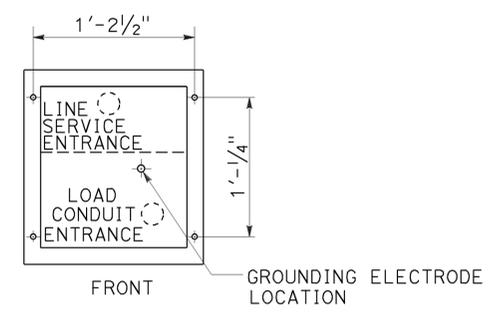
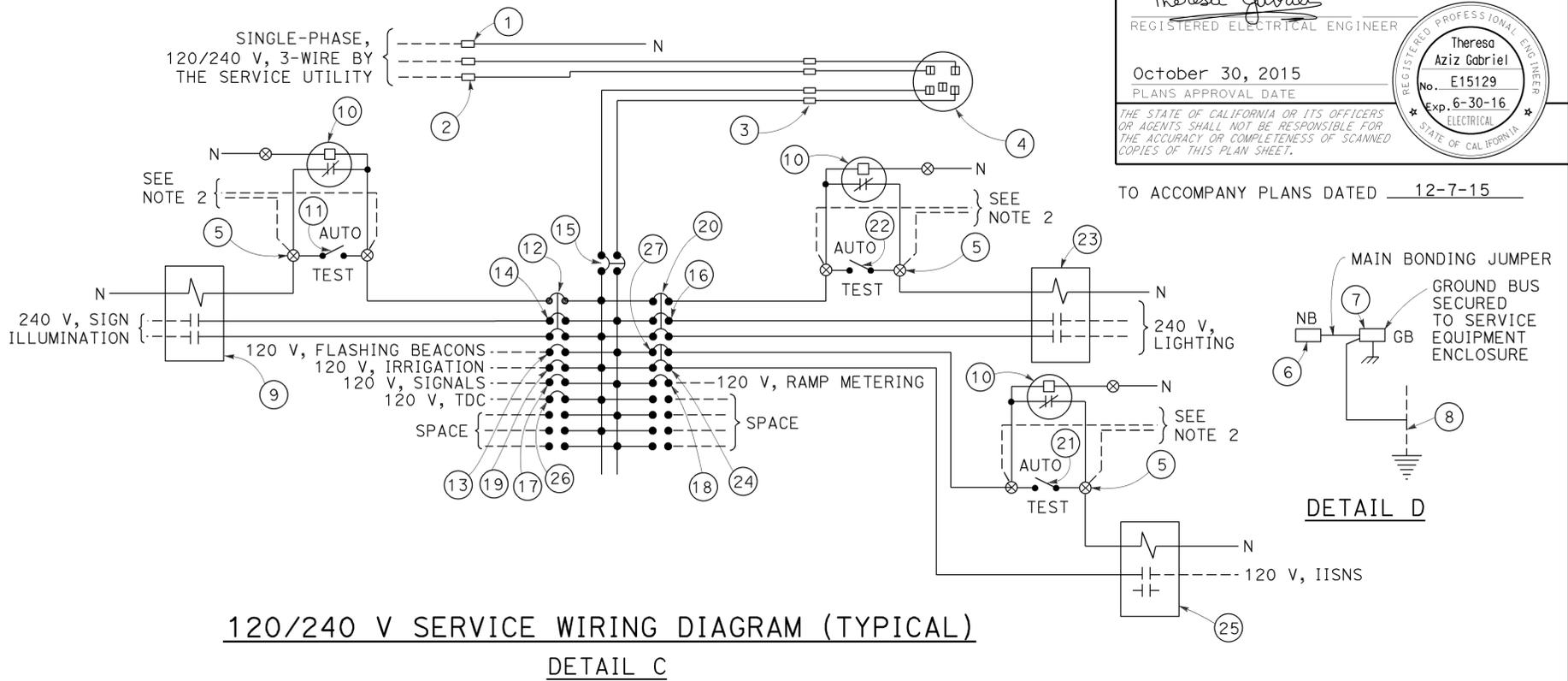


TYPE III-BF SERVICE EQUIPMENT ENCLOSURE (TYPICAL)
 FRONT VIEW SIDE VIEW
 DETAIL A



BASE FOR TYPE III-B SERVICE EQUIPMENT ENCLOSURE
 DETAIL B



120/240 V SERVICE WIRING DIAGRAM (TYPICAL)
 DETAIL C

TYPE III-B SERVICE EQUIPMENT ENCLOSURE LEGEND (120/240 V)					
ITEM	COMPONENT	NAMEPLATE DESCRIPTION	ITEM	COMPONENT	NAMEPLATE DESCRIPTION
①	NEUTRAL LUG		⑭	30 A, 240 V, 2P, CB	SIGN ILLUMINATION
②	LANDING LUG		⑮	100 A, 240 V, 2P, CB	MAIN BREAKER
③	TEST BYPASS FACILITY		⑯	30 A, 240 V, 2P, CB	LIGHTING
④	METER SOCKET AND SUPPORT		⑰	50 A, 120 V, 1P, CB	SIGNALS
⑤	TERMINAL BLOCKS		⑱	30 A, 120 V, 1P, CB	RAMP METERING
⑥	NEUTRAL BUS		⑲	20 A, 120 V, 1P, CB	IRRIGATION
⑦	GROUND BUS		⑳	15 A, 120 V, 1P, CB	LIGHTING CONTROL
⑧	GROUNDING ELECTRODE		㉑	15 A, 1P, TEST SWITCH	IISNS TEST SWITCH
⑨	30 A, 2P, NO CONTACTOR	SIGN ILLUMINATION	㉒	15 A, 1P, TEST SWITCH	LIGHTING TEST SWITCH
⑩	PHOTOELECTRIC UNIT (NOTE 4)	PEU	㉓	60 A, 2P, NO CONTACTOR	LIGHTING
⑪	15 A, 1P, TEST SWITCH	SIGN ILLUMINATION TEST SWITCH	㉔	15 A, 120 V, 1P, CB	IISNS
⑫	15 A, 120 V, 1P, CB	SIGN ILLUMINATION CONTROL	㉕	30 A, 2P, NO CONTACTOR	IISNS
⑬	15 A, 120 V, 1P, CB	FLASHING BEACON	㉖	20 A, 120 V, 1P, CB	TELEPHONE DEMARCATION CABINET
			㉗	15 A, 120 V, 1P, CB	IISNS CONTROL

- NOTES:**
- Unless otherwise indicated on the plans, service equipment items shall be provided for each service equipment enclosure as shown.
 - Connect to remote test switch mounted on lighting standards, sign post or structure when required.
 - Items ① and ⑥ shall be isolated from the service equipment enclosure.
 - Type I photoelectric control shall be used unless otherwise indicated on the plans.
 - Item ⑫, ⑳ and ㉗ shall be ganged operated CB.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(SERVICE EQUIPMENT ENCLOSURE AND
TYPICAL WIRING DIAGRAM,
TYPE III-B SERIES)
 NO SCALE

RSP ES-2E DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-2E DATED MAY 20, 2011 - PAGE 432 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-2E

NOTES:

1. Foundation shall be located to provide 2'-0" minimum clearance between face of curb and any portion of cabinet.
2. Controller units, plug-mounted equipment, shelf-mounted equipment and wall-mounted equipment shall be located to permit safe and easy removal or replacement without removing any other piece of equipment.
3. Cabinet fan may be installed at an alternate location near the top of the cabinet when approved by the Engineer.
4. Where telephone interconnect is required, a minimum of 5" clear vertical space shall be provided inside the cabinet for the equipment.
5. Telephone interconnect conductors shall be enclosed in a 3/4" or larger conduit through the foundation. Type 4 conduit shall be used to separate telephone and power conductors in cabinets.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	502	786

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

October 30, 2015
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.

