

INDEX OF PLANS

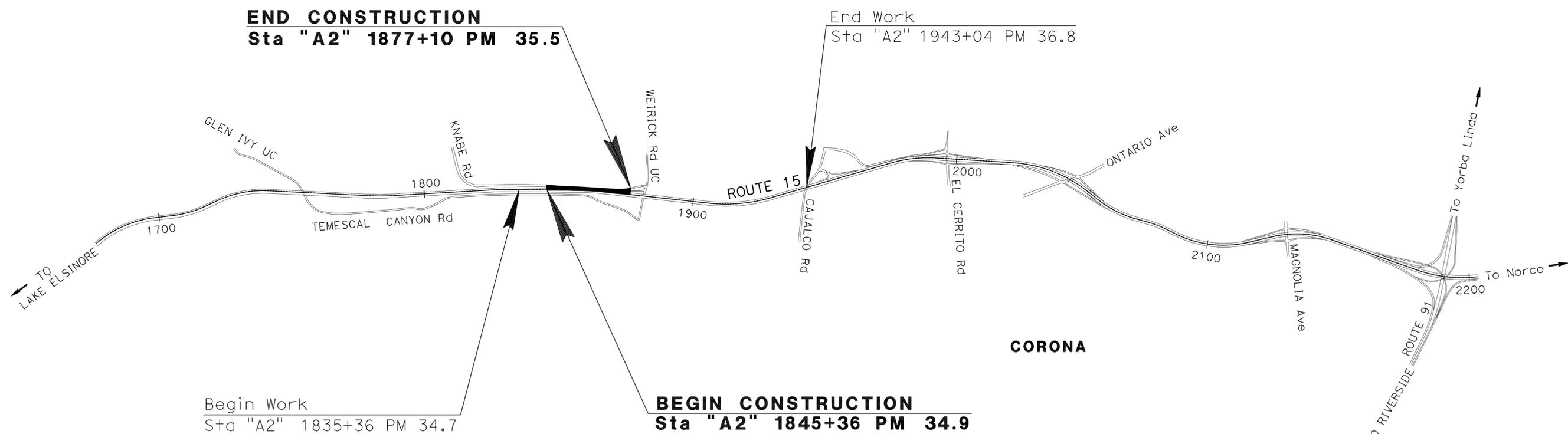
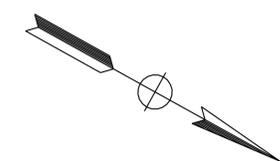
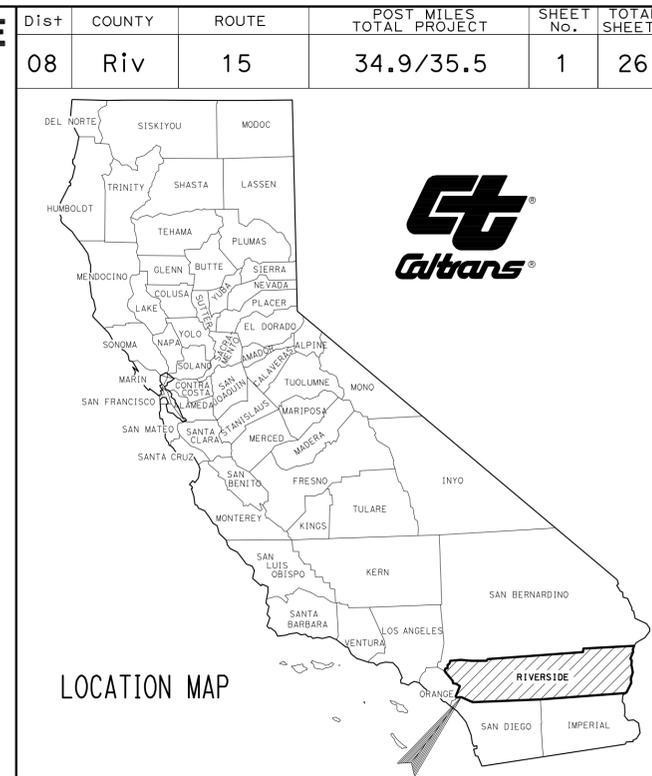
SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTIONS
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9-11	EROSION CONTROL PLAN
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20-26	REVISED AND NEW STANDARD PLANS

THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA **ACHSIMG-015-5(156)89E**  
**DEPARTMENT OF TRANSPORTATION**

**PROJECT PLANS FOR CONSTRUCTION ON  
 STATE HIGHWAY  
 IN RIVERSIDE COUNTY  
 NEAR CORONA**  
**FROM 1.4 MILES NORTH OF GLEN IVY UNDERCROSSING  
 TO 0.1 MILE SOUTH OF WEIRICK ROAD UNDERCROSSING**

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



PROJECT MANAGER  
 ALI HADAVI  
 DESIGN ENGINEER  
 KENT NGUYEN

PROJECT ENGINEER  
 REGISTERED CIVIL ENGINEER  
 DATE 4-25-12  
 AWAIS SHEIKH  
 No. 65531  
 Exp. 9-30-13  
 CIVIL  
 STATE OF CALIFORNIA  
 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.

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

NO SCALE

CONTRACT No.	<b>08-0N2604</b>
PROJECT ID	<b>0800000518</b>

DATE PLOTTED => 25-APR-2012 TIME PLOTTED => 08:11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	34.9/35.5	2	26

REGISTERED CIVIL ENGINEER	DATE	4-25-12
PLANS APPROVAL DATE		4-30-12

REGISTERED PROFESSIONAL ENGINEER	No.	65531
	Exp.	9-30-13
CIVIL		

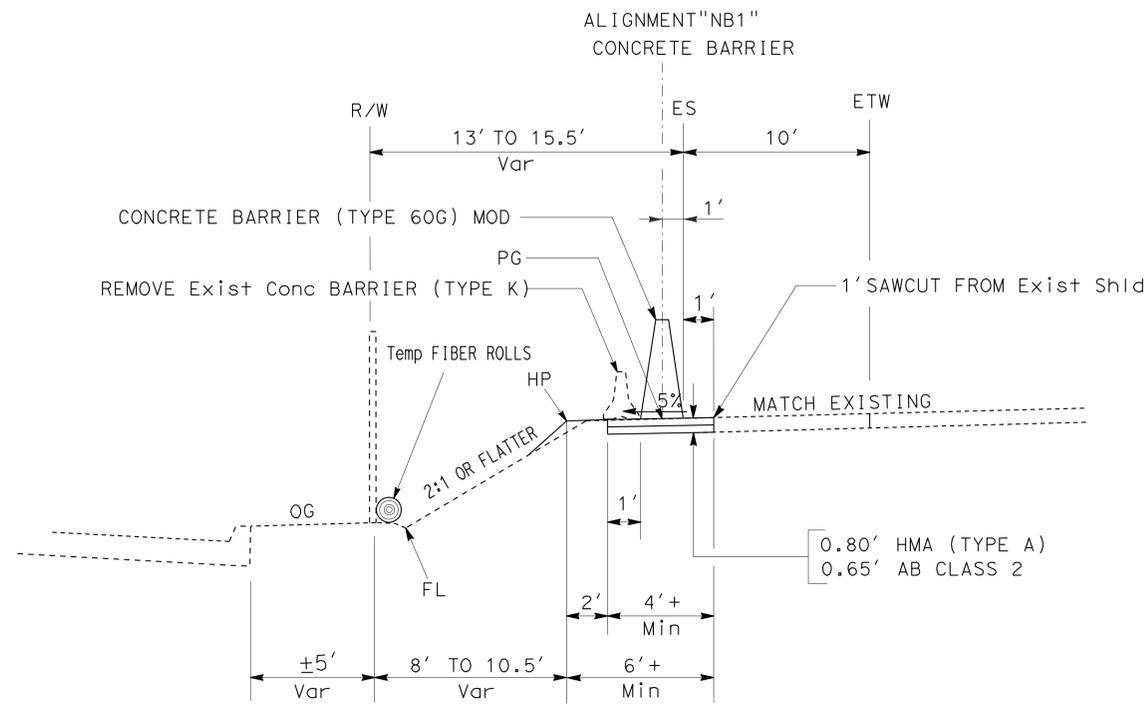
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**NOTE:**

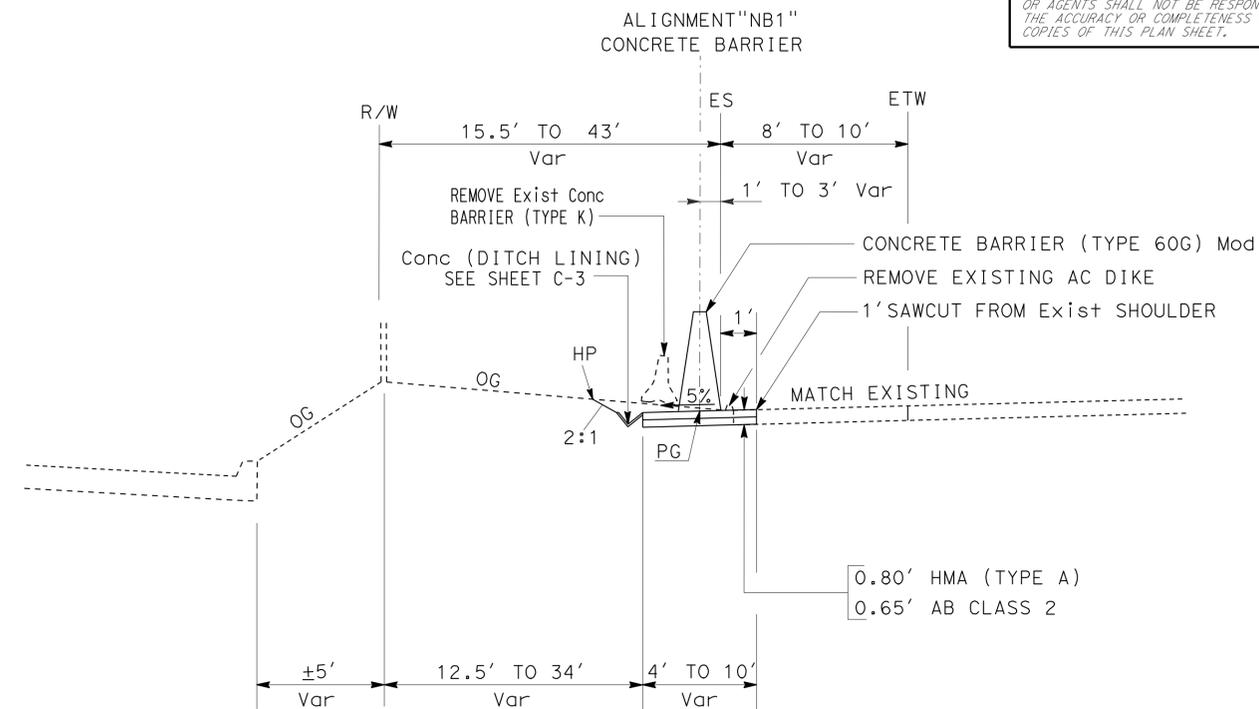
1. DIMENSION OF THE PAVEMENT STRUCTURES ( STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.

**DESIGN DESIGNATION:**

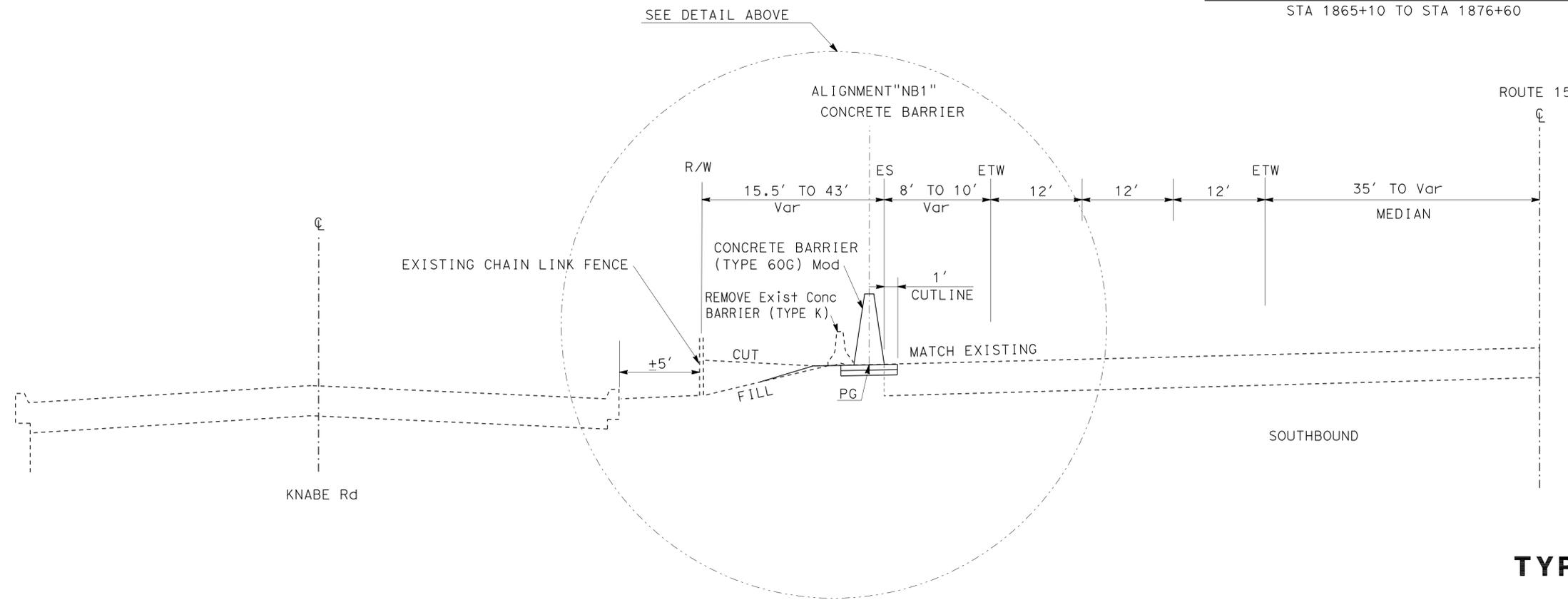
2010 ADT = 57,500 D=8%  
 2032 ADT = 107,900 D=8%  
 DHV = 7,530 V=70 MPH



**DETAIL FOR FILL SECTION**  
 STA 1845+36.00 TO STA 1865+10



**DETAIL FOR CUT SECTION**  
 STA 1865+10 TO STA 1876+60

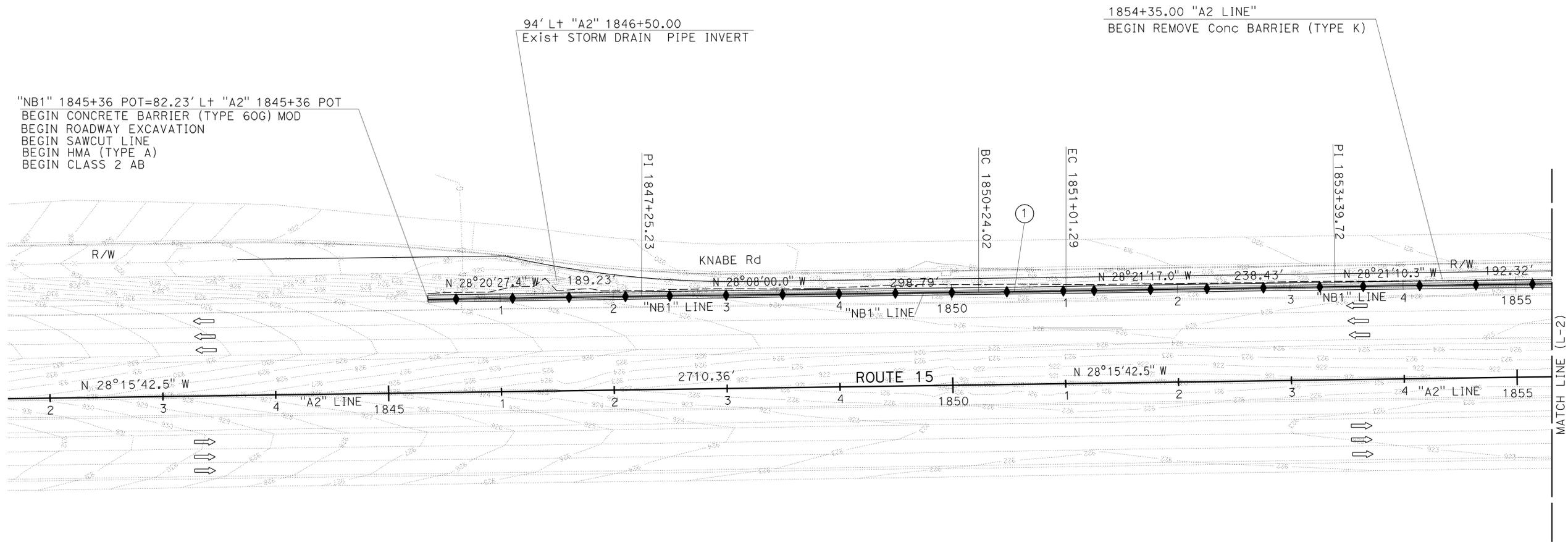
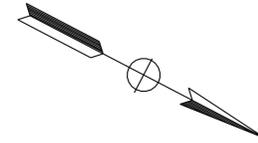


**TYPICAL CROSS SECTIONS**  
 NO SCALE  
 X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC OPERATION  
 BEHZAD SEDIGHI  
 KENT NGUYEN  
 AWAIS SHEIKH  
 REVISOR BY DATE  
 CALCULATED/DESIGNED BY CHECKED BY  
 FUNCTIONAL SUPERVISOR

**NOTE:**

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- CONTRACTOR NEED TO LOCATE SCUPPERS AT LOW POINTS



CURVE DATA "NB1" LINE

No. Ⓢ	R	Δ	T	L
1	20,000	0°13'17"	38.638'	77.276'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC OPERATION  
 FUNCTIONAL SUPERVISOR: BEHZAD SEDIGHI  
 CALCULATED/DESIGNED BY: KENT NGUYEN  
 CHECKED BY: AWAIS SHEIKH  
 REVISED BY: DATE  
 REVISIONS:

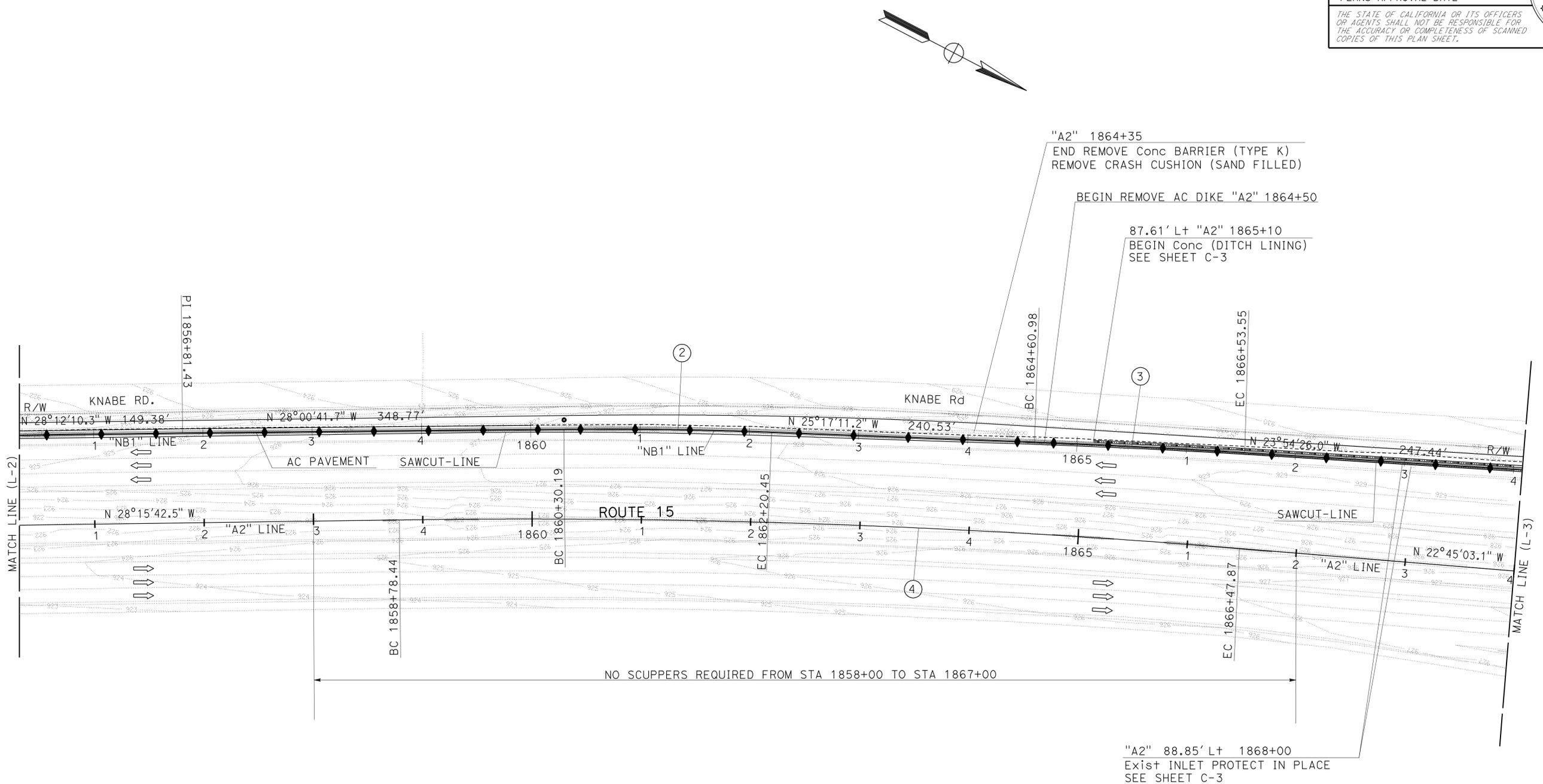
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	34.9/35.5	4	26

4-25-12  
 REGISTERED CIVIL ENGINEER DATE  
 4-30-12  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
**AWAIS SHEIKH**  
 No. 65531  
 Exp. 9-30-13  
 CIVIL  
 STATE OF CALIFORNIA

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**NOTE:**  
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



CURVE DATA "NB1 & A2" LINE

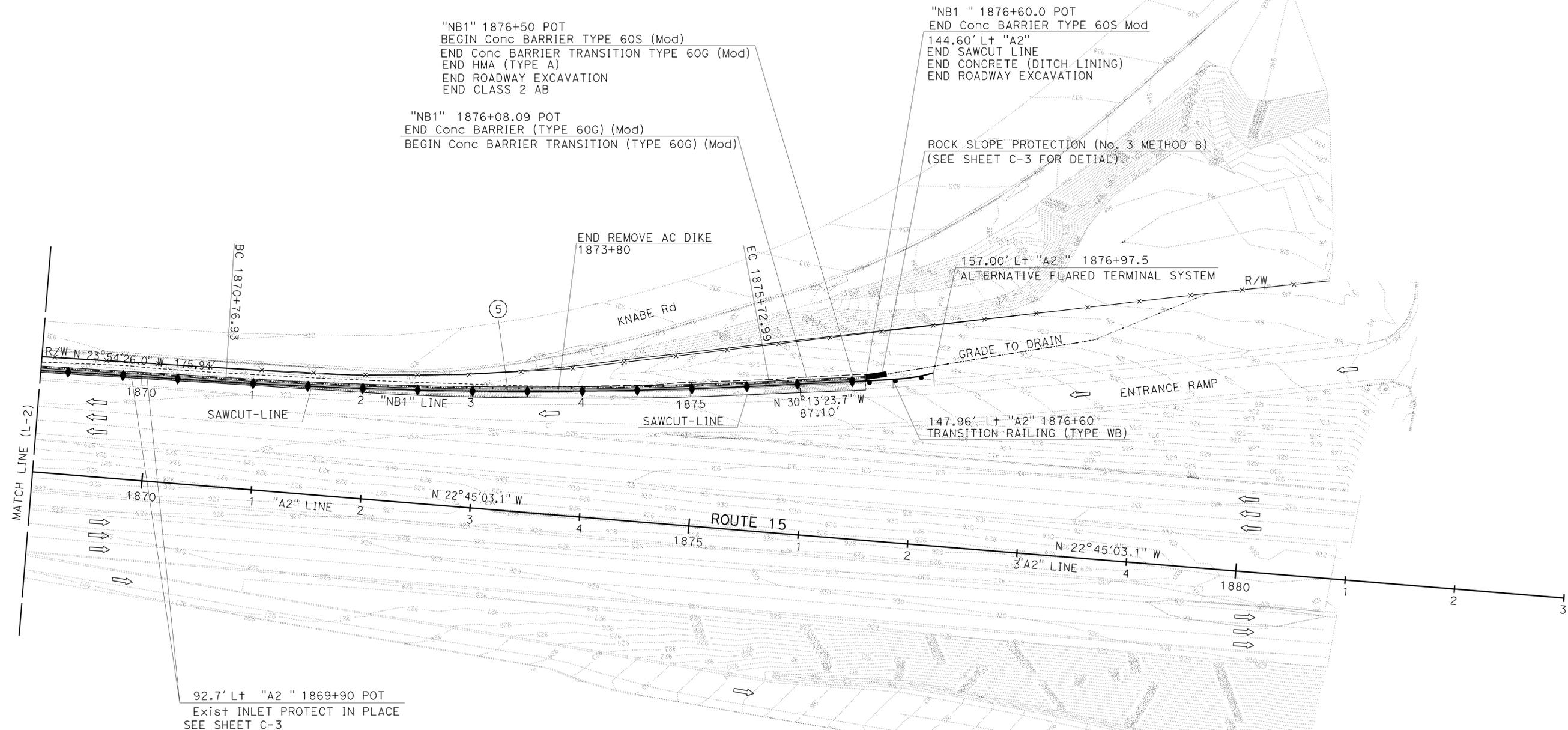
No. ①	R	Δ	T	L
2	4000'	2°43'30.5"	95.144'	190.252'
3	8000'	1°22'45"	96.291	192.573'
4	7999.587'	5°30'39.4"	385.013'	769.432'

**LAYOUT**  
 SCALE: 1"=50'  
**L-2**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC OPERATION  
 BEHZAD SEDIGHI  
 FUNCTIONAL SUPERVISOR  
 CHECKED BY  
 KENT NGUYEN  
 AWAIS SHEIKH  
 REVISOR BY  
 DATE REVISOR

**NOTE:**

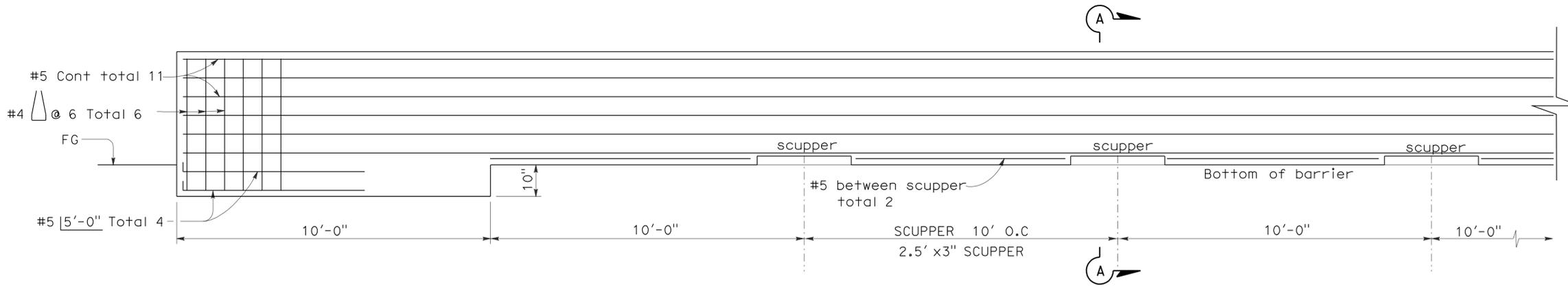
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



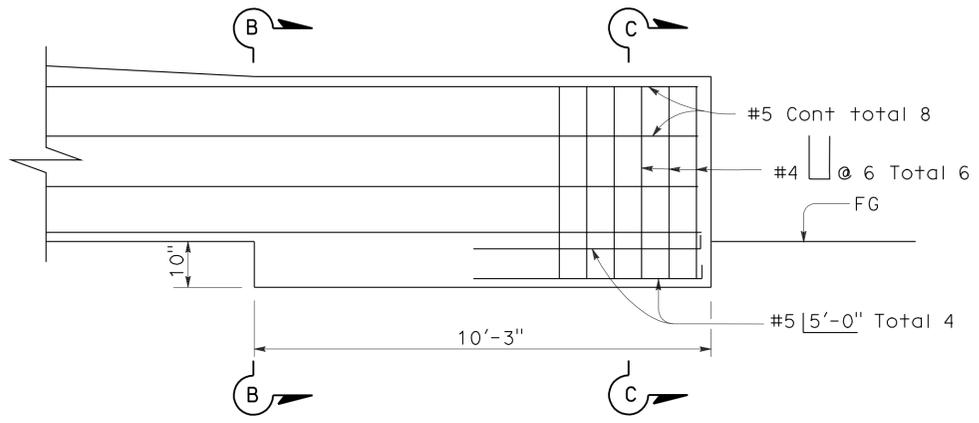
CURVE DATA "NB1" LINE

No. Ⓢ	R	Δ	T	L
5	4500'	-6°18'57.6"	248.281'	496.058'

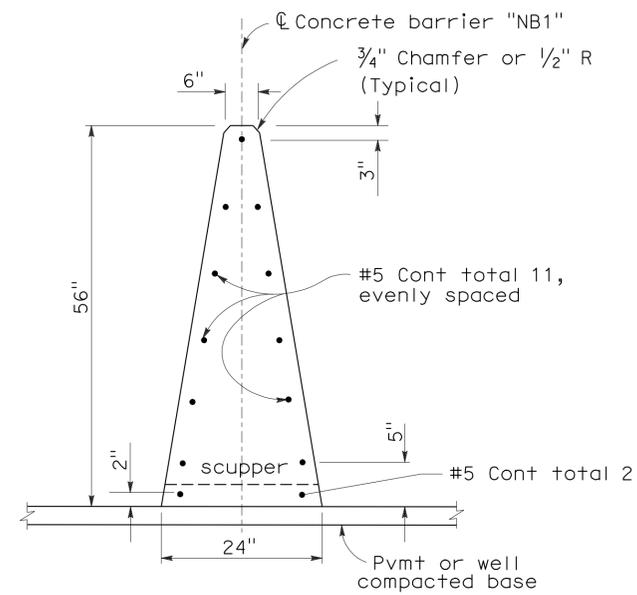
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	34.9/35.5	6	26
 REGISTERED CIVIL ENGINEER			4-25-12 DATE		
4-30-12 PLANS APPROVAL DATE			No. 65531 Exp. 9-30-13 CIVIL		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



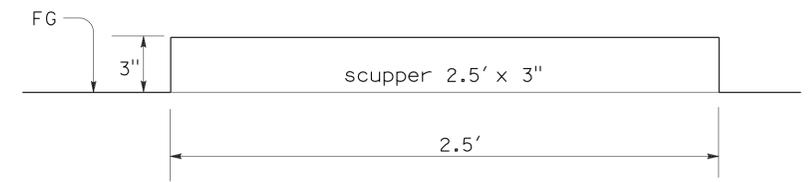
**CONCRETE BARRIER TYPE 60G (Mod) END ANCHORAGE**



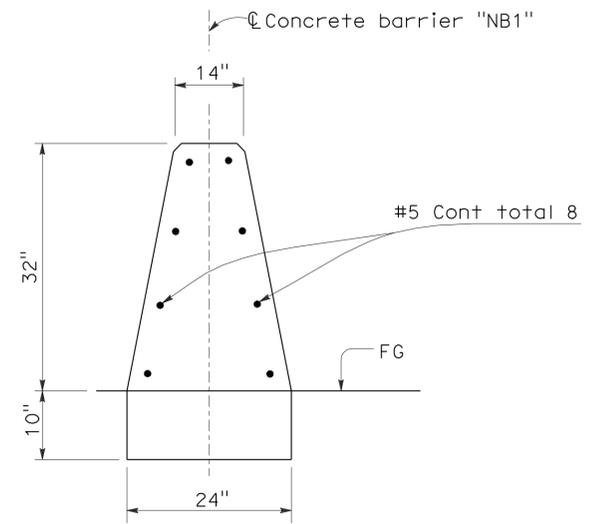
**Exist CONCRETE BARRIER TYPE 60S (Mod) TO VERTICAL END ANCHORAGE**



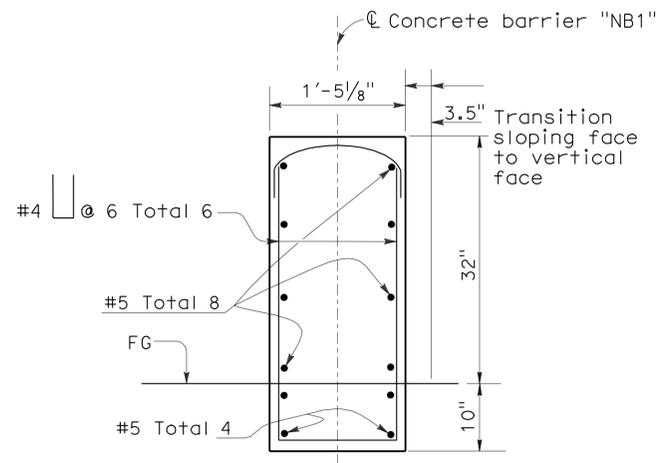
**SECTION A-A  
TYPE 60G Mod**



**SCUPPER DETAIL**



**SECTION B-B  
TYPE 60S Mod**



**SECTION C-C  
VERTICAL FACE**

**NOTES:**

- SEE STANDARD PLAN A76G AND A76H FOR CONCRETE BARRIER TYPE 60G AND TYPE 60S.
- 10" X10' CONCRETE BARRIER FOOTING FOR BEGIN, END AND EVERY 250 FEET SECTIONS.
- CONSTRUCT THE SCUPPER 2.5'X3" AT 10' CENTER TO CENTER AND IGNORE THE FOOTING SECTIONS.

**CONSTRUCTION DETAILS  
NO SCALE  
C-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC OPERATION  
 FUNCTIONAL SUPERVISOR: BEHZAD SEDIGHI  
 CALCULATED/DESIGNED BY: KENT NGUYEN  
 CHECKED BY: AWAIS SHEIKH  
 REVISED BY: DATE REVISION

