP)

Flow Direction



Water Body Designation	Activity in Water Body	Acreage Impacted (P)=Permanent (T)=Temporary	Linear Feet Impacted	Cubic Yards of Earth Fill	Cubic Yards of Riprap Fill	Cubic Yards of Aggregate Road Base
SW-1	Site Grading	0.093 (P)	-	75	0	
SW-2	Site Grading	0.078 (P)	-	63	0	
SW-3	Site Grading	0.015 (P)	-	12	0	
SW-4	Site Grading	0.078 (P)	-	63	0	
SW-5	Site Grading	0.025 (P)	-	20	0	
SW-6	Site Grading	0.012 (P)	-	10	0	
SW-7	Site Grading	0.004 (P)	-	3	0	
SW-8	Site Grading	0.017 (P)	-	14	0	
<b>Seasonal Wetland Totals</b>		<b>0.322(P)</b>	-	<b>260</b>	<b>0</b>	
DDW-1	Fill most of ditch. Install new culvert outfall with RSP at new north end	0.003 (T) 0.524 (P)	24(T) 2,285 (P)	7,405	30	
DDW-2	Shorten ditch and install new culvert outfall with RSP at new west end	0.003 (T) 0.214(P)	12 (T) 824 (P)	2,670	28	
DDW-3	Fill ditch entirely	0.024 (P)	1,030 (P)	37	0	
DDW-4	Remove culvert 42. Install new culvert outfall with RSP	0.099 (T) 0.005 (P)	229 (T) 10 (P)	0	30	
DDW-5	Fill most of ditch. conform to new ditch at south end	0.003 (T) 0.631 (P)	12 (T) 2,290 (P)	7,421	0	
DDW-6	Shorten ditch and install new culvert outfall with RSP at new east end	0.005 (T) 0.217 (P)	12 (T) 525 (P)	1,701	15	
DDW-7	Fill ditch entirely	0.556 (P)	2,413 (P)	7,820	0	
<b>Drainage Ditch Wetland Totals</b>		<b>0.113 (T) 2.171 (P)</b>	<b>289 (T) 9,377 (P)</b>	<b>27,054</b>	<b>103</b>	
IC-1	Shorten canal and install new flash board riser with RSP at new west end	0.004 (T) 0.303(P)	12(T) 880 (P)	2,851	15	
IC-2	Shorten canal and install new culvert outfall and flash board riser with RSP at new east end	0.005 (T) 0.315 (P)	12(T) 764 (P)	2,476	15	
<b>Irrigation Canal Totals</b>		<b>0.009 (T) 0.618 (P)</b>	<b>24 (T) 1,644 (P)</b>	<b>5,327</b>	<b>30</b>	
DD-1	Fill most of ditch. Conform to new ditch at south end	0.005 (T) 0.931 (P)	12 (T) 2220 (P)	13,156	30	
DD-2	Fill ditch entirely	0.093 (P)	227 (P)	736	0	
<b>Drainage Ditch Totals</b>		<b>0.005 (T) 1.024 (P)</b>	<b>12 (T) 2,447 (P)</b>	<b>13,892</b>	<b>30</b>	
Culverts	Remove 25 culverts entirely	0.065 (P)	1,352 (P)	0	0	
<b>Culvert Totals</b>		<b>0.065 (P)</b>	<b>1,352 (P)</b>	<b>0</b>	<b>0</b>	
Rice Fields	Excavate new drainage ditches/bio swales. Fill to allow new roadway construction.	33.10 (P)	-	20,500 to 50,000 (4,100 linear feet of road)		3,500 to 7,000
<b>Rice Field Totals</b>		<b>33.10 (P)</b>		<b>20,500 to 50,000</b>		<b>3,500 to 7,000</b>
<b>Grand Total</b>		<b>0.127 (T) 37.300 (P)</b>	<b>325 (T) 14,820 (P)</b>	<b>67,033 CY to 96,533 CY</b>	<b>163 CY</b>	<b>3,500 CY to 7,000 CY</b>

Matchline - See Figure 3e

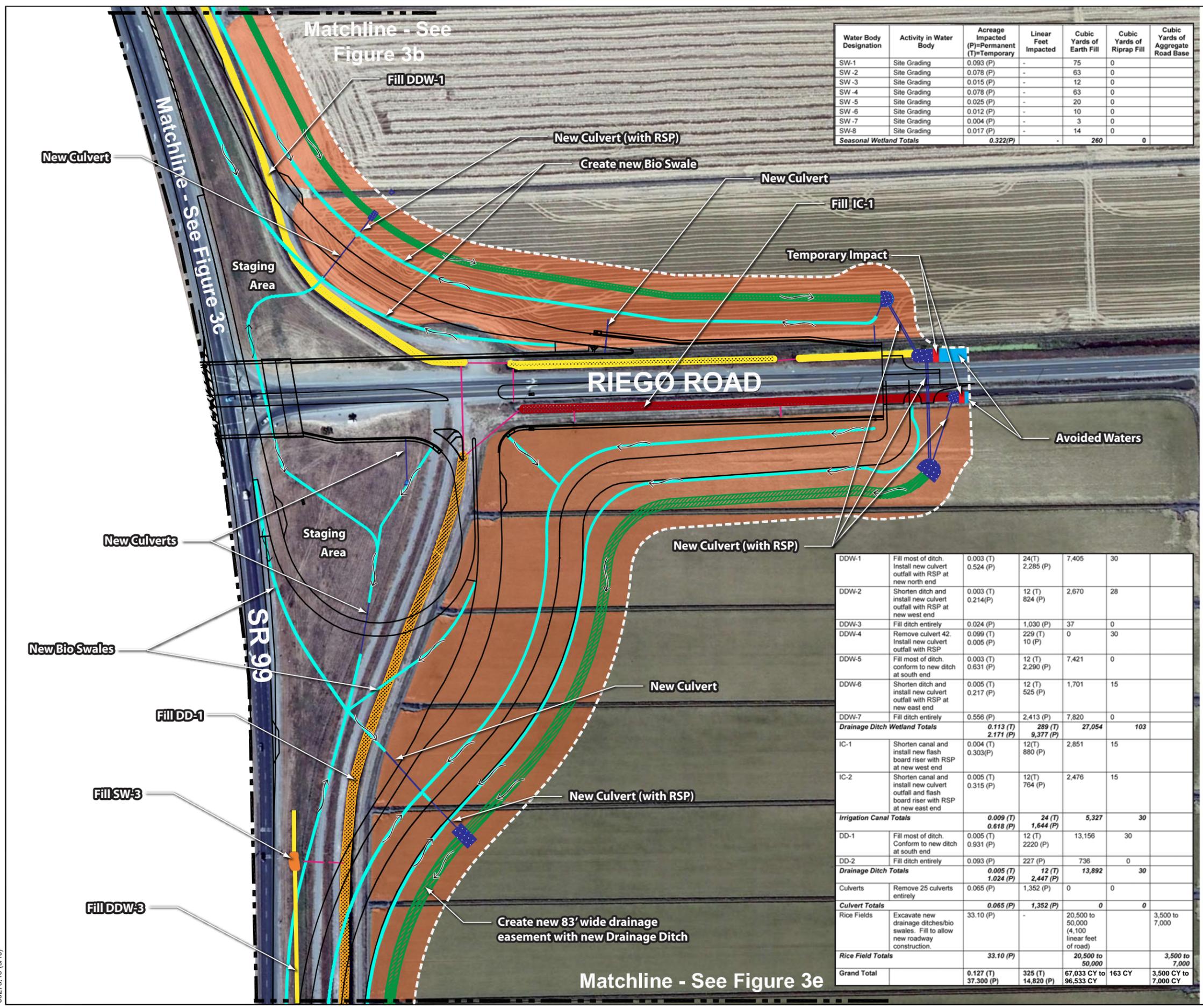
00275.10 (9/10)

Figure 3d

**Project Plan Showing Impacts to Waters Of The U.S. And the Proposed Drainage Plan**

EA 03131-406600, KP 58.4/59.3, 0.0/2.6  
SUTTER COUNTY, CA  
SEPTEMBER 2010

Water Body Designation	Activity in Water Body	Acreeage Impacted (P)=Permanent (T)=Temporary	Linear Feet Impacted	Cubic Yards of Earth Fill	Cubic Yards of Riprap Fill	Cubic Yards of Aggregate Road Base
SW-1	Site Grading	0.093 (P)	-	75	0	
SW-2	Site Grading	0.078 (P)	-	63	0	
SW-3	Site Grading	0.015 (P)	-	12	0	
SW-4	Site Grading	0.078 (P)	-	63	0	
SW-5	Site Grading	0.025 (P)	-	20	0	
SW-6	Site Grading	0.012 (P)	-	10	0	
SW-7	Site Grading	0.004 (P)	-	3	0	
SW-8	Site Grading	0.017 (P)	-	14	0	
<b>Seasonal Wetland Totals</b>		<b>0.322(P)</b>	-	<b>260</b>	<b>0</b>	



**LEGEND**

- Project Area Boundary (113.44 acres)
- Avoided Waters

**PROJECT IMPACTS**

**Temporary Impacts**

- All Waters

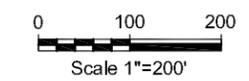
**Permanent Impacts**

- (DDW) Drainage Ditch Wetland
- Irrigated Rice Field
- (SW) Seasonal Wetland
- (DD) Drainage Ditch
- (IC) Irrigation Canal
- Culvert

**NEW DRAINAGE FEATURES**

- Drainage Ditch (1.901 acres / 5,736 linear feet)
- Bio Swale (1.733 acres / 25,162 linear feet)
- Culvert (0.148 acres / 2,738 linear feet)
- Rock Slope Protection (RSP)
- Flow Direction

DDW-1	Fill most of ditch. Install new culvert outfall with RSP at new north end	0.003 (T) 0.524 (P)	24(T) 2,285 (P)	7,405	30	
DDW-2	Shorten ditch and install new culvert outfall with RSP at new west end	0.003 (T) 0.214(P)	12 (T) 824 (P)	2,670	28	
DDW-3	Fill ditch entirely	0.024 (P)	1,030 (P)	37	0	
DDW-4	Remove culvert 42. Install new culvert outfall with RSP	0.099 (T) 0.005 (P)	229 (T) 10 (P)	0	30	
DDW-5	Fill most of ditch. conform to new ditch at south end	0.003 (T) 0.631 (P)	12 (T) 2,290 (P)	7,421	0	
DDW-6	Shorten ditch and install new culvert outfall with RSP at new east end	0.005 (T) 0.217 (P)	12 (T) 525 (P)	1,701	15	
DDW-7	Fill ditch entirely	0.556 (P)	2,413 (P)	7,820	0	
<b>Drainage Ditch Wetland Totals</b>		<b>0.113 (T) 2.171 (P)</b>	<b>289 (T) 9,377 (P)</b>	<b>27,054</b>	<b>103</b>	
IC-1	Shorten canal and install new flash board riser with RSP at new west end	0.004 (T) 0.303(P)	12(T) 880 (P)	2,851	15	
IC-2	Shorten canal and install new culvert outfall and flash board riser with RSP at new east end	0.005 (T) 0.315 (P)	12(T) 764 (P)	2,476	15	
<b>Irrigation Canal Totals</b>		<b>0.009 (T) 0.618 (P)</b>	<b>24 (T) 1,644 (P)</b>	<b>5,327</b>	<b>30</b>	
DD-1	Fill most of ditch. Conform to new ditch at south end	0.005 (T) 0.931 (P)	12 (T) 2220 (P)	13,156	30	
DD-2	Fill ditch entirely	0.093 (P)	227 (P)	736	0	
<b>Drainage Ditch Totals</b>		<b>0.005 (T) 1.024 (P)</b>	<b>12 (T) 2,447 (P)</b>	<b>13,892</b>	<b>30</b>	
Culverts	Remove 25 culverts entirely	0.065 (P)	1,352 (P)	0	0	
<b>Culvert Totals</b>		<b>0.065 (P)</b>	<b>1,352 (P)</b>	<b>0</b>	<b>0</b>	
Rice Fields	Excavate new drainage ditches/bio swales. Fill to allow new roadway construction.	33.10 (P)	-	20,500 to 50,000 (4,100 linear feet of road)		3,500 to 7,000
<b>Rice Field Totals</b>		<b>33.10 (P)</b>		<b>20,500 to 50,000</b>		<b>3,500 to 7,000</b>
<b>Grand Total</b>		<b>0.127 (T) 37.300 (P)</b>	<b>325 (T) 14,820 (P)</b>	<b>67,033 CY to 96,533 CY</b>	<b>163 CY</b>	<b>3,500 CY to 7,000 CY</b>

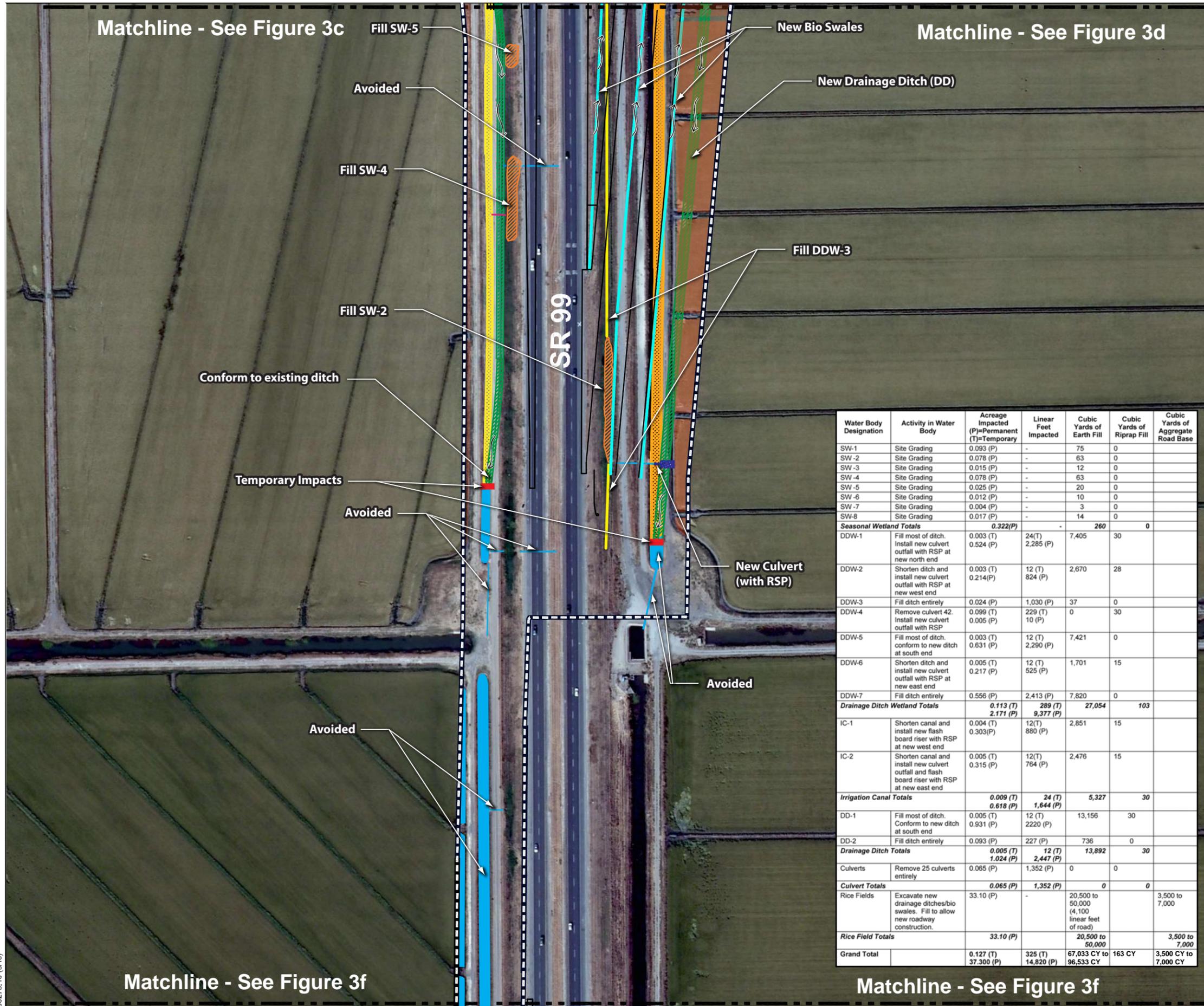


00275.10 (9/10)

Matchline - See Figure 3c

Matchline - See Figure 3d

**Figure 3e**  
**Project Plan Showing Impacts to Waters**  
**Of The U.S. And the Proposed Drainage Plan**  
 EA 03131-406600, KP 58.4/59.3, 0.0/2.6  
 SUTTER COUNTY, CA  
 SEPTEMBER 2010



**LEGEND**

- Project Area Boundary (113.44 acres)
- Avoided Waters

**PROJECT IMPACTS**

**Temporary Impacts**

- All Waters

**Permanent Impacts**

- (DDW) Drainage Ditch Wetland
- Irrigated Rice Field
- (SW) Seasonal Wetland
- (DD) Drainage Ditch
- (IC) Irrigation Canal
- Culvert

**NEW DRAINAGE FEATURES**

- Drainage Ditch (1.901 acres / 5,736 linear feet)
- Bio Swale (1.733 acres / 25,162 linear feet)
- Culvert (0.148 acres / 2,738 linear feet)
- Rock Slope Protection (RSP)
- Flow Direction

Water Body Designation	Activity in Water Body	Acreage Impacted (P)=Permanent (T)=Temporary	Linear Feet Impacted	Cubic Yards of Earth Fill	Cubic Yards of Riprap Fill	Cubic Yards of Aggregate Road Base
SW-1	Site Grading	0.093 (P)	-	75	0	
SW-2	Site Grading	0.078 (P)	-	63	0	
SW-3	Site Grading	0.015 (P)	-	12	0	
SW-4	Site Grading	0.078 (P)	-	63	0	
SW-5	Site Grading	0.025 (P)	-	20	0	
SW-6	Site Grading	0.012 (P)	-	10	0	
SW-7	Site Grading	0.004 (P)	-	3	0	
SW-8	Site Grading	0.017 (P)	-	14	0	
<b>Seasonal Wetland Totals</b>		<b>0.322(P)</b>	<b>-</b>	<b>260</b>	<b>0</b>	
DDW-1	Fill most of ditch. Install new culvert outfall with RSP at new north end	0.003 (T) 0.524 (P)	24(T) 2,285 (P)	7,405	30	
DDW-2	Shorten ditch and install new culvert outfall with RSP at new west end	0.003 (T) 0.214(P)	12 (T) 824 (P)	2,670	28	
DDW-3	Fill ditch entirely	0.024 (P)	1,030 (P)	37	0	
DDW-4	Remove culvert 42. Install new culvert outfall with RSP	0.099 (T) 0.005 (P)	229 (T) 10 (P)	0	30	
DDW-5	Fill most of ditch. conform to new ditch at south end	0.003 (T) 0.631 (P)	12 (T) 2,290 (P)	7,421	0	
DDW-6	Shorten ditch and install new culvert outfall with RSP at new east end	0.005 (T) 0.217 (P)	12 (T) 525 (P)	1,701	15	
DDW-7	Fill ditch entirely	0.556 (P)	2,413 (P)	7,820	0	
<b>Drainage Ditch Wetland Totals</b>		<b>0.113 (T) 2.171 (P)</b>	<b>289 (T) 9,377 (P)</b>	<b>27,054</b>	<b>103</b>	
IC-1	Shorten canal and install new flash board riser with RSP at new west end	0.004 (T) 0.303(P)	12(T) 880 (P)	2,851	15	
IC-2	Shorten canal and install new culvert outfall and flash board riser with RSP at new east end	0.005 (T) 0.315 (P)	12(T) 764 (P)	2,476	15	
<b>Irrigation Canal Totals</b>		<b>0.009 (T) 0.618 (P)</b>	<b>24 (T) 1,644 (P)</b>	<b>5,327</b>	<b>30</b>	
DD-1	Fill most of ditch. Conform to new ditch at south end	0.005 (T) 0.931 (P)	12 (T) 2220 (P)	13,156	30	
DD-2	Fill ditch entirely	0.093 (P)	227 (P)	736	0	
<b>Drainage Ditch Totals</b>		<b>0.005 (T) 1.024 (P)</b>	<b>12 (T) 2,447 (P)</b>	<b>13,892</b>	<b>30</b>	
Culverts	Remove 25 culverts entirely	0.065 (P)	1,352 (P)	0	0	
<b>Culvert Totals</b>		<b>0.065 (P)</b>	<b>1,352 (P)</b>	<b>0</b>	<b>0</b>	
Rice Fields	Excavate new drainage ditches/bio swales. Fill to allow new roadway construction.	33.10 (P)	-	20,500 to 50,000 (4,100 linear feet of road)		3,500 to 7,000
<b>Rice Field Totals</b>		<b>33.10 (P)</b>		<b>20,500 to 50,000</b>		<b>3,500 to 7,000</b>
<b>Grand Total</b>		<b>0.127 (T) 37.300 (P)</b>	<b>325 (T) 14,820 (P)</b>	<b>67,033 CY to 96,533 CY</b>	<b>163 CY</b>	<b>3,500 CY to 7,000 CY</b>