TO ACCOMPANY PLANS DATED 12-7-15

REGISTERED PROFESSIONAL ENGINEER

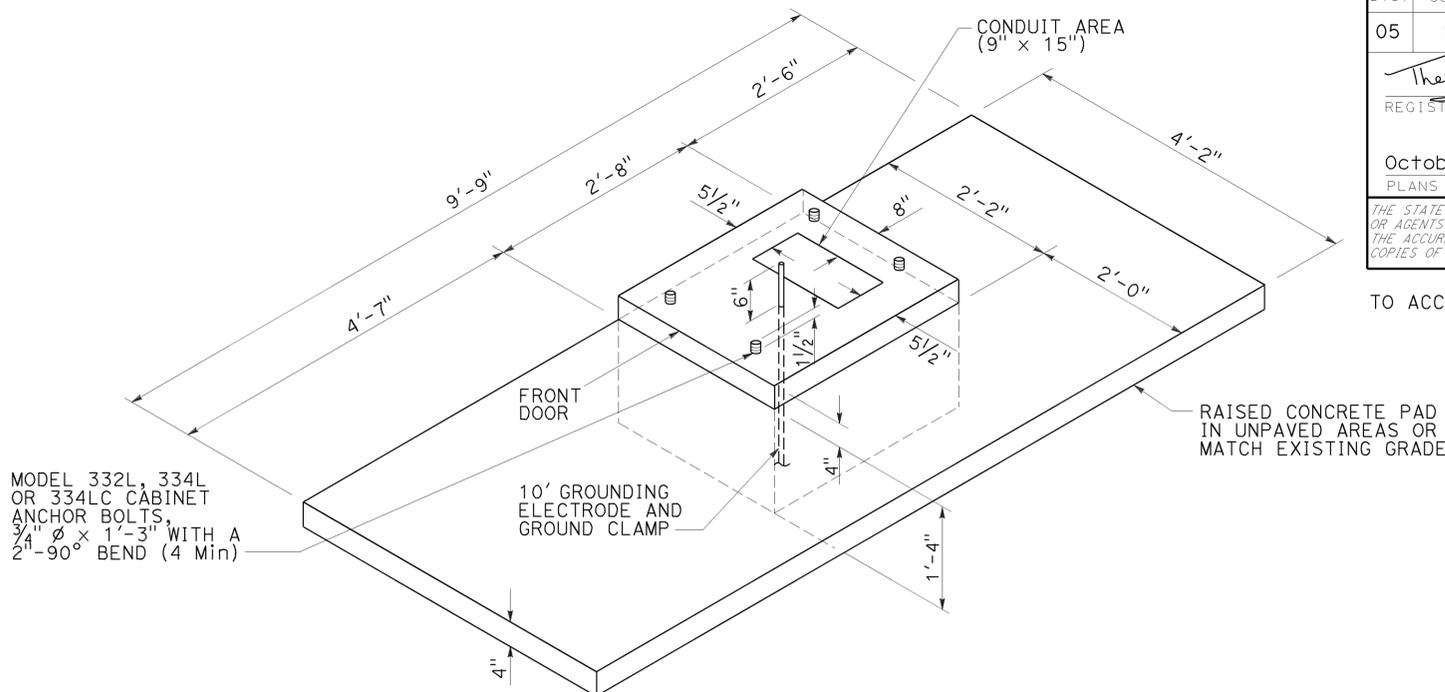
Theresa Aziz Gabriel

No. E15129

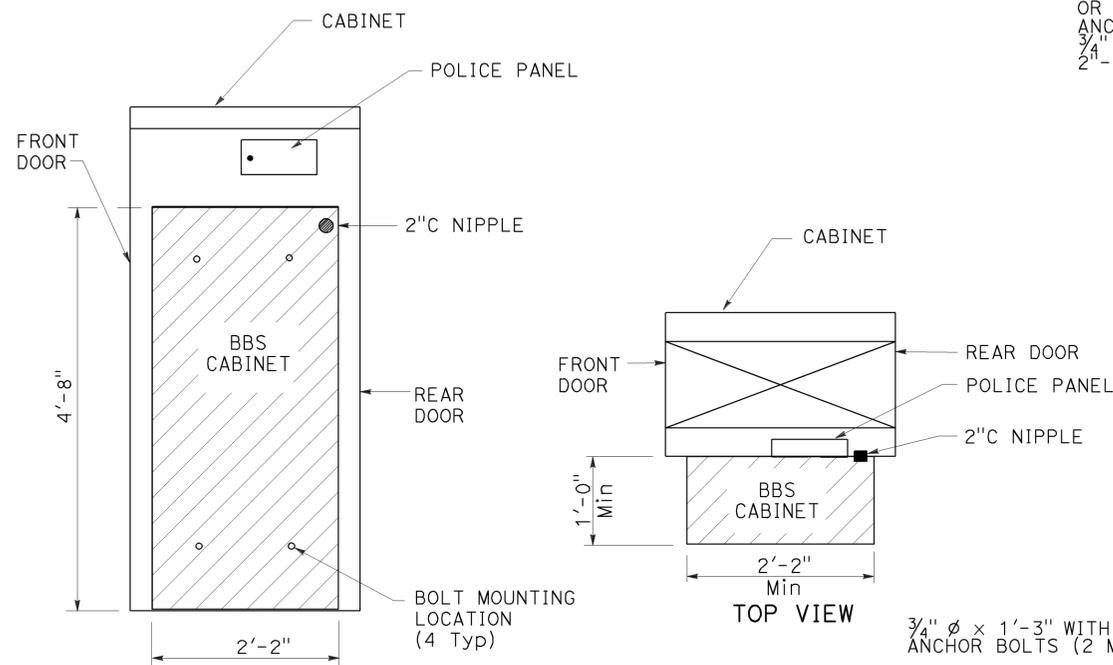
Exp. 6-30-16

ELECTRICAL

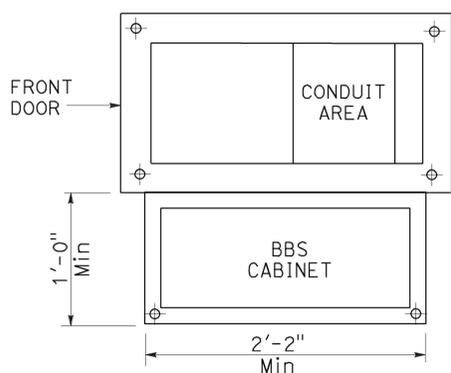
STATE OF CALIFORNIA



FOUNDATION AND PAD DETAIL
Model 332L, 334L and 334LC

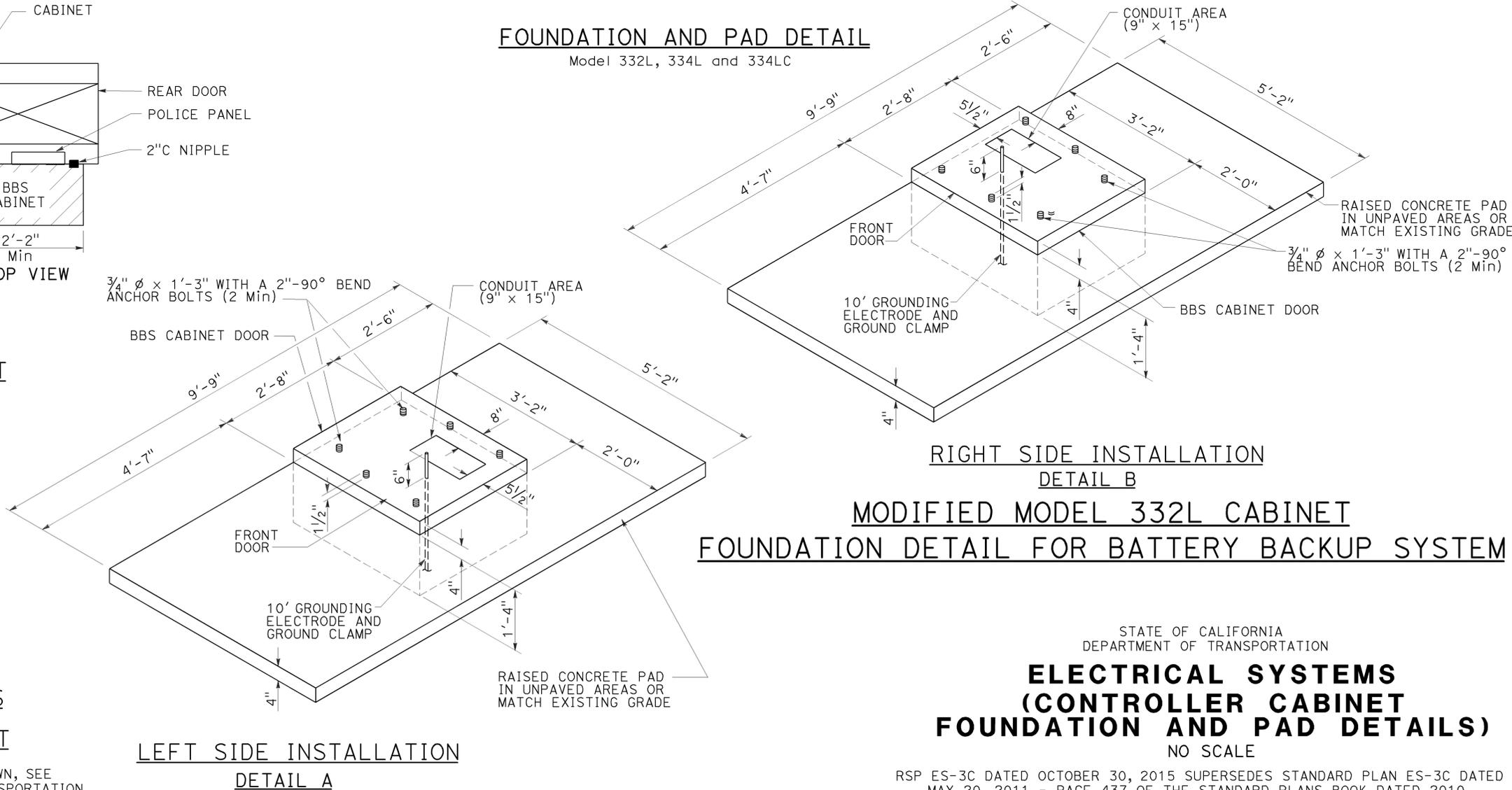


BBS CABINET MOUNTED TO THE MODEL 332L CABINET



BASE PLAN FOR BBS MOUNTED TO THE MODEL 332L CABINET

(FOR DIMENSIONS AND DETAILS NOT SHOWN, SEE CABINET HOUSING DETAILS OF THE TRANSPORTATION ELECTRICAL EQUIPMENT SPECIFICATION (TEES))