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	34.9/35.5	7	26

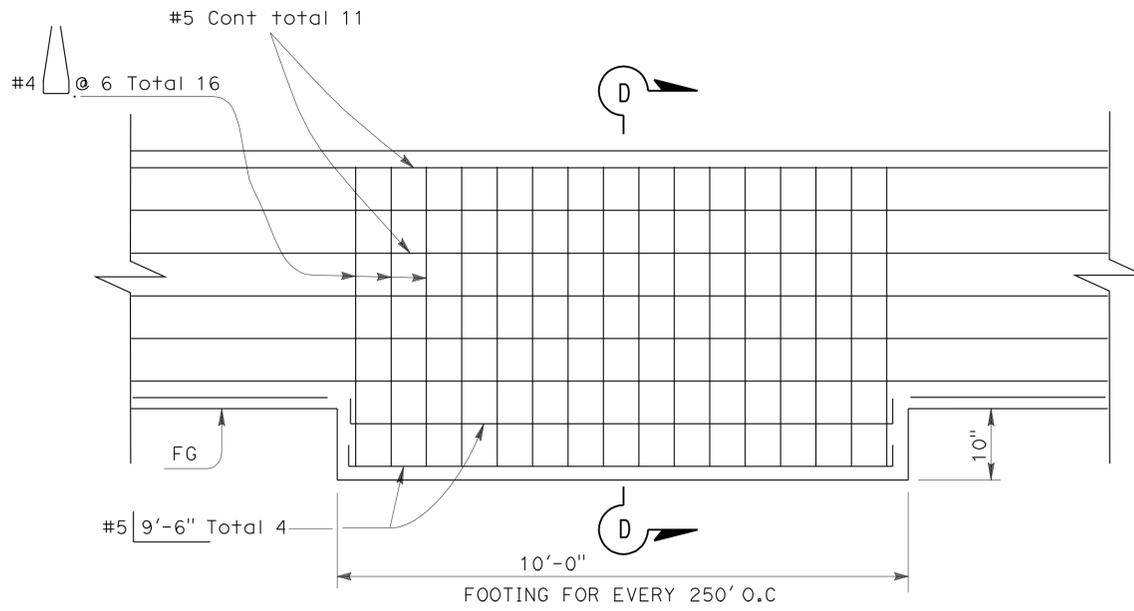
  

REGISTERED CIVIL ENGINEER	DATE
<i>[Signature]</i>	4-25-12
PLANS APPROVAL DATE	
	4-30-12

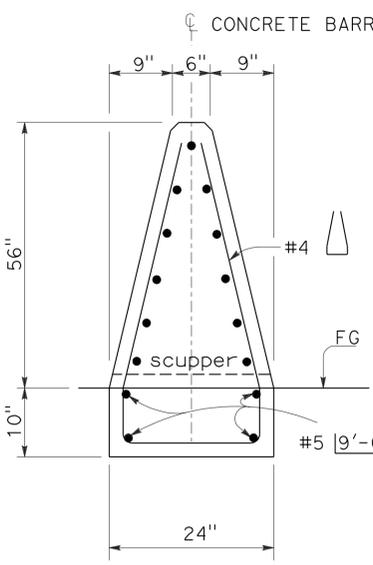
  

REGISTERED PROFESSIONAL ENGINEER	No.	65531
	Exp.	9-30-13
	CIVIL	

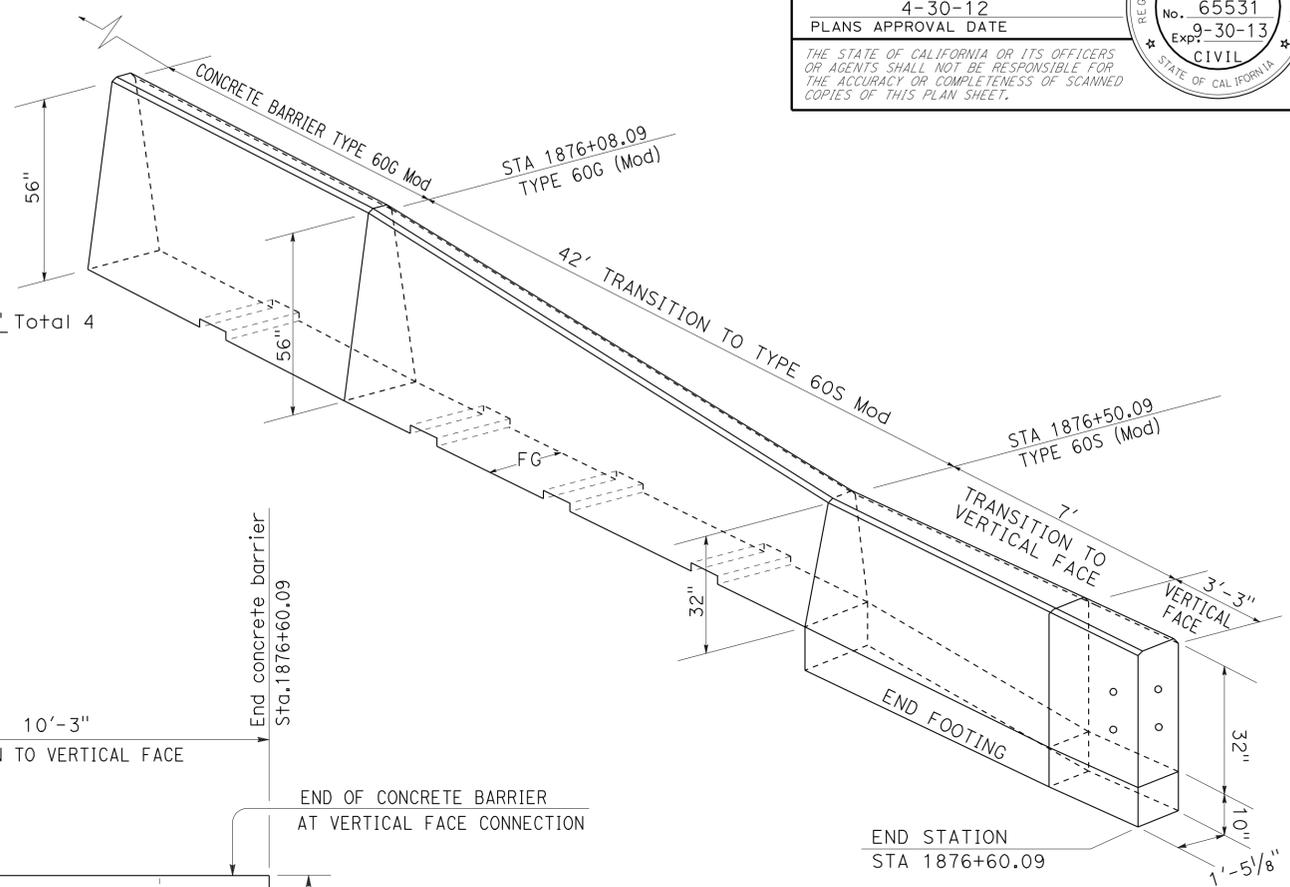
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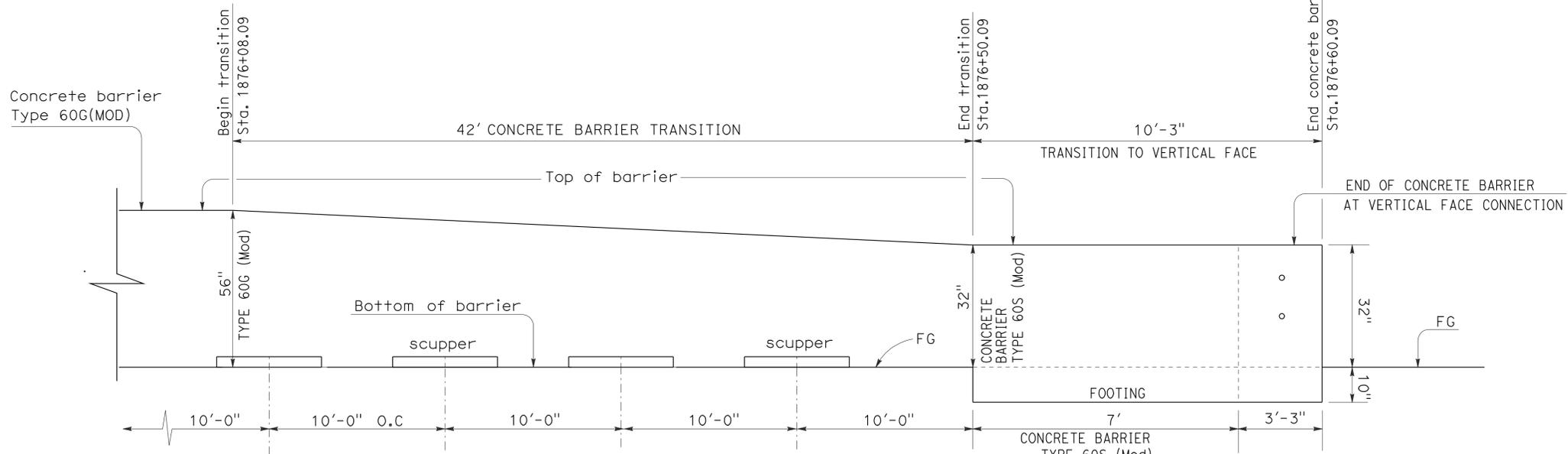
**CONCRETE BARRIER TYPE 60G MODIFIED MIDDLE SECTION FOOTING @ 250 FT, O.C**



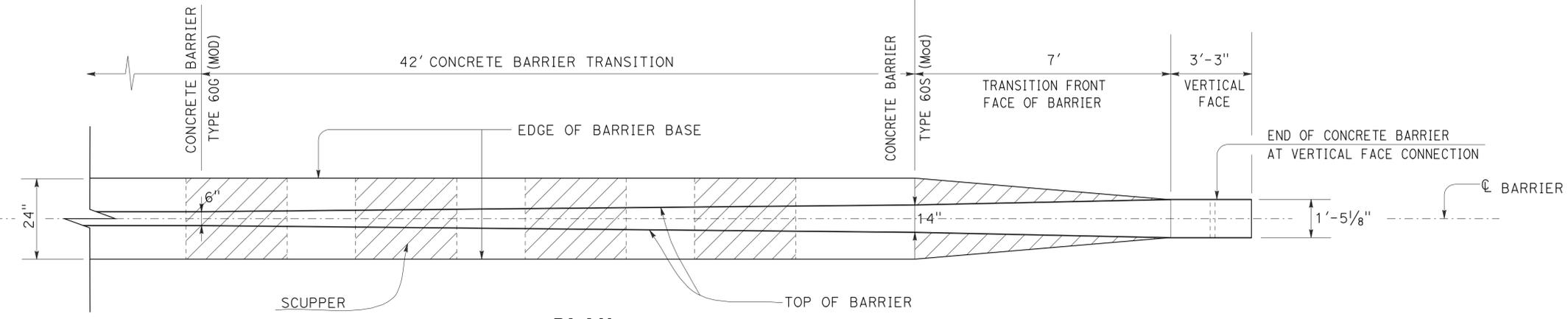
**SECTION D-D TYPE 60G Mod**



**ISOMETRIC SECTION VIEW**



**ELEVATION**



**PLAN**

**TRANSITION CONCRETE BARRIER TYPE 60G (Mod) TO CONCRETE BARRIER TYPE 60S (Mod)**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC OPERATION  
 FUNCTIONAL SUPERVISOR: BEHZAD SEDIGHI  
 CALCULATED/DESIGNED BY: KENT NGUYEN  
 CHECKED BY: AWAIS SHEIKH  
 REVISED BY: DATE REVISION  
 REVISIONS: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

USERNAME => s102458  
 DGN FILE => 80n260ga002.dgn



UNIT 2294

PROJECT NUMBER & PHASE

08000005181

**CONSTRUCTION DETAILS**  
 NO SCALE  
**C-2**

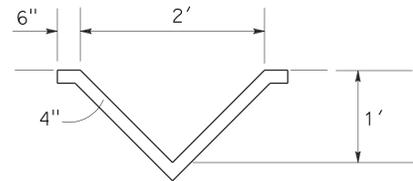
LAST REVISION DATE PLOTTED => 25-APR-2012  
 04-25-12 TIME PLOTTED => 08:11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	34.9/35.5	8	26

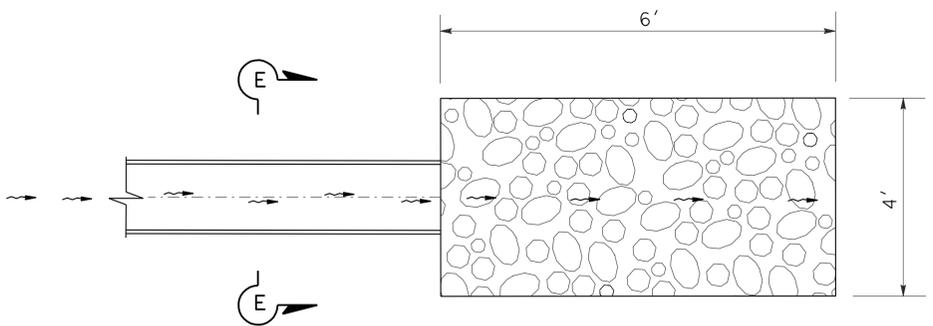
4-25-12  
 REGISTERED CIVIL ENGINEER DATE  
 4-30-12  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
**AWAIS SHEIKH**  
 No. 65531  
 Exp. 9-30-13  
 CIVIL  
 STATE OF CALIFORNIA

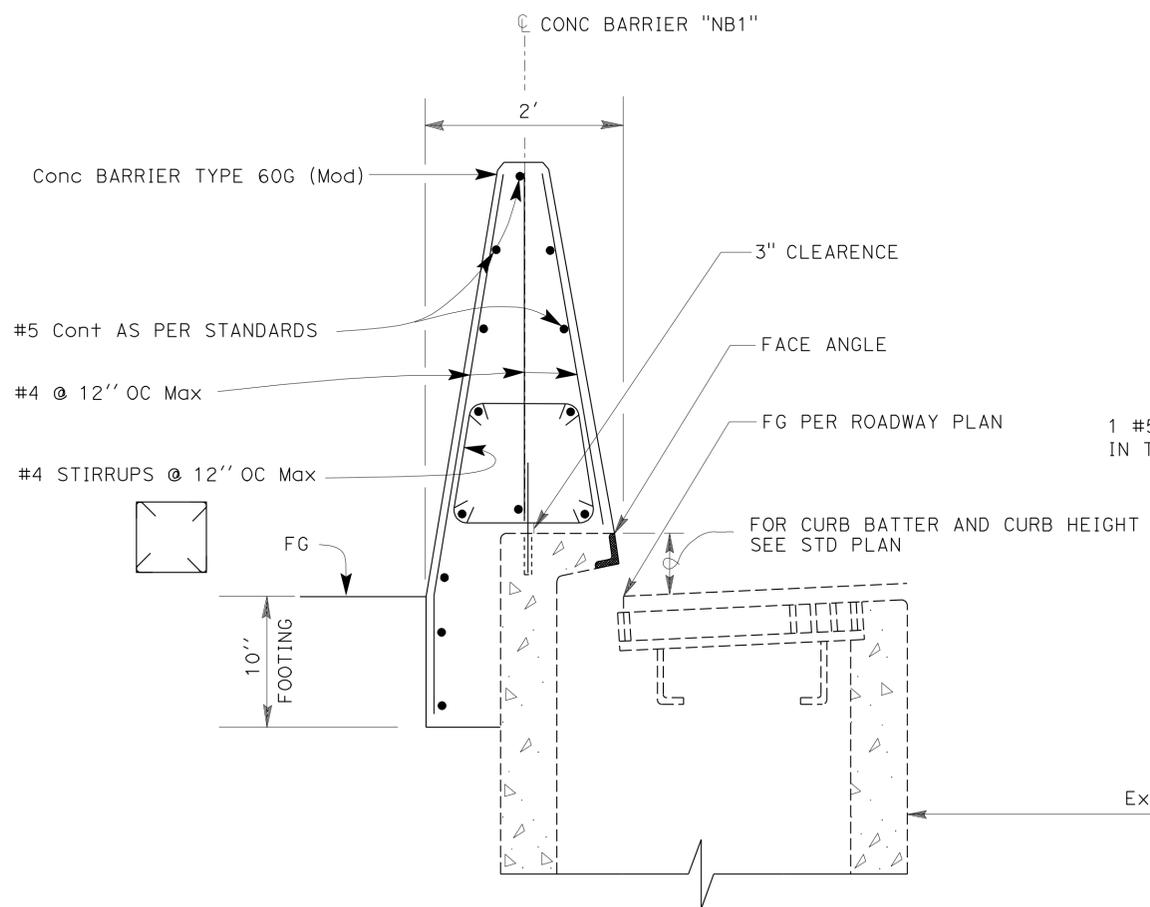
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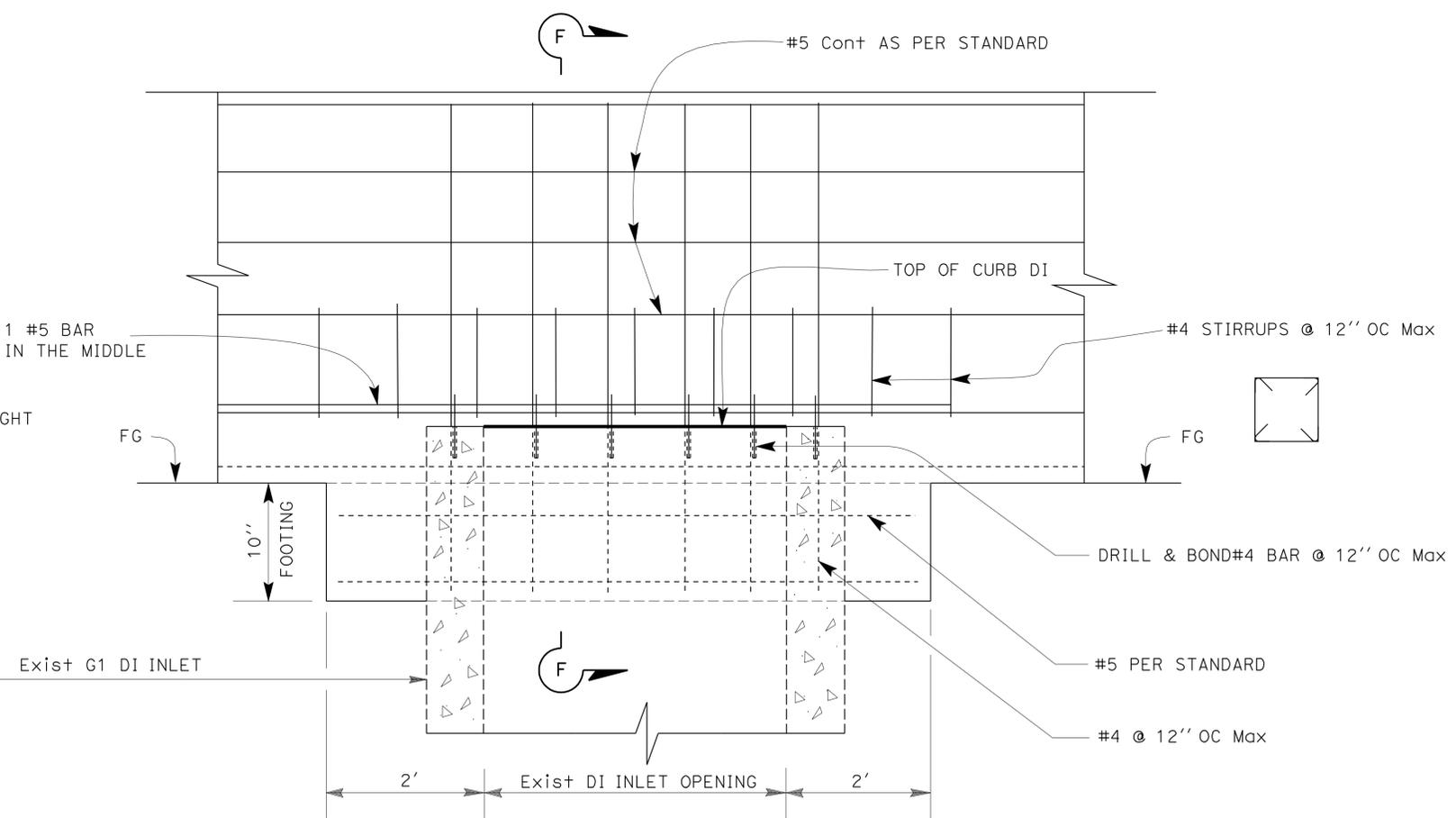
**SECTION E-E**  
CONCRETE (DITCH LINING)



**ROCK SLOPE PROTECTION #3, METHOD B**  
4' x 6' x 10"



**SECTION F-F @ DI OPENING**



**PROFILE @ DI OPENING**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC OPERATION  
 FUNCTIONAL SUPERVISOR: BEHZAD SEDIGHI  
 CALCULATED/DESIGNED BY: KENT NGUYEN  
 CHECKED BY: AWAIS SHEIKH  
 REVISED BY: DATE  
 REVISIONS:

**CONSTRUCTION DETAILS**  
NO SCALE  
**C-3**

LAST REVISION | DATE PLOTTED => 25-APR-2012  
 04-25-12 TIME PLOTTED => 08:11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	34.9/35.5	9	26

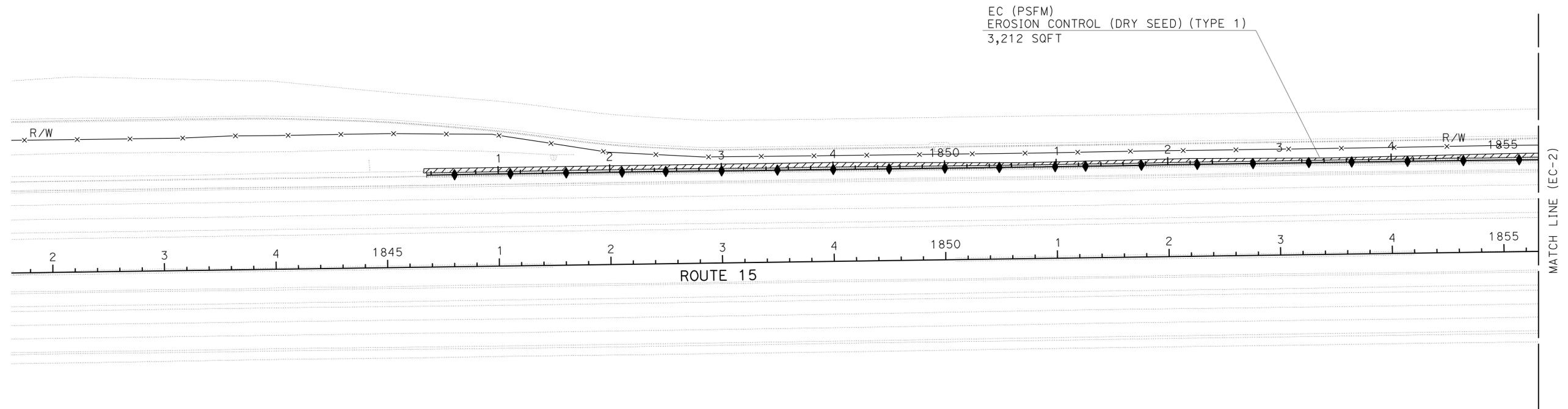
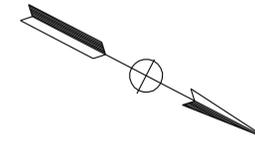
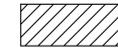
Signature: *Matthew A. Hall*  
 LICENSED LANDSCAPE ARCHITECT  
 4-30-12  
 PLANS APPROVAL DATE  
 10/31/2013  
 Signature: *Matthew A. Hall*  
 Renewal Date: 4-25-12  
 State of California  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**NOTE:**

