



DEPARTMENT OF THE ARMY

Los Angeles District Corps of Engineers
P.O. Box 532711
Los Angeles, CA 90017-3401

June 21, 2013

REPLY TO

ATTENTION OF

Regulatory Division

Scott Quinnell
California Department of Transportation, District 8
Senior Environmental Planner
464 West 4th Street Fl 6
San Bernardino, California 92401-1400

Dear Mr. Quinnell:

Enclosed you will find a signed copy of your Department of the Army Permit (File No. SPL-2012-00528-VCC). Please retain this copy for your files.

Thank you for participating in our regulatory program. If you have any questions, please contact Veronica Chan at 213-452-3292 or via e-mail at Veronica.C.Chan@usace.army.mil.

Please be advised that you can now comment on your experience with Regulatory Division by accessing the Corps web-based customer survey form at:
<http://per2.nwp.usace.army.mil/survey.html>.

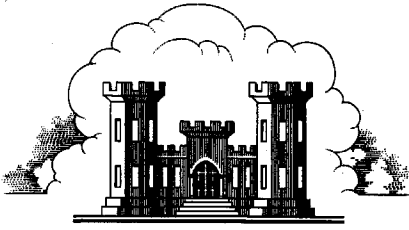
"Building Strong and Taking Care of People!"

Sincerely,

A handwritten signature in black ink that reads "Mark Cohen".

Mark Cohen
Deputy Chief, Regulatory Division

Enclosure(s)



LOS ANGELES DISTRICT
U.S. ARMY CORPS OF ENGINEERS

DEPARTMENT OF THE ARMY PERMIT

Permittee: California Department of Transportation, District 8 (POC: Scott Quinnell)

Permit Number: SPL-2012-00528-VCC

Issuing Office: Los Angeles District

Note: The term "you" and its derivatives, as used in this permit, means the Permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

To permanently discharge fill into 0.002 acre of wetland and 0.001 acre of non-wetland waters of the U.S. and to temporarily discharge fill into 0.21 acre of wetland and 0.32 acre of non-wetland waters of the U.S. pursuant to section 404 of the Clean Water Act of 1972, as amended, in association with the replacement and widening of the Highway 111 Salt Creek Bridge to accommodate standard width lanes and shoulders, as shown on the attached drawings.

Specifically, you are authorized to:

1. Construct six new 6-foot-diameter piers with a new bridge constructed using pre-cast bridge girder segments launched or placed in-situ by overhead cranes perched on the existing abutments resulting in permanent discharge of fill material into 0.002 acre of wetland and 0.001 acre of non-wetland waters of the U.S.; and
2. Discharge temporary fill material into 0.21 acre of wetland and 0.32 acre of non-wetland waters of the U.S. in association with the following:

- Temporary equipment and access roads during construction to remove the existing bridge and piers and to construct a new bridge and piers within the ESA fencing area (shown on the attached Figure 4B).
- Removal of eight piers (3-foot by 3-foot piers) excavated to a depth of two feet under the current ground surface.
- Replace the rock rip rap at the base of the bridge abutments with similar ungrouted rock rip rap where needed within waters of the U.S. and place additional rock rip rap on the slopes of the roadway outside of waters of the U.S.

Project Location: Within Salt Creek near the City of Mecca, Riverside County, California.

Permit Conditions:

General Conditions:

1. **The time limit for completing the authorized activity ends on June 20, 2018.** If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification from this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished with the terms and conditions of your permit.

Special Conditions:

1. The Permittee shall abide by the terms and conditions of the Clean Water Act (CWA) section 401 Water Quality Standards Certification, dated May 14, 2013.
2. The Permittee shall clearly mark the limits of the workspace with flagging or similar means to ensure mechanized equipment does not enter avoided waters of the U.S. areas shown in the attached figures. Adverse impacts to waters of the U.S. beyond the Corps Regulatory Division-approved construction footprint are not authorized. Such impacts could result in permit suspension and revocation, administrative, civil or criminal penalties, and/or substantial, additional, compensatory mitigation requirements.
3. Upon project completion, all temporary fills shall be removed and all temporarily affected wetland and non-wetland waters of the U.S. and adjacent slopes shall be re-contoured to pre-construction conditions. In accordance with the Salt Creek Bridge Replacement on State Route 111 Habitat Mitigation and Monitoring Plan (dated May 2013), the Permittee shall hydro-mulch, seed, or replant, where possible, the disturbed portions of the earthen stream bottoms and banks with native, non-invasive species, as appropriate to the affected areas, to reduce the potential for erosion. The Permittee shall submit the proposed planting palette for review and approval by the Corps Regulatory Division prior to initiation of work within waters of the U.S. The Permittee shall ensure the hydro-mulched, seeded, or replanted areas are maintained and monitored for a period of five years after completing the seeding and planting activities, such that less than 10 percent of the areas disturbed by the project are vegetated by non-native and invasive plant species. In addition, the Permittee shall hand remove non-native, invasive plants within waters of the U.S. within the Biological Study Area (see Approximate Project Boundary on Figure 3) and dry seed with native, non-invasive species. The Permittee shall ensure the Biological Study Area is maintained and monitored for a period of five years after completing the seeding and planting activities such that less than 10 percent of the area within wetland and non-wetland waters of the U.S. are vegetated by non-native and invasive plant species. To avoid impacts to desert pupfish, the areas of the channel with active flows shall not be disturbed. If disturbance to the perennial areas of the channel is required, approval from the Corps is required prior to disturbance. The Permittee shall submit a memorandum by April 15th after each year of annual maintenance and monitoring. The memo shall indicate the project impact areas on a map, when temporary construction areas were re-contoured to pre-construction conditions, when native seeding and planting was completed, the species and percent cover (absolute) of invasive and/or non-invasive plant

species that occur onsite each year prior to treatment, and when and how many/the extent of invasive and/or non-invasive plant species were removed.

4. This Corps permit does not authorize you to take any threatened or endangered species, in particular the desert pupfish (*Cyprinodon macularius*) or the Yuma clapper rail (*Rallus longirostris yumanensis*) or adversely modify designated critical habitat for any federally listed species. In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g. ESA section 10 permit, or a Biological Opinion (BO) under ESA section 7, with "incidental take" provisions with which you must comply). The enclosed USFWS BO (May 8, 2012) contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. Your authorization under this Corps permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take of the attached BO, terms and conditions of which are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your Corps permit. The Corps and USFWS are the appropriate authority to determine compliance with the terms and conditions and reasonable and prudent measures.
5. Within 45 calendar days of completing authorized work in waters of the U.S., the Permittee shall submit to the Corps Regulatory Division a memo including the following:
 - A) Date(s) work within waters of the U.S. was initiated and completed;
 - B) Summary of compliance status with each special condition of this permit (including any noncompliance that previously occurred or is currently occurring and corrective actions completed or being taken to achieve compliance);
 - C) Color photographs taken at the project site before and after construction for those aspects directly associated with impacts to waters of the U.S.;
 - D) One copy of as-built drawings for the entire project (all sheets must be signed, dated, to-scale, and no larger than 8.5 x 11 inches); and
 - E) Signed Certification of Compliance.
6. Pursuant to 36 C.F.R. section 800.13, in the event of any discoveries during construction of either human remains, archeological deposits, or any other type of historic property, the Permittee shall notify the Corps' Regulatory Division and Archeology staff (Steve Dibble at 213-452-3849 or John Killeen at 213-452-3861) within 24 hours. The Permittee shall immediately suspend all work within 100 feet of any area(s) where potential cultural resources are discovered. The Permittee shall not resume construction in the area surrounding the potential cultural resources until the Corps Regulatory Division re-authorizes project construction, per 36 C.F.R. section 800.13.