MODIFIED MODEL 332L CABINET FOUNDATION DETAIL FOR BATTERY BACKUP SYSTEM

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (CONTROLLER CABINET FOUNDATION AND PAD DETAILS)

NO SCALE

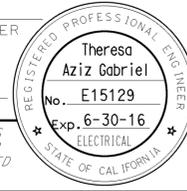
RSP ES-3C DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-3C DATED MAY 20, 2011 - PAGE 437 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-3C

2010 REVISED STANDARD PLAN RSP ES-3C

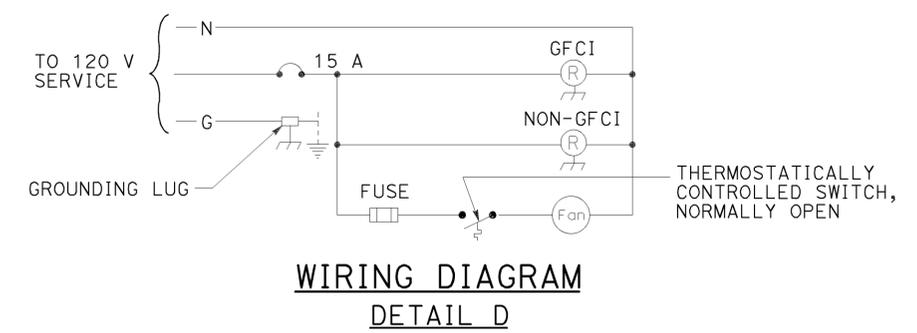
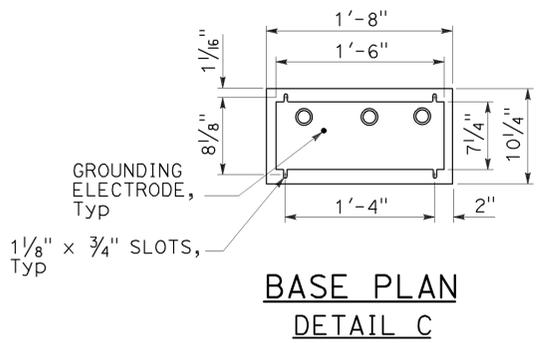
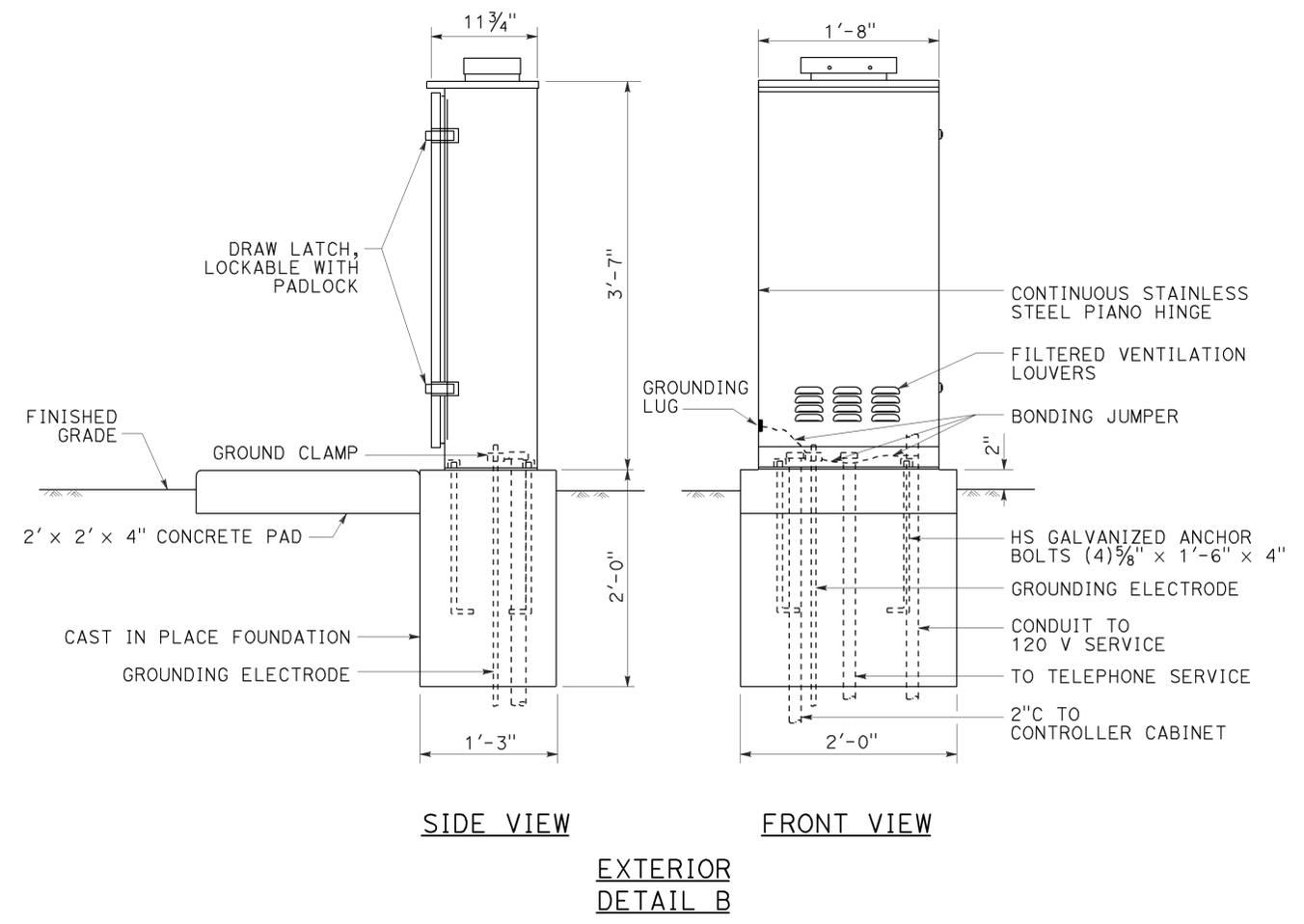
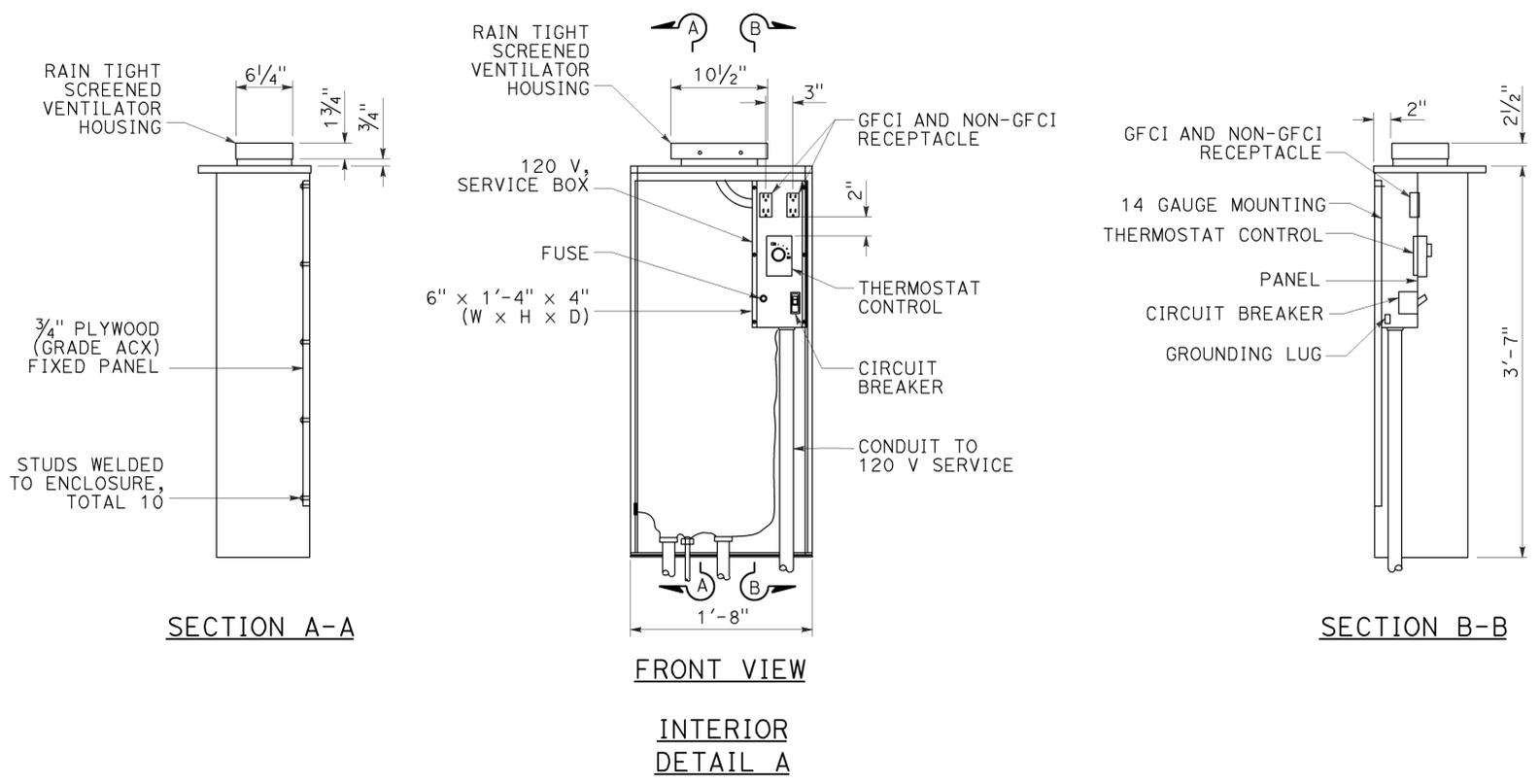
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	503	786