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

**ABBREVIATION:**

EC (PSFM) EROSION CONTROL (POLYMER STABILIZING FIBER MATRIX)



**EROSION CONTROL QUANTITIES**

LOCATION	DRY SEED	POLYMER STABILIZED FIBER MATRIX	MOVE- IN/ MOVE- OUT (EROSION CONTROL)
	(SQFT)	(SQFT)	EA
ADJACENT TO ROUTE 15 STATION 1,845+36 TO 1,876+61	28,896	28,896	1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - LANDSCAPE ARCHITECTURE  
 Lorena Salvador  
 Matthew Hall  
 Byron Strout

APPROVED FOR EROSION CONTROL WORK ONLY

**EROSION CONTROL PLAN**  
 SCALE: 1" = 50'  
**EC-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	34.9/35.5	10	26

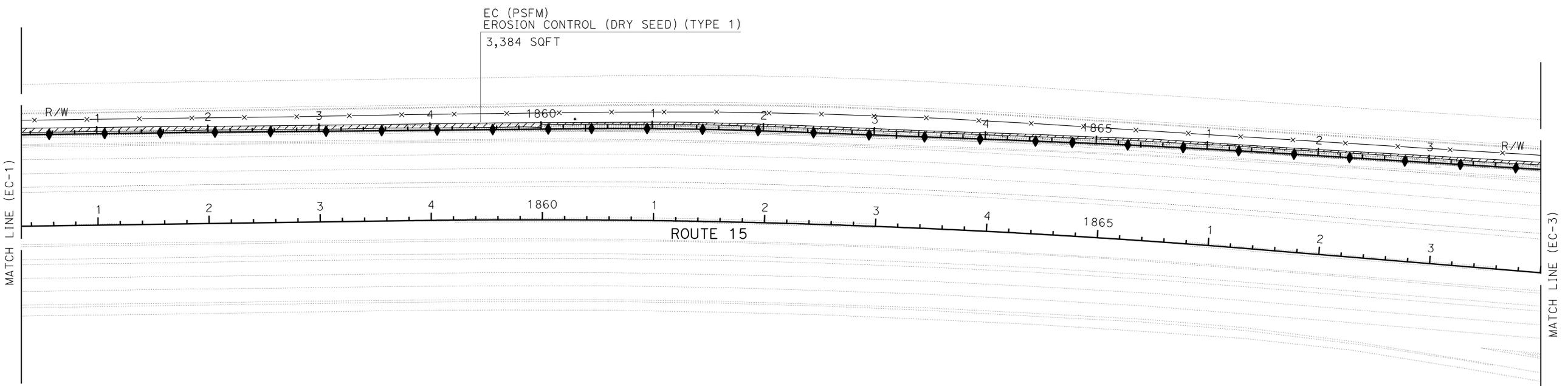
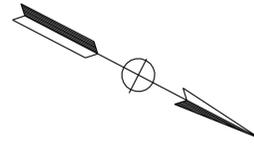
*Matthew A. Hall*  
 LICENSED LANDSCAPE ARCHITECT  
 4-30-12  
 PLANS APPROVAL DATE

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LICENSED LANDSCAPE ARCHITECT  
 SIGNATURE: *Matthew A. Hall*  
 10/31/2013  
 Renewal Date: 4-25-12  
 date  
 STATE OF CALIFORNIA

**NOTE:**

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	LORENA SALVADOR	REVISOR	DATE
Caltrans®	MATTHEW HALL	DESIGNER	DATE
LANDSCAPE ARCHITECTURE	BYRON STROUT	CHECKED BY	DATE
SENIOR LANDSCAPE ARCHITECT		DESIGNED BY	DATE

**EROSION CONTROL PLAN**  
 SCALE: 1" = 50'  
**EC-2**

APPROVED FOR EROSION CONTROL WORK ONLY

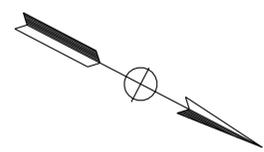
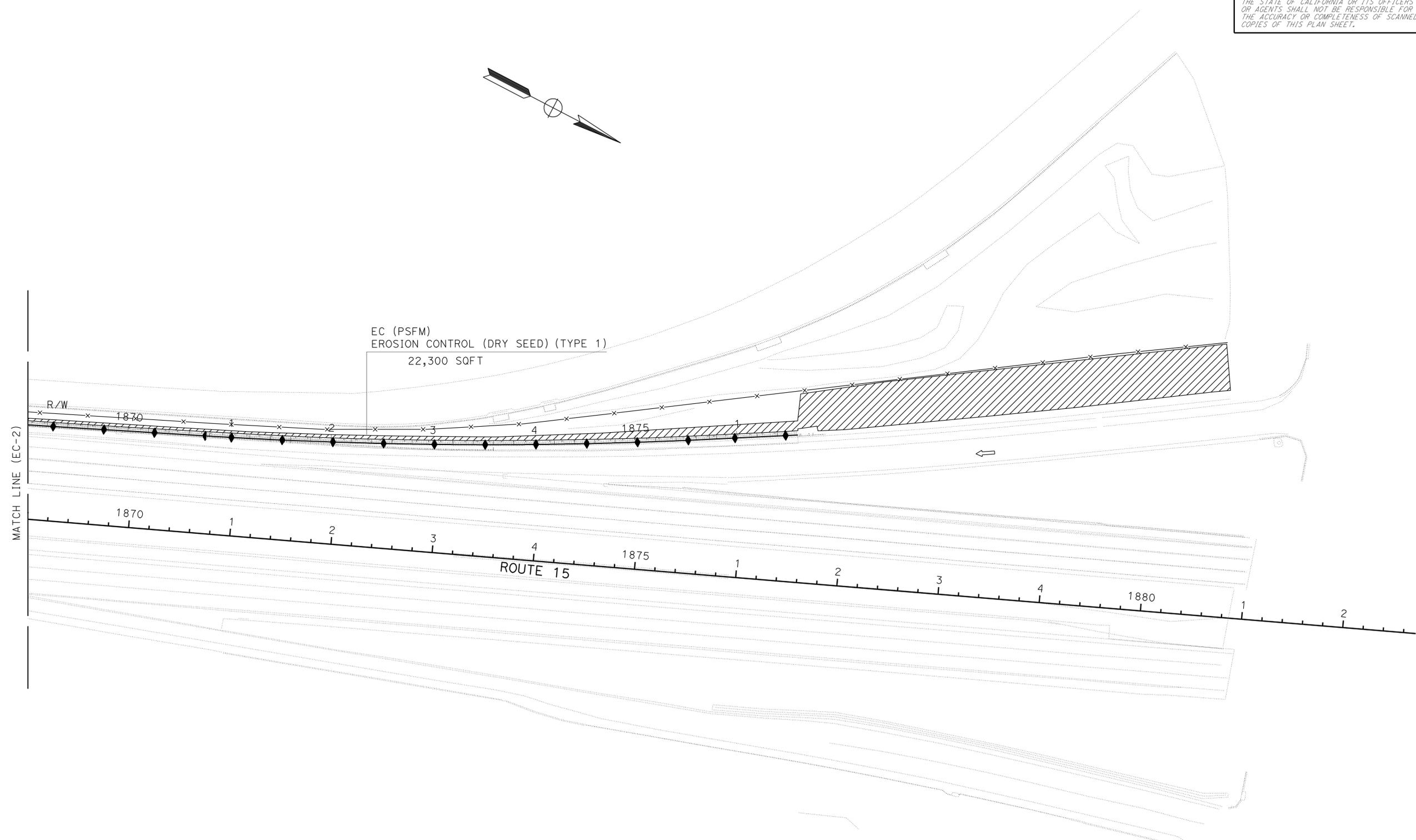
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	34.9/35.5	11	26

*Matthew Hall*  
 LICENSED LANDSCAPE ARCHITECT  
 4-30-12  
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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	LORENA SALVADOR	REVISOR BY	
<b>Caltrans</b>	MATTHEW HALL	DATE REVISOR	
LANDSCAPE ARCHITECTURE			
SENIOR LANDSCAPE ARCHITECT	BYRON STROUT	CALCULATED/DESIGNED BY	CHECKED BY



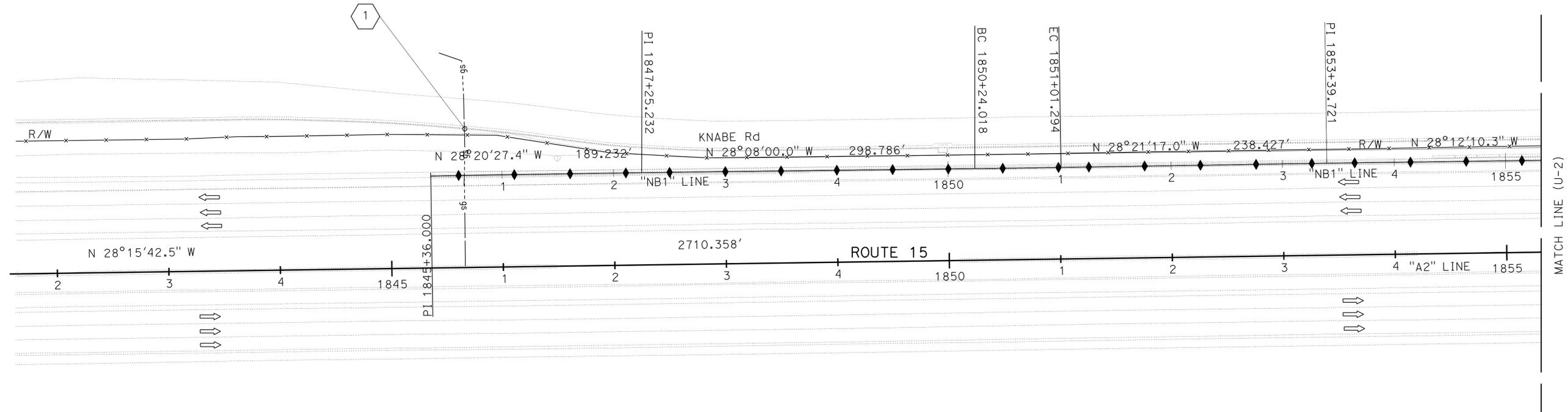
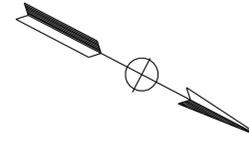
**EROSION CONTROL PLAN**  
 SCALE: 1" = 50'  
**EC-3**

APPROVED FOR EROSION CONTROL WORK ONLY

LAST REVISION     
 DATE PLOTTED => 25-APR-2012     
 04-25-12     
 TIME PLOTTED => 08:11

**NOTE:**

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. ALL ELEVATIONS SHOWN REFER TO GROUND ELEVATION, AND DEPTH FROM GROUND TO TOP OF THE PIPE.
3. UTILITY OWNER: GAS- SOUTHWEST GAS COMPANY



**POTHOLE LOCATION TABLE**

No.	UTILITY	NORTHING	EASTING	GROUND ELEVATION	DEPTH
1	GAS LINE	2236266.989	6181129.706	921.32	5.40'

**UTILITY PLAN**

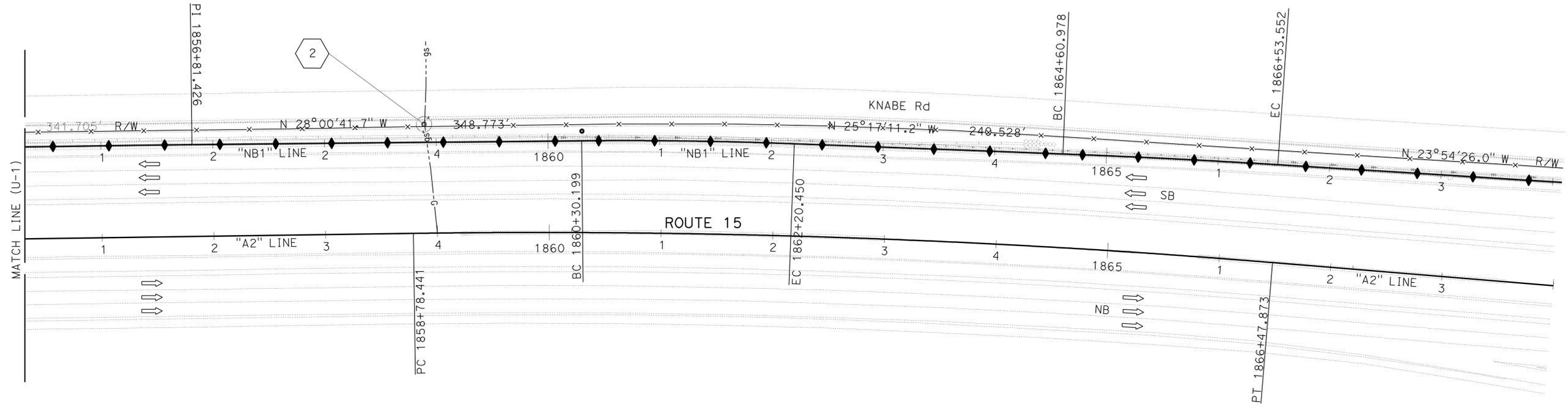
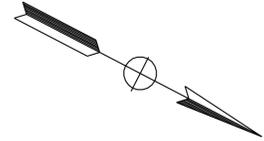
SCALE: 1"=50'

**U-1**

APPROVED FOR UTILITY INFORMATION ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC OPERATION  
 KENT NGUYEN  
 AWAIS SHEIKH  
 BEHZAD SEDIGHI

**NOTE:**  
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT  
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



**POTHOLE LOCATION TABLE**

No.	UTILITY	NORTHING	EASTING	GROUND ELEVATION	DEPTH
2	GAS LINE	2237444.746	6180527.930	924.88	5.67'

**UTILITY PLAN**  
 SCALE: 1"=50'

**U-2**

APPROVED FOR UTILITY INFORMATION ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC OPERATION  
 FUNCTIONAL SUPERVISOR: BEHZAD SEDIGHI  
 CALCULATED/DESIGNED BY: KENT NGUYEN  
 CHECKED BY: AWAIS SHEIKH  
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 REVISIONS:

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M.M. Kamgar *Mehdi M. Kamgar* 4-25-12  
REGISTERED CIVIL ENGINEER DATE

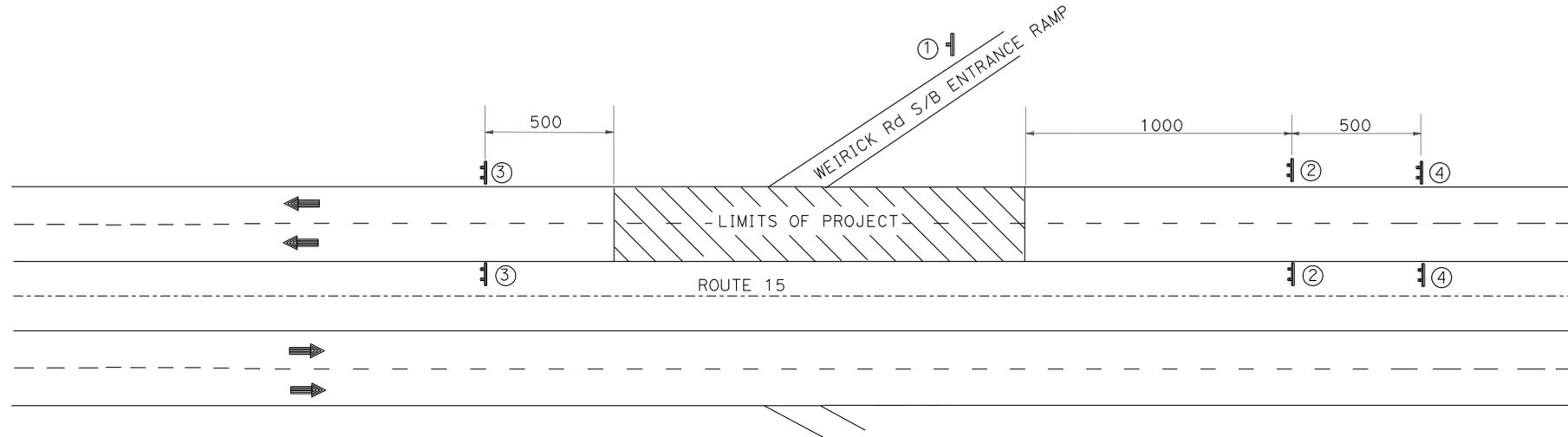
4-30-12  
PLANS APPROVAL DATE

MEHDI M. KAMGAR  
No. 58039  
Exp. 30-12  
CIVIL  
STATE OF CALIFORNIA

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**NOTES**

1. LOCATION OF CONSTRUCTION AREA SIGNS ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
2. SEE SHEET THQ-1 FOR ADDITIONAL CONSTRUCTION AREA SIGNS.