Matchline - See Figure 3f

Matchline - See Figure 3f

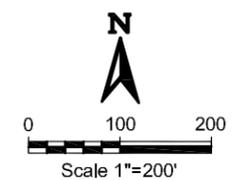
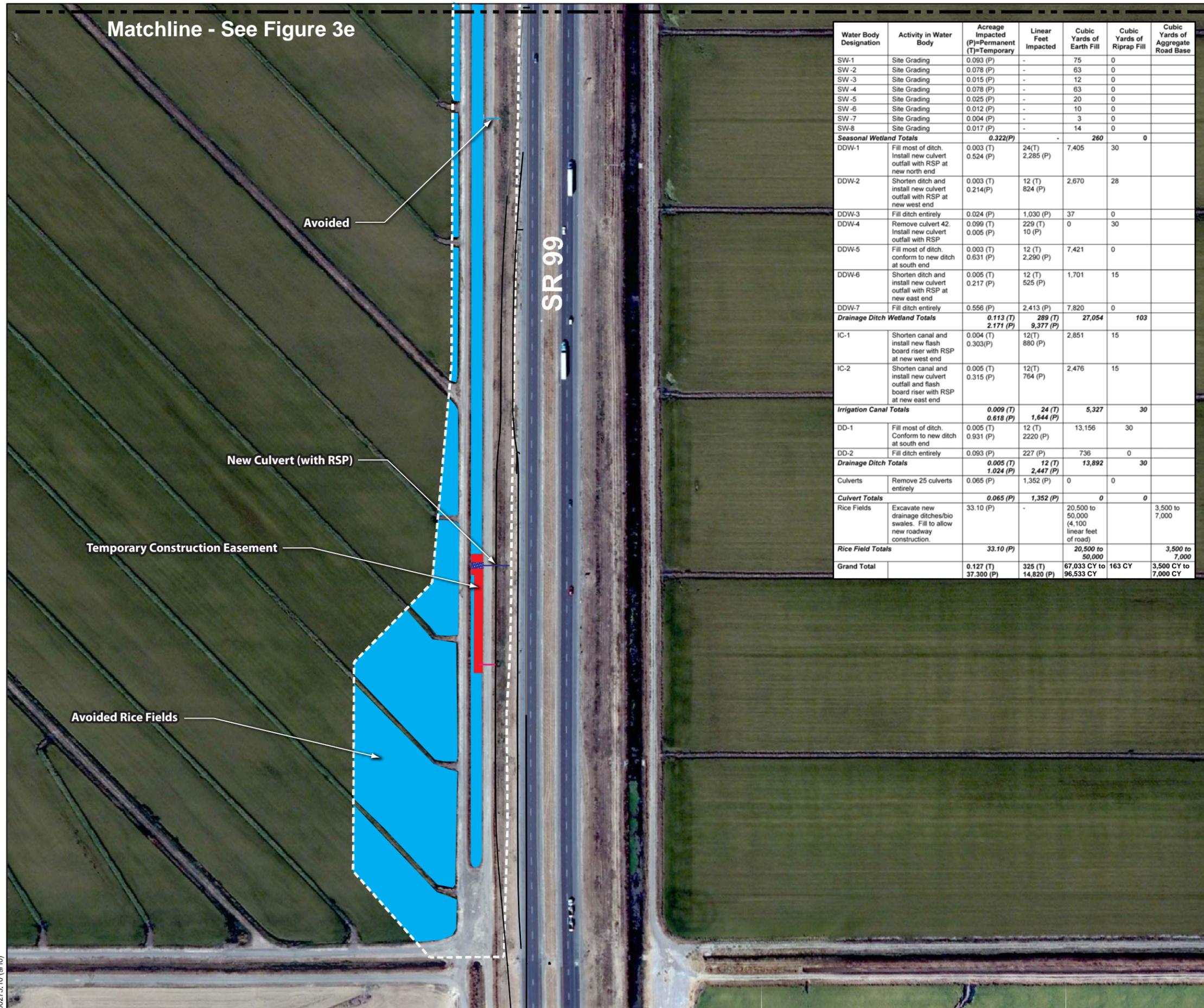


Figure 3f

**Project Plan Showing Impacts to Waters Of The U.S. And the Proposed Drainage Plan**

EA 03131-406600, KP 58.4/59.3, 0.0/2.6  
 SUTTER COUNTY, CA  
 SEPTEMBER 2010



Water Body Designation	Activity in Water Body	Acres Impacted (P)=Permanent (T)=Temporary	Linear Feet Impacted	Cubic Yards of Earth Fill	Cubic Yards of Riprap Fill	Cubic Yards of Aggregate Road Base
SW-1	Site Grading	0.093 (P)	-	75	0	
SW-2	Site Grading	0.078 (P)	-	63	0	
SW-3	Site Grading	0.015 (P)	-	12	0	
SW-4	Site Grading	0.078 (P)	-	63	0	
SW-5	Site Grading	0.025 (P)	-	20	0	
SW-6	Site Grading	0.012 (P)	-	10	0	
SW-7	Site Grading	0.004 (P)	-	3	0	
SW-8	Site Grading	0.017 (P)	-	14	0	
<b>Seasonal Wetland Totals</b>		<b>0.322(P)</b>	-	<b>260</b>	<b>0</b>	
DDW-1	Fill most of ditch. Install new culvert outfall with RSP at new north end	0.003 (T) 0.524 (P)	24(T) 2,285 (P)	7,405	30	
DDW-2	Shorten ditch and install new culvert outfall with RSP at new west end	0.003 (T) 0.214(P)	12 (T) 824 (P)	2,670	28	
DDW-3	Fill ditch entirely	0.024 (P)	1,030 (P)	37	0	
DDW-4	Remove culvert 42. Install new culvert outfall with RSP	0.099 (T) 0.005 (P)	229 (T) 10 (P)	0	30	
DDW-5	Fill most of ditch. conform to new ditch at south end	0.003 (T) 0.631 (P)	12 (T) 2,290 (P)	7,421	0	
DDW-6	Shorten ditch and install new culvert outfall with RSP at new east end	0.005 (T) 0.217 (P)	12 (T) 525 (P)	1,701	15	
DDW-7	Fill ditch entirely	0.556 (P)	2,413 (P)	7,820	0	
<b>Drainage Ditch Wetland Totals</b>		<b>0.113 (T) 2.171 (P)</b>	<b>289 (T) 9,377 (P)</b>	<b>27,054</b>	<b>103</b>	
IC-1	Shorten canal and install new flash board riser with RSP at new west end	0.004 (T) 0.303(P)	12(T) 880 (P)	2,851	15	
IC-2	Shorten canal and install new culvert outfall and flash board riser with RSP at new east end	0.005 (T) 0.315 (P)	12(T) 764 (P)	2,476	15	
<b>Irrigation Canal Totals</b>		<b>0.009 (T) 0.618 (P)</b>	<b>24 (T) 1,644 (P)</b>	<b>5,327</b>	<b>30</b>	
DD-1	Fill most of ditch. Conform to new ditch at south end	0.005 (T) 0.931 (P)	12 (T) 2220 (P)	13,156	30	
DD-2	Fill ditch entirely	0.093 (P)	227 (P)	736	0	
<b>Drainage Ditch Totals</b>		<b>0.005 (T) 1.024 (P)</b>	<b>12 (T) 2,447 (P)</b>	<b>13,892</b>	<b>30</b>	
Culverts	Remove 25 culverts entirely	0.065 (P)	1,352 (P)	0	0	
<b>Culvert Totals</b>		<b>0.065 (P)</b>	<b>1,352 (P)</b>	<b>0</b>	<b>0</b>	
Rice Fields	Excavate new drainage ditches/bio swales. Fill to allow new roadway construction.	33.10 (P)	-	20,500 to 50,000 (4,100 linear feet of road)		3,500 to 7,000
<b>Rice Field Totals</b>		<b>33.10 (P)</b>		<b>20,500 to 50,000</b>		<b>3,500 to 7,000</b>
<b>Grand Total</b>		<b>0.127 (T) 37.300 (P)</b>	<b>325 (T) 14,820 (P)</b>	<b>67,033 CY to 96,533 CY</b>	<b>163 CY</b>	<b>3,500 CY to 7,000 CY</b>

**LEGEND**

Project Area Boundary (113.44 acres)

Avoided Waters

**PROJECT IMPACTS**

**Temporary Impacts**

All Waters

**Permanent Impacts**

(DDW) Drainage Ditch Wetland

Irrigated Rice Field

(SW) Seasonal Wetland

(DD) Drainage Ditch

(IC) Irrigation Canal

Culvert

**NEW DRAINAGE FEATURES**

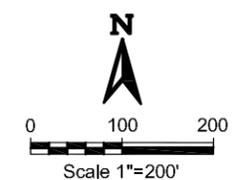
Drainage Ditch (1.901 acres / 5,736 linear feet)

Bio Swale (1.733 acres / 25,162 linear feet)

Culvert (0.148 acres / 2,738 linear feet)

Rock Slope Protection (RSP)

Flow Direction





# Appendix B Layout Sheets

---



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - PROJECT DEVELOPMENT

REVISOR: DAVID LASSITER

CHECKED BY: OSCAR VASQUEZ

FUNCTIONAL SUPERVISOR: OSCAR VASQUEZ

DESIGNED BY: OSCAR VASQUEZ

REVISIONS:

NOTE: FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

**LEGEND**

- COLD PLANE ASPHALT CONCRETE
- CONTRASTING SURFACE TREATMENT
- OBLITERATE SURFACING
- SAWCUT LINE
- EASEMENT

**ABBREVIATION**  
MVP - MAINTENANCE VEHICLE PULLOUT



**CURVE DATA**

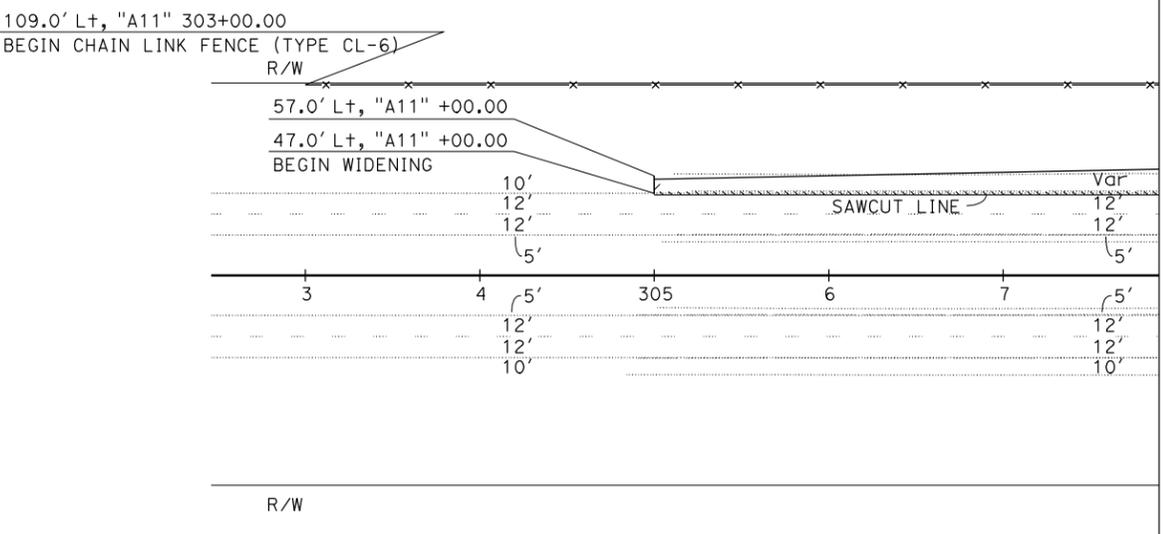
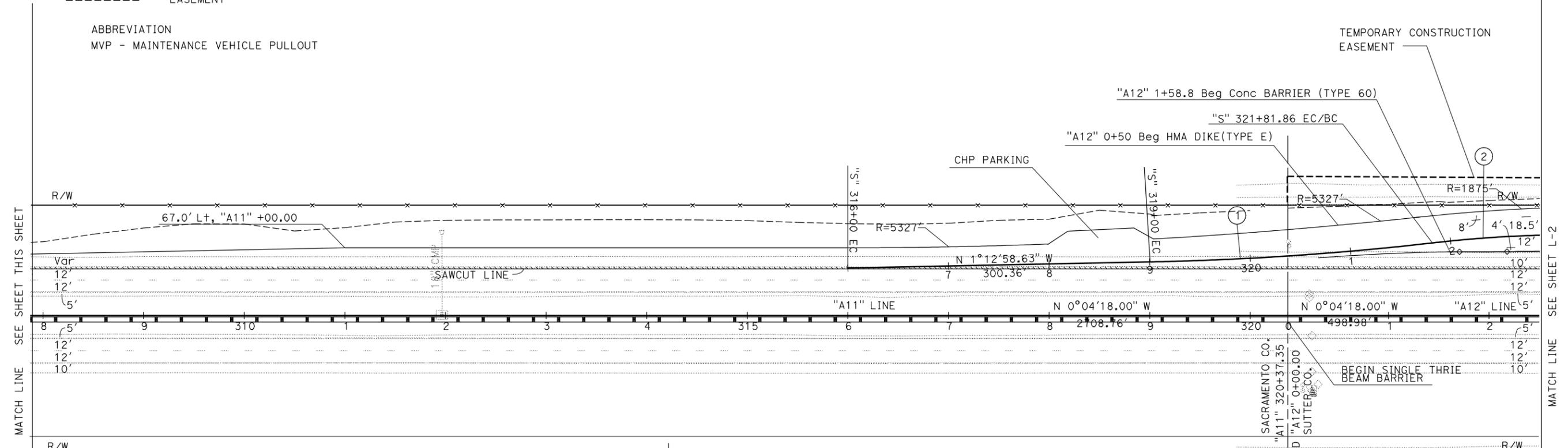
No.	⊕	R	Δ	T	L
1		2999'	5°22'41"	140.85'	281.49'
2		1265'	6°31'21"	72.09'	144.02'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac,Sut	99	PM 36.6/36.9, 0.0/1.6		

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.



**LAYOUT**  
SCALE 1"=50'

**L-1**

LAST REVISION: DATE PLOTTED => 21-JUL-2010 TIME PLOTTED => 13:58

NOTE: FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA,  
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac,Sut	99	PM 36.6/36.9, 0.0/1.6		

REGISTERED CIVIL ENGINEER DATE

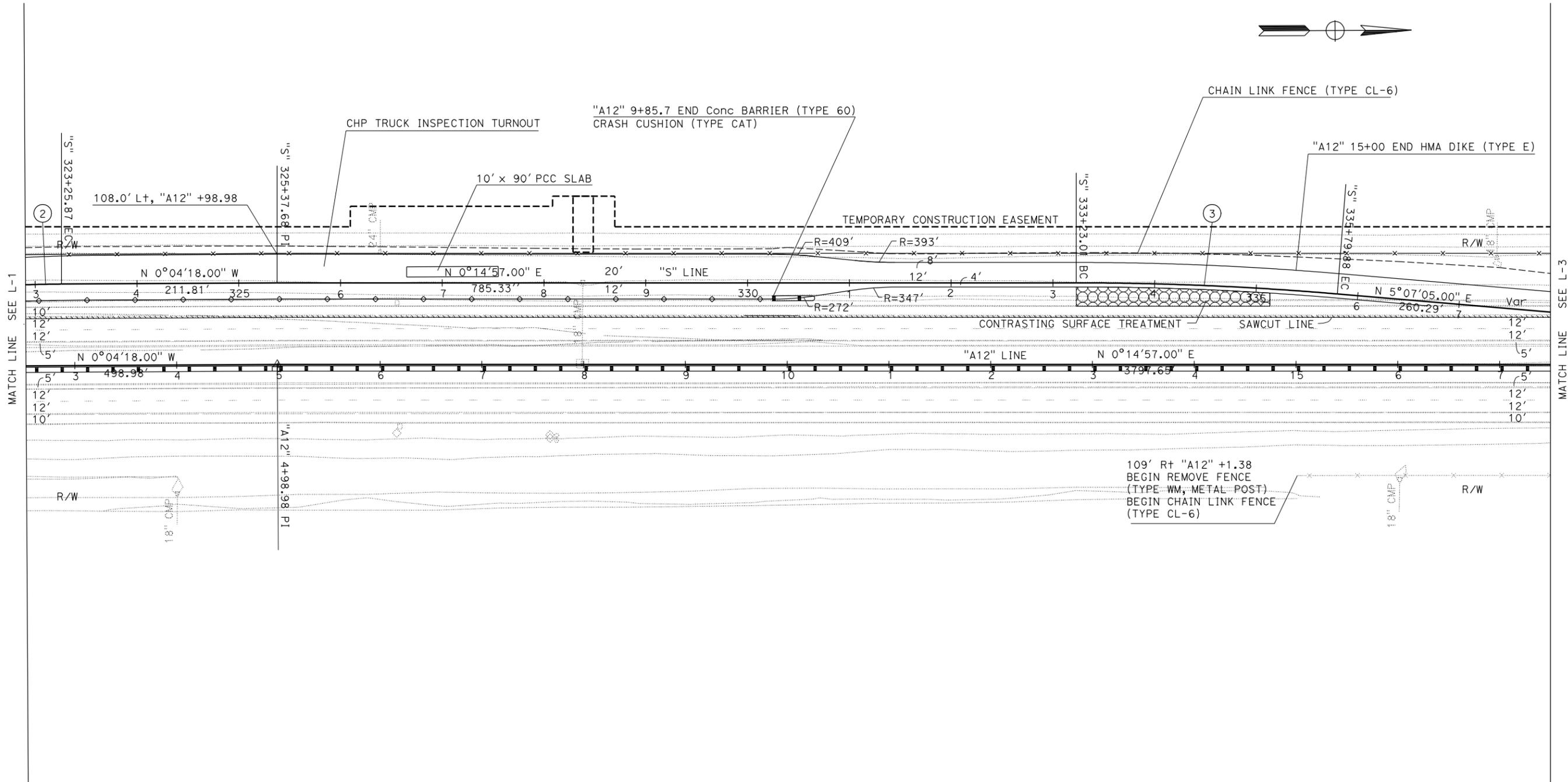
PLANS APPROVAL DATE

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.



CURVE DATA

No. Ⓜ	R	Δ	T	L
2	1265'	6°31'21"	72.09'	144.02'
3	3023'	4°52'08"	128.51'	256.87'



109' Rt "A12" +1.38  
BEGIN REMOVE FENCE  
(TYPE WM, METAL POST)  
BEGIN CHAIN LINK FENCE  
(TYPE CL-6)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
PROJECT DEVELOPMENT

FUNCTIONAL SUPERVISOR  
OSCAR VASQUEZ

CALCULATED-DESIGNED BY  
CHECKED BY

REVISOR  
DAVID LASSITER

REVISION  
DATE REVISION

LAYOUT  
SCALE 1"=50'

L-2









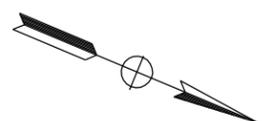
NOTE: FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac,Sut	99	PM 36.6/36.9, 0.0/1.6		

REGISTERED CIVIL ENGINEER DATE \_\_\_\_\_

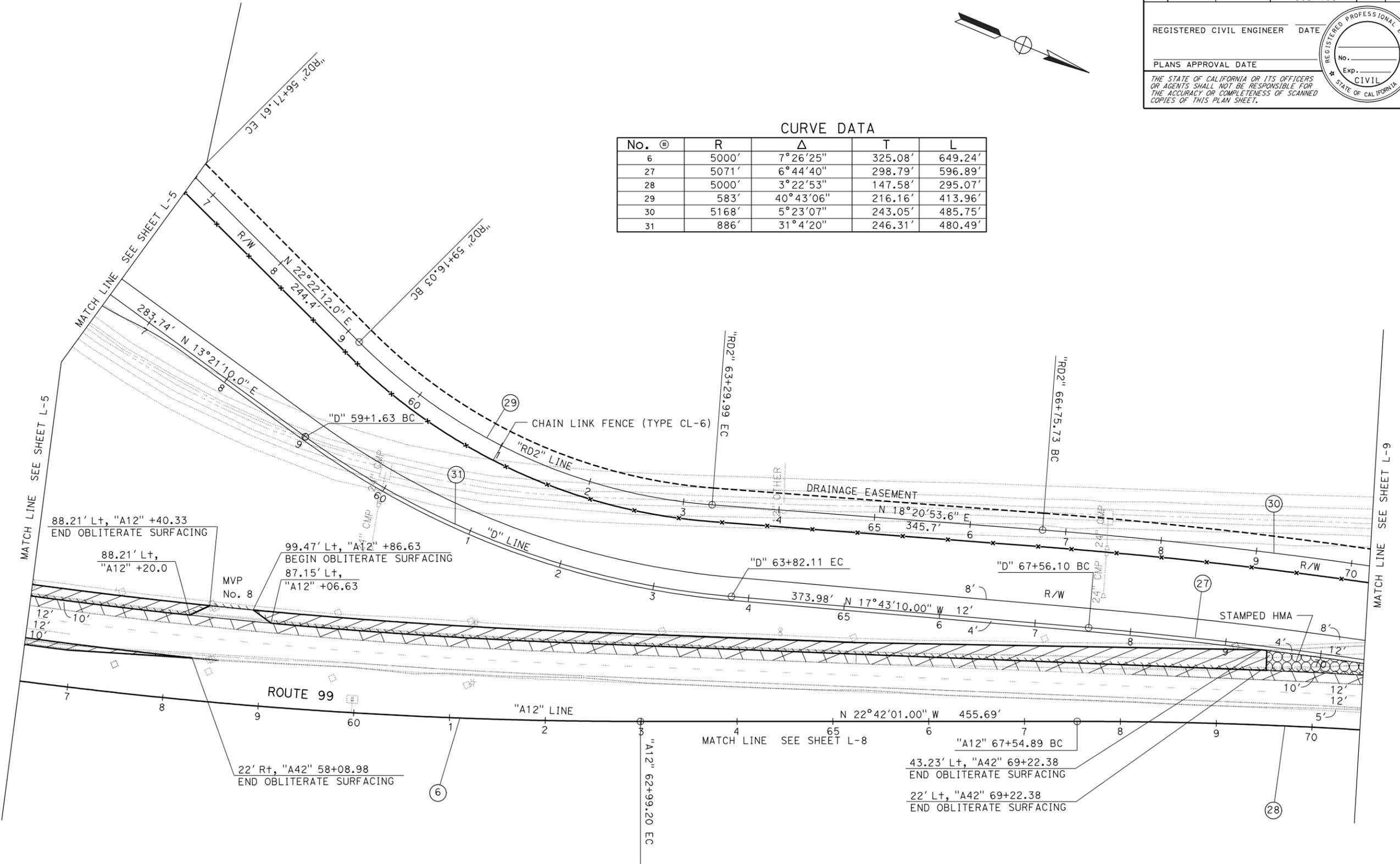
PLANS APPROVAL DATE \_\_\_\_\_

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.