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
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TO ACCOMPANY PLANS DATED 12-7-15

NOTE:
1. Dimensions are nominal.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
(TELEPHONE DEMARCATION
CABINET, TYPE B)**
NO SCALE

RSP ES-3E DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-3E DATED MAY 20, 2011 - PAGE 439 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-3E

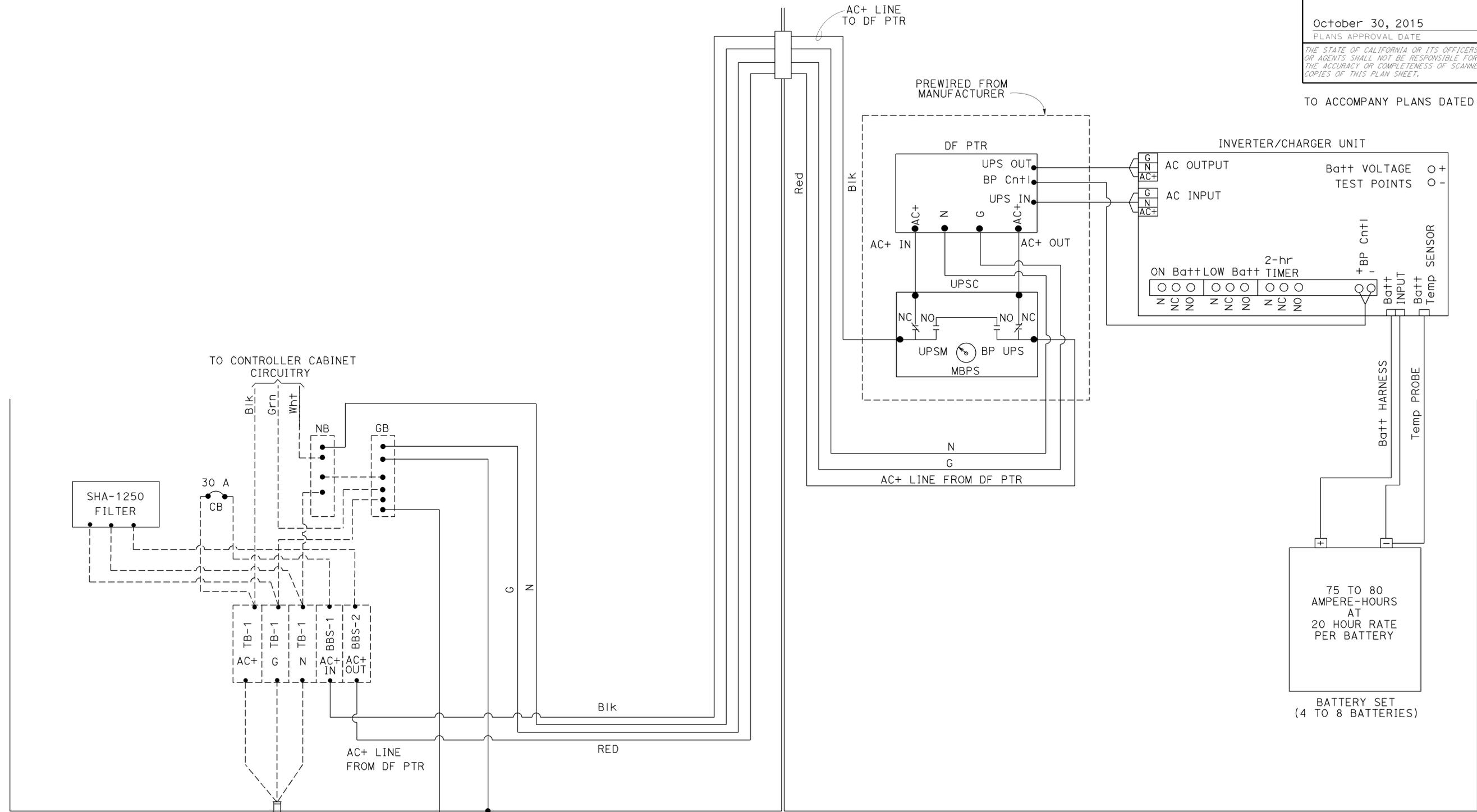
2010 REVISED STANDARD PLAN RSP ES-3E

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	504	786

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 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
 Theresa Aziz Gabriel
 No. E15129
 Exp. 6-30-16
 ELECTRICAL
 STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 12-7-15



BBS CABINET

CONTROLLER CABINET

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(BBS POWER CONNECTION DIAGRAM,
WITH BYPASS CONTROL LINE)
 NO SCALE

RSP ES-3I DATED OCTOBER 30, 2015 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-3I