**TYPICAL INSTALLATION OF CONSTRUCTION AREA SIGNS**

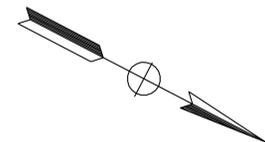
**CONSTRUCTION AREA SIGNS (STATIONARY MOUNTED)**

SIGN No. (X)	SIGN CODE		PANEL SIZE	SIGN MESSAGE	No. OF POSTS AND SIZE	NUMBER OF SIGNS
	FEDERAL	CALIFORNIA				
1	W20-1		36" x 36"	ROAD WORK AHEAD	1 - 4" x 6"	1
2	W20-1		48" x 48"	ROAD WORK AHEAD	1 - 4" x 6"	2
3	G20-2		48" x 48"	END ROADWORK	1 - 4" x 6"	2
4		C40(CA)	48" x 48"	TRAFFIC FINE DOUBLED IN CONSTRUCTION ZONE	1 - 4" x 6"	2

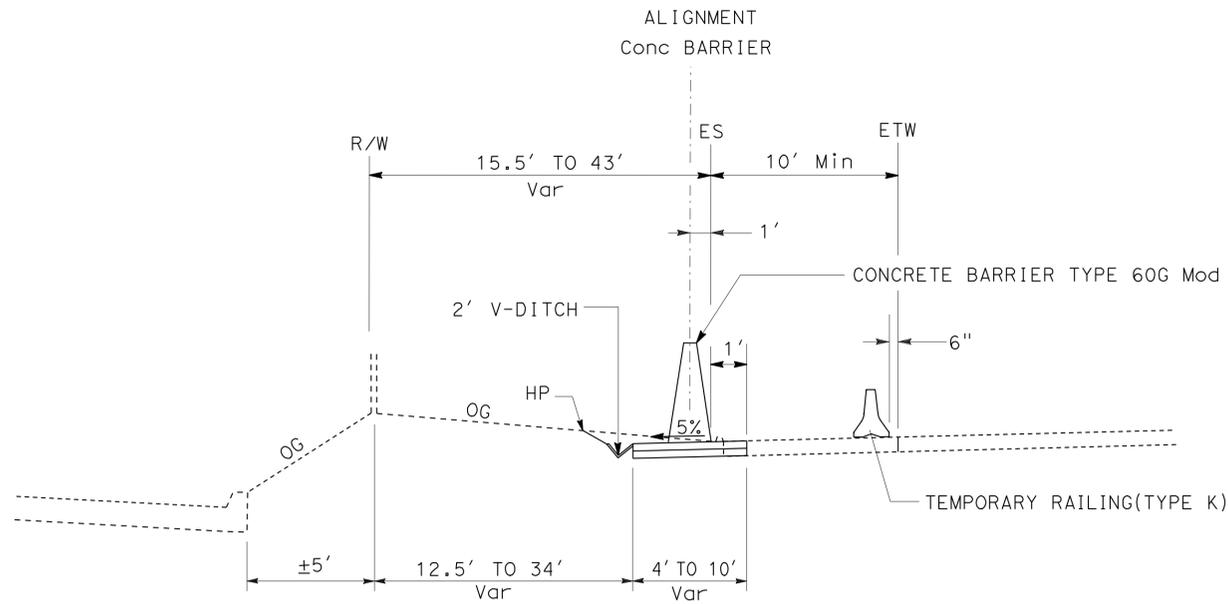
**CONSTRUCTION AREA SIGNS**  
NO SCALE  
**CS-1**

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

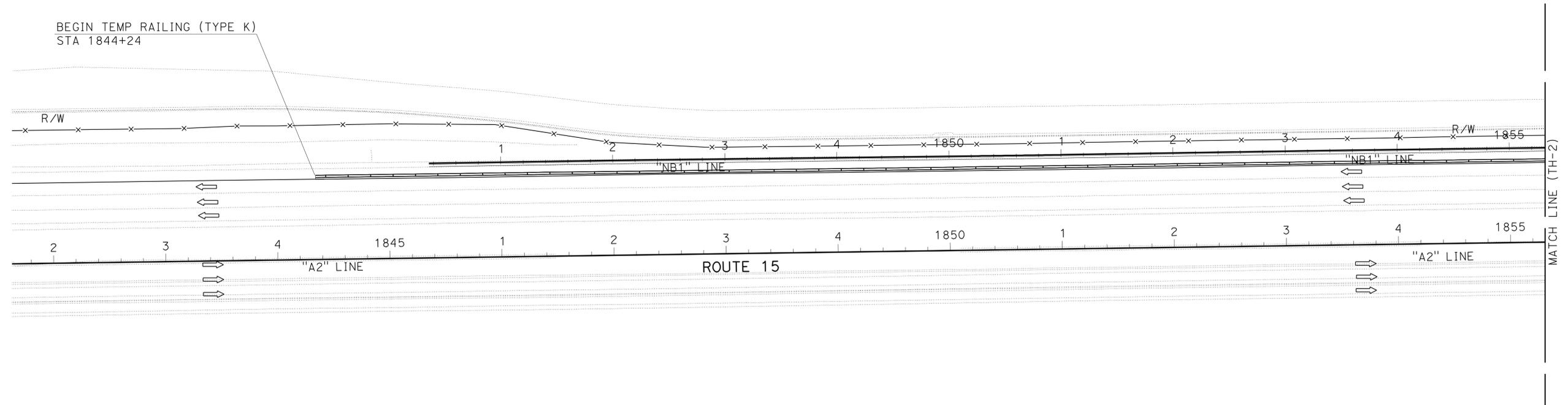
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	34.9/35.5	15	26
M.M. Kamgar Highway			4-25-12	REGISTERED CIVIL ENGINEER DATE	
4-30-12			PLANS APPROVAL DATE		
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**NOTE:**  
FOR ACCURATE RIGHT OF WAY DATA, CONTACT  
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



**TEMPORARY RAILING (TYPE K) PLACEMENT**



REVISOR	DATE	REVISION
MEHDI M. KAMGAR		
BILL WASSER		
CALCULATED/DESIGNED BY	CHECKED BY	
BILL WASSER		
FUNCTIONAL SUPERVISOR		
BILL WASSER		
DEPARTMENT OF TRANSPORTATION		
TRAFFIC DESIGN		

APPROVED FOR TRAFFIC HANDLING WORK ONLY

**TRAFFIC HANDLING PLAN**  
SCALE: 1"=50'  
**TH-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	34.9/35.5	16	26

<i>M.M. Kamgar</i>	4-25-12
REGISTERED CIVIL ENGINEER	DATE
4-30-12	
PLANS APPROVAL DATE	

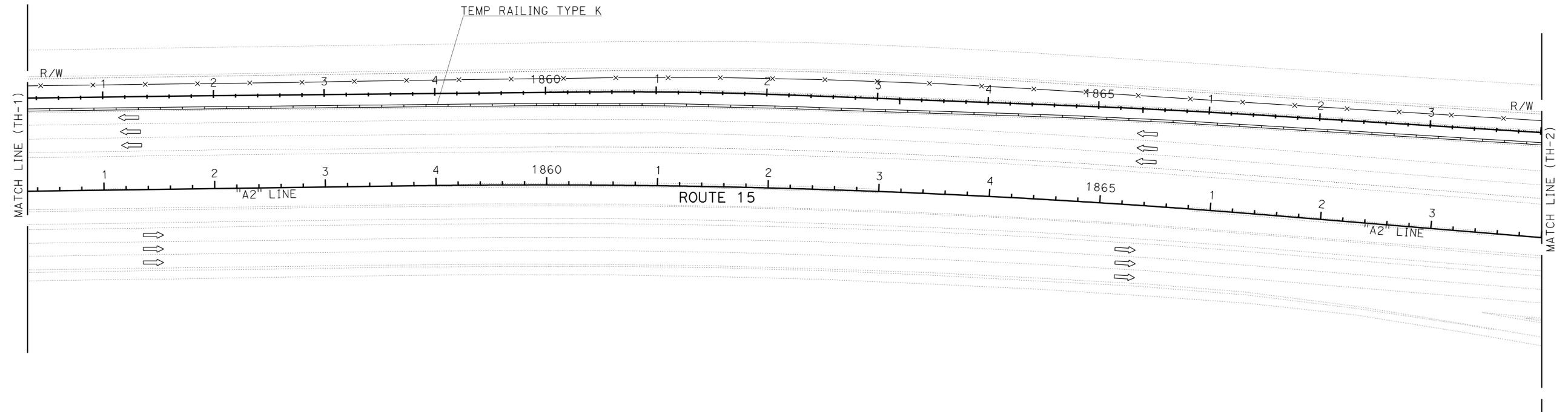
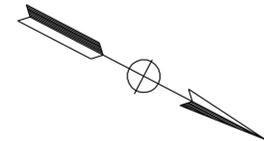
  

MEHDI M. KAMGAR  
No. 58039  
Exp. 30-12  
CIVIL

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**NOTE:**

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	MEHDI M. KAMGAR	REVISED BY
<b>Caltrans</b>	BILL WASSER	CHECKED BY	BILL WASSER	DATE
TRAFFIC DESIGN				REVISED

**TRAFFIC HANDLING PLAN**  
SCALE: 1"=50'  
**TH-2**

APPROVED FOR TRAFFIC HANDLING WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	34.9/35.5	17	26

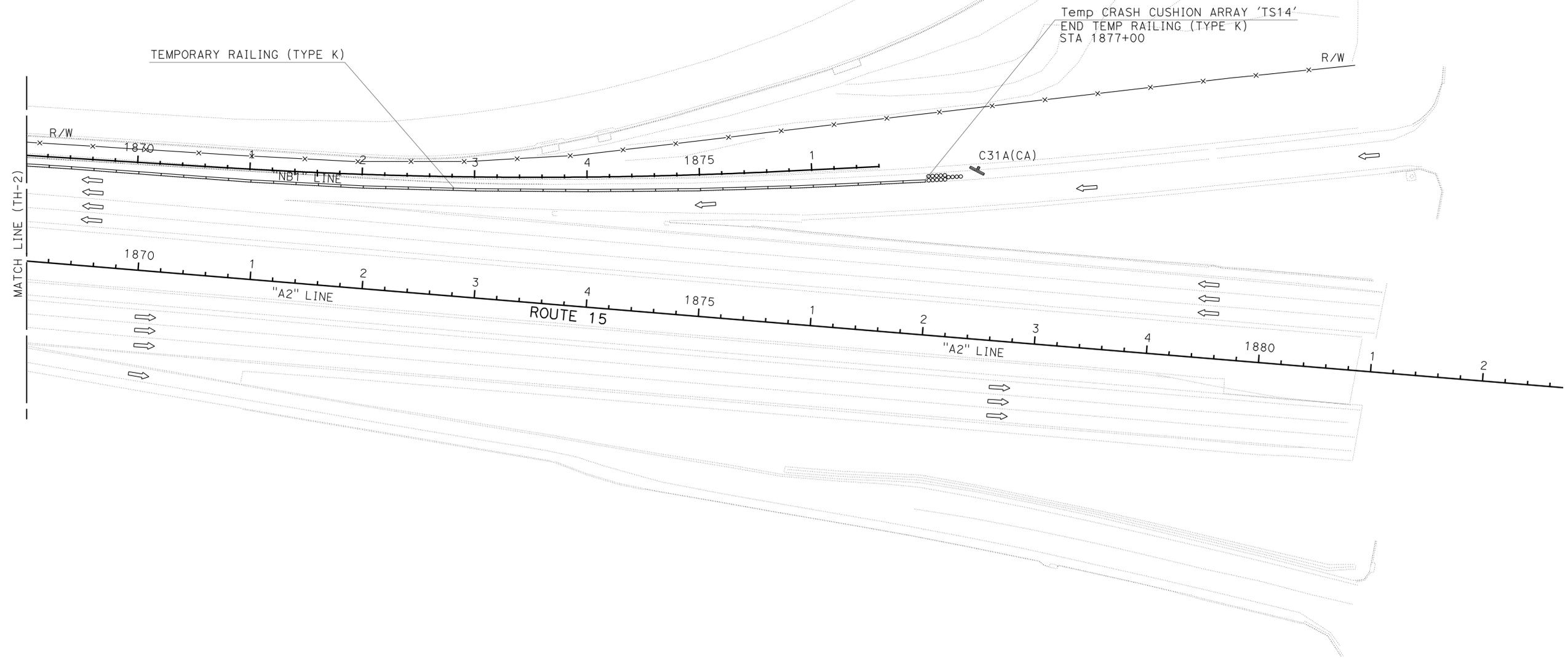
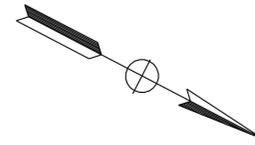
<i>M.M. Kamgar</i>	4-25-12
REGISTERED CIVIL ENGINEER	DATE
MEHDI M. KAMGAR	
No. 58039	
Exp. 3-30-12	
CIVIL	

4-30-12  
PLANS APPROVAL DATE

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**NOTE:**

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	MEHDI M. KAMGAR	REVISOR	DATE
<b>Caltrans</b>	BILL WASSER	DESIGNER	DATE
FUNCTIONAL SUPERVISOR	BILL WASSER	CHECKED BY	DATE
TRAFFIC DESIGN		DESIGNED BY	DATE

**TRAFFIC HANDLING PLAN**  
SCALE: 1"=50'  
**TH-3**

APPROVED FOR TRAFFIC HANDLING WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	34.9/35.5	18	26

*M.M. Kamgar Haghighi* 4-25-12  
 REGISTERED CIVIL ENGINEER DATE

4-30-12  
 PLANS APPROVAL DATE

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 OR AGENTS SHALL NOT BE RESPONSIBLE FOR  
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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN  
 FUNCTIONAL SUPERVISOR  
 BILL WASSER  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 MEHDI M. KAMGAR  
 BILL WASSER  
 REVISED BY  
 DATE REVISED

**TEMP RAILING TYPE(K)**

LF
3240

**TEMP CRASH CUSHION MODULE**

EA
14

**PORTABLE CHANGEABLE MESSAGE SIGN**

EA
2

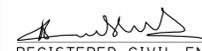
**CONSTRUCTION AREA SIGNS (STATIONARY MOUNTED)**

SIGN CODE	SIGN MESSAGE	No. OF POSTS AND SIZE	No. OF SIGNS
C31A (CA)	NO SHOLDER	1- 4" x 6"	1

**TRAFFIC HANDLING  
QUANTITIES  
THQ-1**

LAST REVISION     
 DATE PLOTTED => 25-APR-2012     
 04-25-12     
 TIME PLOTTED => 08:11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	34.9/35.5	19	26

 4-25-12  
 REGISTERED CIVIL ENGINEER DATE

4-30-12  
 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  
**AWAIS SHEIKH**  
 No. 65531  
 Exp. 9-30-13  
 CIVIL  
 STATE OF CALIFORNIA

### PAVEMENT STRUCTURE QUANTITIES

LOCATION	ROADWAY EXCAVATION	ROADWAY EMBANKMENT (N)	(HMA) TYPE A	LIQUID ASPHALT (PRIME COAT)	CLASS 2 AGGREGATE BASE	ROCK SLOPE PROTECTION No.3 (METHOD B)	CONCRETE (DITCH LINING)	REMOVE CONCRETE BARRIER (TYPE K)	REMOVE CRASH CUSHION (SAND FILLED)	REMOVE AC DIKE	
	CY	CY	TON	TON	CY	CY	CY	LF	EA	LF	
STA 1845+36 TO STA 1876+60	1021	26	889		372						
STA 1865+10 TO STA 1876+60							31				
STA 1876+60.086						1					
STA 1854+35 TO 1864+35								1000	14		
STA 1845+36 TO STA 1876+60				4							
STA 1864+36 TO STA 1873+80										930	
<b>TOTAL</b>	1021	26	889	4	372	1	31	1000	14	930	

(N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY

### TEMPORARY WATER POLLUTION CONTROL QUANTITIES

LOCATION	TEMPORARY DRAINAGE INLET PROTECTION	TEMPORARY FIBER ROLL
	EA	LF
STA 1868+00 STA 1869+90	2	
STA 1845+36 TO STA 1860+36		1535
<b>TOTAL</b>	2	1535

### CONCRETE BARRIER

LOCATION	TYPE 60G Mod	(N) TYPE 60S Mod
	LF	LF
STA 1845+36 TO STA 1876+60	3124	10.25
<b>TOTAL</b>	3124	10.25

(N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY

### TRANSITION RAILING AND TERMINAL SYSTEM

LOCATION	TRANSITION RAILING (TYPE WB)	ALTERNATIVE FLARED TERMINAL SYSTEM
	EA	EA
STA 1876+60	1	
STA 1876+97.5		1

## SUMMARY OF QUANTITIES Q-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	34.9/35.5	20	26

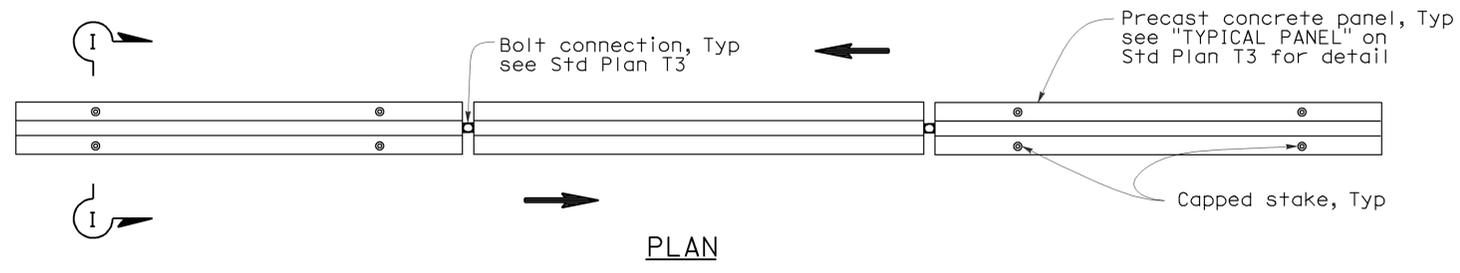
Randell D. Hiatt  
REGISTERED CIVIL ENGINEER

May 20, 2011  
PLANS APPROVAL DATE

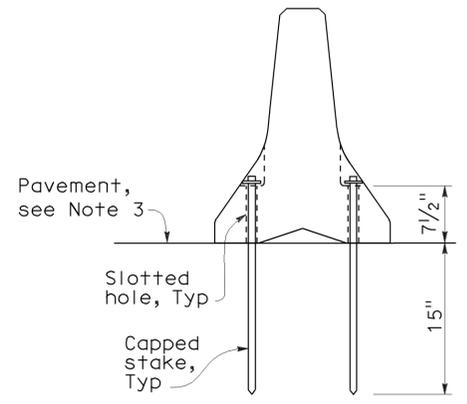
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REGISTERED PROFESSIONAL ENGINEER  
Randell D. Hiatt  
No. C50200  
Exp. 6-30-11  
CIVIL  
STATE OF CALIFORNIA

To accompany plans dated 4-30-12



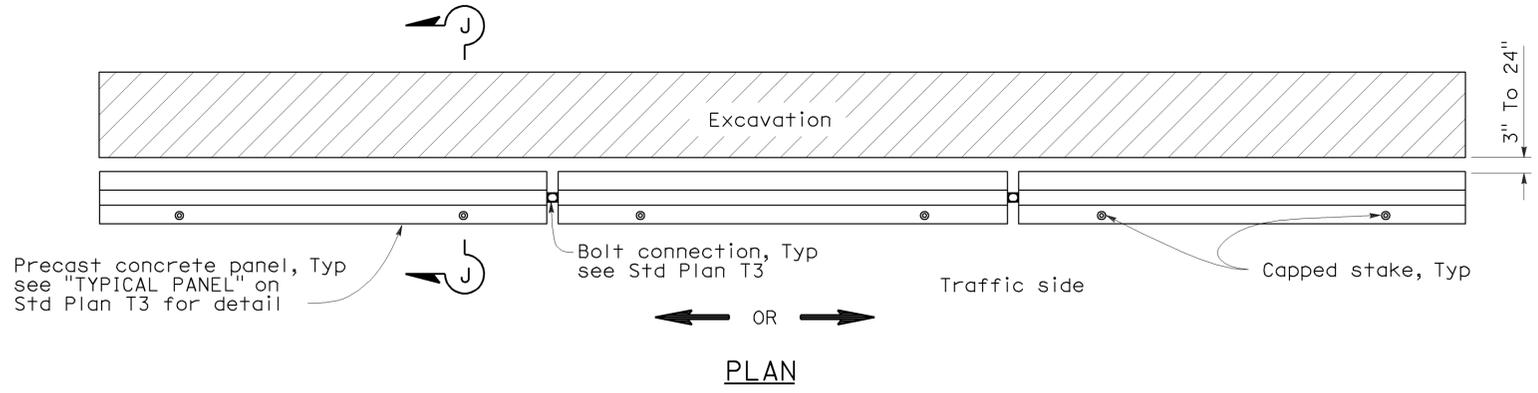
**RAILING STAKING CONFIGURATION FOR TWO-WAY TRAFFIC**  
See Note 1