**CURVE DATA**

No.	R	Δ	T	L
6	5000'	7°26'25"	325.08'	649.24'
27	5071'	6°44'40"	298.79'	596.89'
28	5000'	3°22'53"	147.58'	295.07'
29	583'	40°43'06"	216.16'	413.96'
30	5168'	5°23'07"	243.05'	485.75'
31	886'	31°4'20"	246.31'	480.49'



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - PROJECT DEVELOPMENT

FUNCTIONAL SUPERVISOR: OSCAR VASQUEZ

REVISOR: DAVID LASSITER

**LAYOUT**  
SCALE 1"=50'

**L-7**

LAST REVISION: DATE PLOTTED => 21-JUL-2010 01-25-10 TIME PLOTTED => 13:59

NOTE: FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac, Sut	99	PM 36.6/36.9, 0.0/1.6		

No. #	R	Δ	T	L
6	5000'	7°26'25"	325.08'	649.24'
31	5000'	3°22'53"	147.58'	295.07'
32	4953'	6°34'16"	284.32'	568.01'
33	2500'	7°7'19"	155.57'	310.75'

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.

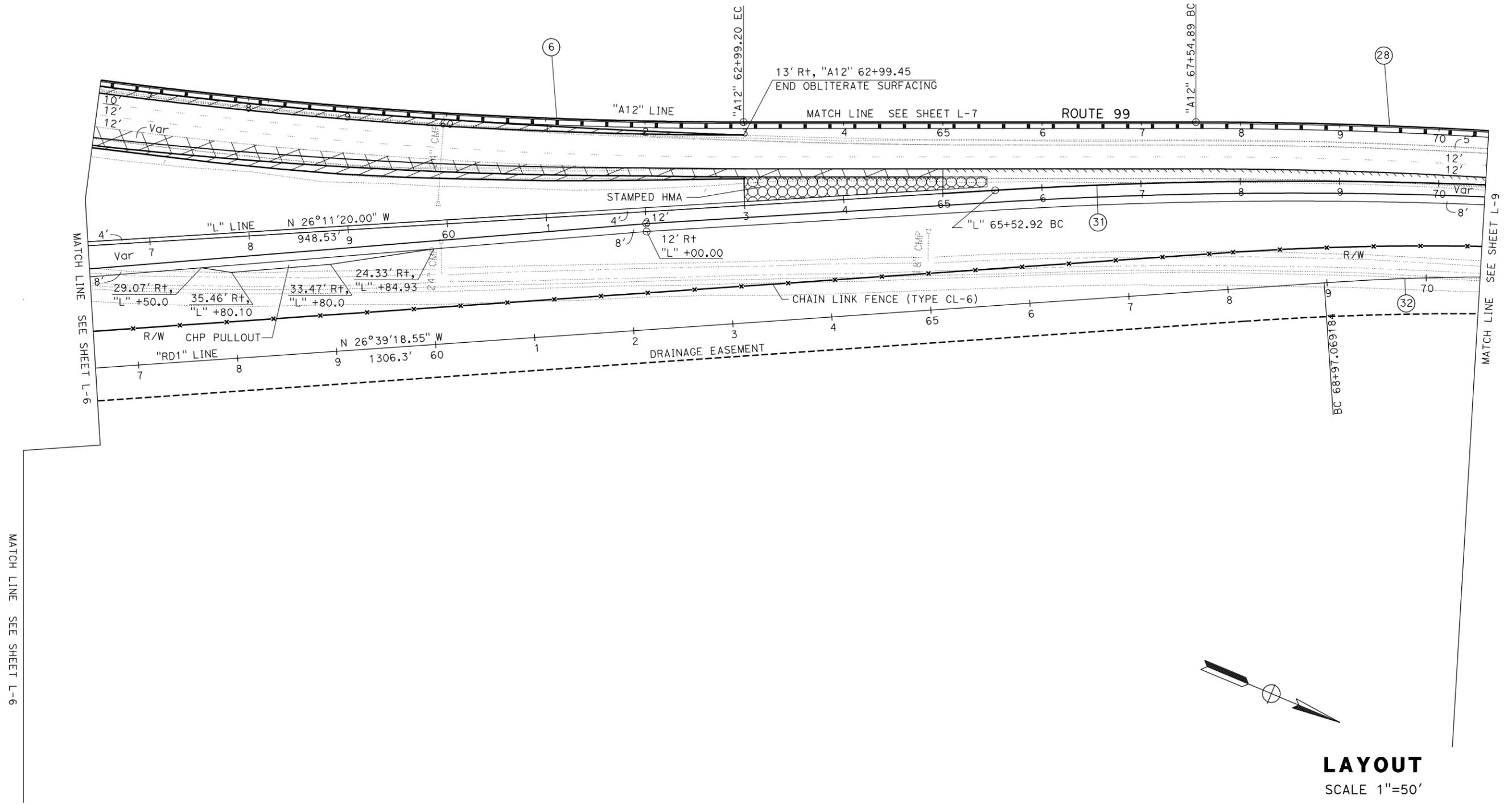
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 PROJECT DEVELOPMENT

FUNCTIONAL SUPERVISOR  
 OSCAR VASQUEZ

CALCULATED-DESIGNED BY  
 CHECKED BY

DAVID LASSITER

REVISED BY  
 DATE REVISED



**LAYOUT**  
 SCALE 1"=50'

**L-8**

LAST REVISION: DATE PLOTTED => 21-JUL-2010 TIME PLOTTED => 13:59

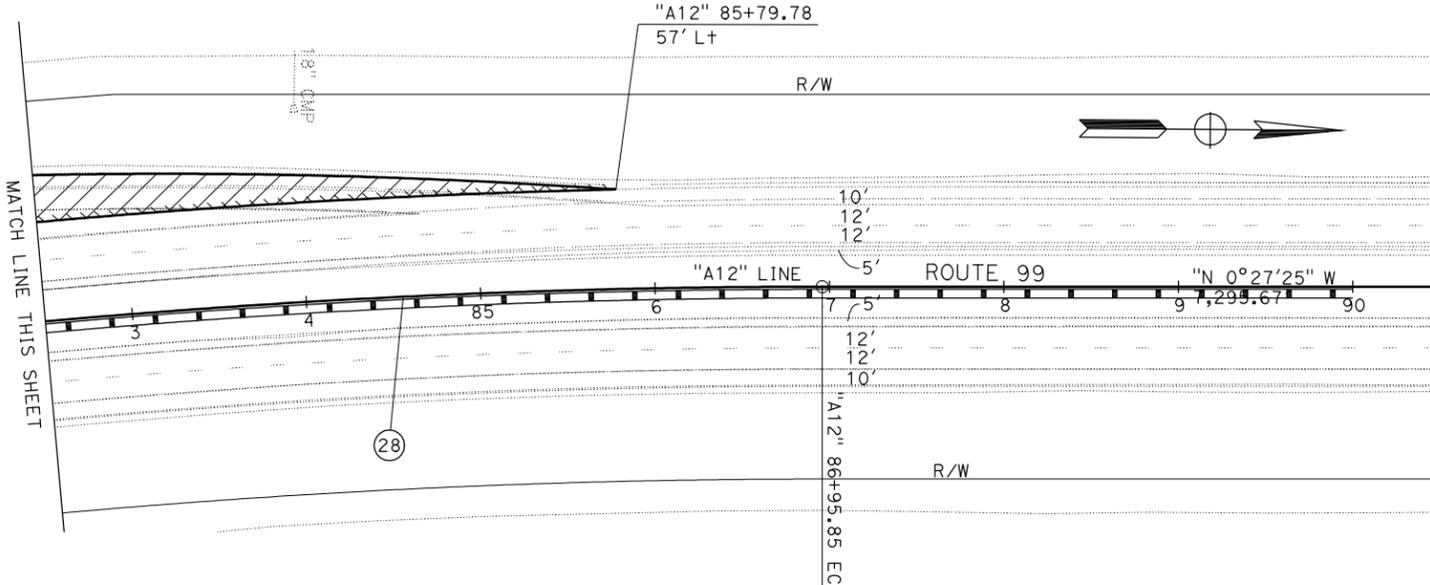
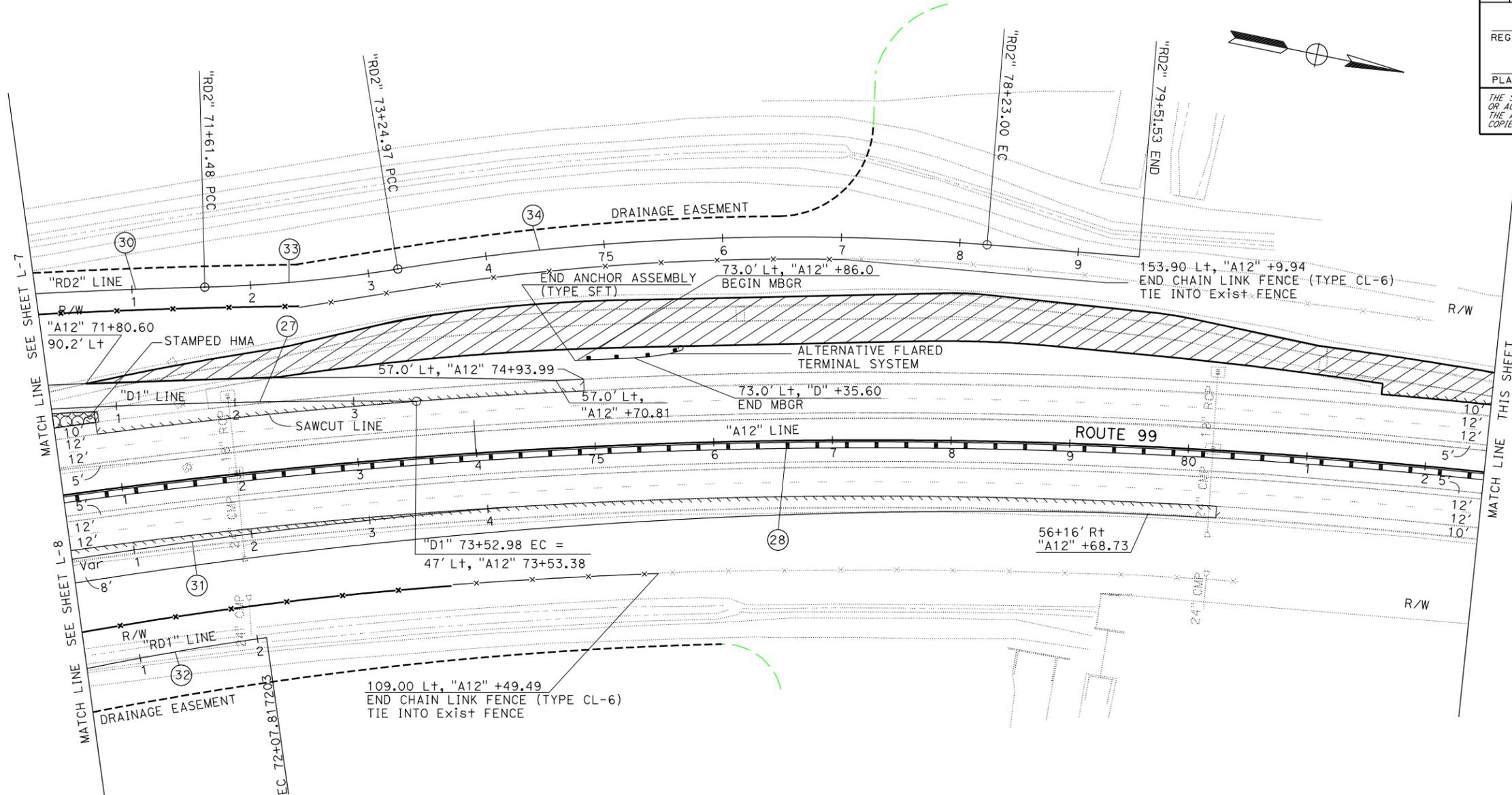
NOTE: FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac,Sut	99	PM 36.6/36.9, 0.0/1.6		

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.

CURVE DATA

No. Ⓢ	R	Δ	T	L
27	5071'	6°44'40"	298.79'	596.89'
28	5000'	22°14'36"	982.86'	1940.96'
30	5168'	5°23'07"	243.05'	485.75'
31	4953'	10°1'20"	434.27'	866.32'
32	2500'	7°7'19"	155.57'	310.75'
33	1200'	7°48'23"	81.87'	163.49'
34	2067'	13°48'09"	250.22'	498.02'

**LAYOUT**  
SCALE 1"=50'

**L-9**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - PROJECT DEVELOPMENT

FUNCTIONAL SUPERVISOR: OSCAR VASQUEZ

DAVID LASSITER

REVISOR: DAVID LASSITER

CALCULATED/DESIGNED BY: OSCAR VASQUEZ

CHECKED BY:

LAST REVISION: DATE PLOTTED => 21-JUL-2010 01-25-10 TIME PLOTTED => 13:59

NOTE: FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA,  
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac,Sut	99	PM 36.6/36.9, 0.0/1.6		

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.




**CURVE DATA**

No. Ⓢ	R	Δ	T	L
35	40'	88°7'47"	38.72'	61.53'
36	40'	85°52'13"	37.22'	59.95'
37	200'	9°30'00"	16.62'	33.16'

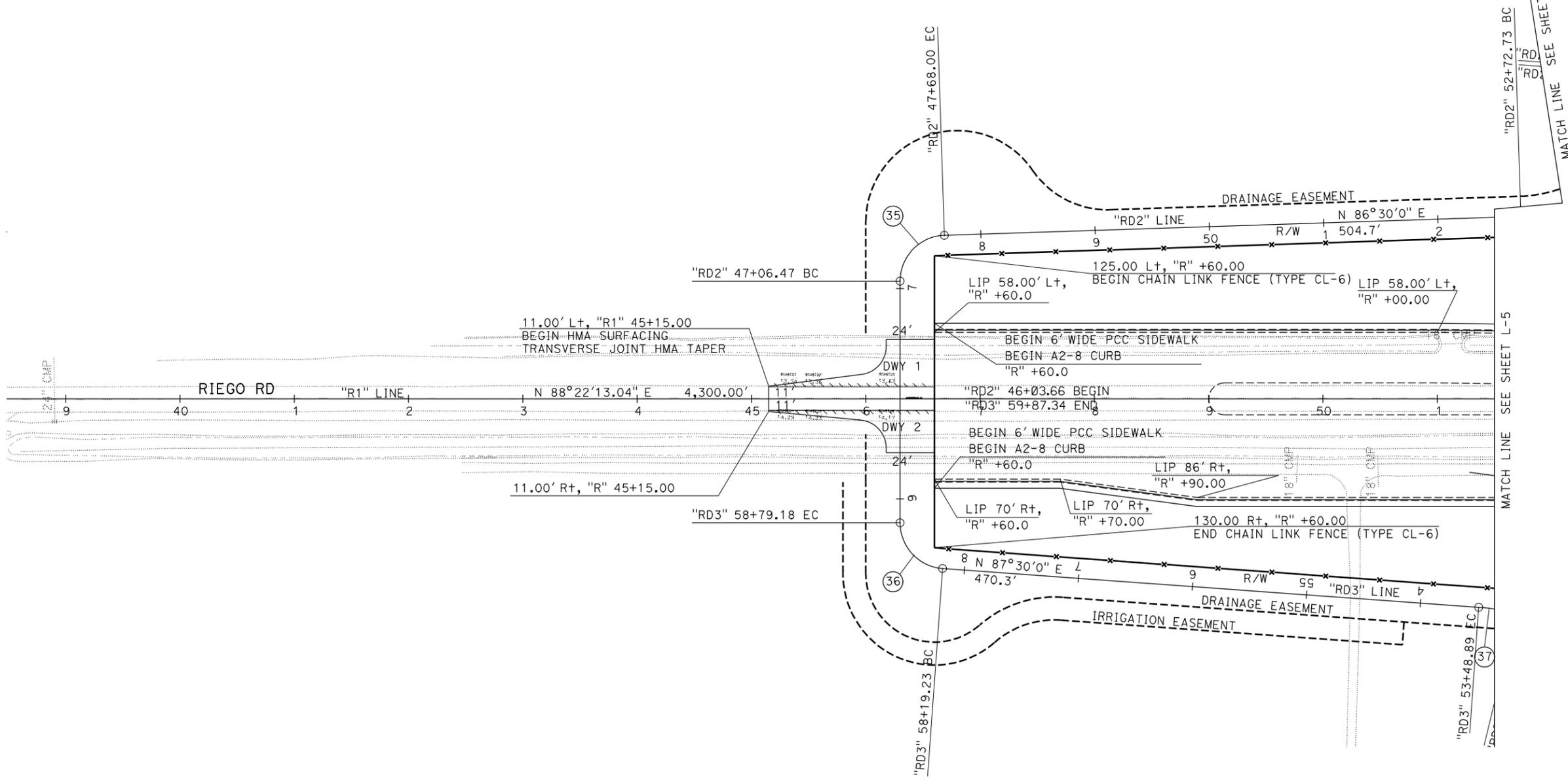
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 PROJECT DEVELOPMENT

FUNCTIONAL SUPERVISOR  
 OSCAR VASQUEZ

CALCULATED-DESIGNED BY  
 CHECKED BY

REVISOR  
 DAVID LASSITER

DATE REVISOR  
 DATE REVISOR



**LAYOUT**  
SCALE 1"=50'  
**L-10**

LAST REVISION: DATE PLOTTED => 21-JUL-2010  
 01-25-10 TIME PLOTTED => 13:59

NOTE: FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA,  
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac,Sut	99	PM 36.6/36.9, 0.0/1.6		

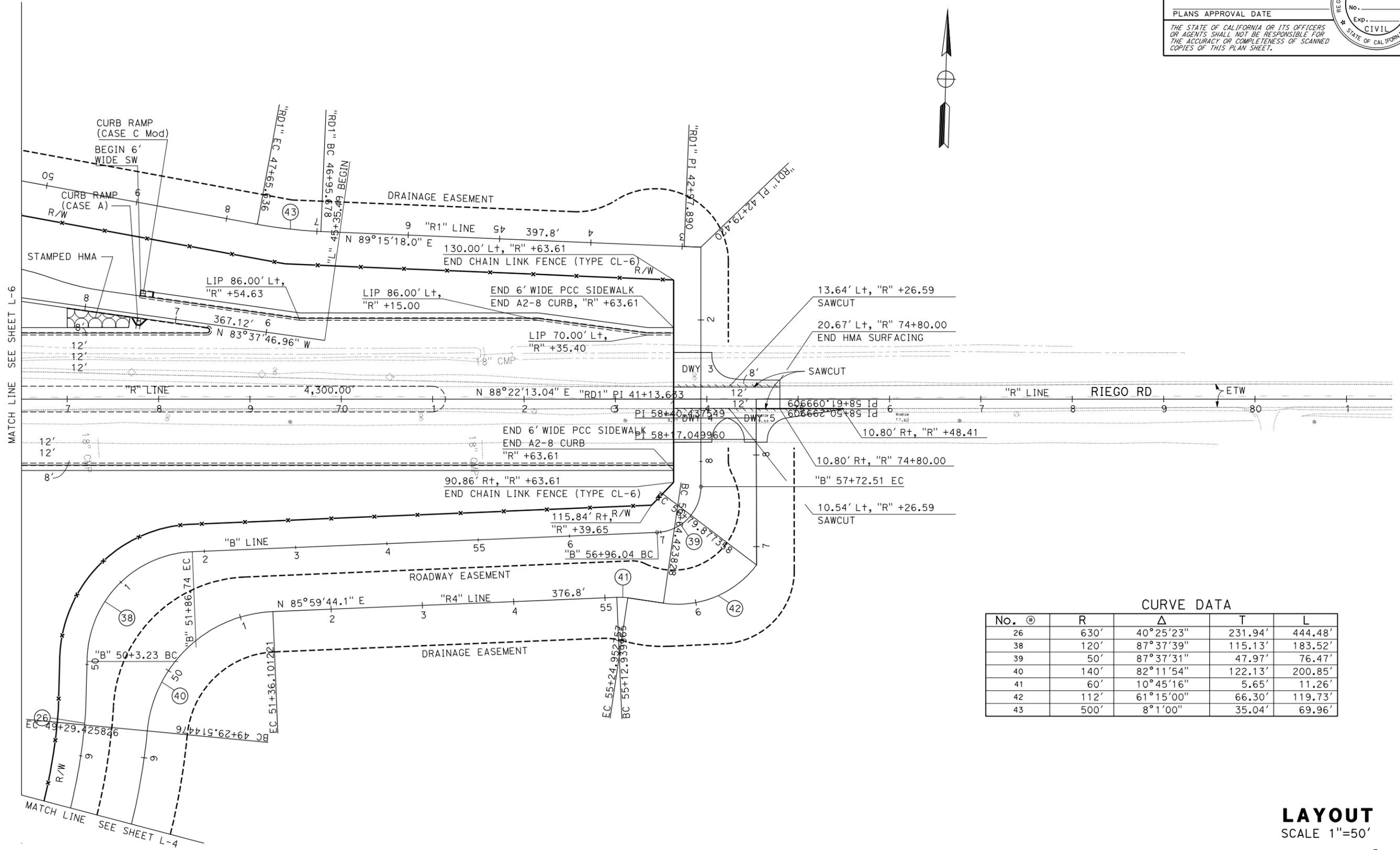
REGISTERED CIVIL ENGINEER DATE \_\_\_\_\_

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.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** PROJECT DEVELOPMENT  
 FUNCTIONAL SUPERVISOR OSCAR VASQUEZ  
 CALCULATED-DESIGNED BY CHECKED BY  
 DAVID LASSITER  
 REVISED BY DATE REVISED



CURVE DATA

No. Ⓢ	R	Δ	T	L
26	630'	40°25'23"	231.94'	444.48'
38	120'	87°37'39"	115.13'	183.52'
39	50'	87°37'31"	47.97'	76.47'
40	140'	82°11'54"	122.13'	200.85'
41	60'	10°45'16"	5.65'	11.26'
42	112'	61°15'00"	66.30'	119.73'
43	500'	8°1'00"	35.04'	69.96'

**LAYOUT**  
SCALE 1"=50'  
**L-11**

LAST REVISION: DATE PLOTTED => 21-JUL-2010 TIME PLOTTED => 13:59



## Appendix C Drainage Plan Sheets

---

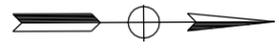


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac,Sut	99	PM 36.6/36.9, 0.0/1.6		

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.