Further Information:

1. Congressional Authorities. You have been authorized to undertake the activity described above pursuant to:

() Section 10 of the River and Harbor Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

() Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data. The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.


b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measure ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give you favorable consideration to a request for an extension of this time limit.

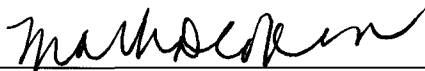
Your signature below, as Permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.



Scott Quinnell
California Department of Transportation, District 8

6-20-13
DATE

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.



Mark D. Cohen
Deputy Chief, Regulatory Division

6-21-13
DATE

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

TRANSFEREES

DATE

LOS ANGELES DISTRICT
U.S. ARMY CORPS OF ENGINEERS

**NOTIFICATION OF COMMENCEMENT OF WORK
FOR
DEPARTMENT OF THE ARMY PERMIT**

Permit Number: SPL-2012-00528-VCC
Name of Permittee: California Department of Transportation, District 8 (POC: Scott Quinnell)
Date of Issuance: June 20, 2013

Date work in waters of the U.S. will commence: _____
Estimated construction period (in weeks): _____
Name & phone of contractor (if any): _____

Please note that your permitted activity is subject to a compliance inspection by an Army Corps of Engineers representative. If you fail to comply with this permit you may be subject to permit suspension, modification, or revocation.

I hereby certify that I, and the contractor (if applicable), have read and agree to comply with the terms and conditions of the above referenced permit.

Signature of Permittee

Date

At least ten (10) days prior to the commencement of the activity authorized by this permit, sign this certification and return it using any ONE of the following three (3) methods:

(1) E-MAIL a statement including all the above information to:
Veronica.C.Chan@usace.army.mil

OR

(2) FAX this certification, after signing, to: 213-452-4196

OR

(3) MAIL to the following address:

U.S. Army Corps of Engineers
Regulatory Division
ATTN: CESPL-RG-SPL-2012-00528-VCC
P.O. Box 532711
Los Angeles, CA 90017-3401

LOS ANGELES DISTRICT
U.S. ARMY CORPS OF ENGINEERS

**NOTIFICATION OF COMPLETION OF WORK AND
CERTIFICATION OF COMPLIANCE WITH
DEPARTMENT OF THE ARMY PERMIT**

Permit Number: SPL-2012-00528-VCC
Name of Permittee: California Department of Transportation, District 8 (POC: Scott Quinnell)
Date of Issuance: June 20, 2013

Date work in waters of the U.S. completed: _____
Construction period (in weeks): _____
Name & phone of contractor (if any): _____

Please note that your permitted activity is subject to a compliance inspection by an Army Corps of Engineers representative. If you fail to comply with this permit you may be subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of said permit.

Signature of Permittee

Date

Upon completion of the activity authorized by this permit, sign this certification and return it using any ONE of the following three (3) methods:

(1) E-MAIL a statement including all the above information to:
Veronica.C.Chan@usace.army.mil

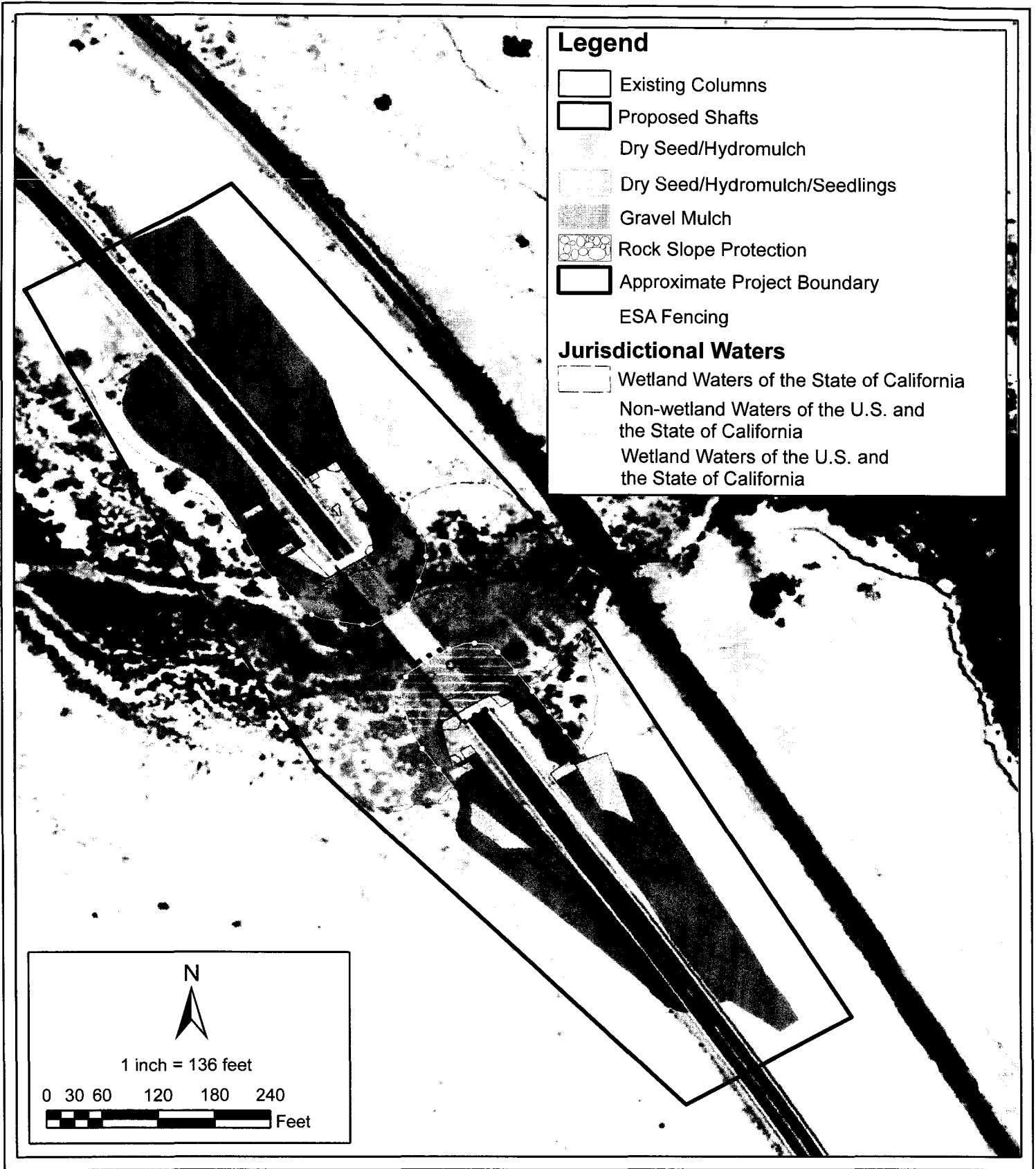
OR

(2) FAX this certification, after signing, to: 213-452-4196

OR

(3) MAIL to the following address:

U.S. Army Corps of Engineers
Regulatory Division
ATTN: CESPL-RG-SPL-2012-00528-VCC
P.O. Box 532711
Los Angeles, CA 90017-3401

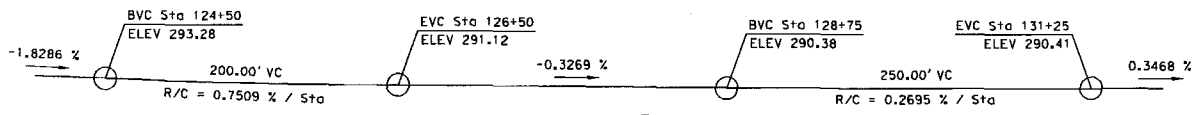


**Proposed Work
Salt Creek Bridge
California Department of Transportation**

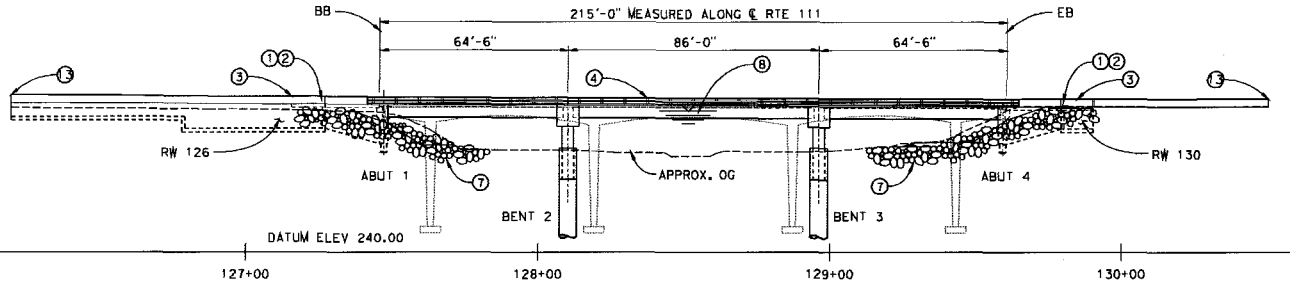
FIGURE

3

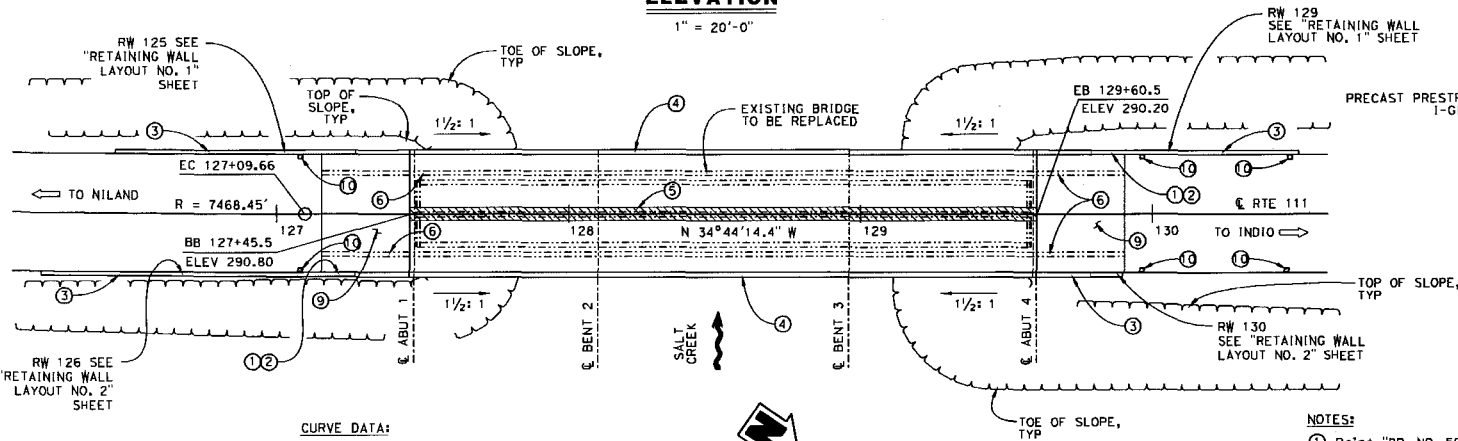
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	RIV	111	1.51	1.51	1.51
<i>Jonathan Szabo</i> REGISTERED CIVIL ENGINEER No. C78263 Exp. 9-30-13 CIVIL STATE OF CALIFORNIA			DATE		
PLANS APPROVAL DATE					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					



PROFILE
No Scale



ELEVATION
1" = 20'-0"



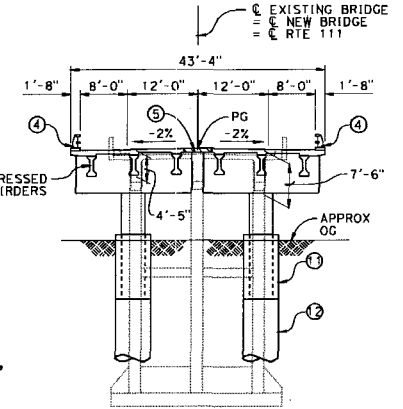
CURVE DATA:
 R = 7468.45'
 Δ = 6°20'41"
 T = 413.93'
 L = 827.02'

PLAN
1" = 20'-0"

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

Note: for General Notes, Index to Plans, Pile Data Table, see "INDEX TO PLANS" sheet

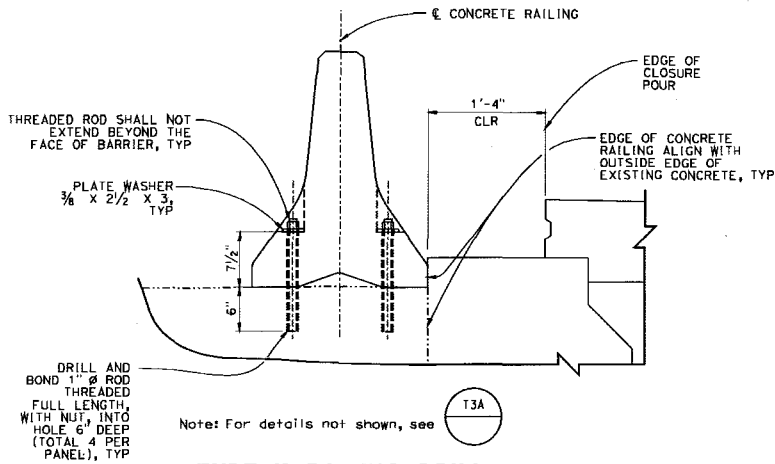
- LEGEND:**
- Indicates closure pour
 - Indicates new construction
 - Indicates existing structure
 - Indicates existing bridge in elevation and section views