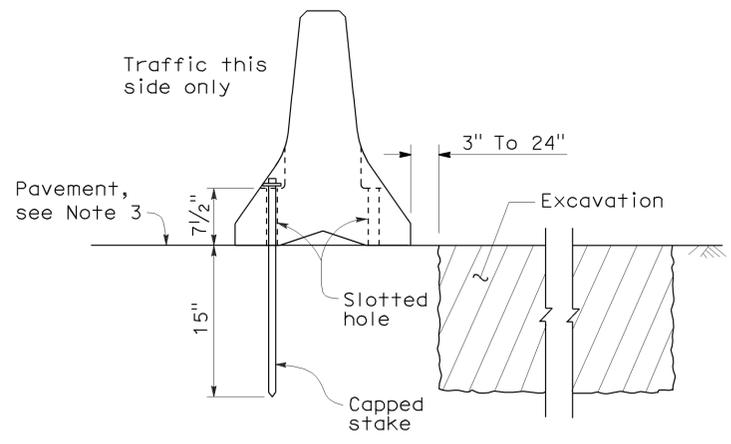
**SECTION I-I**

**NOTES:**

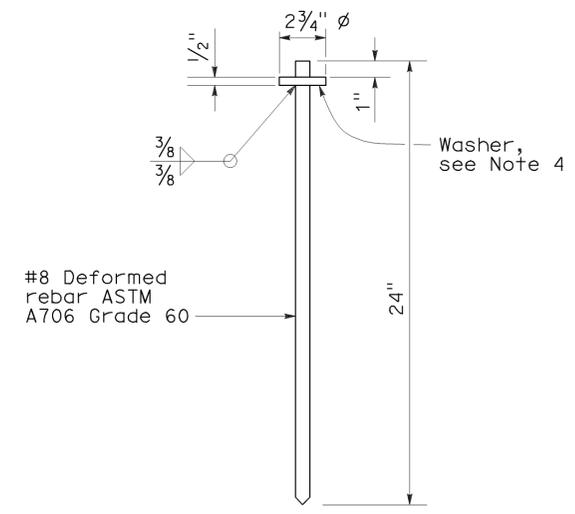
1. Where Type K Temporary Railing is placed as a temporary or long term barrier in two-way traffic on highways with less than 24" from the edge of traveled way, use four capped stakes per every other panel with end panels staked.
2. Where Type K Temporary Railing is placed 3" to 24" from the edge of an excavation on highways, use two capped stakes per panel along the traffic side.
3. Staked Type K Temporary Railing must be supported by at least 4" thick concrete, hot mix asphalt or existing asphalt concrete pavement.
4. The minimum yield strength for the washer must be 60,000 psi.
5. Direction of adjacent traffic indicated by  $\Rightarrow$ .



**RAILING STAKING CONFIGURATION ADJACENT TO AN EXCAVATION**  
See Note 2



**SECTION J-J**



**CAPPED STAKE DETAIL**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY RAILING  
(TYPE K)**  
NO SCALE

NSP T3A DATED MAY 20, 2011 SUPPLEMENTS  
THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T3A

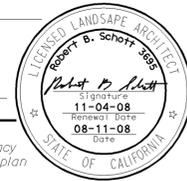
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	34.9/35.5	21	26

Robert B. Schott  
LICENSED LANDSCAPE ARCHITECT

August 15, 2008  
PLANS APPROVAL DATE

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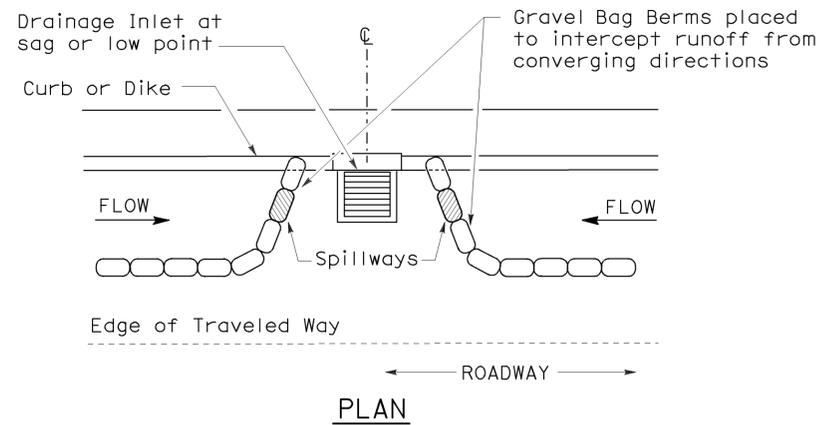
To accompany plans dated 4-30-12



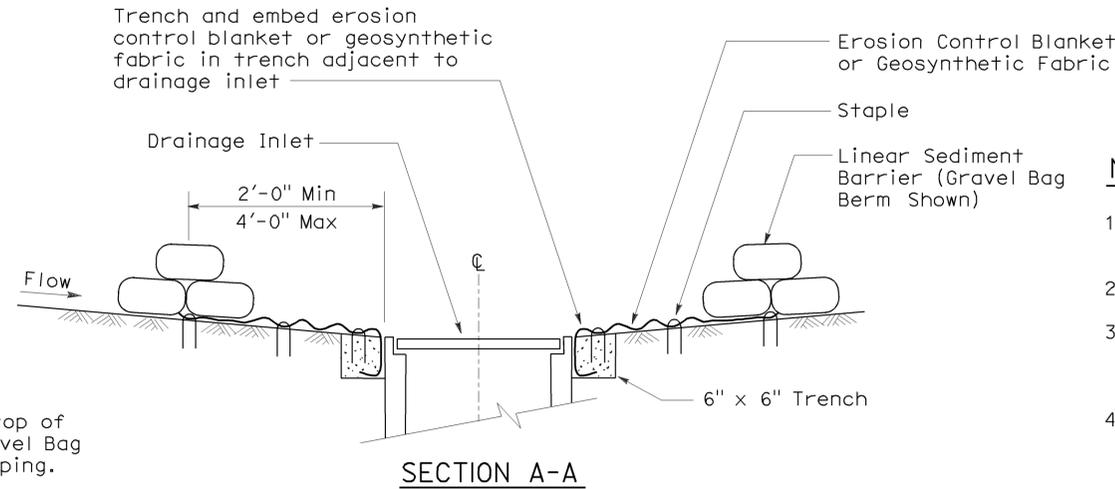
### GRAVEL BAG BERM (TYPE 3A) SPACING TABLE

SLOPE OF ROADWAY (PERCENT)	1 to 3.9	4 to 5.9	6 to 7.9	8 to 10	10+
INTERVAL BETWEEN BERM	100'	75'	50'	25'	12'

For slope of less than 1%, install barriers only if erosion/sediment is prevalent



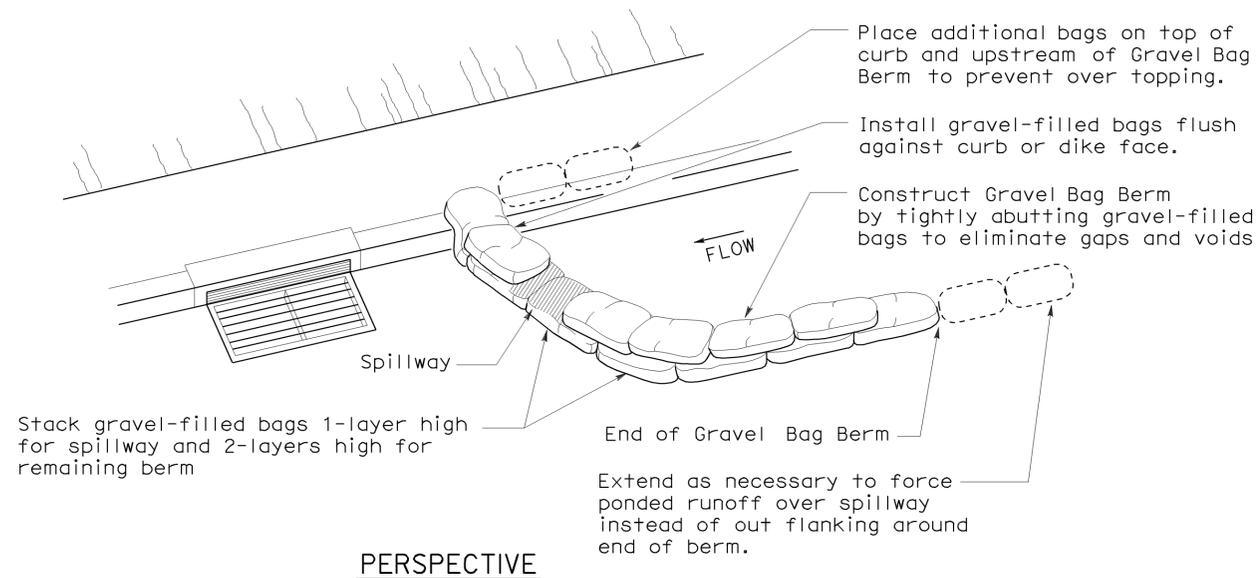
**CONFIGURATION FOR SAG POINT INLET (GRAVEL BAG BERM)**



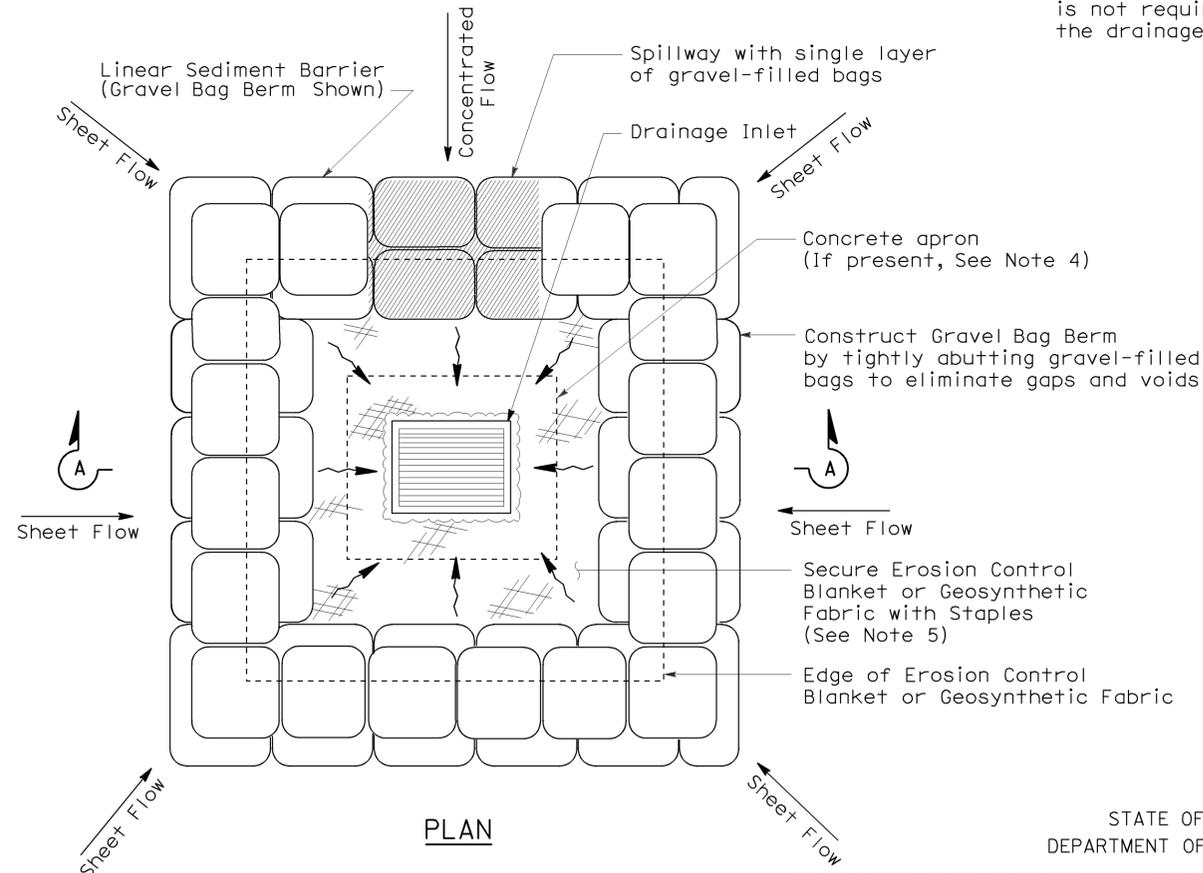
**SECTION A-A**

**NOTES:**

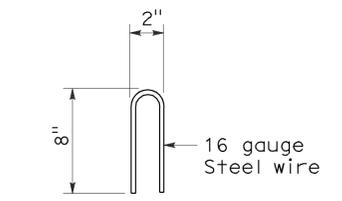
1. Place safety cones adjacent to drainage inlet protection.
2. Dimensions may vary to fit field conditions.
3. Install a minimum of 3 gravel bag berms upstream of each drainage inlet to be protected.
4. Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.
5. Erosion control blanket or geosynthetic fabric is not required if the area adjacent to the drainage inlet is vegetated or paved.



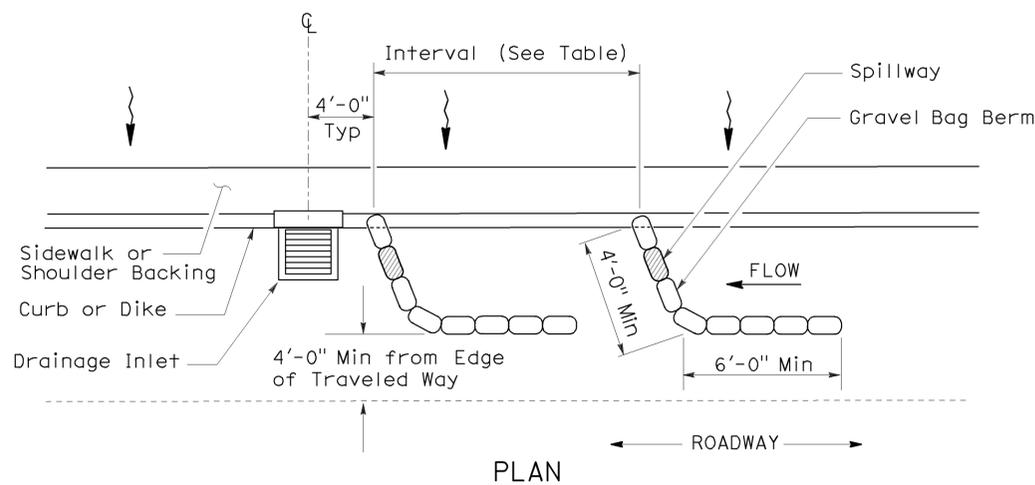
**PERSPECTIVE**



**TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3B)**



**STAPLE DETAIL**



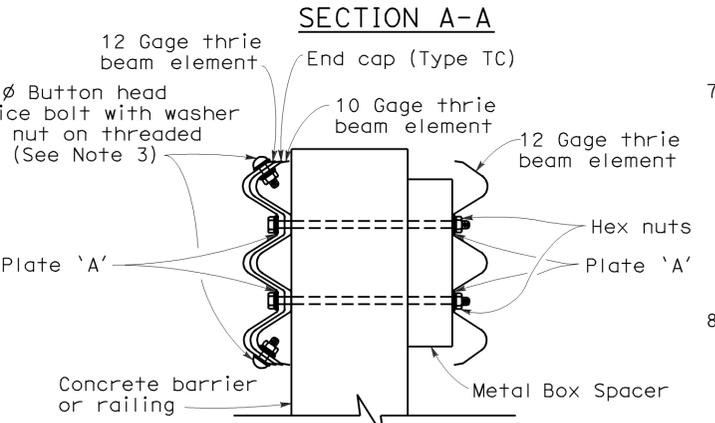
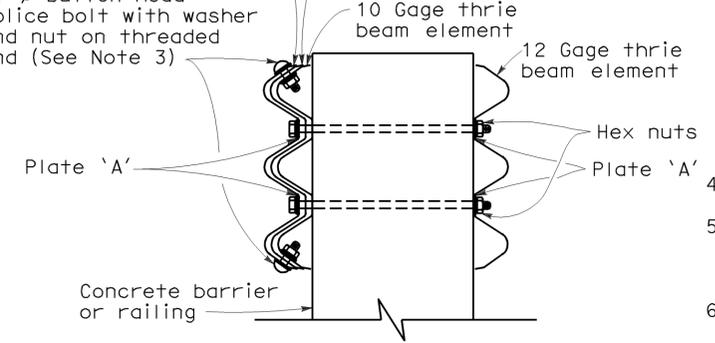
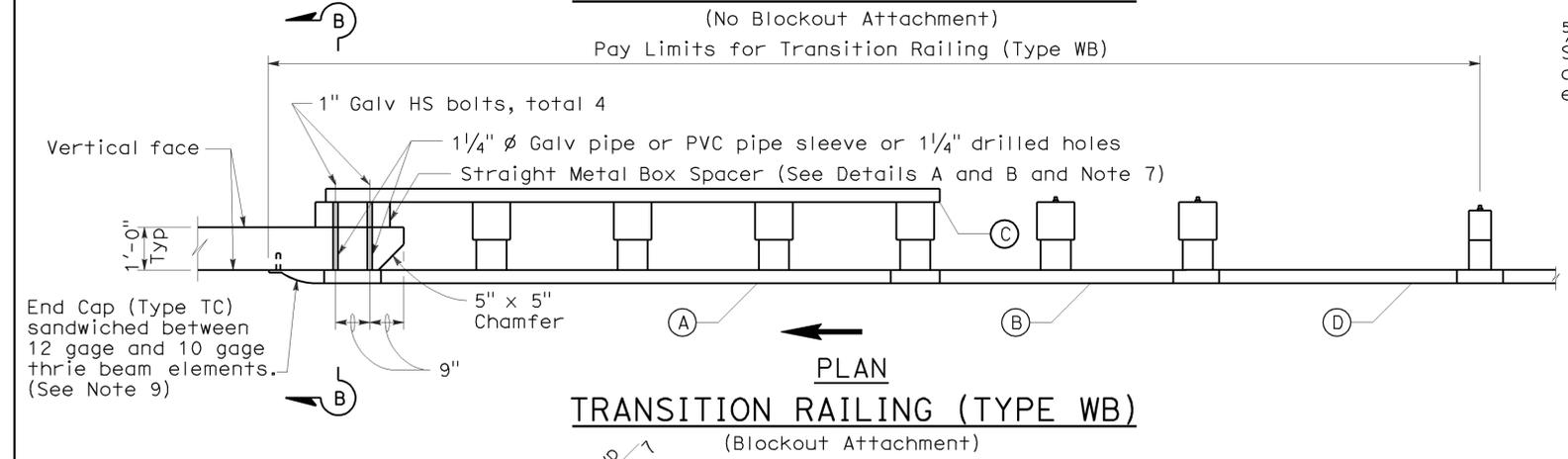
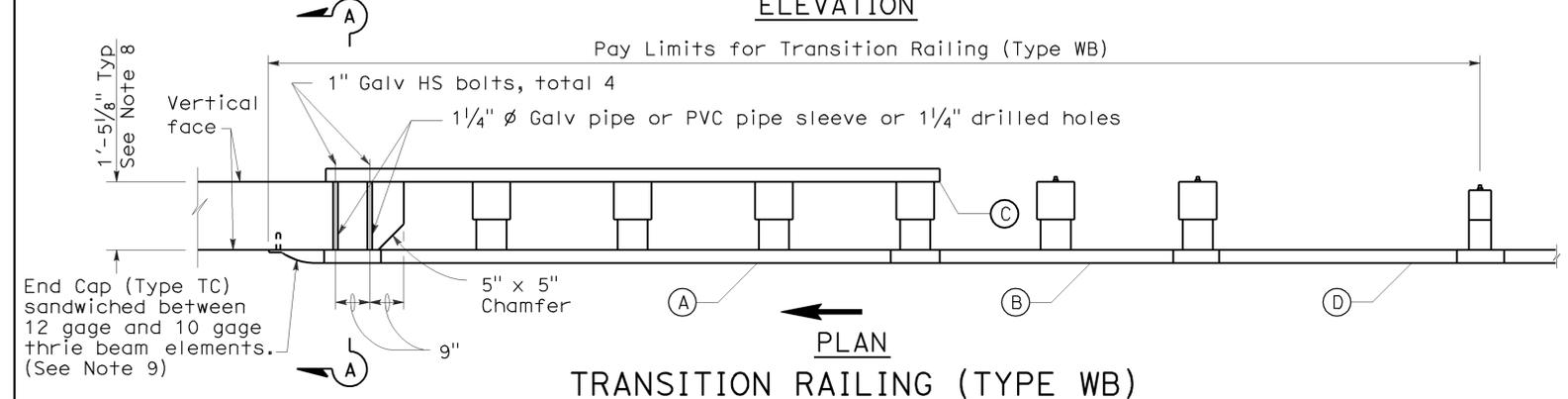
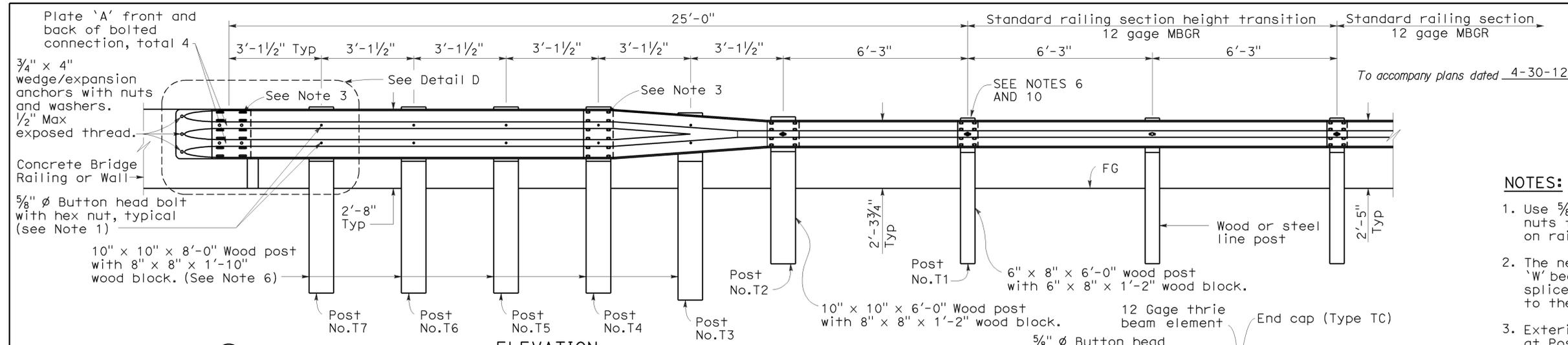
**TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3A) (GRAVEL BAG BERM)**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)**