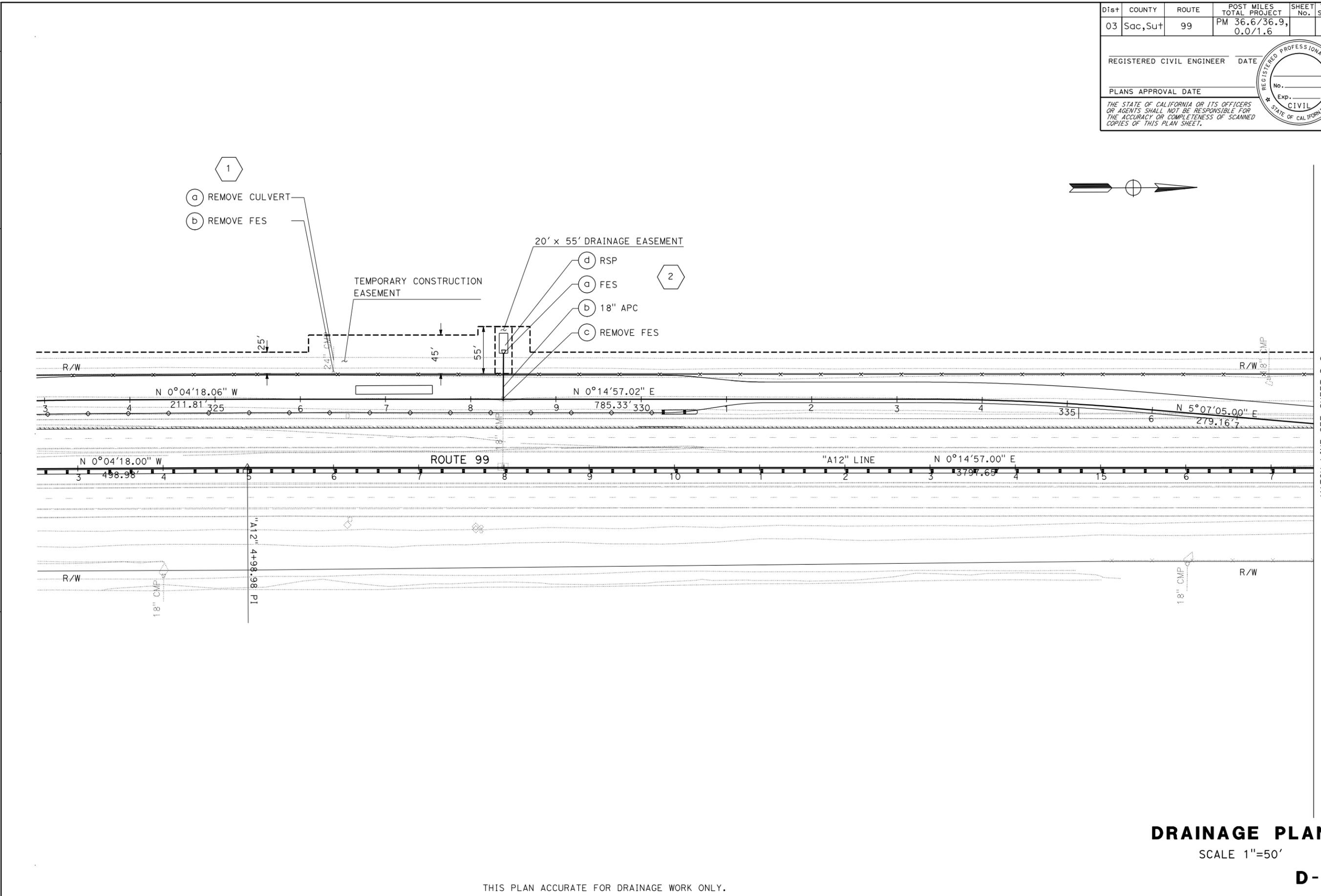
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** PROJECT DEVELOPMENT

FUNCTIONAL SUPERVISOR  
 OSCAR VASQUEZ

CALCULATED-DESIGNED BY  
 CHECKED BY

DAVID LASSITER

REVISED BY  
 DATE REVISED



MATCH LINE SEE SHEET D-2

**DRAINAGE PLAN**  
 SCALE 1"=50'

**D-1**

THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY.

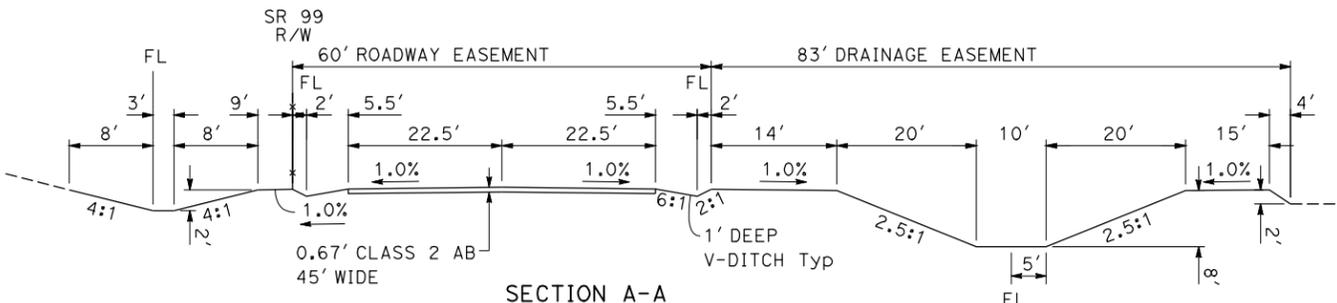
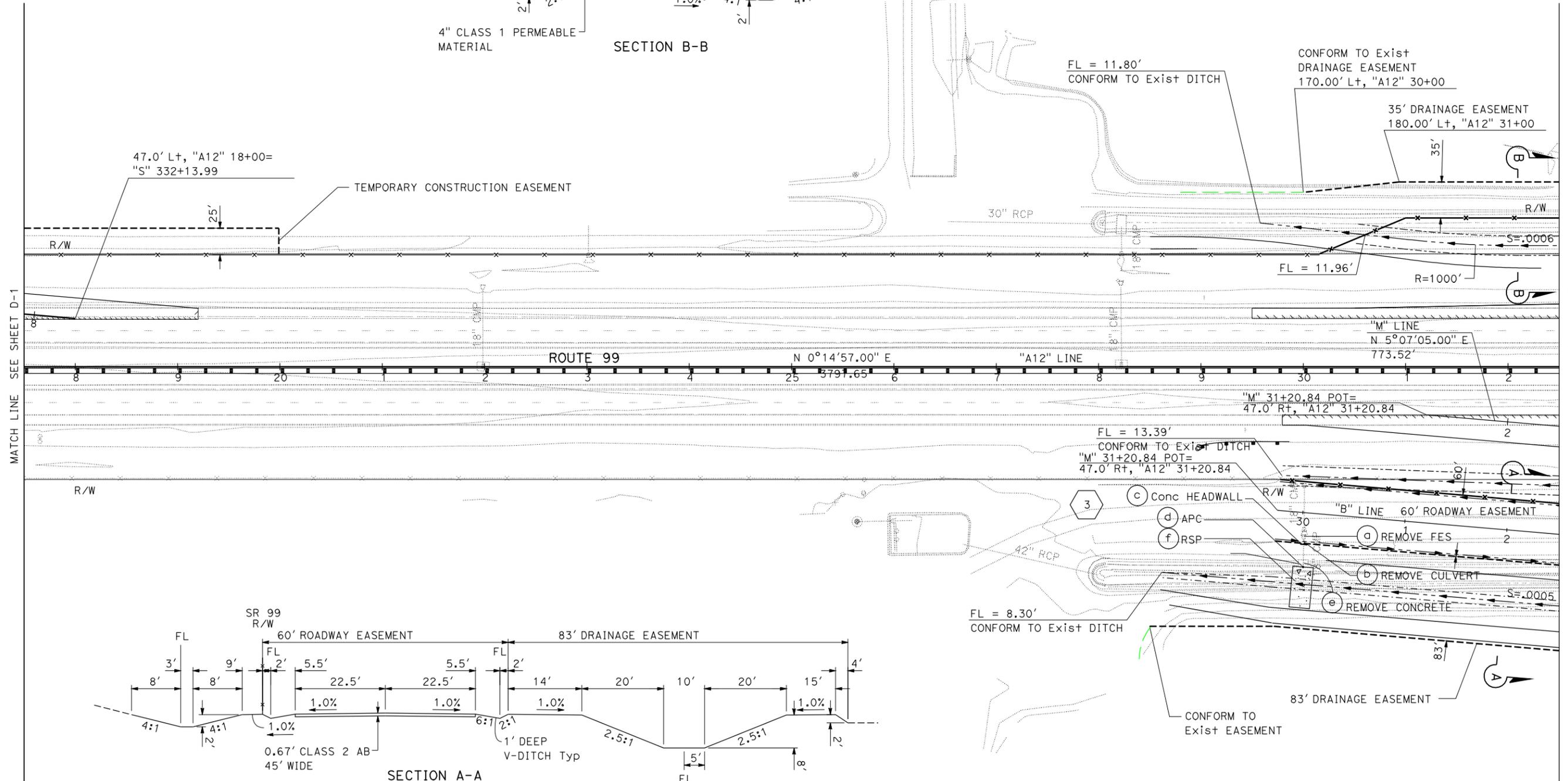
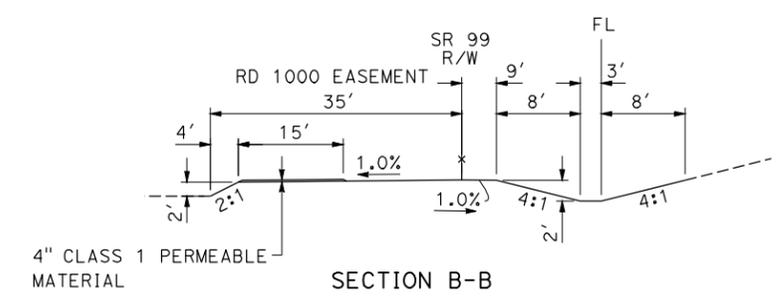
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** PROJECT DEVELOPMENT

FUNCTIONAL SUPERVISOR: OSCAR VASQUEZ  
 CALCULATED-DESIGNED BY: DAVID LASSITER  
 CHECKED BY: [Blank]  
 REVISED BY: [Blank] DATE REVISED: [Blank]

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac,Sut	99	PM 36.6/36.9, 0.0/1.6		

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.



**DRAINAGE PLAN**  
 SCALE 1"=50'

THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY.

LAST REVISION: DATE PLOTTED => 21-JUL-2010 TIME PLOTTED => 13:57

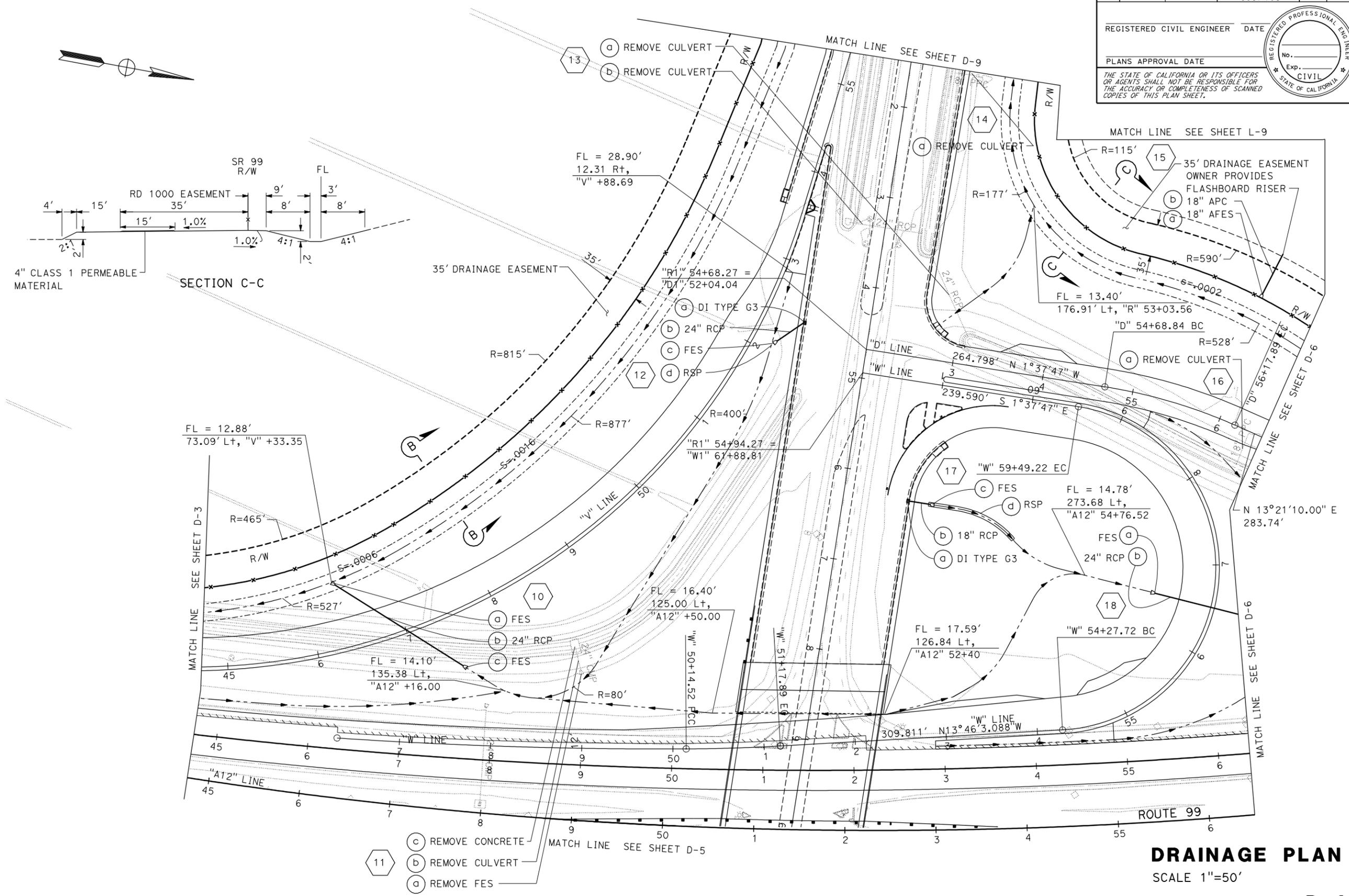
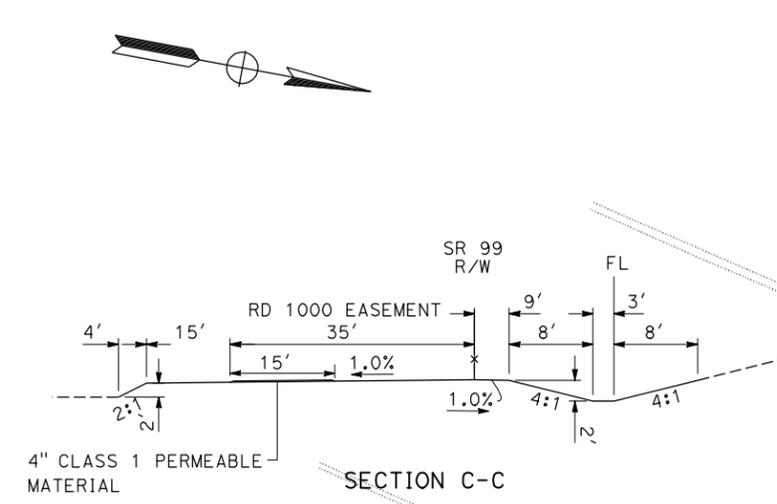


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac,Sut	99	PM 36.6/36.9, 0.0/1.6		

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.



- (c) REMOVE CONCRETE
- (b) REMOVE CULVERT
- (a) REMOVE FES

**DRAINAGE PLAN**  
SCALE 1"=50'

THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	REVISOR	DATE
Caltrans	DAVID LASSITER	
	CHECKED BY	
FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	DATE
OSCAR VASQUEZ	OSCAR VASQUEZ	
PROJECT DEVELOPMENT		

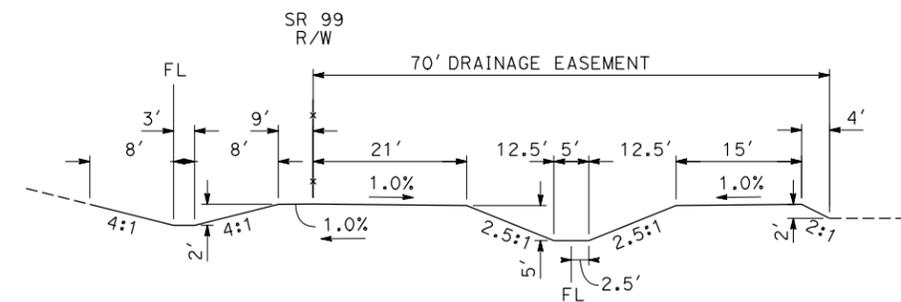
LAST REVISION DATE PLOTTED => 21-JUL-2010 06-21-10 TIME PLOTTED => 13:57

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac,Sut	99	PM 36.6/36.9, 0.0/1.6		

REGISTERED CIVIL ENGINEER DATE \_\_\_\_\_

PLANS APPROVAL DATE \_\_\_\_\_

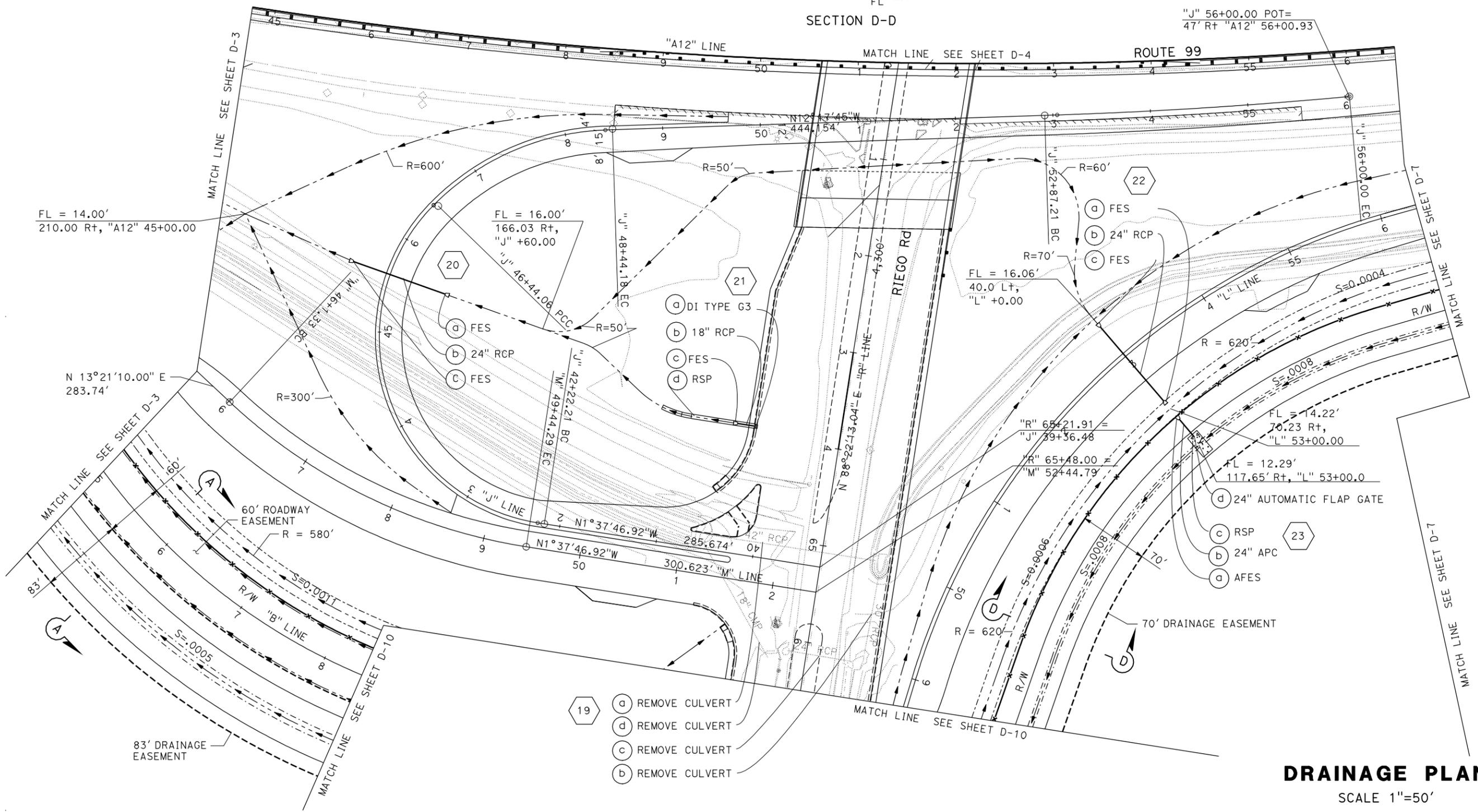
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



SECTION D-D

"J" 56+00.00 POT = 47' Rt "A12" 56+00.93

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
PROJECT DEVELOPMENT	OSCAR VASQUEZ	DAVID LASSITER	
		CALCULATED-DRAWN BY	CHECKED BY
		REVISOR	DATE



- 19 (a) REMOVE CULVERT
- 19 (d) REMOVE CULVERT
- 19 (c) REMOVE CULVERT
- 19 (b) REMOVE CULVERT

- (d) 24" AUTOMATIC FLAP GATE
- (c) RSP
- (b) 24" APC
- (a) AFES

**DRAINAGE PLAN**  
SCALE 1"=50'

THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY.