TYPICAL SECTION
1" = 10'-0"

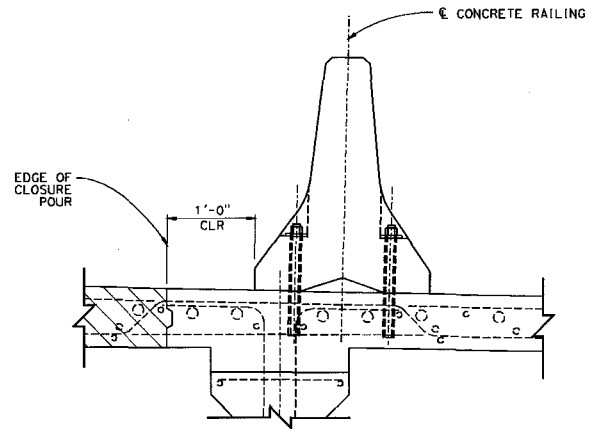
- NOTES:**
- ① Paint "BR. NO. 56-0854"
 - ② Paint "SALT CREEK BRIDGE"
 - ③ Conc Barrier, Type 732A(MOD) (for modified portion of standard concrete barrier, see "ABUTMENT DETAL NO. 4" sheet)
 - ④ Bridge Rail, Type ST-10
 - ⑤ Closure Pour
 - ⑥ Remove existing MBGR, see "ROADWAY PLANS"
 - ⑦ Rock Slope Protection, see "ROADWAY PLANS"
 - ⑧ For Hydrologic Summary, see "FOUNDATION PLANS"
 - ⑨ Approach Slab, Type N(30D)
 - ⑩ Drainage Inlet, see "ROADWAY PLANS"
 - ⑪ Isolation Casing
 - ⑫ 6'-0" ø CIDH Concrete Shaft
 - ⑬ MBGR continuing from end of Conc. Barrier not shown, see "ROADWAY PLANS"

DESIGN BY: J. Szabo		CHECKED: L. Ju	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADINGS: HS 20, 10' / E-80, 10' / E-100, 10' / E-130	DESIGN VEHICLE	BRIDGE NO. 56-0854	SALT CREEK BRIDGE (REPLACE)
DETAILS BY: D. Wooten / J. Szabo		CHECKED: J. Szabo	LAYOUT BY: D. Wooten / J. Szabo	PLANS CHECKED: J. Szabo	COMPILED: J. Szabo	POST MILE 1.51	
DESIGN ENGINEER: DANIEL T. ADAMS		CHECKED: A. McPhee / A. Yo	SPECIFICATIONS BY: M. Pan			GENERAL PLAN	



TYPE K RAILING DRILL AND BOND DETAIL FOR STAGE 1 CONSTRUCTION

1-1/2" = 1'-0"

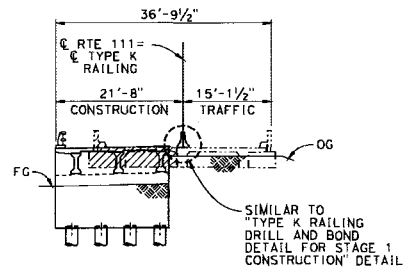


TYPE K RAILING DRILL AND BOND DETAIL FOR STAGE 2 CONSTRUCTION

1-1/2" = 1'-0"

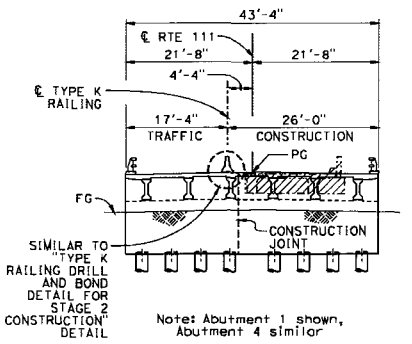
- LEGEND:**
- Indicates bridge removal
 - Indicates closure pour
 - Indicates new construction
 - Indicates existing structure

NOTE: For location and quantities of Type K Railing segments and quantities of drill and bond bolts, see "ROADWAY PLANS"



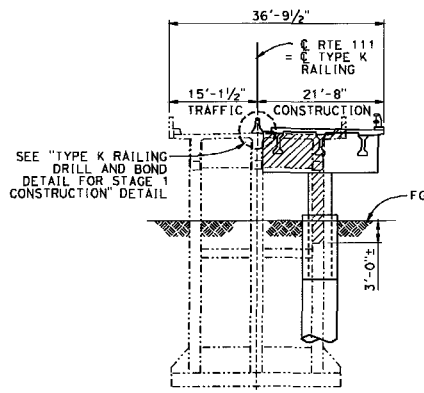
ABUTMENT 1 ELEVATION AT STAGE 1 CONSTRUCTION

1" = 10'-0"



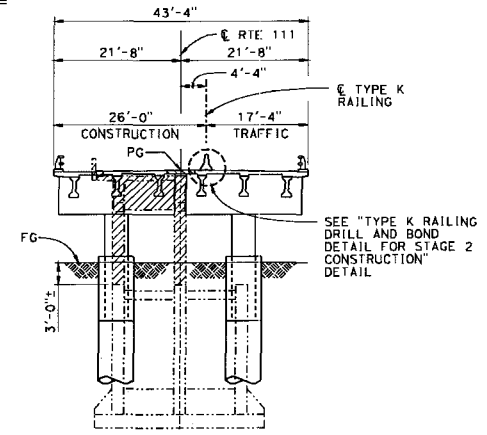
ABUTMENT 1 ELEVATION AT STAGE 2 CONSTRUCTION

1" = 10'-0"



BENT ELEVATION AT STAGE 1 CONSTRUCTION

1" = 10'-0"



BENT ELEVATION AT STAGE 2 CONSTRUCTION

1" = 10'-0"

NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

Note: Abutment Elevations shown facing BB, Bent Elevations shown facing EB

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	RIV	111	1.51		

Jonathan Szabo
 REGISTERED CIVIL ENGINEER
 DATE: 2-15-13
 PLANS APPROVAL DATE: _____
 REGISTERED PROFESSIONAL ENGINEER
 JONATHAN SZABO
 No. C79563
 Exp. 9-30-13
 CIVIL
 STATE OF CALIFORNIA

DESIGN	J. Szabo	CHECKED	L. Yu	BRIDGE NO.	56-0854	SALT CREEK BRIDGE (REPLACE) STAGE CONSTRUCTION DETAILS
DETAILS	D. Rooten/J. Szabo	CHECKED	J. Szabo	POST MILE	1.51	
QUANTITIES	J. Szabo	CHECKED	A. McPhee/A. Yo			

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH 10
 UNITS: 3589
 PROJECT NUMBER & PHASE: 0800000714
 CONTRACT NO.: 08-449101
 DISCARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
2-14-13	3	27