NO SCALE  
NSP T62 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

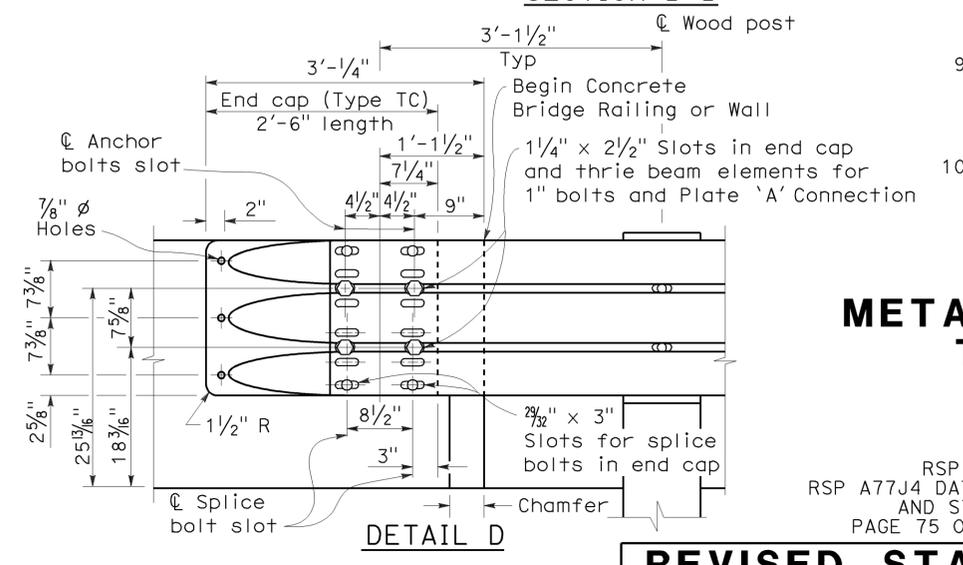
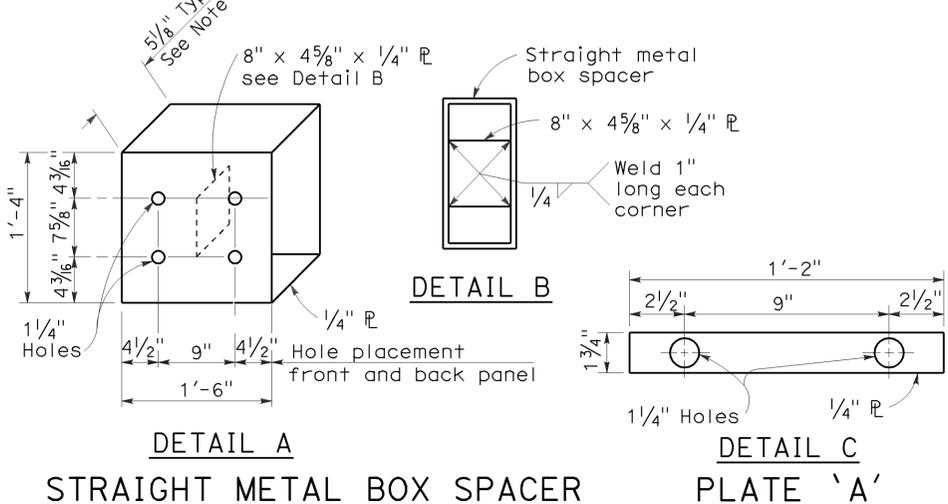
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	34.9/35.5	22	26

RANDALL D. HIATT  
 REGISTERED CIVIL ENGINEER  
 No. C50200  
 Exp. 6-30-11  
 STATE OF CALIFORNIA



- NOTES:**
- Use 5/8" ø Button head bolts and hex nuts for connections to posts. No washer on rail face for bolted connections to post.
  - The nested rail elements, end cap, and 'W' beam to thrie beam element may be spliced together prior to bolting the elements to the wood post and concrete barrier or railing.
  - Exterior splice bolt holes for rail element splices at Post No. T4 and the connection to the concrete barrier or railing shall be the standard 7/32" x 1/8" slot size. Interior splice bolt holes at these locations may be increased up to 1/4" ø. Only the top 2 and the bottom 2 splice bolts with washers and nuts are required for rail splices at Post No. T4 and the connection to the concrete barrier or railing.
  - Direction of adjacent traffic indicated by →.
  - The top elevation of Posts No. T2 through No. T7 shall not project more than 1" above the top elevation of the rail element.
  - Typically, the railing connected to Transition Railing (Type WB) will be either standard railing section of metal beam guard railing with height transition ratio of 120:1 or an approved Caltrans end treatment attached to Post No. T1.
  - The depth of the metal box spacer varies from the 5/8" to 1/2" and is dependent on the width of the concrete railing or wall. The combined dimension for the depth of the metal box spacer plus the width of railing or wall is typically 17 7/8". Where the space between the backside of the concrete railing or wall and the rear thrie beam element is less than 1/2", metal plates similar to Plate 'A' are to be used as spacers.
  - Where the width of the concrete railing or wall is greater than 17 7/8", wood blocks are to be used to fill the space created between the backside of Posts No. T4 through No. T7 and the rear thrie beam element. These wood blocks shall be 8" in width and 1'-2" in length. The dimension between the front thrie beam element and the rear thrie beam element is to match the width of the concrete railing or wall.
  - End cap may be installed over 12 gage and 10 gage thrie beam elements where transition railing is installed on the departure end of bridge railing.
  - Conform standard railing section height to 2'-3 3/4" at Post No. T1 using height transition ratio of 120:1.

- LEGEND**
- (A) Nested thrie beam elements (one 12 gage element nested over one 10 gage element).
  - (B) One 10 gage "W" beam to thrie beam element.
  - (C) One 12 gage thrie beam element.
  - (D) One 10 gage "W" beam rail element (7'-3 1/2" length)
- 10 gage = 0.135" thick  
 12 gage = 0.108" thick



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	34.9/35.5	23	26

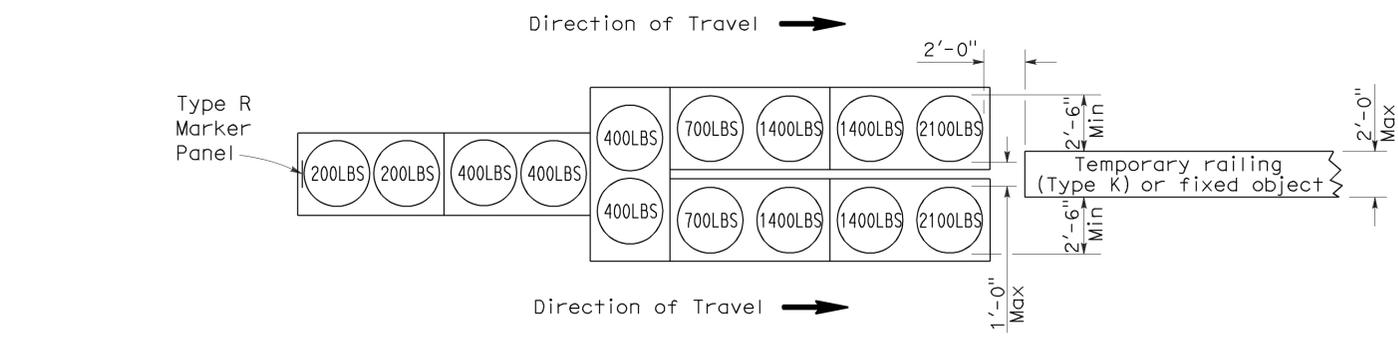
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

*Randell D. Hiatt*  
No. C50200  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA

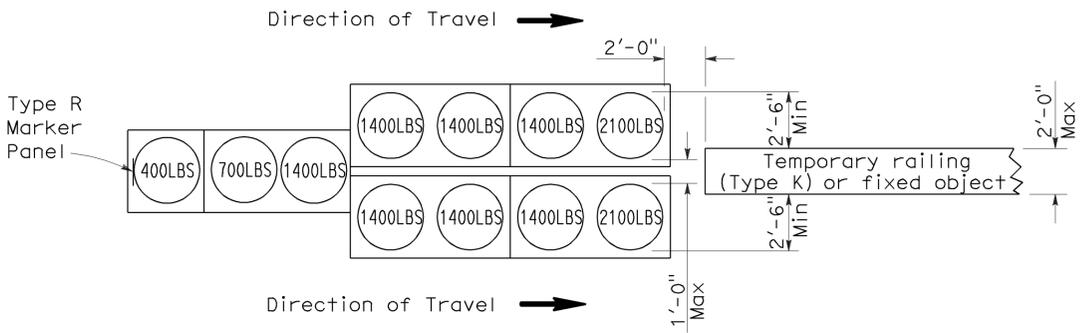
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To accompany plans dated 4-30-12



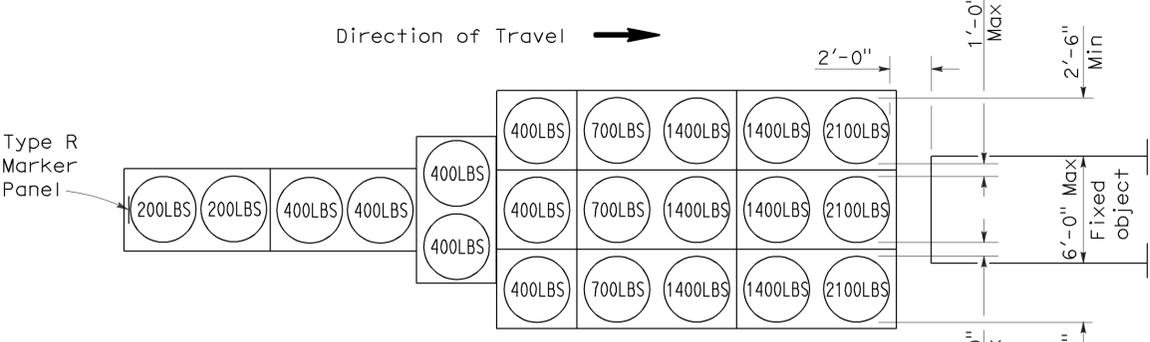
**ARRAY 'TU14'**

Approach speed 45 mph or more



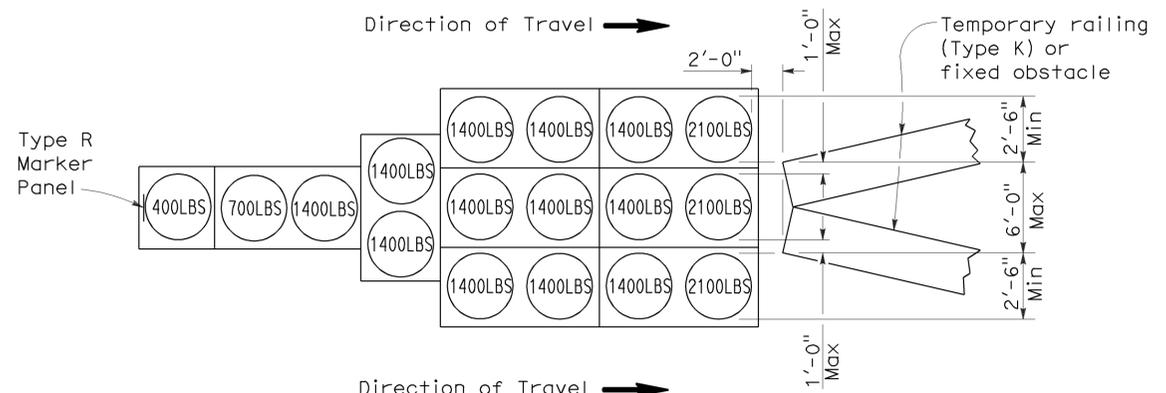
**ARRAY 'TU11'**

Approach speed less than 45 mph



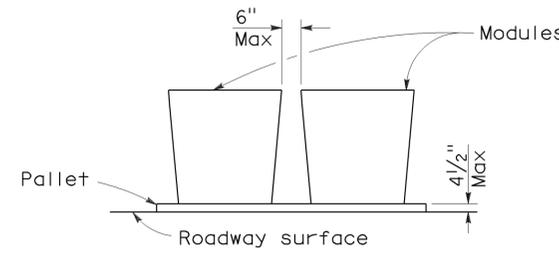
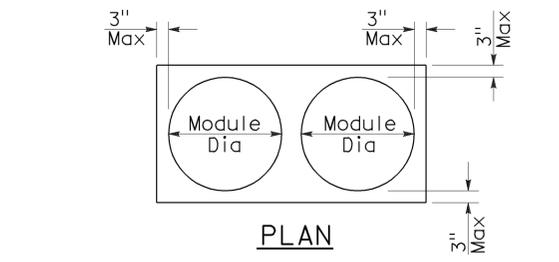
**ARRAY 'TU21'**

Approach speed 45 mph or more



**ARRAY 'TU17'**

Approach speed less than 45 mph



**CRASH CUSHION PALLET DETAIL**

See Note 7

**NOTES:**

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the top of Type R marker panel 1" below the module lid.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of pallets is optional.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(UNIDIRECTIONAL)**

NO SCALE

RSP T1A DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1A  
DATED MAY 1, 2006 - PAGE 211 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T1A**

2006 REVISED STANDARD PLAN RSP T1A

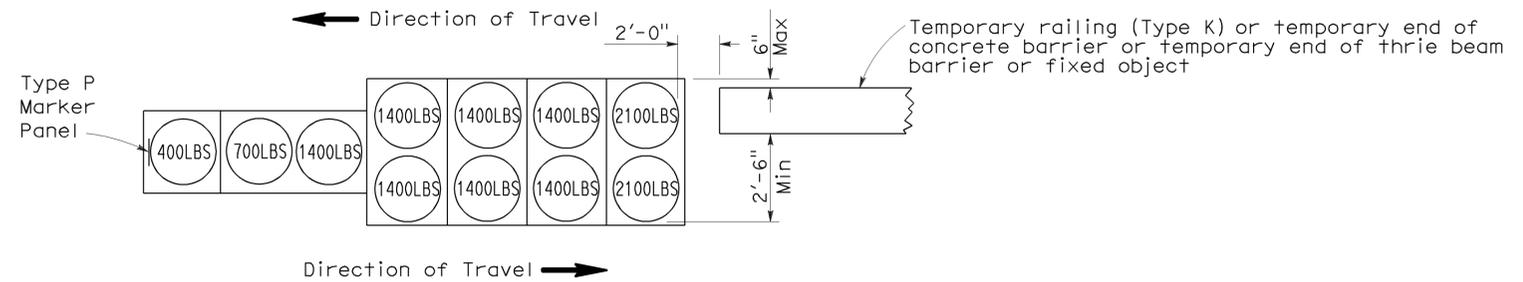
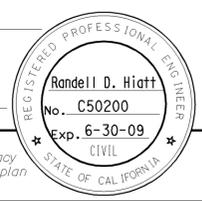
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	34.9/35.5	24	26