LAST REVISION: DATE PLOTTED => 21-JUL-2010  
06-21-10 TIME PLOTTED => 13:57

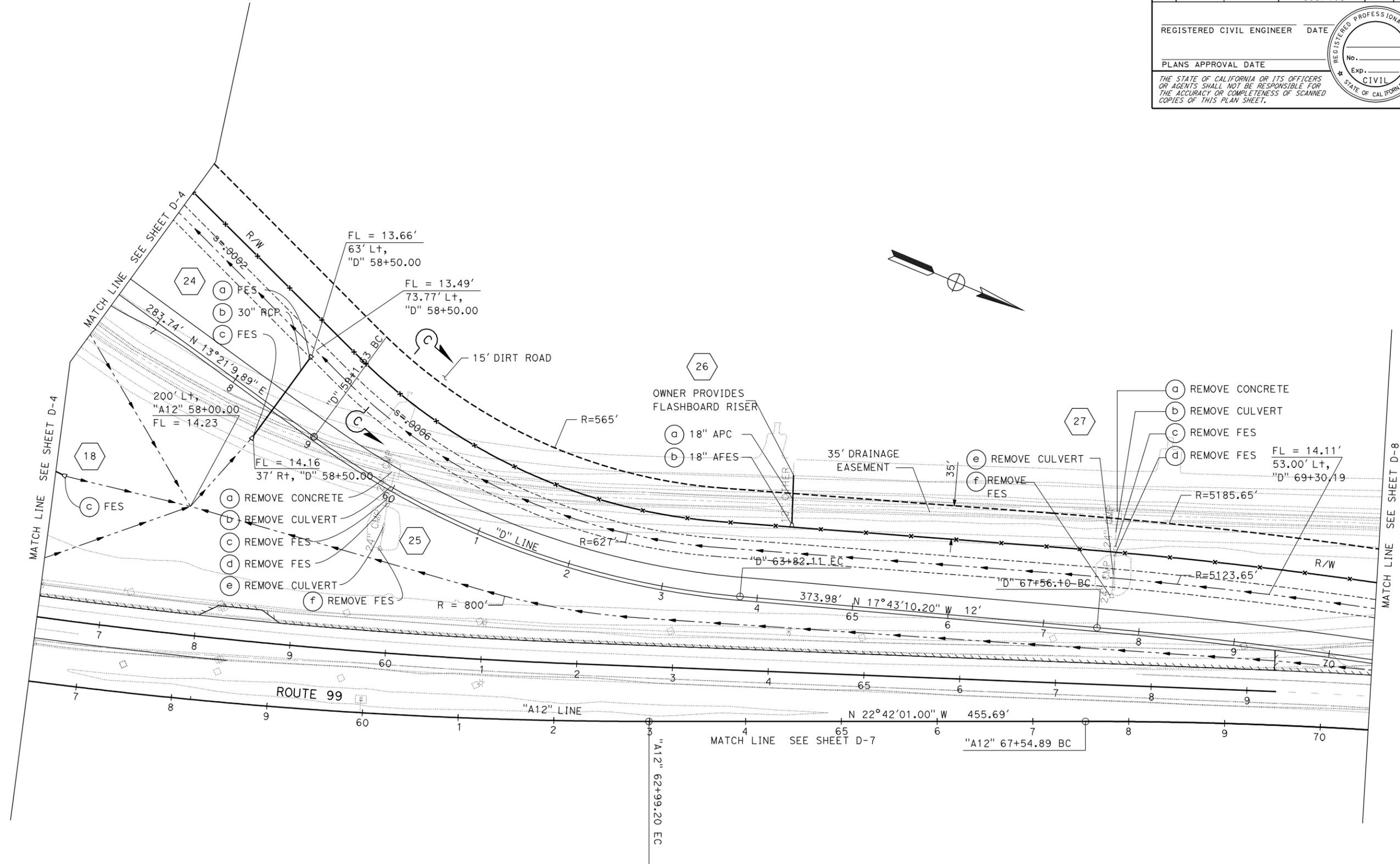
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac,Sut	99	PM 36.6/36.9, 0.0/1.6		

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.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DRAWN BY	REVISOR
PROJECT DEVELOPMENT	OSCAR VASQUEZ	CHECKED BY	DAVID LASSITER
			DATE REVISOR



# DRAINAGE PLAN

SCALE 1"=50'

**D-6**

THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY.

LAST REVISION: DATE PLOTTED => 21-JUL-2010  
07-12-10 TIME PLOTTED => 13:57

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac,Sut	99	PM 36.6/36.9, 0.0/1.6		

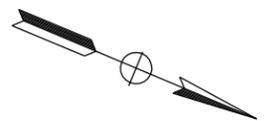
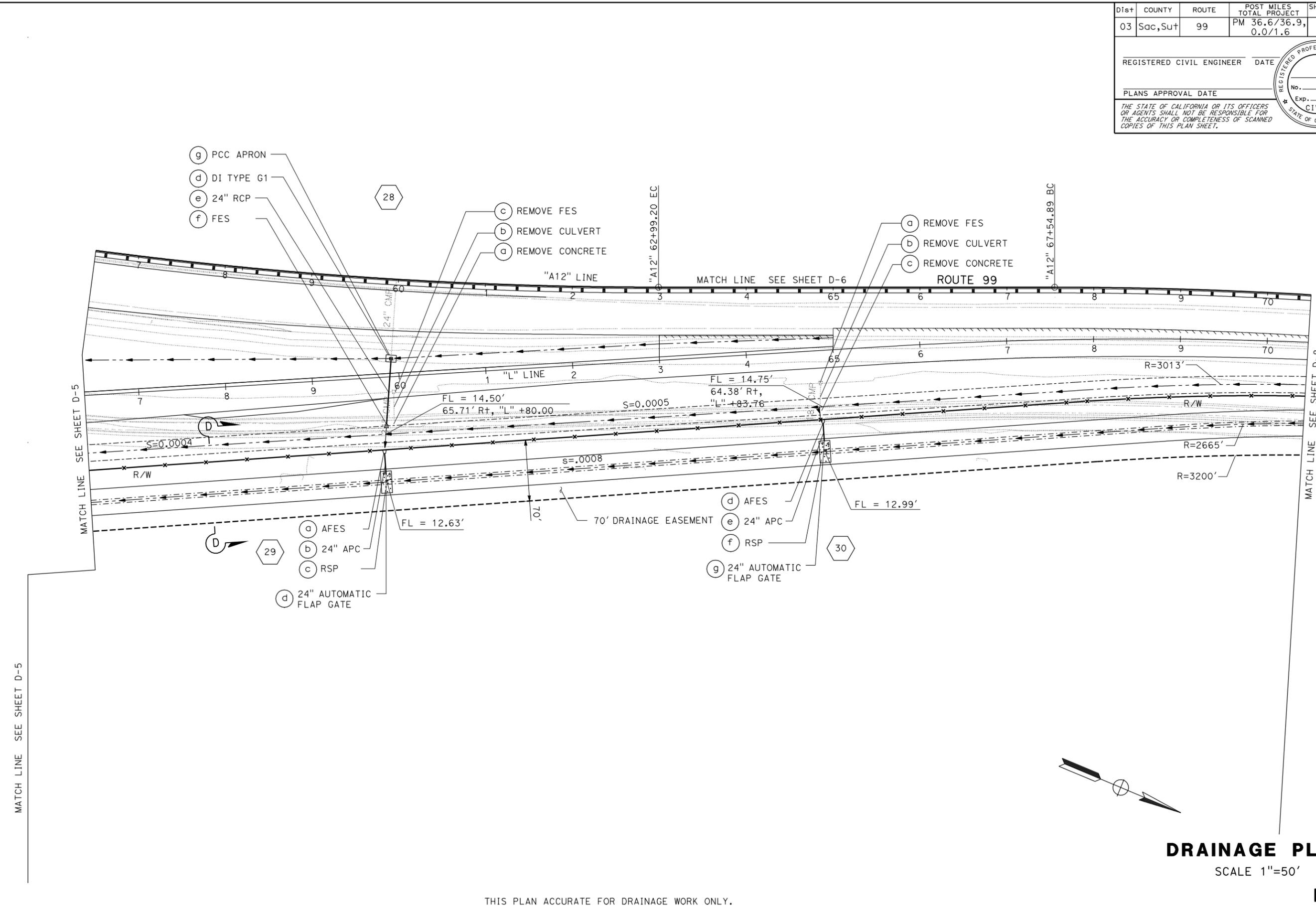
REGISTERED CIVIL ENGINEER DATE \_\_\_\_\_

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.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISOR
PROJECT DEVELOPMENT	OSCAR VASQUEZ	CHECKED BY	DAVID LASSITER
			DATE REVISOR



**DRAINAGE PLAN**  
SCALE 1"=50'

**D-7**

THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY.

LAST REVISION: DATE PLOTTED => 21-JUL-2010  
06-21-10 TIME PLOTTED => 13:57

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac,Sut	99	PM 36.6/36.9, 0.0/1.6		

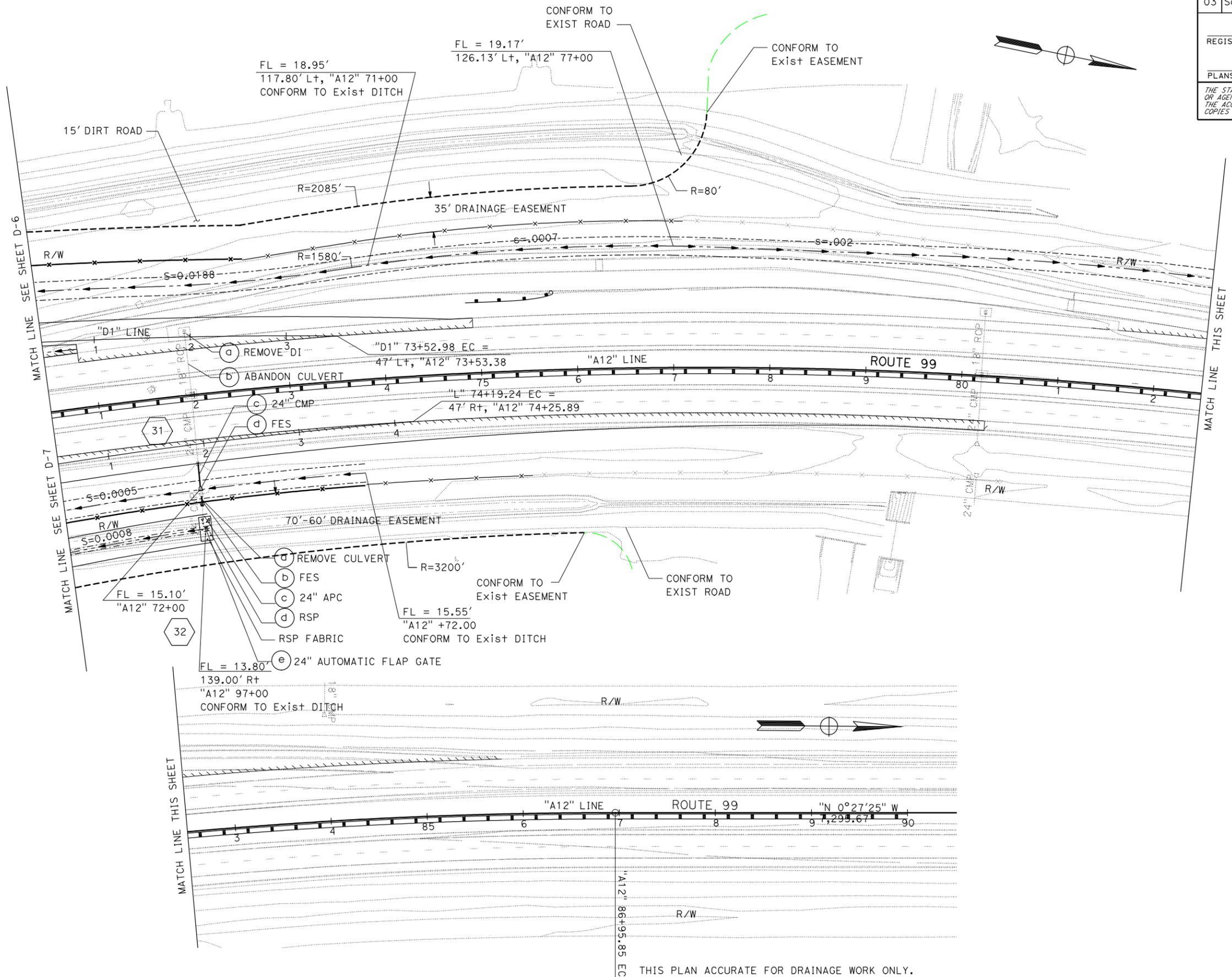
REGISTERED CIVIL ENGINEER DATE \_\_\_\_\_

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.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR
PROJECT DEVELOPMENT	OSCAR VASQUEZ	DAVID LASSITER
	CHECKED BY	DATE REVISOR
	DESIGNED BY	



**DRAINAGE PLAN**  
SCALE 1"=50'  
**D-8**

THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY.

LAST REVISION: DATE PLOTTED => 21-JUL-2010 07-12-10 TIME PLOTTED => 13:57

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

FUNCTIONAL SUPERVISOR  
 OSCAR VASQUEZ

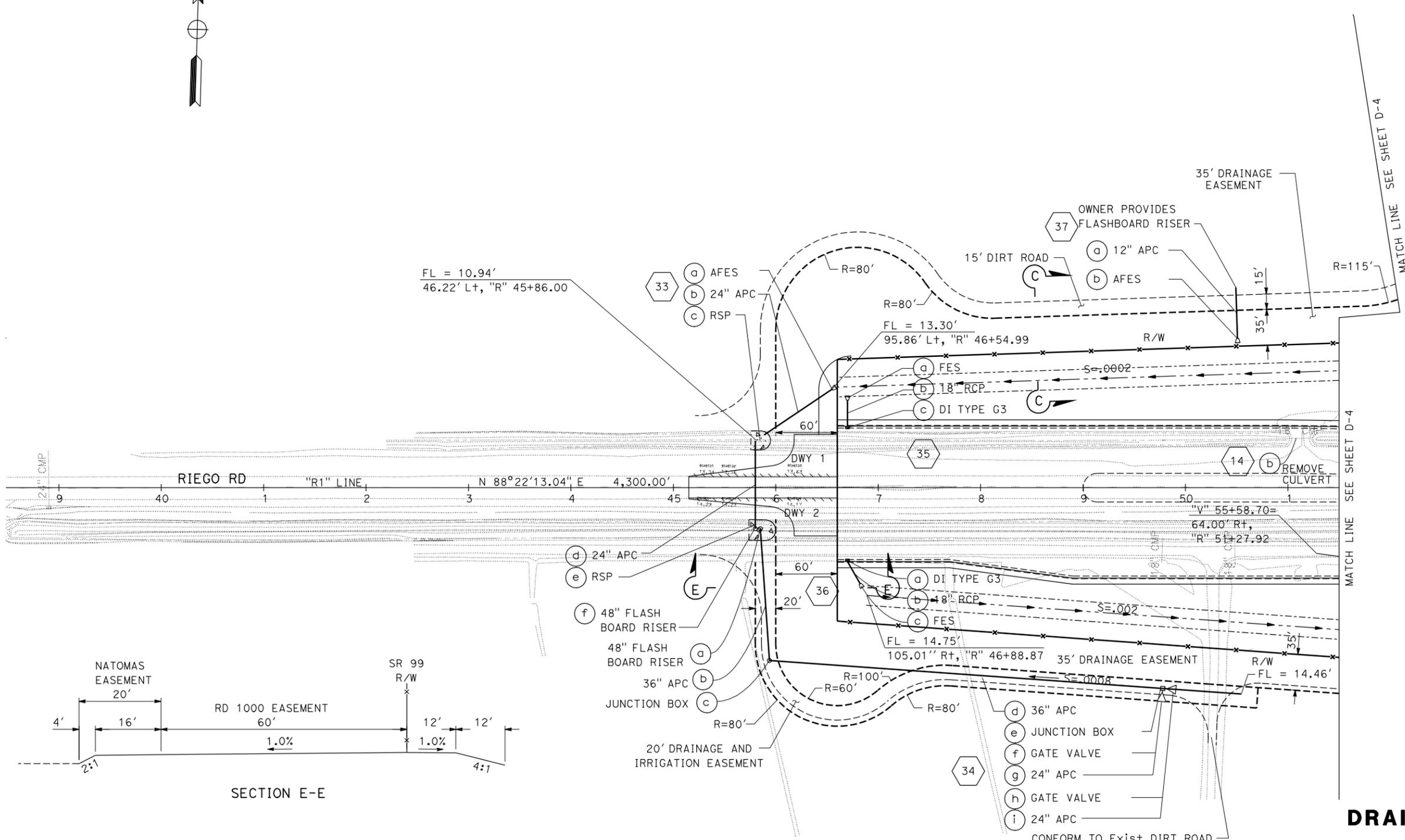
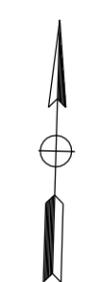
REVISOR BY  
 DAVID LASSITER

DATE REVISOR  
 DATE REVISOR

CALCULATED-DESIGNED BY  
 CHECKED BY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac,Sut	99	PM 36.6/36.9, 0.0/1.6		

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.



**DRAINAGE PLAN**  
 SCALE 1"=50'

THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY.

LAST REVISION DATE PLOTTED => 21-JUL-2010 TIME PLOTTED => 13:57

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac,Sut	99	PM 36.6/36.9, 0.0/1.6		

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.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - PROJECT DEVELOPMENT

Caltrans

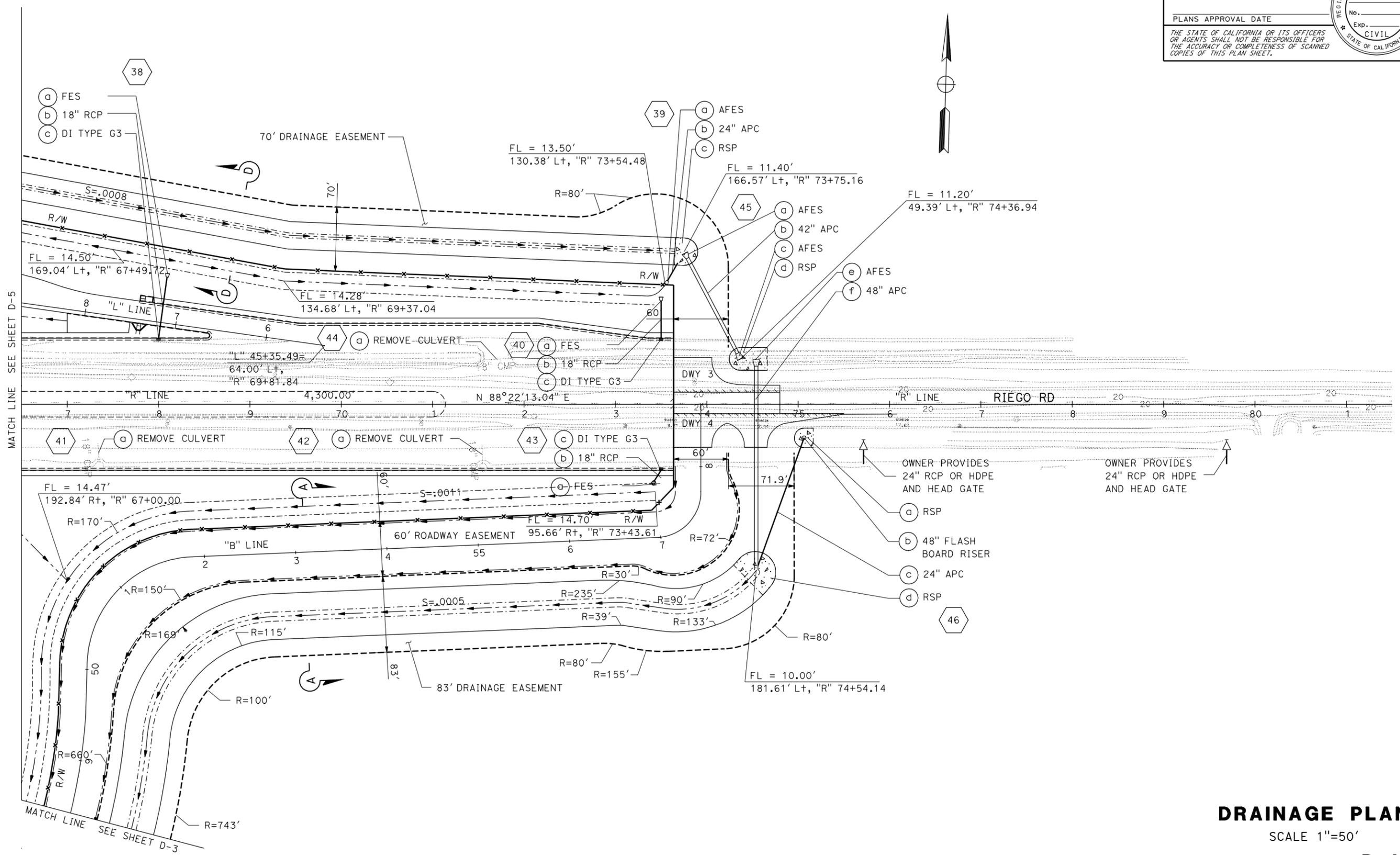
FUNCTIONAL SUPERVISOR: OSCAR VASQUEZ

DAVID LASSITER

REVISOR: \_\_\_\_\_ DATE: \_\_\_\_\_

CHECKED BY: \_\_\_\_\_

DESIGNED BY: \_\_\_\_\_



THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY.

**DRAINAGE PLAN**  
SCALE 1"=50'  
**D-10**

LAST REVISION: 06-21-10 DATE PLOTTED => 21-JUL-2010 TIME PLOTTED => 13:57

## Appendix D Section 7 Consultation

---



**DEPARTMENT OF TRANSPORTATION**

DISTRICT 3  
703 B STREET  
P. O. BOX 911  
MARYSVILLE, CA 95901-0911  
PHONE (530) 741-4233  
FAX (530) 741-4245  
TTY (530) 741-4509



*Flex your power!  
Be energy efficient!*

February 11, 2003

**File No. 1-1-03-0403**

Mr. Wayne White, Field Supervisor  
US Fish and Wildlife Service  
Attention: Mr. Craig Aubrey  
2800 Cottage Way, Room E-1803  
Sacramento, Ca. 95825-1846

**SUBJECT: Section 7 Formal Consultation on Riego Road Interchange- Additional Information**

Dear Mr. Aubrey,

Enclosed is the additional information requested by the US Fish and Wildlife Service (FWS) to the Biological Assessment (BA) prepared for the Riego Road Interchange at Highway 99 (File No. 1-1-03-0403). The Federal Highway Department (FHWA) and the California Department of Transportation are assisting the County of Sutter in constructing an interchange at the intersection of State Route 99 (SR99) and Riego Road.