2010 REVISED STANDARD PLAN RSP ES-3I

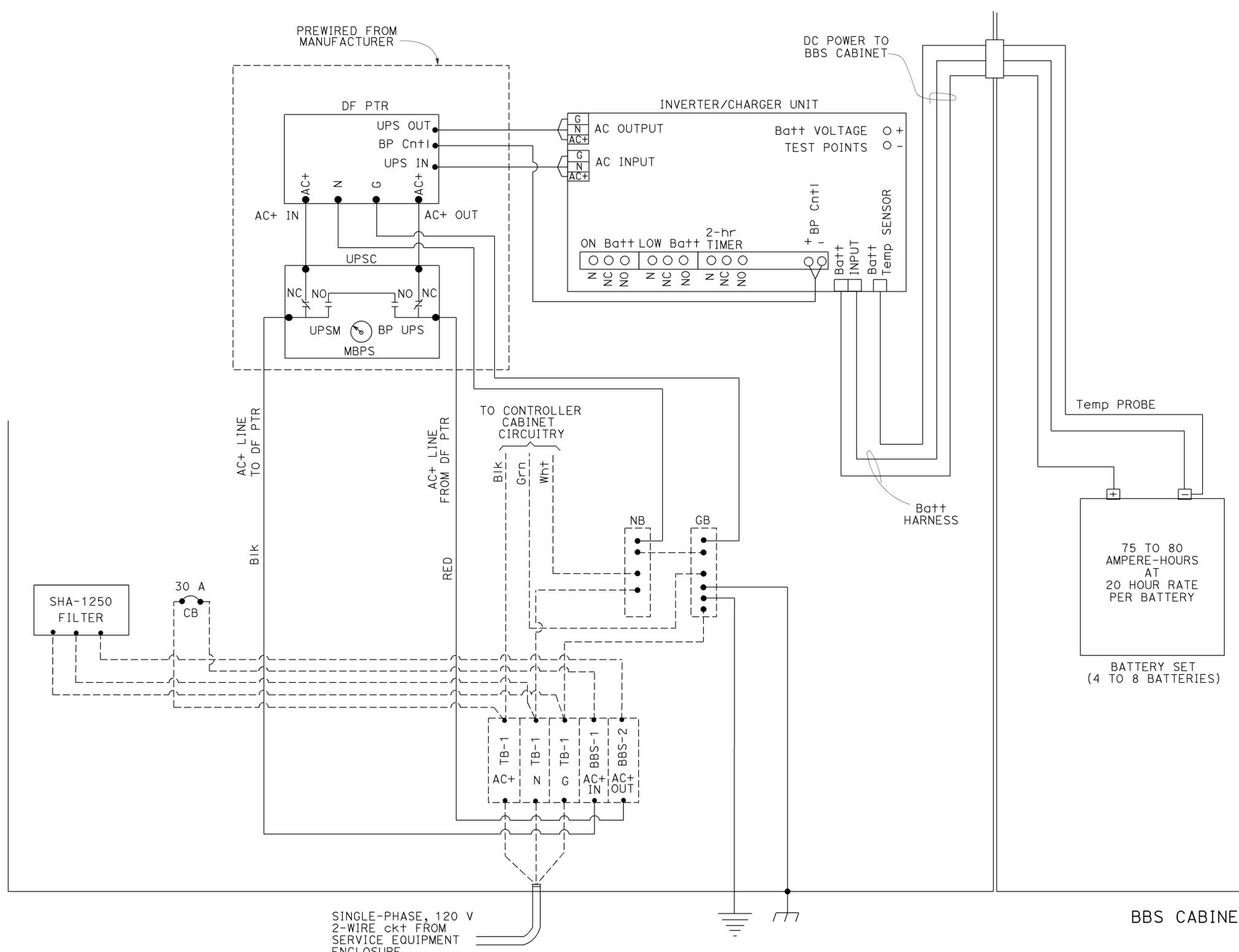
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	505	786

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE

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TO ACCOMPANY PLANS DATED 12-7-15

2010 REVISED STANDARD PLAN RSP ES-3J



STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (BBS POWER CONNECTION DIAGRAM,
 WITH BYPASS CONTROL LINE)**
 NO SCALE

RSP ES-3J DATED OCTOBER 30, 2015 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

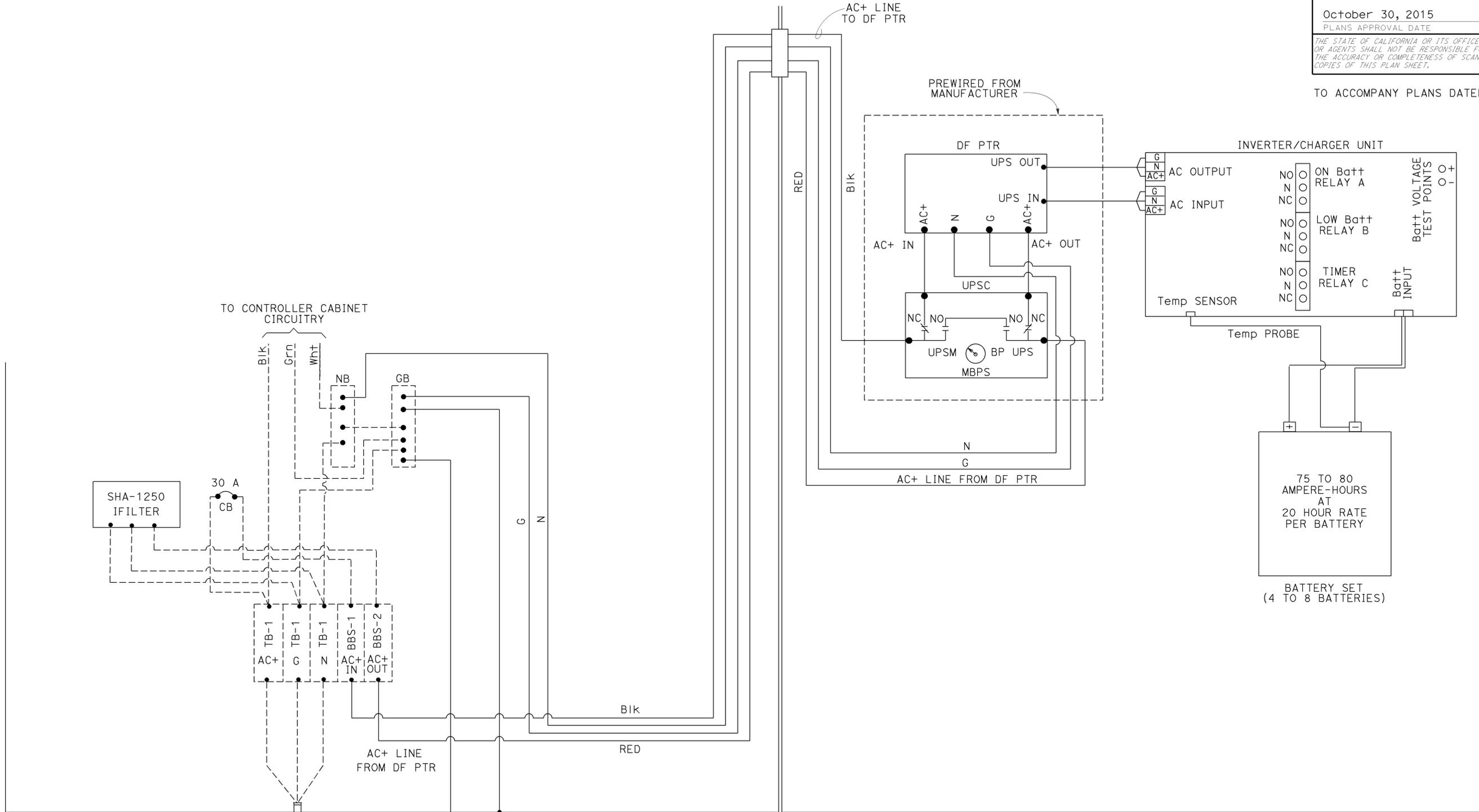
REVISED STANDARD PLAN RSP ES-3J

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	506	786

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 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
 Theresa Aziz Gabriel
 No. E15129
 Exp. 6-30-16
 ELECTRICAL
 STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 12-7-15



2010 REVISED STANDARD PLAN RSP ES-3K

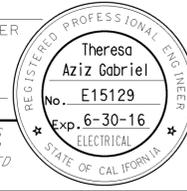
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(BBS POWER CONNECTION DIAGRAM,
WITHOUT BYPASS CONTROL LINE)
 NO SCALE