Randell D. Hiatt  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

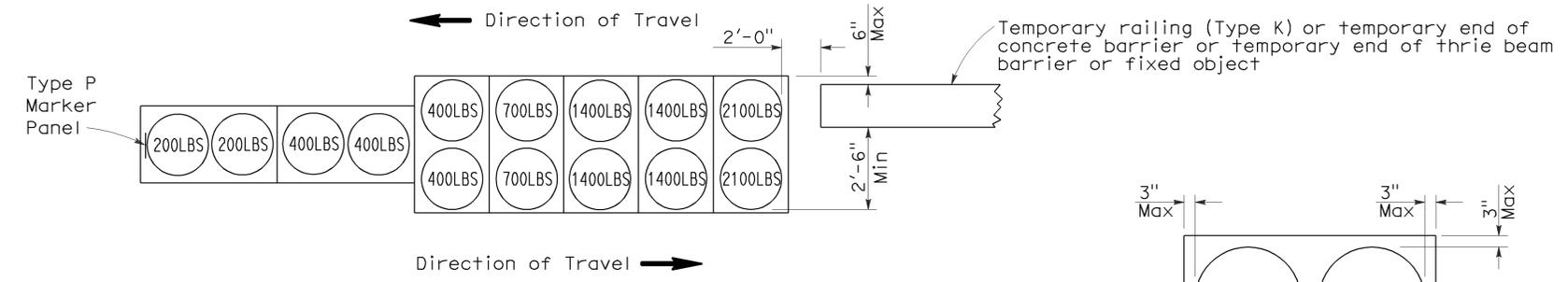
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To accompany plans dated 4-30-12



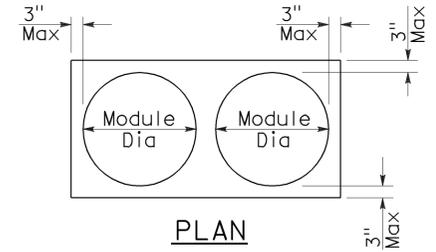
**ARRAY 'TB11'**

Approach speed less than 45 mph

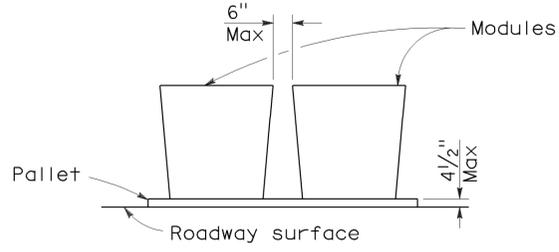


**ARRAY 'TB14'**

Approach speed 45 mph or more



PLAN



ELEVATION

**CRASH CUSHION PALLET DETAIL**

See Note 7

**NOTES:**

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the Type P marker panel so that the bottom of the panel rests upon the pallet.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of pallets is optional.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(BIDIRECTIONAL)**

NO SCALE

RSP T1B DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1B  
DATED MAY 1, 2006 - PAGE 212 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T1B**

2006 REVISED STANDARD PLAN RSP T1B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	34.9/35.5	25	26

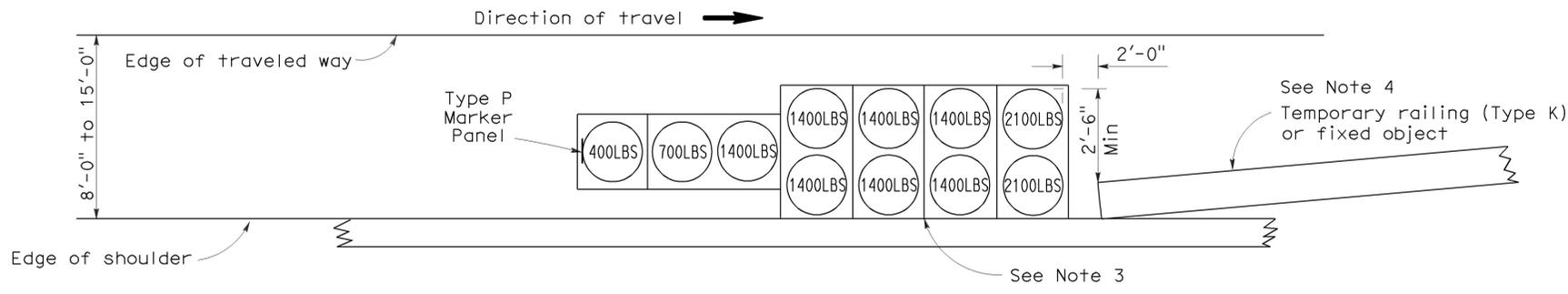
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

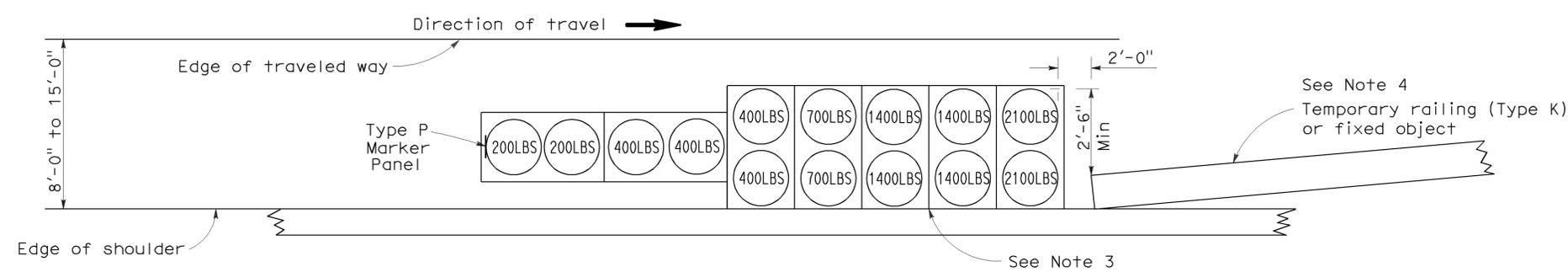
*The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.*

REGISTERED PROFESSIONAL ENGINEER  
Randell D. Hiatt  
No. C50200  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA

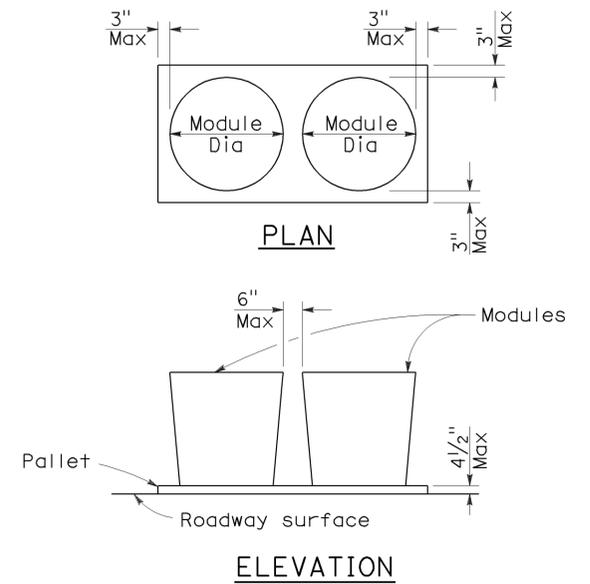
To accompany plans dated 4-30-12



**ARRAY 'TS11'**  
Approach speed less than 45 mph  
See Note 9



**ARRAY 'TS14'**  
Approach speed 45 mph or more  
See Note 9



**CRASH CUSHION PALLET DETAIL**  
See Note 11

**NOTES:**

- (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
- All sand weights are nominal.
- The temporary crash cushion arrays shown on this plan shall be used only in locations where there will be traffic on one side of the temporary crash cushion array.
- If the fixed object or approach end of the temporary railing is less than 15'-0" from the edge of traveled way, a temporary crash cushion is required in a construction or work zone.
- Temporary crash cushion arrays shall not encroach on the traveled way.
- Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
- Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
- Refer to Standard Plan A73B for marker details.
- For shoulder widths less than 8'-0", appropriate approved crash cushion protection, other than sand filled modules, shall be provided at fixed objects and at approach ends of temporary railing. The specific type of crash cushion shall be as shown on the project plans or as specified in the Special Provisions, or if not shown on the project plans or specified in the Special Provisions, shall be as approved by the Engineer.
- Approach speeds indicated conform to NCHRP 350 Report criteria.
- Use of pallets is optional.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(SHOULDER INSTALLATIONS)**

NO SCALE  
RSP T2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T2  
DATED MAY 1, 2006 - PAGE 213 OF THE STANDARD PLANS BOOK DATED MAY 2006.

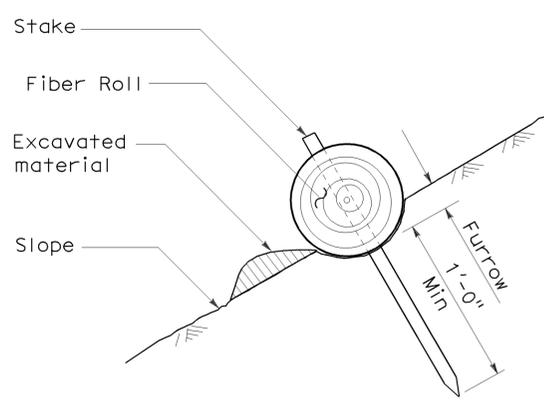
**REVISED STANDARD PLAN RSP T2**

2006 REVISED STANDARD PLAN RSP T2

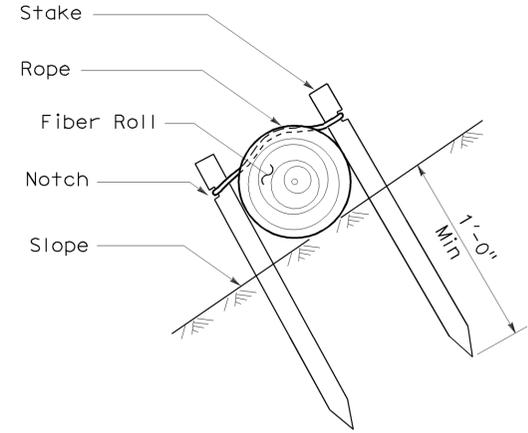
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	34.9/35.5	26	26

*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT  
 April 3, 2009  
 PLANS APPROVAL DATE  
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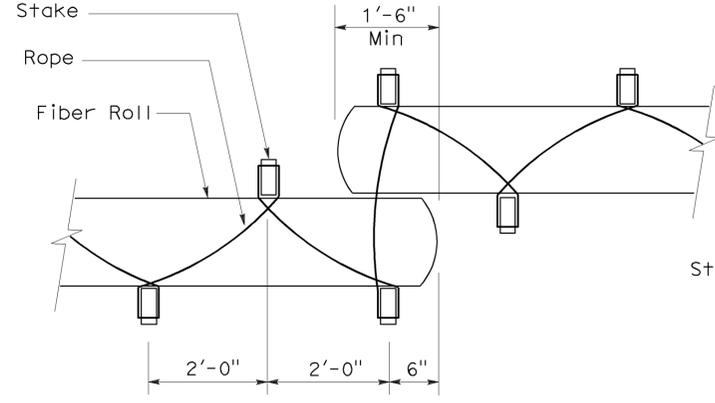
To accompany plans dated 4-30-12



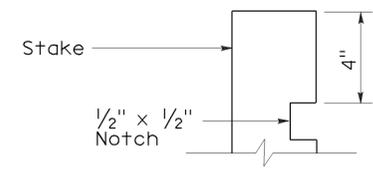
**SECTION**  
**TEMPORARY FIBER ROLL (TYPE 1)**



**SECTION**  
**TEMPORARY FIBER ROLL (TYPE 2)**

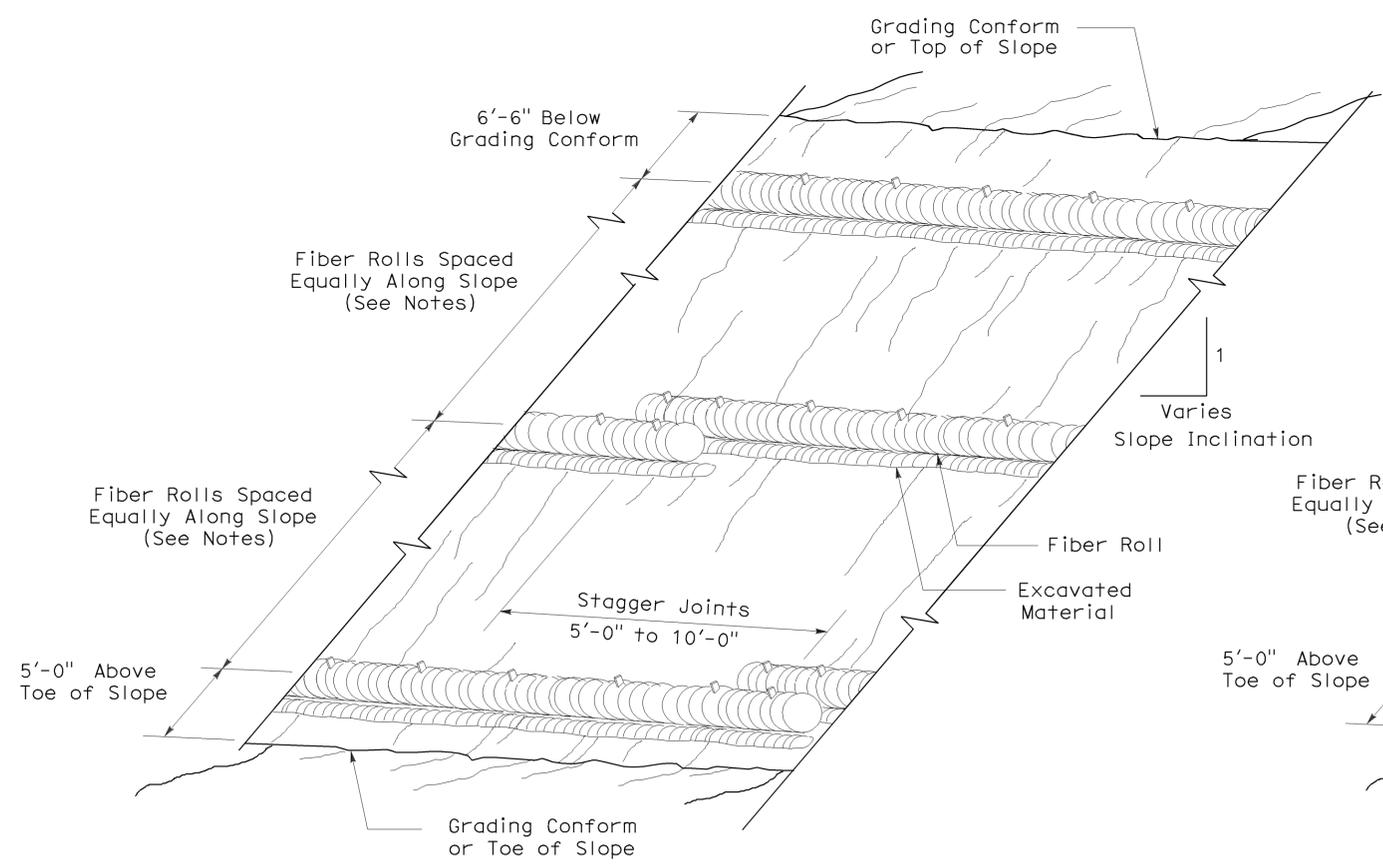


**PLAN**

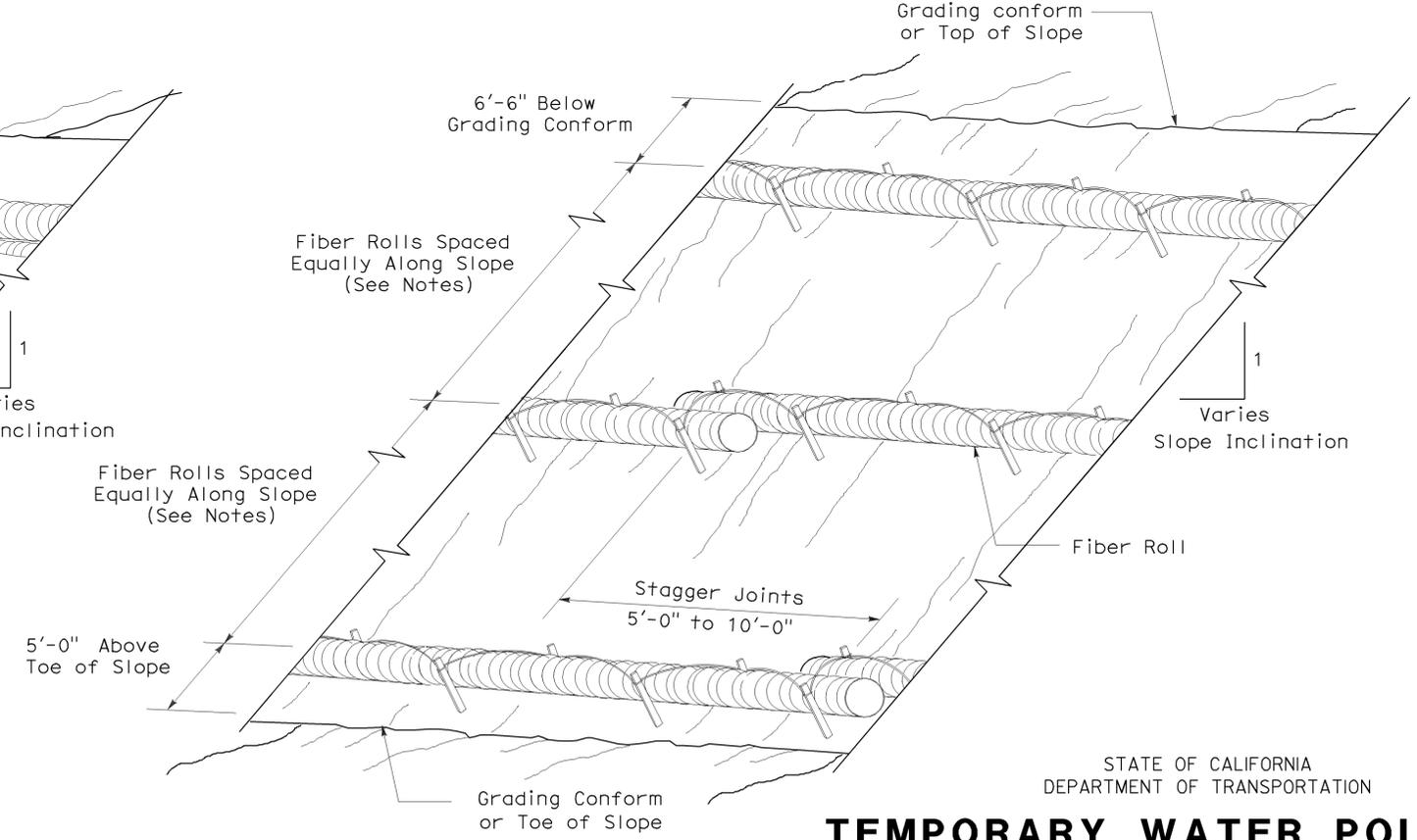


**ELEVATION**  
**STAKE NOTCH DETAIL**

- NOTES:**
1. Temporary fiber roll spacing varies depending upon slope inclination.
  2. Installations shown in the perspectives are for slope inclination of 10:1 and steeper.



**PERSPECTIVE**  
**TEMPORARY FIBER ROLL (TYPE 1)**



**PERSPECTIVE**  
**TEMPORARY FIBER ROLL (TYPE 2)**

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

**TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY FIBER ROLL)**

NO SCALE

RSP T56 DATED APRIL 3, 2009 SUPERSEDES STANDARD PLAN T56 DATED MAY 1, 2006 - PAGE 232 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T56**

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2006 REVISED STANDARD PLAN RSP T56