The enclosed information is in response to the letter sent by your office on November 11, 2002. Clarification of the additional information, needed by your agency, was made per your phone conversations with Jeff Bray, from LSA consulting on January 3 & 6, 2003. The questions posed by the FWS have been answered in the attachments and subsequent changes made to tables and calculations. Also in the attachment is a detailed design regarding the phased relocation of the canal as requested.

Mr. White  
February 11, 2003  
Page 2

It is believed that the attached information provides the answers needed to complete the Biological Opinion. Should you need further assistance please contact Caltrans Biologist Suzanne Melim at (530) 741-4484 or Jeff Bray, LSA Associates, Inc. at (916) 630-4600.

Sincerely,



Jeffrey M. Loudon, Chief  
Office of Environmental Management, M-1

Cc: Brian Zewe, FHWA  
Sutter County

**RIEGO ROAD/SR-99 INTERCHANGE (EA 03131-406600)**  
**RESPONSE TO FWS 2<sup>ND</sup> REQUEST FOR ADDITIONAL**  
**INFORMATION (FILE NO. 1-1-03-0403)**  
**DATED NOVEMBER 22, 2002**

1) An updated accounting of the proposed project's effects on the snake. Table B of the September 25, 2002, biological assessment that accompanied your October 30, 2002, letter summarized the proposed project's effects on the snake. The Service is concerned that Table B does not account for all the proposed project's temporary and permanent effects on the snake. Examples include:

A Table B states that there will be no temporary effects to rice habitat. The Service believes that any permanent effects to rice habitat will likely be accompanied by temporary effects (i.e., an entire field may be removed from production even though only part of the field is in the construction area).

**Response:** Necessary right of way will be acquired for project construction at least several months prior to commencement of project construction, since right of way certification would precede advertising for bids on the construction contract. We anticipate that such acquisition will be completed in advance of the planting season, and that the adjacent agricultural lands (rice fields) will be managed accordingly. The farmer(s) will establish the dike system with the new property lines in mind; any dike relocations, perimeter road construction, adjustments to irrigation facilities, etc. will be completed before that season's planting and before the interchange project construction begins. Therefore, the construction of the canal relocations will have no further effect on the agricultural lands adjacent to the interchange project.

B The relocation of irrigation/drainage canals will likely be dewatered in an area greater than that depicted in the proposed project's footprint. Unless coffer dams are installed at the edge of the proposed project's footprint, water will likely be rerouted around the proposed project at existing junctions located away from the project site.

**Response:** Each relocated portion of a canal will be constructed "in the dry" to the maximum feasible extent while the existing canals remain in service (see "Phase 1" on the attached "Canal Relocation Phasing Concept" drawing).

The final excavation of the relocated canal at each tie-in to the existing canal will result in the flooding of the relocated portion of the canal while the existing canal remains flooded ("Phase 2").

The planting of the banks of the relocated canal will be accomplished to the maximum practical extent during "Phase 2".

The portion of the existing canal to be abandoned will be isolated from the rest of the canal so that it may be dewatered ("Phase 3"). Although the Contractor will select the method, we anticipate that this will be accomplished with sheet pile.

The portion of the existing canal to be abandoned and filled will be pumped dry and allowed to stand to allow any garter snakes or other wildlife to relocate to the new canal.

The minimum duration of the standing period and season will be controlled by the contract specifications.

Once the standing period is complete, the placement of fill in the portion of the canal which has been abandoned will be completed ("Phase 4"). We anticipate that the sheet piling will be removed at this point, and planting of the remaining portion of the canal bank will be accomplished.

In view of the anticipated construction procedure outlined above, we believe that the estimates of the proposed project's effects on the giant garter snake contained in Table B of the Biological Assessment dated September 25, 2002, are correct.

- C The aquatic habitat areas (irrigation/drainage canals) that Table B states will be temporarily affected will in fact be Level 3 effects (>2 years of affected snake habitat). Hansen and Brode (1993) observed that snakes did not recolonize canals that had been relocated for at least five years. The Service considers any project-related effects to the snake that last more than two construction seasons to be Level 3 effects (please see Appendix A).

**Response:** See updated Table C below which reflects a Level 3 effects mitigation ratio (Restoration + 2:1 Replacement) for temporary impacts to aquatic (irrigation/drainage canals) habitat.

**Table C: Giant Garter Snake Direct Impacts and Proposed Mitigation**

Habitat	Impacts	Mitigation Ratio	Mitigation Required
Aquatic (Permanent)	----	----	----
Aquatic (Temporary)	2.1 ha / 5.2 ac	Restoration + 2:1 Replacement	2.1 ha / 5.2 ac Restoration 4.2 ha / 10.4 ac Replacement
Upland (Permanent)	2.8 ha / 6.9 ac	3:1 Replacement	8.4 ha / 20.7 ac Replacement
Upland (Temporary)	3.1 ha / 7.6 ac	Restoration + 1:1 Replacement	3.1 ha / 7.6 ac Restoration 3.1 ha / 7.6 ac Replacement
Rice Fields (Permanent)	10.9 ha / 26.8 ac	1:1 Replacement	10.9 ha / 26.8 ac Replacement (w/natural aquatic habitat)
Rice Fields (Temporary)	----	----	----
Totals	18.9 ha / 46.5 ac	----	5.2 ha / 12.8 ac Restoration 26.6 ha / 65.5 ac Replacement

As shown in Table C, the project will restore a total of 5.2 ha (12.8 ac) on-site during relocation of the irrigation/drainage canals in accordance with the measures in Section VII. C, item 2. The project will also purchase sufficient credits at a FWS-approved conservation/mitigation bank to provide 26.6 ha (65.5 ac) of replacement habitat as mitigation for the loss of a total of 18.9 ha (46.5 ac) of aquatic and upland habitat for giant garter snake.

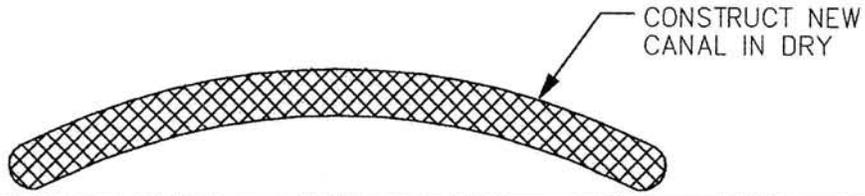
- 2) Updated conservation measures to reflect the changes in the proposed project's effects on the snake, as detailed in item 1.

**Response:** Refer to Table C, above.

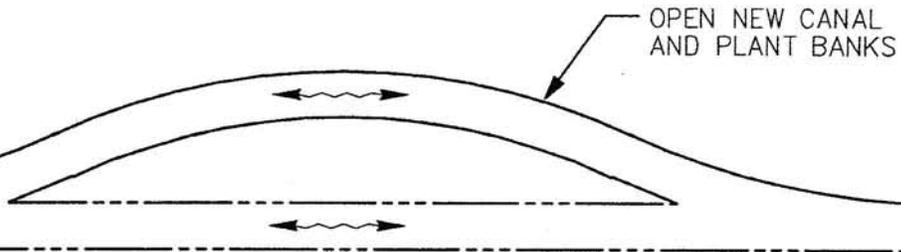


# CANAL RELOCATION PHASING CONCEPT

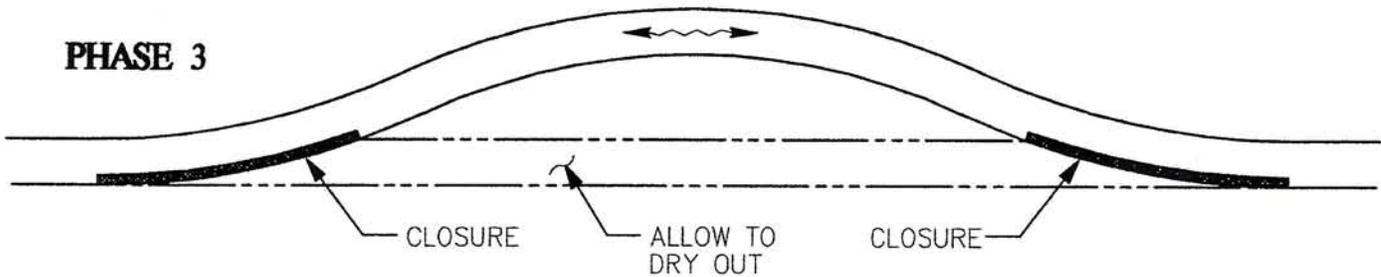
**PHASE 1**



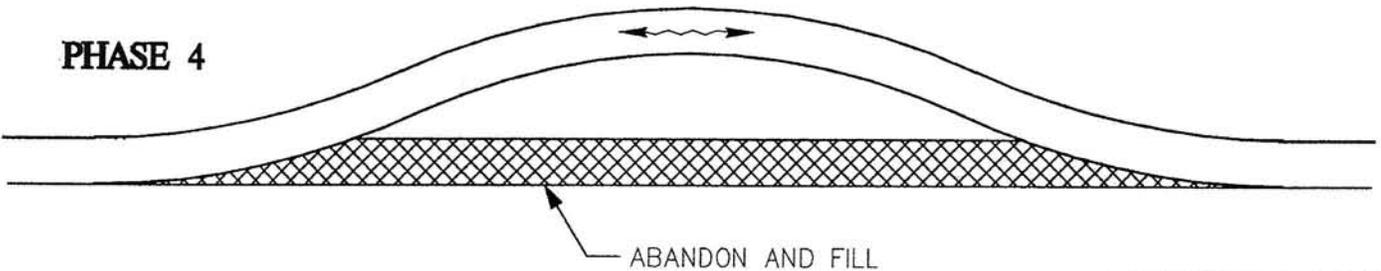
**PHASE 2**



**PHASE 3**



**PHASE 4**



**WOOD RODGERS**  
ENGINEERING • PLANNING • MAPPING • SURVEYING  
3301 G Street, Bldg. 100-B Tel: 916.341.7760  
Sacramento, CA 95816 Fax: 916.341.7767



## **BIOLOGICAL ASSESSMENT RECOMMENDED MITIGATION - RIEGO ROAD/SR-99 INTERCHANGE PROJECT**

### **Recommended Mitigation and Minimization Measures**

1. A total of \$181,587.90 shall be transferred to the NBC to establish habitat reserves to minimize the indirect and cumulative effects of the removal of 24.5 ha (60.6 ac) of GGS habitat during project construction (i.e., compensation at a 0.5:1 ratio, resulting in 12.25 ha (30.3 ac), at a cost of \$5,993/acre).
2. The project will implement the “Standard Avoidance and Minimization Measures for Construction Activities in Giant Garter Snake Habitat,” as follows:
  - Construction activities within 61.0 m (200 ft) from the banks of GGS aquatic habitat will be avoided as much as possible. Movement of heavy equipment will be limited to existing roadways and designated staging areas to minimize habitat disturbance.
  - Construction activity within GGS habitat should be conducted between May 1 and October 1, the GGS active period. In the event work within GGS habitat must be conducted within the snake’s dormant winter season (October 1 through April 30), a qualified biological monitor with the authority to stop work shall be present to prevent take of GGS.
  - If GGS are encountered during construction, activities shall cease until appropriate corrective measures have been completed or it has been determined that the snake will not be harmed (e.g., the snake has exited the immediate work area). Any sightings or incidental take will be reported to the FWS, Sacramento Office at 916-414-6600.
  - Clearing will be confined to the minimal areas necessary to facilitate construction activities. GGS habitat within or adjacent to the project area will be fenced and designated as ESAs. ESAs will be avoided by all construction personnel.
  - Construction personnel will receive FWS-approved worker environmental awareness training to instruct workers to recognize GGS and their habitat.
  - The project area will be surveyed for GGS 24 hours prior to the start of construction activities. Survey of the project area will be repeated if a lapse in construction of two weeks or greater occurs. If GGS are encountered during construction, the procedures included in bullet point 3, above, will be followed.
  - Dewatered canals will be left dry (i.e., no standing water) for at least 15 consecutive days after April 15 before initiating construction activities in the dewatered habitat.
  - Following completion of construction activities, all temporary fill and construction debris will be removed and, where feasible, disturbed areas shall be restored to pre-project conditions.
3. Contract specifications will include the following Best Management Practices, where applicable, to reduce erosion during construction.
  - Scheduling. A specific work schedule will be implemented to coordinate the timing of land disturbing activities and the installation of erosion and sedimentation control practices to reduce on-site erosion and off-site sedimentation.
  - Preservation of Existing Vegetation. In addition to measures #1 above, existing vegetation will be protected in place where feasible to provide an effective form of erosion and sediment control, as well as watershed protection, landscape beautification, dust control, pollution control, noise reduction, and shade.

- Mulching. Loose bulk materials will be applied to the soil surface as a temporary cover to reduce erosion by protecting bare soil from rainfall impact, increasing infiltration, and reducing runoff.
  - Soil Stabilizers. Stabilizing materials will be applied to the soil surface to prevent the movement of dust from exposed soil surfaces on construction sites as a result of wind, traffic, and grading activities.
  - Slope Roughening/Terracing/Rounding. Roughening and terracing will be implemented to create unevenness on bare soil through the construction of furrows running across a slope, creation of stair steps, or by utilization of construction equipment to track the soil surface. Surface roughening or terracing reduces erosion potential by decreasing runoff velocities, trapping sediment, and increasing infiltration of water into the soil, aiding in the establishment of vegetative cover from seed.
4. During project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.
  5. All fueling and maintenance of vehicles and other equipment and staging areas shall occur at least 20 meters (66 feet) from any water body. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

## BIOLOGICAL ASSESSMENT RECOMMENDED MITIGATION - RIEGO ROAD/SR-99 INTERCHANGE PROJECT

### Recommended Mitigation and Minimization Measures

1. A total of \$181,587.90 shall be transferred to the NBC to establish habitat reserves to minimize the indirect and cumulative effects of the removal of 24.5 ha (60.6 ac) of GGS habitat during project construction (i.e., compensation at a 0.5:1 ratio, resulting in 12.25 ha (30.3 ac), at a cost of \$5,993/acre).
2. The project will implement the "Standard Avoidance and Minimization Measures for Construction Activities in Giant Garter Snake Habitat," as follows:
  - Construction activities within 61.0 m (200 ft) from the banks of GGS aquatic habitat will be avoided as much as possible. Movement of heavy equipment will be limited to existing roadways and designated staging areas to minimize habitat disturbance.
  - Construction activity within GGS habitat should be conducted between May 1 and October 1, the GGS active period. In the event work within GGS habitat must be conducted within the snake's dormant winter season (October 1 through April 30), a qualified biological monitor with the authority to stop work shall be present to prevent take of GGS.
  - If GGS are encountered during construction, activities shall cease until appropriate corrective measures have been completed or it has been determined that the snake will not be harmed (e.g., the snake has exited the immediate work area). Any sightings or incidental take will be reported to the FWS, Sacramento Office at 916-414-6600.
  - Clearing will be confined to the minimal areas necessary to facilitate construction activities. GGS habitat within or adjacent to the project area will be fenced and designated as ESAs. ESAs will be avoided by all construction personnel.
  - Construction personnel will receive FWS-approved worker environmental awareness training to instruct workers to recognize GGS and their habitat.
  - The project area will be surveyed for GGS 24 hours prior to the start of construction activities. Survey of the project area will be repeated if a lapse in construction of two weeks or greater occurs. If GGS are encountered during construction, the procedures included in bullet point 3, above, will be followed.
  - Dewatered canals will be left dry (i.e., no standing water) for at least 15 consecutive days after April 15 before initiating construction activities in the dewatered habitat.
  - Following completion of construction activities, all temporary fill and construction debris will be removed and, where feasible, disturbed areas shall be restored to pre-project conditions.
3. Contract specifications will include the following Best Management Practices, where applicable, to reduce erosion during construction.
  - Scheduling. A specific work schedule will be implemented to coordinate the timing of land disturbing activities and the installation of erosion and sedimentation control practices to reduce on-site erosion and off-site sedimentation.
  - Preservation of Existing Vegetation. In addition to measures #1 above, existing vegetation will be protected in place where feasible to provide an effective form of erosion and sediment control, as well as watershed protection, landscape beautification, dust control, pollution control, noise reduction, and shade.

- Mulching. Loose bulk materials will be applied to the soil surface as a temporary cover to reduce erosion by protecting bare soil from rainfall impact, increasing infiltration, and reducing runoff.
  - Soil Stabilizers. Stabilizing materials will be applied to the soil surface to prevent the movement of dust from exposed soil surfaces on construction sites as a result of wind, traffic, and grading activities.
  - Slope Roughening/Terracing/Rounding. Roughening and terracing will be implemented to create unevenness on bare soil through the construction of furrows running across a slope, creation of stair steps, or by utilization of construction equipment to track the soil surface. Surface roughening or terracing reduces erosion potential by decreasing runoff velocities, trapping sediment, and increasing infiltration of water into the soil, aiding in the establishment of vegetative cover from seed.
4. During project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.
  5. All fueling and maintenance of vehicles and other equipment and staging areas shall occur at least 20 meters (66 feet) from any water body. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.



**U.S. DEPARTMENT OF TRANSPORTATION**  
FEDERAL HIGHWAY ADMINISTRATION  
CALIFORNIA DIVISION  
650 Capitol Mall, Suite 4-100  
Sacramento, CA. 95814  
March 13, 2006

IN REPLY REFER TO  
HDA-CA  
File # 03-Sut/Sac-99  
EA 03-406600  
Riego Road/SR 99 Interchange  
Document # P53315

**CERTIFIED RETURN RECEIPT REQUESTED: 7003 1680 0002 3834 1169**

Mr. Wayne White, Field Supervisor  
U.S. Fish and Wildlife Service  
Sacramento Fish and Wildlife Office  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846

Attention: Craig Aubrey

Dear Mr. White:

This letter is to follow-up on meetings held between the U.S. Fish & Wildlife Service, the Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and Sutter County on September 28, 2004 and October 5, 2005. The meetings were to resolve issues related to the issuance of a biological opinion (BO) to FHWA under Section 7 of the Endangered Species Act for the Riego Road/State Route 99 Interchange Project. Specifically, the meetings were to identify a mitigation strategy that would meet the regulations governing the use of FHWA funding and to also meet Sutter County's obligation under the Natomas Basin Habitat Conservation Plan (NBHCP). The following is being submitted for your use in the on-going consultation.

The FHWA and Sutter County are proposing to purchase lands that have been identified as acceptable for acquisition by The Natomas Basin Conservancy (TNBC), and that meet the habitat needs of the giant garter snake that is being adversely affected by the proposed project. The FHWA and Sutter County will verify in writing that TNBC will accept the proposed mitigation lands prior to acquiring the lands. Based on the current design, the project will impact 18.63 acres of developed lands and 58.24 acres of undeveloped lands for a total footprint of 76.87 acres. Per the NBHCP, the FHWA will participate with Sutter County in the purchase of 29.12 acres (0.5:1 ratio) to mitigate project effects resulting from the conversion of 58.24 acres of undeveloped land. The lands will then be donated to TNBC for management, and operation and maintenance (O&M). Donation of the lands to the Conservancy will be completed prior to initiation of ground disturbing activities on the proposed project.

The above strategy will allow the FHWA to participate in funding both the land acquisition and restoration/enhancement necessary to meet our obligation to mitigate for the project's effects.



Funding participation by FHWA will be at the applicable sliding scale rate at the time of authorization for the project (currently 88.53%). Sutter County will be responsible for the costs of Administration O&M, the O&M Endowment Fund, the Supplemental Endowment Fund, and the Fee Collection Administration portions of TNBC mitigation fees from developer fees.

In addition to providing mitigation lands consistent with the NBHCP, the FHWA and Sutter County agree to implement all other requirements of the NBHCP, such as conducting a pre-construction survey between 30 days and six months prior to initiating ground disturbing activities on the proposed project. Based upon the results of the pre-construction survey, FHWA and Sutter County will implement all appropriate avoidance and minimization measures, as detailed in Section IV.A of the April 2003, Final Natomas Basin Habitat Conservation Plan.

The original design of the California Highway Patrol (CHP) Enforcement Area required new right-of-way from the Natomas Basin Conservancy Preserve (Sills Tract) land. Please note that the CHP Enforcement Area has been redesigned so that it will be constructed solely within the existing Caltrans right of way. A plan view of the CHP Inspection Station is attached.

Formal consultation was initiated for this project in 2002 with additional information supplied in both 2003 and 2004. We request that the BO be issued for this project, and also request that the BO recognizes the limitation of authority the FHWA has for this project.

If you have any questions, please contact Cesar Perez, at (916) 498-5065 or Gary Sweeten, at (916) 498-5128.

Sincerely,

*/s/ Gary Sweeten*

For  
Gene K. Fong  
Division Administrator

Enclosure

cc: (E-mail, w/Enclosure)

Jay Norvell, Caltrans

Gina Moran, Caltrans

Richard Hill, Caltrans

John Webb, Caltrans

Clark Peri, Caltrans

Chis Collison, Caltrans

Laura Walsh, Caltrans

Suzanne Mellim, Caltrans

Richard L. Hall, Sutter County

George L. Musallam, Sutter County

Al Sawyer, Sutter County

Leland Dong, FHWA

Cesar Perez, FHWA

Gary Sweeten, FHWA





## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office  
2800 Cottage Way, Room W-2605  
Sacramento, California 95825-1846



In reply refer to:  
1-1-03-F-0026

**MAR 27 2006**

Mr. Gene Fong, Division Administrator  
U.S. Department of Transportation  
Federal Highway Administration  
California Division  
650 Capitol Mall, Suite 4-100  
Sacramento, California 95814

**Subject:** Addendum of the Proposed Riego Road and State Route 99 Interchange Project in Sutter County, California to the Intra-Service Biological and Conference Opinion on Issuance of a Section 10(a)(1)(B) Incidental Take Permit to the City of Sacramento and Sutter County for Urban Development in the Natomas Basin, Sacramento and Sutter Counties, California (Service File 1-1-03-F-0225)

Dear Mr. Fong:

This letter is in response to the U.S. Department of Transportation - Federal Highway Administration's (FHWA) October 30, 2002, request for formal consultation, pursuant to section 7(a) of the Endangered Species Act, as amended (16 U.S.C. 1531 *et seq.*)(Act), on the proposed Riego Road and State Route (SR) 99 Interchange project in Sutter County, California. The U.S. Fish and Wildlife Service (Service) received your request on October 31, 2002. The County of Sutter (County), in conjunction with FHWA and the California Department of Transportation (Caltrans) (hereafter collectively referred to as the project proponents), proposes to construct a new interchange at the intersection of Riego Road and SR 99. The applicants will replace the existing signalized intersection with a Type L-9 (partial cloverleaf) interchange. In addition, they will relocate a California Highway Patrol (CHP) truck inspection area from north of the Riego Road/SR 99 intersection to just north of the Sutter/Sacramento County boundary. After reviewing the information provided by FHWA and LSA Associates, Inc. (consultant for the project proponents) (LSA), the Service concurs with your determination that the proposed project is likely to adversely affect the threatened giant garter snake (*Thamnophis gigas*)(snake). The snake has been observed in close proximity to the proposed project site, there is suitable snake habitat in the proposed project area, and the proposed project activities are of the nature that may

**TAKE PRIDE  
IN AMERICA** 

**Received**  
**MAR 28 2006**  
**FHWA**

harass, harm, injure or kill snakes. In addition, implementation of the proposed project is likely to result in indirect and cumulative effects to the snake, as the proposed project will facilitate urban development in the Sutter County portion of the Natomas Basin.