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 FILE => 560854ccont03.dgn

DATE PLOTTED: 19FEB2013 11:27 THE PLOTTED BY: 4113354

CURVE DATA				
No.	R	Δ	T	L
1	7468.45'	6°20'41"	413.93'	827.02'

Bridge Location	
①	- 13.056 Lt & Sta 127+48.20 Elev=289.583 ±
②	- 13.036 Lt & Sta 129+57.73 Elev=289.520 ±
③	- 13.039 Rt & Sta 129+57.71 Elev=289.530 ±
④	- 12.977 Rt & Sta 127+48.27 Elev=289.478 ±

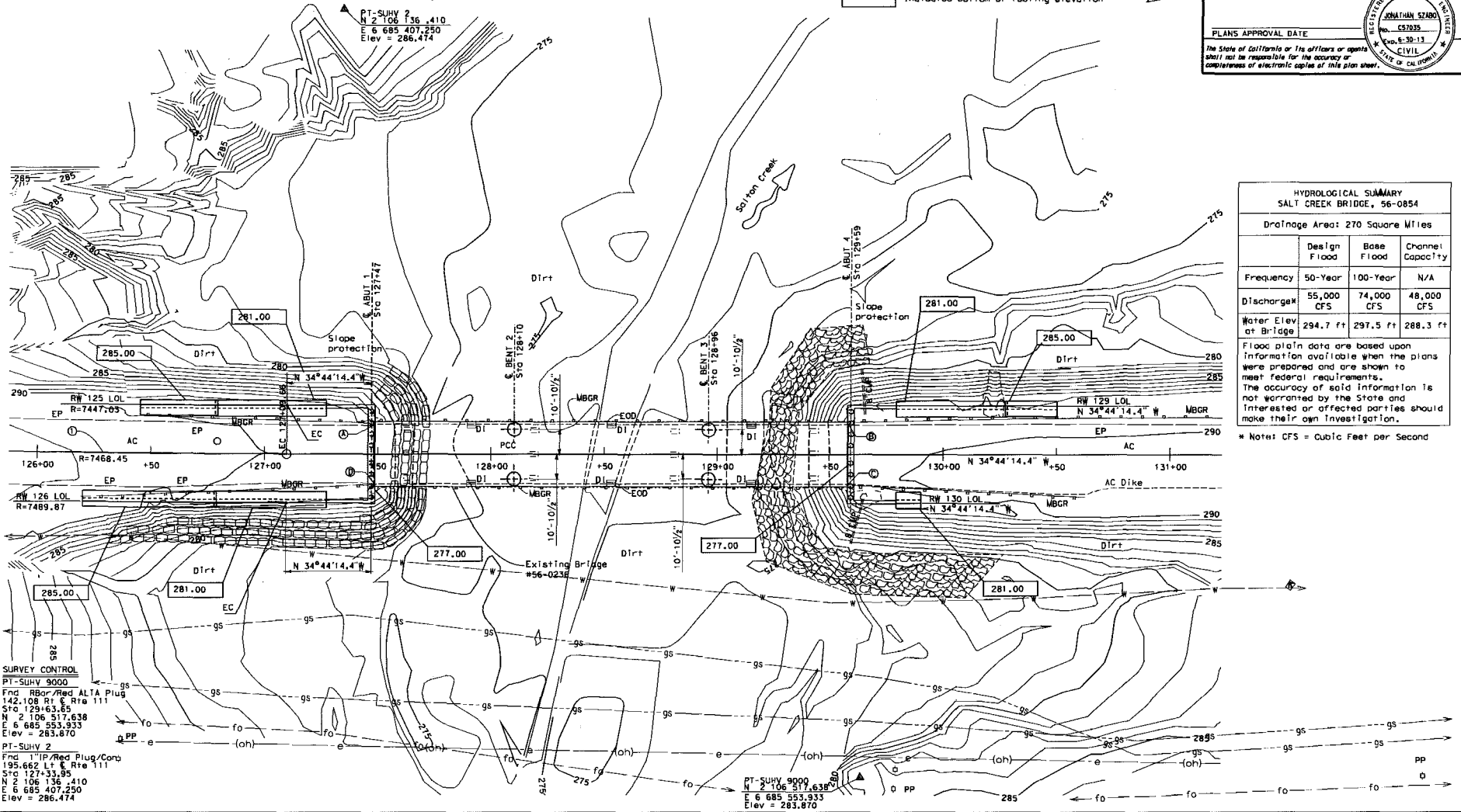
Note:  Indicates bottom of footing elevation

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	RIV	111	1.51		

Jonathan Szabo 2-15-13
 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 electronic copies of this plan sheet.

JONATHAN SZABO
 No. C-37095
 Exp. 5-30-13
 CIVIL
 STATE OF CALIFORNIA



HYDROLOGICAL SUMMARY			
SALT CREEK BRIDGE, 56-0854			
Drainage Area: 270 Square Miles			
	Design Flood	Base Flood	Channel Capacity
Frequency	50-Year	100-Year	N/A
Discharge	55,000 CFS	74,000 CFS	48,000 CFS
Water Elev. at Bridge	294.7 ft	297.5 ft	288.3 ft

Flood plain data are based upon information available when the plans were prepared and are shown to meet federal requirements. The accuracy of said information is not warranted by the State and interested or affected parties should make their own investigation.

* Note: CFS = Cubic Feet per Second

SURVEY CONTROL
 PT-SUHV 9000
 Fnd RBar/Red ALTA Plug
 142.108 Rt & Rte 111
 Sta. 129+53.65
 N 2 106 517.638
 E 6 685 553.933
 Elev = 283.870
 PT-SUHV 2
 Fnd 1"IP/Red Plug/Coro
 195.662 Lt & Rte 111
 Sta. 127+33.95
 N 2 106 136.410
 E 6 685 407.250
 Elev = 286.474

PRELIMINARY INVESTIGATION SECTION SCALE VERT. DATUM NAD 83 1"-20" HORIZ. DATUM NAD 83 ALIGNMENT TIES Dist. Traverse Sheet		DESIGN J. Szabo DETAILS D. Wooten / J. Szabo QUANTITIES J. Szabo		CHECKED L. Wu CHECKED J. Szabo CHECKED A. McPhee/A. Vo		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION		DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 10		BRIDGE NO. 56-0854 POST MILE 1.51-1.54		SALT CREEK BRIDGE (REPLACE) FOUNDATION PLAN	
PHOTOGRAMMETRY AS OF: X SURVEYED P District DRAFTED P. W. Sedgwick 5-12		CHECKED P. C. Stewart CHECKED P. C. Vigor 5-12		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3647 PROJECT NUMBER & PHASE: 080000714		CONTRACT NO.: 08-449101		DISSEMINATION PRINTS BEARING EARLIER REVISION DATES		REVISION DATES SHEET 5 OF 27	

FILE -> 560854efp105.dgn

NOTES:

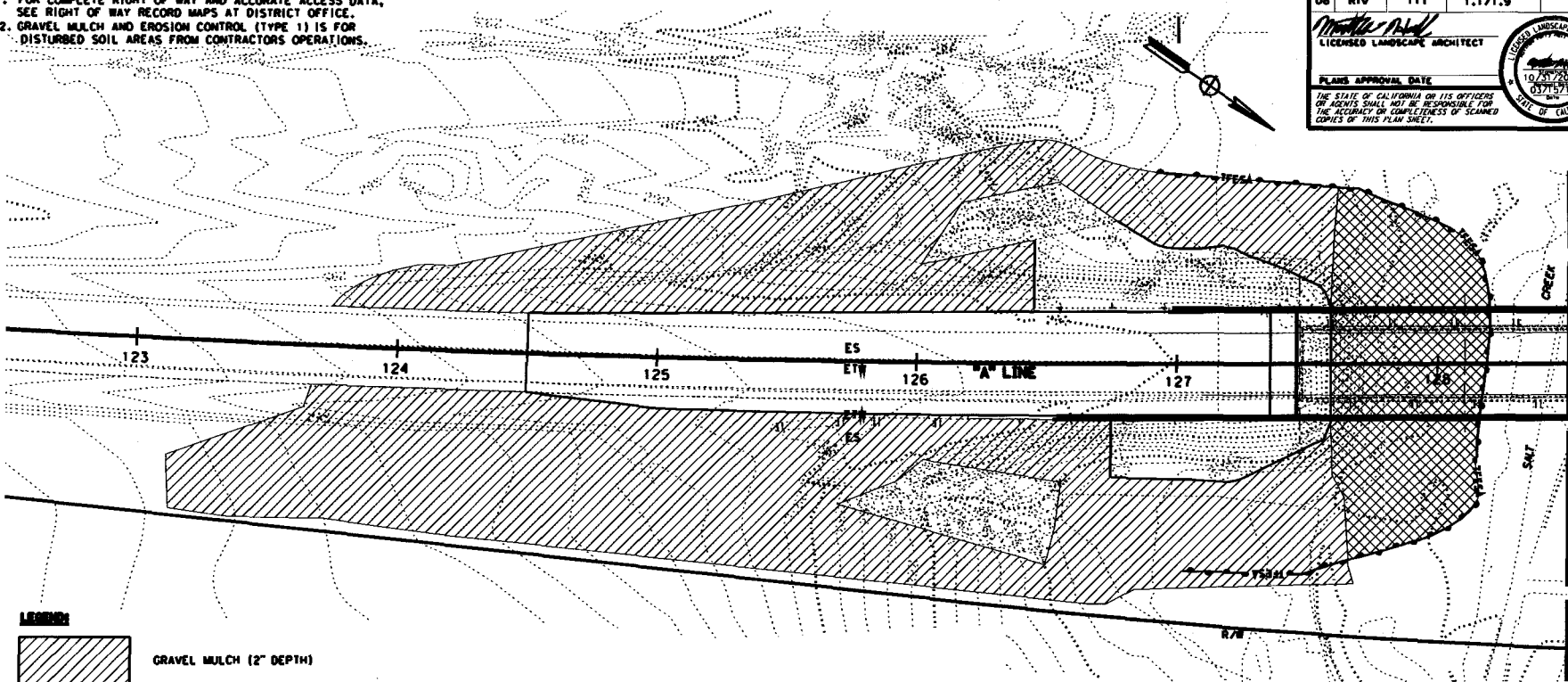
1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
2. GRAVEL MULCH AND EROSION CONTROL (TYPE 1) IS FOR DISTURBED SOIL AREAS FROM CONTRACTORS OPERATIONS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	111	1.1/1.9		

Matthew Hall
 LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE: 10/20/2013
 03/15/13
 STATE OF CALIFORNIA

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



- LEGEND:**
- GRAVEL MULCH (2" DEPTH)
 - EROSION CONTROL (TYPE 1)

EROSION CONTROL (TYPE 1)

SEQUENCE	ITEM	MATERIAL		APPLICATION RATE
		DESCRIPTION	TYPE	
STEP 1	DRY SEED	DRY APPLIED SEED	SEED MIX	4 LB/ACRE
		BFM FIBER	WOOD	
STEP 2	HYDROMULCH	BFM TACKIFIER	PLANT BASED	3,500 LB/ACRE

SEED MIX

BOTANICAL NAME (COMMON NAME)	PERCENT GERMINATION (MINIMUM)	PURE LIVE SEED (POUNDS PER ACRE)
ALLENROLFEA OCCIDENTALIS (IODINE BUSH)	50	1
DISTICHLIS SPICATA (SALTGRASS)	40	3
TOTAL		4

EROSION CONTROL PLAN
 SCALE: 1"=20'
EC-1

REVISIONS: DATE PLOTTED: 03-12-13 TIME PLOTTED: 08:14:25
 SENIOR LANDSCAPE ARCHITECT: RAY DESSELLE
 CALCULATED/DESIGNED BY: CHECKED BY:
 LANDSCAPE ARCHITECTURE: LORNA SALVADOR MATTHEW HALL
 REVISED BY: DATE REVISED:
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
LANDSCAPE ARCHITECTURE
 SENIOR LANDSCAPE ARCHITECT
 RAY RESELLE
 CHECKED BY
 MATTHEW HALL
 REVISIONS
 REVISED BY
 LORDANA SALVADOR
 DATE REVISED

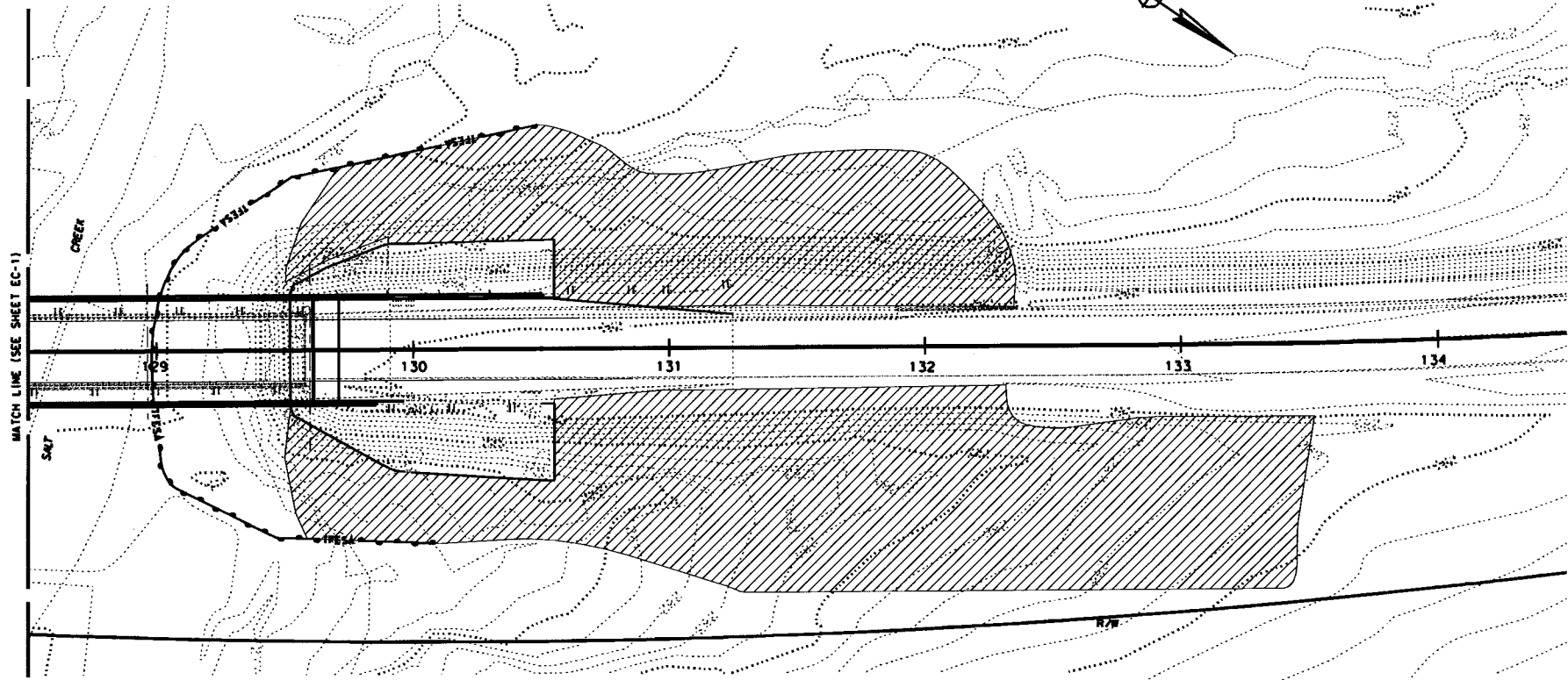
NOTE:
 1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA,
 SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