RSP ES-3K DATED OCTOBER 30, 2015 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

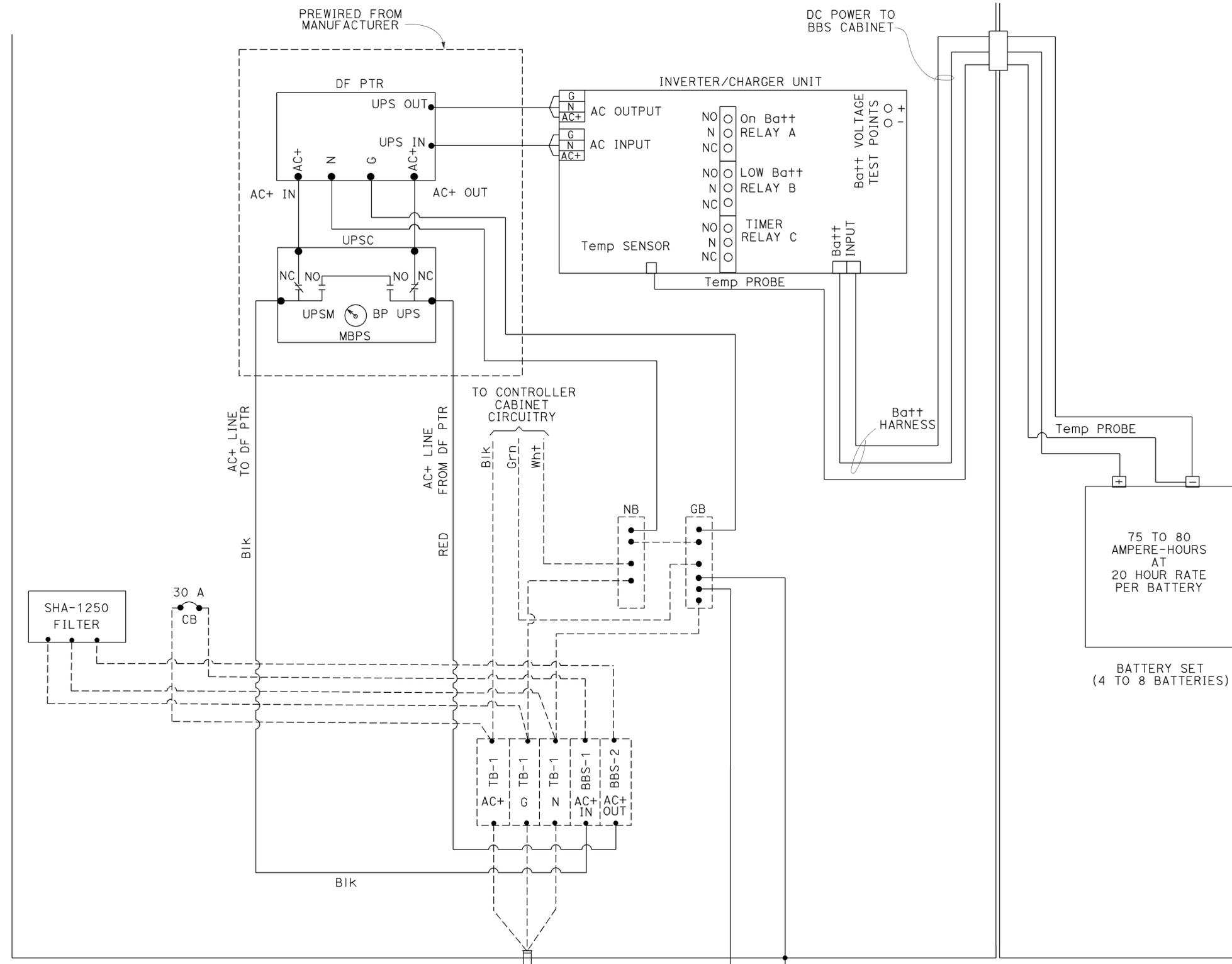
REVISED STANDARD PLAN RSP ES-3K

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	507	786

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
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TO ACCOMPANY PLANS DATED 12-7-15



BBS CABINET

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

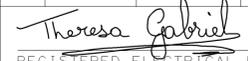
**ELECTRICAL SYSTEMS
(BBS POWER CONNECTION DIAGRAM,
WITHOUT BYPASS CONTROL LINE)**

NO SCALE

RSP ES-3L DATED OCTOBER 30, 2015 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

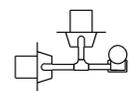
REVISED STANDARD PLAN RSP ES-3L

2010 REVISED STANDARD PLAN RSP ES-3L

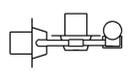
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	508	786
 REGISTERED ELECTRICAL ENGINEER					
October 30, 2015 PLANS APPROVAL DATE					
					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

TO ACCOMPANY PLANS DATED 12-7-15

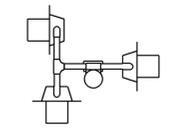
2010 REVISED STANDARD PLAN RSP ES-4A



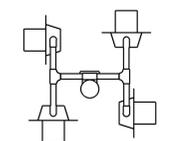
SV-2-TD



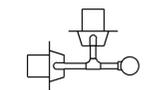
SV-2-TC



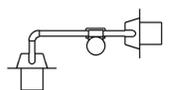
SV-3-TC



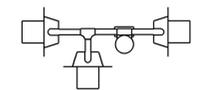
SV-4-TC



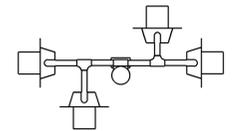
SV-2B



SV-2-TB

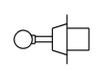


SV-3-TB



SV-4-TB

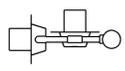
PLAN VIEW OF OTHER
SIDE MOUNTINGS



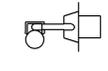
SV



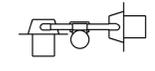
SV-1



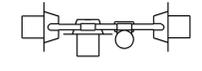
SV-2A



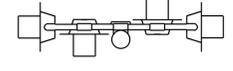
SV-1-T



SV-2-TA



SV-3-TA



SV-4-TA

SIDE MOUNTINGS

ABBREVIATIONS:

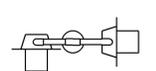
- SV SIDE MOUNTED SIGNAL HEADS
- T TERMINAL COMPARTMENT
- TV TOP MOUNTED SIGNAL HEADS
- 1, 2, 3, 4 NUMBER OF SIGNAL FACES
(3 - SECTION, UNLESS OTHERWISE INDICATED)
- A, B, C, D CONFIGURATION OF SIGNALS

NOTES:

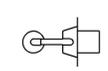
1. Mountings shall be oriented to provide maximum horizontal clearance to adjacent roadway.
2. Bracket arms shall be long enough to permit proper alignment of signals and backplate installation.
3. See Revised Standard Plans RSP ES-4D and RSP ES-4E for attachment fitting details.



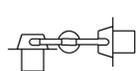
TV-1



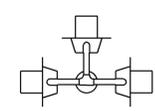
TV-2



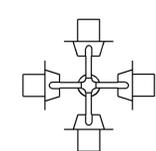
TV-1-T



TV-2-T



TV-3-T



TV-4-T

PLAN VIEW OF
TOP MOUNTINGS

TOP MOUNTINGS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
(SIGNAL HEADS AND MOUNTINGS)**
NO SCALE

RSP ES-4A DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-4A DATED JULY 19, 2013 AND
STANDARD PLAN ES-4A DATED MAY 20, 2011 - PAGE 443 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-4A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	509	786