The proposed project is not likely to result in direct effects to the threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)(beetle), endangered vernal pool tadpole shrimp (*Lepidurus packardii*), threatened vernal pool fairy shrimp (*Branchinecta lynchi*), threatened California tiger salamander (*Ambystoma californiense*)(salamander), endangered Sacramento Orcutt grass (*Orcuttia viscida*), threatened Colusa grass (*Neostapfia colusana*) and threatened slender Orcutt grass (*Orcuttia tenuis*); no suitable habitat for any of these species is located in the proposed project area. Implementation of the proposed project may however result in indirect and cumulative effects to these species, as the proposed project will facilitate urban development in the Natomas Basin and these species may be found there. No designated beetle or vernal pool critical habitat will be adversely modified or destroyed, as none is located in the proposed project's action area.

The proposed project is located within the County's Permit Area (TE0736653-0), as defined in the Final Natomas Basin Habitat Conservation Plan (NBHCP) (City *et al.* 2003). The proposed project site includes portions of SR 99 and its surrounding lands from approximately 1.1 kilometer (km) north to 1.0 km south of the Riego Road/SR 99 interchange. It is located in Sections 32 and 33 of Township 11 North, Range 4 East and Sections 3 and 4 of Township 10 North, Range 4 East of the *Verona, California* and *Taylor Monument, California* 7.5-minute quadrangle maps, respectively.

The purpose of the proposed project is to replace the existing signalized interchange at the intersection of SR 99 and Riego Road with a with a Type L-9 (partial cloverleaf) interchange. Riego Road will be improved so that it crosses SR 99 by way of an overcrossing. It will be expanded to five lanes on the overcrossing (three westbound lanes and two eastbound lanes), with four lanes approaching both sides of the overcrossing. Improvements to Riego Road associated with the new interchange will occur out to approximately 0.4 km from the proposed interchange. As part of the proposed project, SR 99 will be expanded in the vicinity of the proposed interchange so that it may be eventually expanded from a four to six-lane freeway. The improved roadway will also accommodate possible future expansion to include two high occupancy vehicle lanes. The distance of roadwork on SR 99 from the proposed intersection to the north will be approximately 1.1 km. This will result in expansion of the SR 99 roadway area by approximately 2.1 acres. The distance of roadwork on SR 99 from the proposed intersection to the south will be approximately 2.4 km. This will result in expansion of the SR 99 roadway by approximately 4.3 acres. Construction of the proposed interchange will require the relocation of drainage canals operated by Reclamation District 1000 where the proposed interchange will be constructed. In order minimize the potential effects of the proposed project on the snake, all canal relocations will take place between May 1 and October 1. The construction area will be accessed using existing roadways. The four quadrants (cloverleaves) of the new interchange will be used as staging areas.

In addition to construction of the new interchange, the proposed project includes the relocation of a California Highway Patrol (CHP) truck inspection station. The existing station is located on the west side of SR 99 and is approximately 1.0 km north of the proposed interchange. The new inspection station will be located approximately 0.7 km south of the proposed interchange. The existing truck inspection station will be used as a staging and parking area for construction of the new truck inspection station. After construction of the new truck inspection station, the existing truck inspection station will be abandoned.

FHWA has proposed to abide the terms and conditions of the NBHCP. In accordance with the NBHCP, FHWA will conduct a pre-construction survey of the proposed project site between 30 days and six months of commencing the proposed project. Based upon the results of the surveys, FHWA will implement the appropriate species-specific avoidance and minimization measures, as listed in Chapter V of the NBHCP. Based upon the September 25, 2002, biological assessment, a November 5, 2003, email from Jeff Bray of LSA to Craig Aubrey of the Service, and an August 4, 2004, site survey conducted by Mr. Aubrey, the avoidance and minimization measures conducted for the proposed project will likely include, at a minimum, those required in the NBHCP for the snake and the burrowing owl (*Athene cunicularia*). The proposed project will result in the permanent conversion of 58.24 acres of land within the County's NBHCP Permit Area. Prior to groundbreaking on the proposed project, the project proponents will mitigate this loss of habitat in accordance with the NBHCP, which will result in the preservation of 29.12 acres of mitigation lands in the Natomas Basin. Respective responsibilities for the total mitigation obligation are outlined in letters from FHWA to the Service and the County to the Service, dated March 13 and March 8, 2006, respectively. According to the letters, FHWA will participate in acquiring the mitigation land and funding the restoration and enhancement portions of the NBHCPs' mitigation fee. Sutter County will pay the remainder of the NBHCP mitigation fee. Regardless of responsibility described in this Addendum to the NBHCP's Biological Opinion, since the proposed project is located within Sutter County's NBHCP Permit Area and Sutter County is a project proponent, failure by either of the project proponents to meet their mitigation responsibilities (e.g., mitigation land is acquired but only a portion of the required mitigation fees are paid) would likely result in a finding by the Service that Sutter County is in violation of its NBHCP incidental take permit.

The proposed project consists of infrastructure improvements to facilitate planned development within the County's Permit Area and is a covered activity under the County's NBHCP and incidental take permit. The proposed project, including the avoidance, minimization, and mitigation measures submitted by FHWA is consistent with the NBHCP and no new circumstances as identified at 50 C.F.R. 402.16 have occurred that would alter the non-jeopardy determination for the NBHCP's 22 covered species we made in our internal biological opinion (Service File No. 1-1-03-F-0225) regarding the NBHCP and County's incidental take permit application. Therefore, the biological opinion remains valid and, upon fulfillment of the County's obligations under the NBHCP, take of NBHCP-covered species by the project proponents will be authorized through the County's incidental take permit.

This letter constitutes an addendum to the Intra-Service Biological and Conference Opinion (Service File No. 1-1-03-F-0225) exempting from the take prohibitions of Section 9 of the Act,

take of the snake, beetle, salamander, vernal pool tadpole shrimp, and vernal pool fairy shrimp by the FHWA arising out of its undertaking the proposed Riego Road and State Route 99 Interchange project. We note that no take beyond that anticipated in the NBHCP biological opinion will occur. By this addendum we are extending to the FHWA the take coverage already provided to the County under the County's incidental take permit. Therefore, the FHWA's obligations under the Act for section 7 formal consultation have been completed.

This concludes formal consultation on the proposed Riego Road and State Route 99 Interchange project. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

As discussed above, the proposed project has been designed so that SR 99 may eventually be expanded to accommodate additional lanes. If the roadway expansion results in additional conversion of lands (i.e., conversion of greater than 58.24 acres of land) or effects to NBHCP-covered species not described in this document, then FHWA should reinitiate formal consultation in accordance with the above paragraph.

If you have any questions or concerns about this biological opinion for the proposed Riego Road and State Route 99 Interchange project or the consultation process in general, please contact Craig Aubrey or Holly Herod at (916) 414-6645.

Sincerely,



*for* Kenneth Sanchez  
Acting Field Supervisor

cc:

ARD (ES), Portland, OR  
California Department of Transportation, Sacramento, California (Attn: Chris Collison)  
California Department of Fish and Game, Rancho Cordova, California (Attn: Kent Smith)  
State Water Resources Control Board, Sacramento, California (Attn: Gary Carlton)  
County of Sutter, Yuba City, California (Attn: Rich Hall)

## Appendix E Section 106 Consultation

---



**OFFICE OF HISTORIC PRESERVATION  
DEPARTMENT OF PARKS AND RECREATION**

P.O. BOX 942896  
SACRAMENTO, CA 94296-0001  
(916) 653-6624 Fax: (916) 653-9824  
calshpo@ohp.parks.ca.gov  
www.ohp.parks.ca.gov



May 2, 2005

Reply To: FHWA050408A

Sue Bauer, Chief  
Environmental Management, M1  
Caltrans District 3  
PO Box 911  
Marysville, CA 95901-0911

Re: Determinations of Eligibility for the Proposed Grade-separated Interchange at SR 99 and Riego Road, Sutter County, CA

Dear Ms. Bauer:

Thank you for consulting with me about the subject undertaking in accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on 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 (PA)*.

The California Department of Transportation (Caltrans) is requesting my concurrence pursuant to Stipulation VIII.C.5 of the PA that the following properties do not retain sufficient integrity to convey their historical significance as contributors to the National Register of Historic Places (NRHP) eligibility of RD 1000:

- Portion of Riego Road beginning 1200 feet east of SR 99 and continuing west for a distance of 2400 feet. The intersection of SR 99 and Riego Road is PM 1.0.
- 300-foot-long segment of the East Drainage Canal running under SR 99 in an east/west direction and found at PM 0.50 in Sutter County.

Based on review of the submitted documentation, I concur with this determination.

Thank you for considering historic properties during project planning. If you have any questions, please contact Natalie Lindquist of my staff at (916) 654-0631 or e-mail at [nlind@ohp.parks.ca.gov](mailto:nlind@ohp.parks.ca.gov).

Sincerely,

A handwritten signature in black ink that reads "Milford Wayne Donaldson" followed by a small flourish.

Milford Wayne Donaldson, FAIA  
State Historic Preservation Officer



**DEPARTMENT OF TRANSPORTATION**

DISTRICT 3  
703 B STREET  
P. O. BOX 911  
MARYSVILLE, CA 95901-0911  
PHONE (530) 741-4573  
FAX (530) 741-4598  
TTY (530) 741-4509



*Flex your power!  
Be energy efficient!*

April 7, 2005

Mr. Milford W. Donaldson  
State Historic Preservation Officer  
P.O. Box 942896  
Sacramento, CA 94296-0001

Re: Eligibility Determination for proposed grade-separated interchange at State Route 99 and Riego Road in Sutter County.

Dear Mr. Donaldson:

The California Department of Transportation (Caltrans), District 3, under authority of the Federal Highway Administration (FHWA) is initiating consultation with the State Historic Preservation Officer (SHPO) regarding the proposed construction of a grade-separated interchange at the intersection of State Route (SR) 99 and Riego Road in Sutter County. This consultation is undertaken in accordance with the January 2004 *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on 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 Federally-Aided Highway Program in California* (PA).

Enclosed please find a *Historic Property Survey Report* (HPSR) and attached *Historic Resources Evaluation Report* (HRER) and *Archaeological survey Report* (ASR). Caltrans is responsible under the PA for ensuring the adequacy of the APE (Stipulation VIII.A) and identification efforts (Stipulation VIII.B). Caltrans is consulting with you at the present time under Stipulation VIII.C.5 of the PA, which requires submittal of eligibility determinations and supporting documentation to the SHPO for comment.

In conjunction with Caltrans and the FHWA, the County of Sutter is proposing to replace the current signalized intersection of SR 99 and Riego Road by constructing a grade-separated partial cloverleaf interchange. This interchange project will consist of a bridge structure over SR 99, associated ramps, relocation of the California Highway Patrol truck inspection area, and canal relocation. The new interchange will meet future traffic needs at the intersection. A complete project description can be found on pages 1 and 2 of the HPSR. The APE consists of current right of way and is located in Attachment 3 of the HPSR.

Pursuant to Stipulation VIII.C.5, Caltrans requests concurrence with the following eligibility determination:

Milford W. Donaldson  
March 23, 2005  
Page 2 of 2

A 2,400-foot-long segment of Riego Road and a 300-foot-long segment of the East Drainage Canal, within the APE for this project, do not appear to retain sufficient integrity to convey their historical significance as contributors to the National Register of Historic Places eligibility of RD 1000 and are therefore they are no longer contributors to RD 1000.

We look forward to your response within 30 days of your receipt of this submittal, in accordance with Stipulation VIII.C.5.a of the PA.

Please contact Daryl Noble, Associate Environmental Planner (Archaeology), at (530) 741-4573 if you have any questions regarding this document.

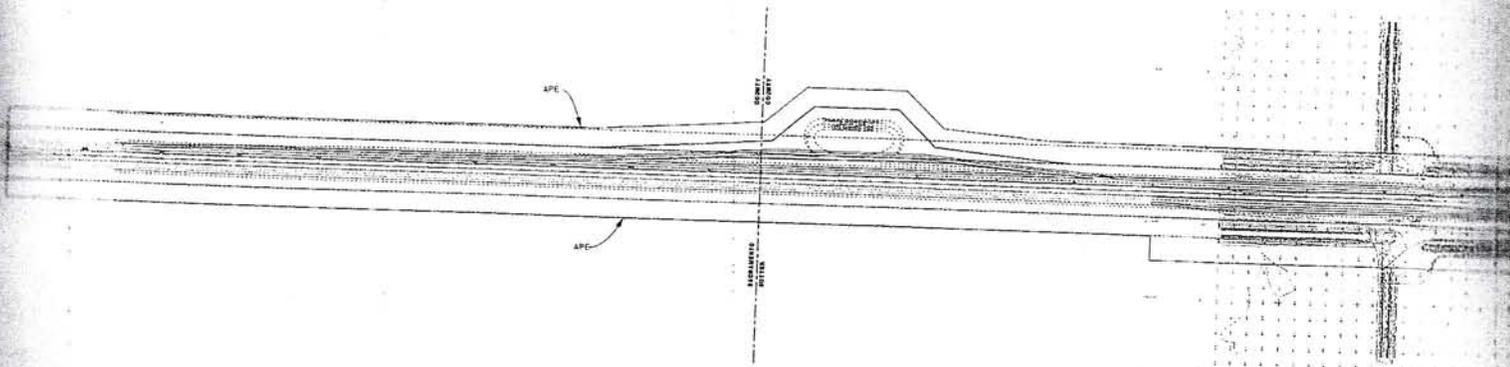
Sincerely,



SUE BAUER, Chief  
Environmental Management, Branch M1

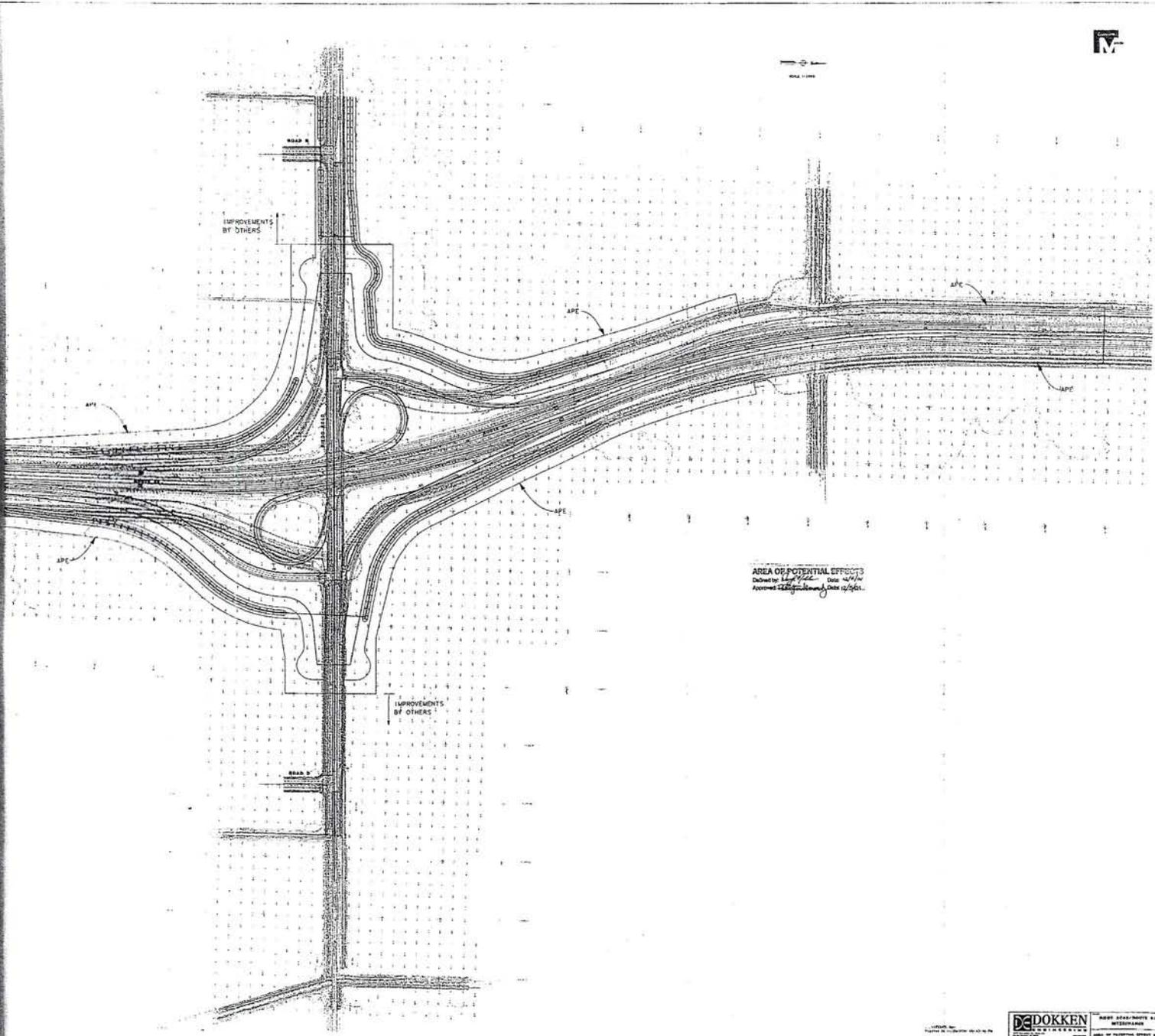
Attachment: addendum HPSR for the Orangevale Avenue Bridge Replacement Project, Sacramento County, California

cc: Gene K. Fong, Acting Division Administrator, FHWA w/ attachment  
Laura Walsh, District Project Environmental Coordinator  
Jill Hupp, Caltrans Headquarters  
Project files





SCALE 1:1000



AREA OF POTENTIAL EFFECTS  
Defined by: *1:1000* Date: *10/1/01*  
Approved: *[Signature]* Date: *12/5/01*

LEGEND

**DOKKEN**  
ADVANCED ENGINEERING & ARCHITECTURE  
1000 WEST 10TH AVENUE, SUITE 100  
DENVER, CO 80202  
TEL: 303.733.1111  
WWW.DOKKEN.COM

## Appendix F Caltrans Categorical Exclusion

---



**CATEGORICAL EXEMPTION  
CATEGORICAL EXCLUSION/PROGRAMMATIC CATEGORICAL EXCLUSION  
DETERMINATION FORM**

Revised 11/2005

03-SUT-99  
Dist.-Co.-Rte. (or Local Agency)

PM 58.4-59.3 KP 0.0/3.0      406600  
K.P./K.P.(P.M/P.M.)      E.A. (State project)

Special Funded-Sutter County  
Proj. No. (Local project)  
(Fed.Prog. Prefix  
Proj. No., Agr. No.)

**PROJECT DESCRIPTION:** (Briefly describe project, purpose, location, limits, right-of-way requirements, and activities)

The County of Sutter, in conjunction with FHWA and Caltrans, proposes to construct a grade-separated interchange at the Riego Road and State Route (SR) 99 intersection. This new interchange would replace the existing traffic light that signalizes the intersection. The existing intersection is (Continued on page 2)

**CEQA COMPLIANCE** (for State Projects only)

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

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

**CALTRANS CEQA DETERMINATION**

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

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

**Categorically Exempt.** Class \_\_\_\_, (PRC 21084; 14 CCR 15300 et seq.) or **General Rule exemption** [This project does not fall within an exempt class, but it can be seen with certainty that there is no possibility that the activity may have a significant effect on the environment (CCR 15061(b)(3))]

N/A      N/A  
Signature: Environmental Office Chief      Date      Signature: Project Manager      Date

**NEPA COMPLIANCE** (23 CFR 771.117)

Based on an examination of this proposal, supporting information, and the following statements.

- This project does not have a significant impact on the environment as defined by the NEPA.
- This project does not involve substantial controversy on environmental grounds.
- This project does not involve significant impacts on properties protected by Section 4(f) of the DOT Act or Section 106 of the National Historic Preservation Act.
- In non-attainment or maintenance areas for Federal air quality standards: this project comes from a currently conforming plan and Transportation Improvement Program or is exempt from regional conformity.
- This project is consistent with all Federal, State, & local laws, requirements or administrative determinations relating to the environmental aspects of this action.

**CALTRANS NEPA DETERMINATION**

Based on an examination of this proposal, supporting information, and the statements above under "NEPA Compliance", it is determined that the project is a:

**PROGRAMMATIC CATEGORICAL EXCLUSION (PCE):** Based on the evaluation of this project and supporting documentation in the project files, all the conditions of the November 18, 2003 Programmatic Categorical Exclusion Agreement have been met.

**CATEGORICAL EXCLUSION (CE):** For actions that do not individually or cumulatively have a significant environmental effect and are excluded from the requirement to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS). Require FHWA determination.

Susan D. Bauer      8/2/06      Romanov      8/18/06  
Signature: Environmental Office Chief      Date      Signature: Project Manager/DIA Engineer      Date

**FHWA DETERMINATION**

Based on the evaluation of this project and the statements above, it is determined that the project meets the criteria of and is properly classified as a Categorical Exclusion (CE).