DIST	COUNTY	ROUTE	TOTAL SHEETS	SHEET NO.	TOTAL SHEETS
08	Riv	111	1,171.9		

Matthew Hall
 LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE
 10/24/2013
 03715213

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.



QUANTITIES

SHEETS	DRY SEED	HYDROMULCH	GRAVEL MULCH
	SOFT	SOFT	SOFT
EC-1	5,907	5,907	34,991
EC-2	7,131	7,131	37,331
TOTAL	13,038	13,038	72,322

EROSION CONTROL PLAN

SCALE: 1"=20' **EC-2**



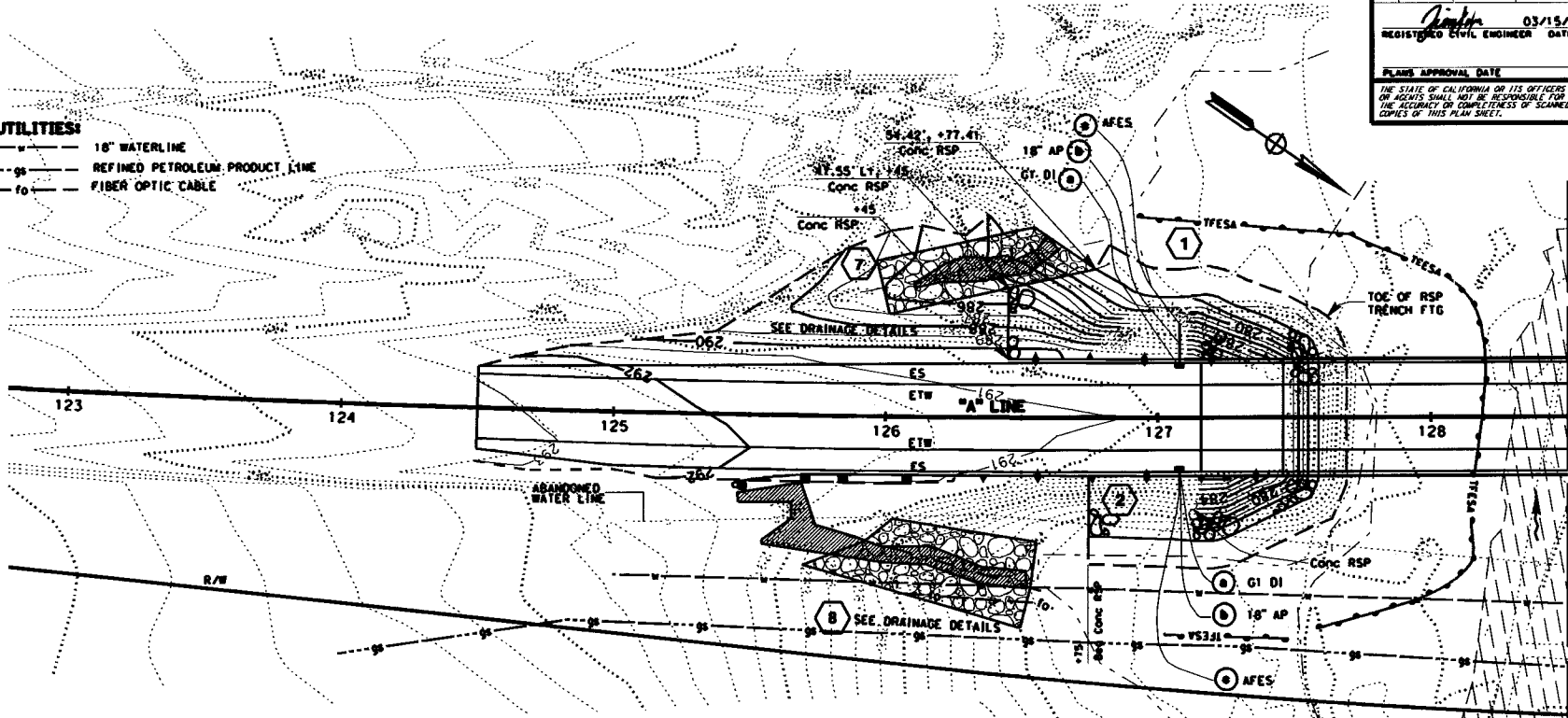
FOR COMPLETE RIGHT OF WAY, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

Dist#	COUNTY#	ROUTE	POST MILE TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	111	1.5		

REGISTERED CIVIL ENGINEER *Jiam Lam* DATE 03/15/13
 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.

REGISTERED PROFESSIONAL ENGINEER
 JIAM LAM
 (C6398)
 09/30/14
 CIVIL
 STATE OF CALIFORNIA

- UTILITIES:**
- 18" WATERLINE
 - - 96 REFINED PETROLEUM PRODUCT LINE
 - 0 FIBER OPTIC CABLE



MATCH LINE (SEE SHEET D-2)

REVISIONS:
 REVISED BY: JIAM LAM (03/13) DATE: 03/15/13
 DESIGNED BY: GEORGE MORRIS
 CHECKED BY:
 CALCULATED BY:
 FUNCTIONAL SUPERVISOR: GEORGE MORRIS
 DESIGN C

NOTES:

1. THE CONTOUR GRADING SHOWN IS BEFORE PLACING RSP.
2. THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES AT ESA AREA. ESA FENCES SHOWN ARE FOR INFO ONLY. ESA FENCE SHALL BE PLACED AT DIFFERENT Const STAGES PER RESIDENT ENGINEER'S INSTRUCTIONS.
3. THE CONTRACTOR SHALL LIMIT DISTURBANCE TO THE AREA WITHIN FEDERAL AND STATE NON-WETLAND WATERS.
4. SEE DRAINAGE DETAIL SHEET FOR RSP DETAILS.
5. RSP 3' AROUND THE DRAINAGE PIPE SHALL BE PLACED BY METHOD A. THE OTHER AREA SHALL BE PLACED BY METHOD B.