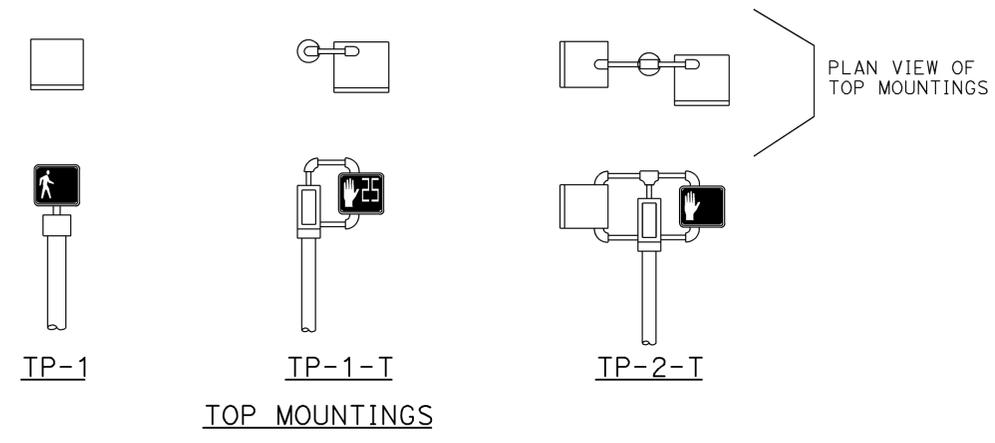
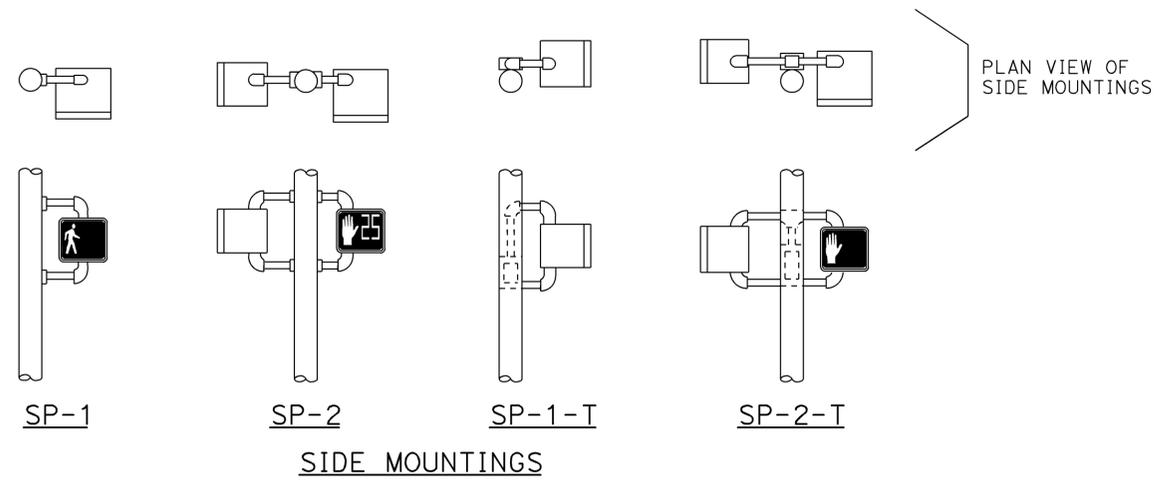
Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

October 30, 2015
PLANS APPROVAL DATE

Theresa
Aziz Gabriel
No. E15129
Exp. 6-30-16
ELECTRICAL
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.

TO ACCOMPANY PLANS DATED 12-7-15



PEDESTRIAN SIGNAL HEAD MOUNTINGS
DETAIL A



PERSON WALKING INTERVAL FLASHING UPRaised HAND INTERVAL STEADY UPRaised HAND INTERVAL
LED COUNTDOWN PEDESTRIAN SIGNAL FACE MODULE
DETAIL B

NOTES:

1. Mounting shall be oriented to provide maximum horizontal clearance to adjacent roadway.
2. Bracket arms shall be long enough to permit proper alignment of signals.
3. See Revised Standard Plan RSP ES-4D for attachment fittings details.

ABBREVIATIONS:

- 1, 2 NUMBER OF SIGNAL FACES
- SP SIDE MOUNTED PEDESTRIAN SIGNAL
- T TERMINAL COMPARTMENT
- TP TOP MOUNTED PEDESTRIAN SIGNAL

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(PEDESTRIAN SIGNAL HEADS)**

NO SCALE

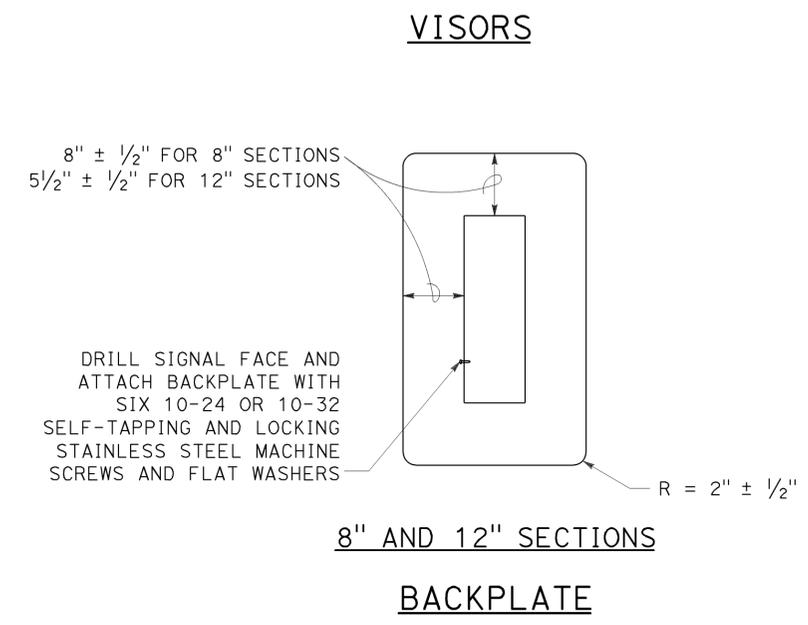
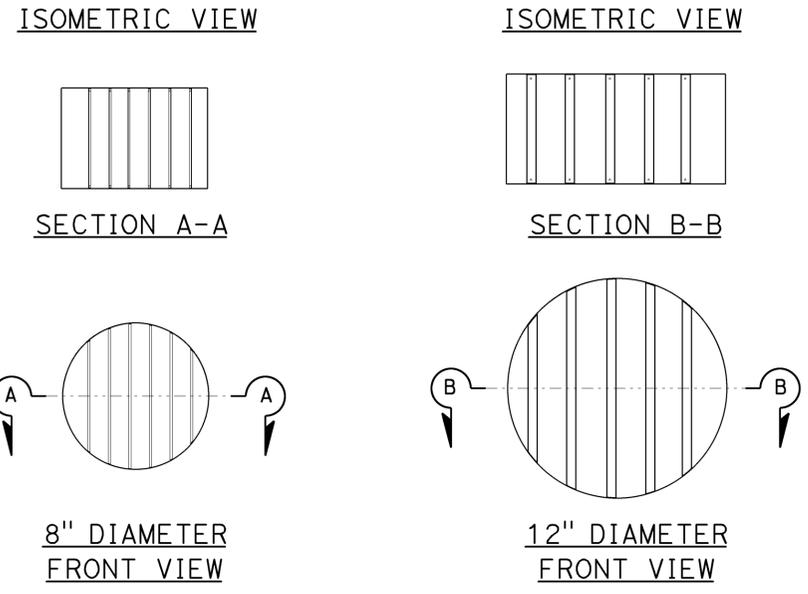
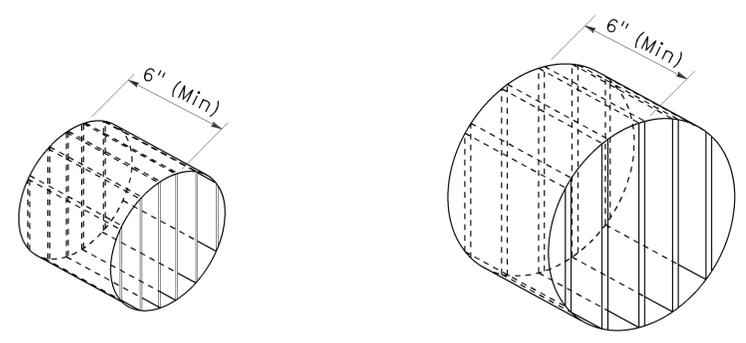
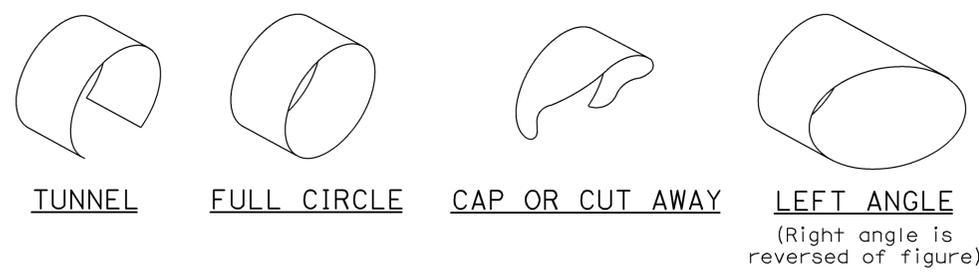
RSP ES-4B DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-4B DATED JULY 19, 2013 AND STANDARD PLAN ES-4B DATED MAY 20, 2011 - PAGE 444 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-4B