Carm Plein      9/6/06  
Signature: FHWA Project Development Engineer      Date

Additional information attached or referenced, as appropriate (e.g. Mitigation commitments for NEPA only; Air Quality studies or documentation of exemption from regional conformity or use of CO Protocol; §106 commitments; §4(f) or Programmatic §4(f); date of COE nationwide permit; § 7 species survey results; Wetlands Finding; Floodplain Finding; additional studies; design conditions. Rev. 11/2005

**CATEGORICAL EXEMPTION  
CATEGORICAL EXCLUSION/PROGRAMMATIC CATEGORICAL EXCLUSION  
DETERMINATION FORM**

**CONTINUATION SHEET**

**PROJECT DESCRIPTION CONTINUED:**

inadequately sized to meet the traffic demands for current and forecast traffic volumes. Construction of the interchange will improve the circulation of traffic and relieve congestion that already exists. The new design will reflect a partial cloverleaf interchange. Riego Road will be expanded to five lanes at the highway overcrossing with three westbound lanes and two eastbound lanes. SR 99 will remain as an at-grade highway; however, the design of the interchange would accommodate additional highway lanes should a future widening project be proposed. Currently, there is a California Highway Patrol (CHP) truck inspection area along the southbound SR 99 shoulder. Because the existing location of the inspection area conflicts with the design of an off-ramp to Riego Road, the CHP enforcement area will be relocated along southbound SR 99, just north of the Sacramento County boundary. In addition, construction of the proposed interchange requires the relocation of drainage canals operated by the Reclamation District 1000. The four quadrants (i.e. cloverleaf) of the new interchange will be used as staging areas for the storage of materials and equipment. The acquisition of additional right-of-way is required on both sides of SR 99 and along Riego Road. This project involves a partnership between state, federal, local, and private entities and a combination of funding from those sources. Since this project will be constructed on the State highway system, the Office of Special Funded Projects provided technical assistance to the County of Sutter. On behalf of the FHWA, Caltrans provided oversight to the technical studies developed for environmental approval to ensure these studies were performed in accordance to the National Environmental Policy Act. Currently, Caltrans has only programmed funding for this project to the PA/ED phase.

**Summary of Environmental Studies**

**Hazardous Waste**

An Initial Site Assessment was performed to identify potential hazardous waste issues. The research concluded there was no evidence of contamination from existing or past land uses, activities, or operations either along the highway corridor or in the project vicinity. In spite of the findings, additional investigations (Phase II) are necessary to determine the potential concentrations of aerially deposited lead (ADL). These investigation require the following:

1. Adjacent Lands Involved in Construction - Prior to construction, soil sampling investigation must be conducted to determine the concentration of ADL. An ADL sampling work plan must be prepared and approved by Caltrans prior to the sampling investigation. Upon determination of ADL levels, appropriate actions will be followed for handling soils.
2. Restriping - Special provision must be included in the specifications to address removal and disposal of the traffic stripes because the paint used is known to contain hazardous levels of lead and chromium.

**Visual Impacts Analysis**

The project area is surrounded by agricultural and farm lands. The existing aesthetic resources within the landscape are very limited. As such, the project area has limited existing aesthetic value. SR 99 is not a designated or eligible for being listed as a Scenic Highway. Similarly, Riego Road does not have scenic designations from the County of Sutter's General Plan. The most obvious visual change involves the transition from an at-grade intersection to a full-movement, grade-separated interchange. With this change in grade, a new vertical element will be placed in an area where no other vertical elements exist. However, the aesthetic setting will be enhanced with landscaping and the construction of the interchange using engineering architecture. Since there are no existing viewsheds considered unique, construction of the interchange will not adversely impact visual conditions.

**Farmland Conversion Assessment**

The proposed project encroaches onto land designated as Prime Farmland and Farmland of Statewide Importance. Approximately, 24-acres of farmlands will be converted to urban use. The loss of this agricultural land was evaluated based on the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) Farmland Conversion Impact Rating System. The total relative value of farmland rating calculated by the NRCS was 21 points, and a total site assessment of 71 points, for a combined total of 92 points. NRCS scores below 160 points do not require examination of alternative capable of reducing the amount of farmland conversion. Therefore, it was concluded that construction of the interchange will not significantly impact agricultural soils or productivity.

**Biological Resources**

Rice fields surround the project area. Earthen dikes separate these rice fields and gate valves built into the dikes regulate the water level within the rice fields. Dirt access roads and earthen irrigation canals are around the perimeter of the fields. Based on the current design, the project will impact 18.63-acres of developed lands and 58.24-acres of undeveloped lands for a total footprint of 76.87-acres. Biology surveys identified a pair of burrowing

**CATEGORICAL EXEMPTION  
CATEGORICAL EXCLUSION/PROGRAMMATIC CATEGORICAL EXCLUSION  
DETERMINATION FORM**

owls occupying a burrow in the northwest quadrant of the project area. These owls, along with the water fowl, are protected by the Migratory Bird Treaty Act. The agricultural land provides habitat for the giant garter snake (GGS). Formal consultation was initiated with U.S. Fish and Wildlife Service for the impacts to GGS, a species federally listed as threatened with extinction. The project is located within the area covered by the Natomas Basin Habitat Conservation Plan (NBHCP). In accordance to the NBHCP, the FHWA will participate with Sutter County in the purchase of 29.12-acres (0.5:1 ratio) to minimize the effects of the project resulting from the conversion of 58.24-acres of undeveloped land. The lands will then be donated to the Natomas Basin Conservancy for management, operation, and maintenance. Donation of the lands to the Conservancy must be completed prior to initiation of ground disturbing activities.

Environmental Commitments

- Pre-construction biological surveys shall be conducted six months prior to ground breaking construction activities. Based upon the results of the surveys, FHWA will implement the appropriate species-specific avoidance and minimization measures as listed in Chapter V of the NBHCP.
- The contract specifications will implement the appropriate species-specific avoidance and minimization measures, as listed in Chapter V of the Natomas Basin Habitat Conservation Plan (see attachment).
- The contract specifications will implement the U.S Fish and Wildlife Services's "*Standard Avoidance and Minimization Measures During Construction Activities in Giant Garter Snake Habitat.*"
- All canal relocations will take place between May 1<sup>st</sup> thru October 1<sup>st</sup>
- The contract specifications shall include measures to prevent the introduction of invasive plant species.

Jurisdictional Waters

The only potential jurisdictional waters within the project area are the irrigation canals associated with the rice fields. These canals have been excavated on dry lands. Per Section 328.3 of the U.S. Army Corps of Engineers (USACE) preamble, non-tidal irrigation and drainage ditches are not generally considered Waters of the U.S. In addition, the California Department of Fish and Game (CDFG) does not generally regulate these types of features unless they support certain types of riparian vegetation. Biological surveys characterized and inventoried the vegetation. The project area does not contain suitable habitat for any special status plant species. Since the irrigation and drainage canals associated with the rice fields are regularly maintained by herbicide treatments and mechanical vegetation removal, which are typical agricultural activities, riparian vegetation has not become established. Thus, it is not likely these canals will be regulated either by the USACE, the CDFG, or the Regional Water Quality Control Board.

Noise Analysis

Even though the current land use is agricultural, the land adjacent to SR99 south of Riego Road has been zoned for commercial development. A noise analysis using Sound32 model was conducted using the following three scenarios: existing noise conditions, future noise conditions without constructing the proposed project, and future noise conditions with the project constructed. The traffic noise levels for the existing conditions and both future alternatives were calculated using eight receptor locations. The traffic noise model results revealed no substantial noise level increases would result from the implementation of the proposed project; therefore, no noise abatement measures are required for long-term operation.

Air Quality

The air quality assessment estimated emissions associated with short-term construction and long-term operation of the proposed highway interchange. The Caline4 Model was used to determine if the proposed project would result in any carbon monoxide (CO) hot spot concentrations. Both alternatives, the build verses the no build, were analyzed using projected traffic data and calculated composite vehicle emission factors. Because the projected CO concentrations would be below the state and federal standards, no CO hot spots were identified. In conclusion, the project would not have any adverse impact on local air quality in the future.

When considering particulate matter (PM<sub>10</sub>), the project area is located in an attainment area for federal levels of PM<sub>10</sub>. Projects are only subject to conformity analysis if they are located in a non-attainment area for PM<sub>10</sub>. Therefore, this project is exempt from a conformity analysis. In addition, new vehicular traffic trips should not occur as a result of the interchange being constructed; therefore, there is no reason to believe this project would cause or contribute to violations of the PM<sub>10</sub> standards.

Ground disturbing activities caused by construction equipment will result in an increase of fugitive dust emissions. Although the amount of dust and particulate matter (PM<sub>10</sub>) would increase from clearing and grading operations, this increase is temporary until construction eases. With the implementation of the standard construction measures, such as frequent watering, fugitive dust emissions from construction activities are expected to be below the levels set by the Feather River Air Quality Management District.

**NEPA/CEQA RE-VALIDATION FORM**

DIST./CO./RTE.	03 - SAC, SUT - 99
PM/PM	KP 58.4/59.3, 0.0/2.6
E.A. or Fed-Aid Project No.	EA 03131-406600
PROJECT TITLE	Riego Road/SR-99 Interchange
ENVIRONMENTAL APPROVAL TYPE	NEPA Categorical Exclusion/CEQA Initial Study/Mitigated Negative Declaration
DATE APPROVED	NEPA approval 9/6/06. CEQA approval 3/6/03
REASON FOR CONSULTATION (23 CFR 771.129)	Check reason for consultation: <input type="checkbox"/> Project proceeding to next major federal approval <input checked="" type="checkbox"/> Change in scope, setting, effects, mitigation measures, requirements <input type="checkbox"/> 3-year timeline (EIS only)
DESCRIPTION OF CHANGED CONDITIONS	The project proposes to construct a four-lane interchange, relocate irrigation ditches, and reconstruct the CHP enforcement area. The previous environment documentation evaluated a five-lane facility and did not acknowledge future growth in the project vicinity. New traffic data supports the construction of a phased interchange to better accommodate planned growth around the project area. The proposed four-lane project has the same footprint as the previously identified five-lane project and also accommodates the eight-lane ultimate facility. The interim phase, this project, is sufficiently studied by the original environmental document. The ultimate phase will widen the overcrossing, construct new ramps, and involve minor ditch relocations. A discussion of the minor changes to the interim phase project and the impacts of a larger interchange facility for the ultimate project are included below. Only the interim phase will be constructed by this project.

**NEPA CONCLUSION - VALIDITY**

Based on an examination of the changed conditions and supporting information: [Check ONE of the two statements below, regarding the validity of the original document/determination (23 CFR 771.129). If document is no longer valid, indicate whether additional public review is warranted and whether the type of environmental document will be elevated.]

- The original environmental document or CE remains valid. No further documentation will be prepared.
- The original document or CE is no longer valid; further documentation has been  or will be  prepared and is included on the continuation sheets  or  will be attached.
- NO (Yes/No) Additional public review is warranted (23 CFR 771.111(h)(3))
- NO (Yes/No) Supplemental environmental document is needed.
- NO (Yes/No) New environmental document is needed. (If "Yes," specify type: \_\_\_\_\_)

**CONCURRENCE WITH NEPA CONCLUSION**

I concur with the NEPA conclusion above.

Susan D. Bauer  
Signature: Environmental Branch Chief

10/21/07  
Date

[Signature]  
Signature: Project Manager/DLAE

10/30/07  
Date

**CEQA CONCLUSION** : (Only mandated for projects on the State Highway System.)

Based on an examination of the changed conditions and supporting information, the following conclusion has been reached regarding appropriate CEQA documentation: (Check ONE of the four statements below, indicating whether any additional documentation will be prepared, and if so, what kind. If additional documentation is prepared, attach a copy of this signed form and any continuation sheets.)

- Original document remains valid. No further documentation is necessary.
- Only minor technical changes or additions to the previous document are necessary. An addendum has been or will be  prepared and is  included on the continuation sheets or  will be attached. It need not be circulated for public review. (CEQA Guidelines, §15164)
- Changes are substantial, but only minor additions or changes are necessary to make the previous document adequate. A Supplemental environmental document will be prepared, and it will be circulated for public review. (CEQA Guidelines, §15163)
- Changes are substantial, and major revisions to the current document are necessary. A Subsequent environmental document will be prepared, and it will be circulated for public review. (CEQA Guidelines, §15162) (Specify type of subsequent document, e.g., Subsequent FEIR.)

**CONCURRENCE WITH CEQA CONCLUSION**

I concur with the CEQA conclusion above.

Aria Wilson  
Signature: Environmental Branch Chief

11/2/07  
Date

[Signature]  
Signature: Project Manager

11/2/07  
Date

NEPA/CEQA RE-VALIDATION FORM

CONTINUATION SHEET(S)

*Address only substantial changes or substantial new information since approval of the original document and only those areas that are applicable. Use the list below as section headings as they apply to the project change(s). Use as much or as little space as needed to adequately address the project change(s) and the associated impacts, minimization, avoidance and/or mitigation measures, if any.*

***Changes in project design, e.g., substantial scope change; a new alternative; change in project alignment.***

Although the proposed project will construct a four-lane interchange rather than the five-lane interchange as described in the approved project in the Categorical Exclusion, reopening of the CE was deemed necessary to acknowledge new planning for future growth in the project area. A traffic study produced for the Sutter Point Specific Plan indicates that staged construction of the SR-99/Riego Road interchange would better accommodate future growth while still meeting projected demands through an interim project. This revalidation therefore describes a one-lane reduction in the number of travel lanes for the proposed project and also considers the future construction of an eight-lane overcrossing structure on the same interchange footprint and its associated environmental impacts.

The project proposes to construct a four-lane interchange, relocate irrigation ditches, and reconstruct the CHP enforcement area (see Interim Project Impacts exhibit). The proposed four-lane project has the same footprint as the previously identified five-lane project and also accommodates the eight-lane ultimate facility. The interim phase, this project, is sufficiently studied by the original project description and environmental document. The ultimate phase will widen the overcrossing to eight lanes, construct new ramps, and involve minor ditch relocations (see Ultimate Project Impacts exhibit). Only the interim phase will be constructed by this project.

***Changes in environmental setting, e.g., new development affecting traffic or air quality;***

The passage of Measure M and the current work on the Sutter Point Specific Plan resulted in a traffic study for the project area, which predicted the need for an eight-lane interchange by the year 2035. This project therefore determined to study the impacts associated with the ultimate interchange. A new air quality study was produced and determined that no new impacts would result from the interim or the ultimate projects.

***Changes in environmental circumstances, e.g., a new law or regulation; change in the status of a listed species.***

No changes to environmental circumstances have occurred.

***Changes to environmental impacts of the project, e.g., a new type of impact, or a change in the magnitude of an existing impact.***

The proposed project will construct a four-lane overcrossing structure with two loop ramps and relocate irrigation ditches. Overall, most impacts studied under the original environmental compliance document remain unchanged and stay within the previously evaluated footprint.

The impacts associated with the ultimate 8-lane interchange are a minor increase in magnitude from the previously studied impacts. Since the original project was the development of an entirely new interchange, the impacts were sufficiently studied because it considered the loss of the new footprint as a whole. The impacts of the ultimate interchange stay within the proposed footprint. This results in unchanged findings from those originally proposed for environmental resources.

A summary of the updates to the remaining environmental technical studies is presented here:

**Hazardous Waste**

The hazardous waste report was updated due to its approval in 2002. No new impacts were identified. The site survey did not reveal any significant hazardous waste concerns within the areas proposed for construction and/or right of way. Soil sampling for aerially deposited lead from vehicle exhaust is recommended prior to construction to determine whether lead concentrations above action levels exist in the soils in the project area. A special provision in the contract documents to address removal and disposal of traffic stripes known to contain hazardous levels of lead and chromium is also recommended.

## NEPA/CEQA RE-VALIDATION FORM

### Visual Impact Analysis

Conditions remain unchanged from the initial LSA, Associates analysis in 2002. The finding that no adverse impacts to visual conditions will result from the project remains valid. Recommendations for landscaping and engineering architecture will ensure that no impacts will result from the ultimate project. Furthermore, none of the existing viewsheds were considered unique. Future viewer groups will be short-term transportation related and will not be affected by the expansion of the interchange.

### Farmland Conversion Assessment

The 2002 LSA, Associates assessment concluded that 24-acres of farmland would be converted to urban use by the proposed project. Calculations for the interim and ultimate project find that this number remains the same due to the project footprint remaining unchanged. Therefore, no additional conversion will result from the ultimate project. Furthermore, the finding that the project will not significantly impact agricultural soils or productivity remains valid.

### Biological Resources

The habitat assessment conducted for the Natural Environment Study by LSA Associates in 2002 remains valid and complete. Conditions within the project remain unchanged from the time of study as do as the limits of study.

The interim construction phase will relocate irrigation ditches as previously proposed in the five-lane project. The interim project will have 4.4 acres (1.8 ha) of temporary impacts to GGS aquatic habitat. Temporary impacts under the original NES were calculated at 5.2 acres, however, under both scenarios, the ditches will be relocated therefore replacing the habitat. Additional minor relocations will be required under the ultimate project, resulting in temporary impacts to approximately 2.7 acres (1.1 ha) of aquatic habitat. Additional consultation with USFWS will be required prior to construction of the ultimate project for impacts associated with the ultimate project.

The project habitat impact calculations made by LSA Associates regarding rice fields, ruderal vegetation, and ditches were compared to the interim and ultimate project impact calculations and remain unchanged because of the conversion of undeveloped land to developed land for the interchange footprint. The original calculation of 58.24-acres of undeveloped land to be converted remains accurate for project impacts and accounts for habitat loss for the special status species considered for the project, including Swainson's Hawk, Western Burrowing Owl, Tricolored Blackbird, Waterfowl, Wading Birds/Shorebirds, and GGS. The proposed mitigation measure to purchase 29.12-acres (0.5:1 ratio) through the Natomas Basin Habitat Conservation Plan will minimize the indirect and cumulative effects of habitat loss. This measure remains valid and a requirement prior to construction.

Due to the second phase of impacts to GGS habitat, Caltrans will reinitiate formal consultation with the Service during PS&E to inform them of the changes and that future consultation will be conducted for the ultimate interchange.

### Jurisdictional Waters

Under LSA Associates' initial assessment of potential jurisdictional waters within the project area, the report concluded that the irrigation ditches did not fall under the jurisdiction of Army Corps of Engineers (ACOE), California Department of Fish & Game (CDFG), or Regional Water Quality Control Board (RWQCB) due to the excavation, maintenance, and purpose as agricultural ditches. Since that time, the Sutter Point Specific Plan has prepared a jurisdictional delineation which is under review at ACOE. The report prepared by ECORP concludes that water is pumped into and out of the irrigation system regulated by Reclamation District 1000. Furthermore, they conclude that the ditches did not channelize water that would have collected as tributaries and discharged to the Sacramento River. Rather, water historically percolated through the Natomas Basin. Therefore, this revalidation concurs with the original finding that no jurisdictional features are present within the project area. It is acknowledged, although not anticipated, that, depending upon the verification produced by ACOE, environmental permits including a 404 and 401 could be pursued during PS&E by Caltrans if the features are determined jurisdictional.

### Noise Analysis

Although described in further detail below, noise analysis was conducted was sufficiently studied under the original LSA Associates noise report. While noise levels immediately adjacent to the interchange were found to reach 72 dBA, no receptors are anticipated for opening day. The adjacent land has been zoned for commercial use, however, no plans have been approved for their development.

## NEPA/CEQA RE-VALIDATION FORM

Furthermore, with appropriate construction of setbacks and shielding from the interchange itself, noise impacts are not anticipated nor are abatement measures considered necessary or desired for the proposed land use. Mitigation measures are proposed below which require Sutter County to consider noise levels prior to adjacent development.

### Air Quality

Although air quality was sufficiently studied for the proposed project under LSA Associates' study, an updated air quality assessment was prepared to consider the impacts of the ultimate interchange. The report concludes that future emissions related to the interchange operations would not have any adverse impact on local or regional air quality. The proposed project will not conflict or obstruct the implementation of the applicable air quality plan; violate any air quality standard or contribute substantially to an existing or projected air quality violation; result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under and applicable federal or state ambient air quality standard [in this case, if PM10 or exceed quantitative thresholds for O3 precursors, oxides of nitrogen (NOX) and Reactive Organic Compounds (ROCs)]; expose sensitive receptors (including, but not limited to, schools, hospitals, resident care facilities, or day-care centers) to substantial pollutant concentrations including air toxics such as diesel particulates; or create objectionable odors affecting a substantial number of people.

With the implementation of construction related mitigation, all levels of fugitive dust would remain below emission standards set by the Feather River Air Quality Management District.

### ***Changes to avoidance, minimization, and/or mitigation measures since the environmental document was approved.***

All proposed avoidance, minimization, and mitigation measures remain valid and applicable for the interim and ultimate projects.

One additional area of mitigation measures has been added to this revalidation and applies to noise analysis.

Noise analysis for this project was sufficiently studied under the 2006 environmental document. In the LSA Associates Noise Analysis, noise levels for existing and future conditions (2025) approach and meet 72 dBA at several locations adjacent to the interchange. In the case of this project, however, no project specific plans have been developed for construction on adjacent parcels prior to opening day. Therefore no receptors will feasibly exist to be impacted. Areas adjacent to the project are zoned for commercial use and likely typical attenuation measures are not desired by the developer. **With any development that occurs after construction of the interchange, consideration of noise reviews would fall upon the County and developer.**

The following mitigation measures are hereby added to this project:

***N-1: Sutter County shall require an acoustical review of any proposed commercial uses adjacent to the SR 99/ Riego Road interchange to determine if those uses contain noise-sensitive areas. If noise-sensitive areas are identified for the proposed commercial uses, reasonable and feasible noise abatement measures shall be considered for those areas in accordance with County noise policy.***

***N-2: The Sutter Point Specific Plan Environmental Impact Report shall acknowledge that noise impacts could occur at future noise-sensitive receptors constructed adjacent to the SR99 Riego Road Interchange, thereby requiring consideration of appropriate noise abatement measures.***

***Changes to environmental commitments since the environmental document was approved, e.g. the addition of new conditions in permits or approvals. When this applies, append a revised Environmental Commitments Record (ECR) as one of the Continuation Sheets.***

No changes to environmental commitments were made.