LEGEND:

- NO. DRAINAGE SYSTEM NUMBER
- DRAINAGE ITEM
- ROCK SLOPE PROTECTION
- ENVIRONMENTALLY SENSITIVE AREA (ESA)
- FEDERAL AND STATE WETLAND WATERS LIMIT
- FEDERAL NON-WETLAND LAND WATERS
- STATE NON-WETLAND WATERS
- TFESA - Temp FENCE (TYPE ESA)

ABBREVIATION:

Conc RSP - CONCRETED RSP (LIGHT GLASS)

DRAINAGE PLAN

SCALE: 1"=20' D-1

THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY.

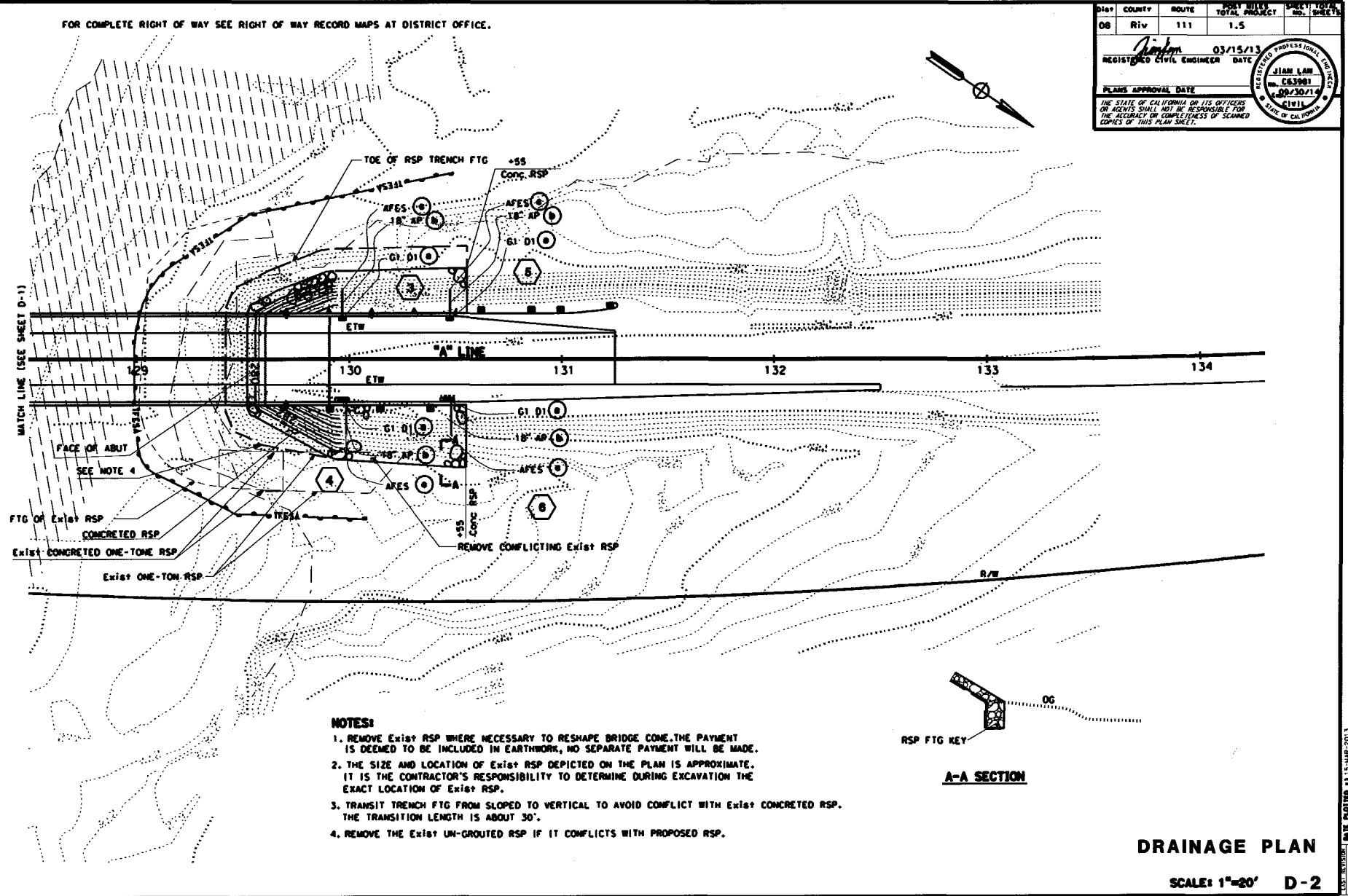


FOR COMPLETE RIGHT OF WAY SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	111	1.5		

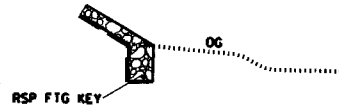
REGISTERED CIVIL ENGINEER DATE: 03/15/13
 PLANS APPROVAL DATE: 03/15/13
 REGISTERED PROFESSIONAL SEAL: JIAM LAM, C.E. 33981, 09/30/14, CIVIL, STATE OF CALIFORNIA
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REVISIONS:
 REVISED BY: JIAM LAM (S) LAM
 DATE REVISED: GEORGE MORRIS
 CALCULATED BY: GEORGE MORRIS
 DESIGNED BY: GEORGE MORRIS
 FUNCTIONAL SUPERVISOR: GEORGE MORRIS
 DESIGN C



NOTES:

1. REMOVE EXIST RSP WHERE NECESSARY TO RESHAPE BRIDGE CONE. THE PAYMENT IS DEEMED TO BE INCLUDED IN EARTHWORK, NO SEPARATE PAYMENT WILL BE MADE.
2. THE SIZE AND LOCATION OF EXIST RSP DEPICTED ON THE PLAN IS APPROXIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE DURING EXCAVATION THE EXACT LOCATION OF EXIST RSP.
3. TRANSIT TRENCH FTG FROM SLOPED TO VERTICAL TO AVOID CONFLICT WITH EXIST CONCRETED RSP. THE TRANSITION LENGTH IS ABOUT 30'.
4. REMOVE THE EXIST UN-GROUTED RSP IF IT CONFLICTS WITH PROPOSED RSP.



A-A SECTION

DRAINAGE PLAN

SCALE: 1"=20' D-2

BORDER LAST REVISED 7/2/2010

USERNAME: #9102458
 DGN FILE: #9 08000071410002.dgn

RELATIVE BORDER SCALE 15 IN INCHES
 0 1 2 3

UNIT 2231

PROJECT NUMBER & PHASE

08000007141

DATE PLOTTED: 15-MAR-2013
 TIME PLOTTED: 11:25