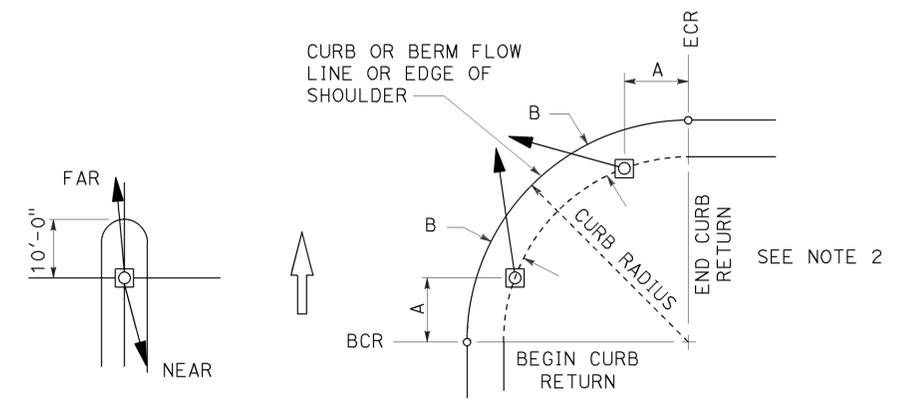
2010 REVISED STANDARD PLAN RSP ES-4B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	510	786

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
 Theresa Aziz Gabriel
 No. E15129
 Exp. 6-30-16
 ELECTRICAL
 STATE OF CALIFORNIA
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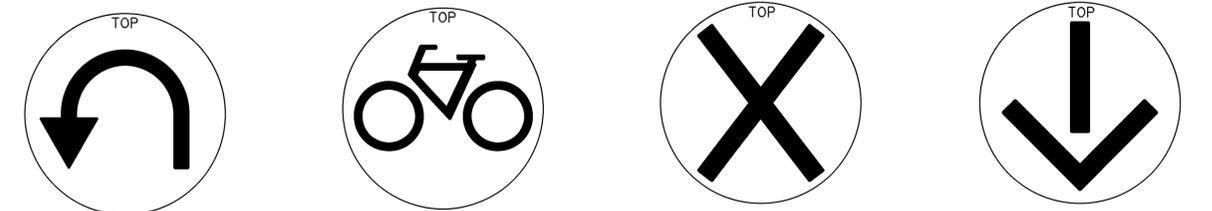
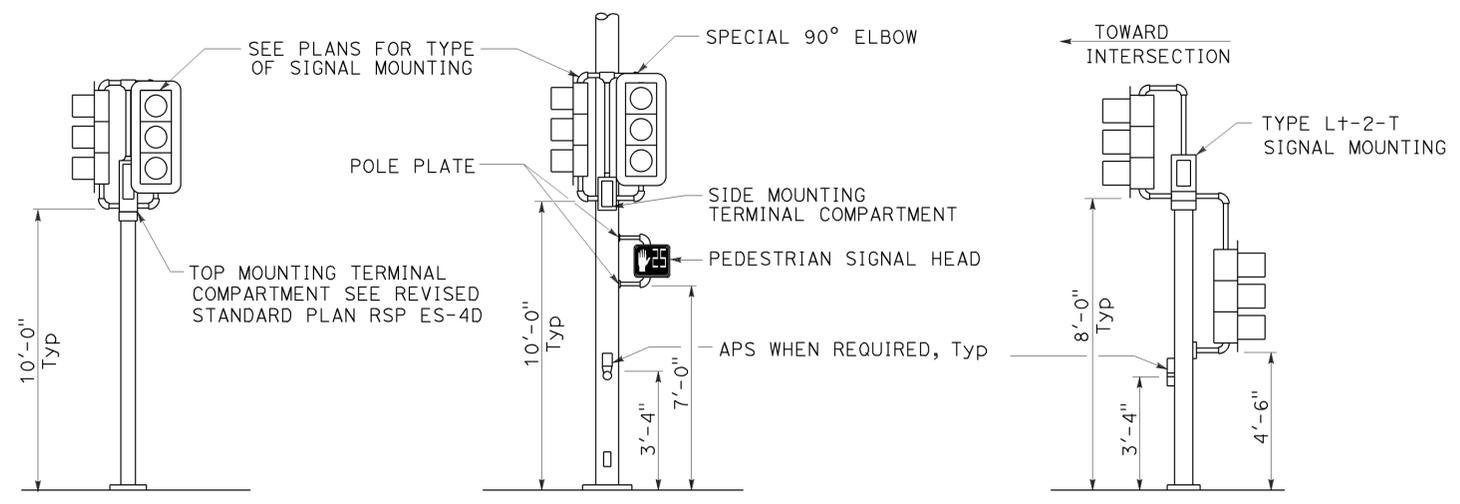


DIRECTIONAL LOUVER
 Directional louvers shall be oriented and secured in place with one plated brass machine screw and nut.



- NOTES:**
1. Typical signal pole placement unless dimensioned on plans.
 2. For A and B dimensions, see Pole Schedule.

SIGNAL STANDARD PLACEMENT DIMENSIONS AND EQUIPMENT LOCATIONS



SIGNAL FACES

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SIGNAL HEADS AND MOUNTINGS)

NO SCALE

RSP ES-4C DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-4C DATED JULY 19, 2013 AND STANDARD PLAN ES-4C DATED MAY 20, 2011 - PAGE 445 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-4C

2010 REVISED STANDARD PLAN RSP ES-4C

TYPICAL SIGNAL HEAD INSTALLATIONS

Type 1-A, 1-B, 1-C and 1-D standard as indicated on the plans

Normally used on standards with luminaire or signal mast arm

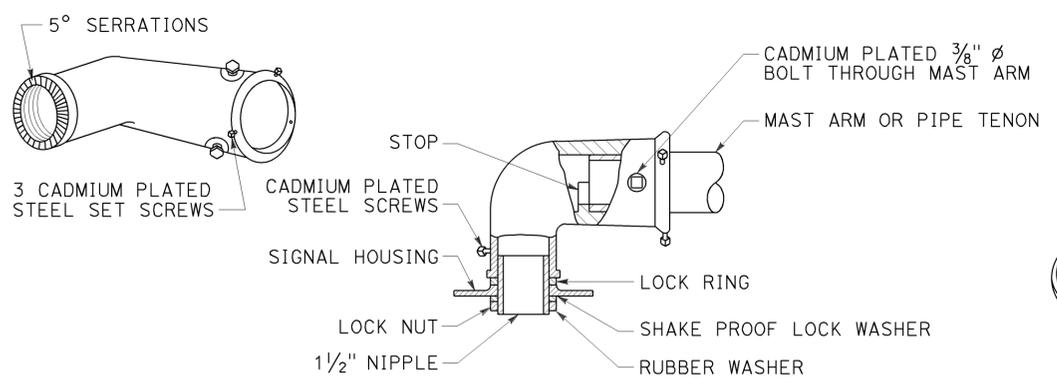
Type 1-A, 1-B, 1-C and 1-D standard as indicated on plans

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	511	786

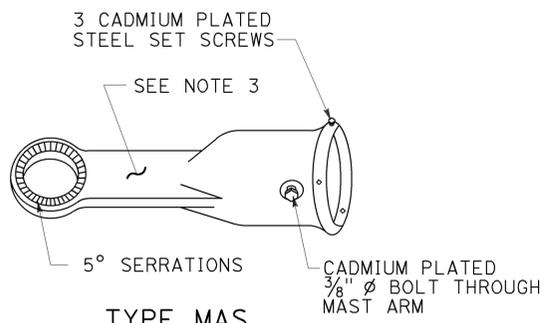
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



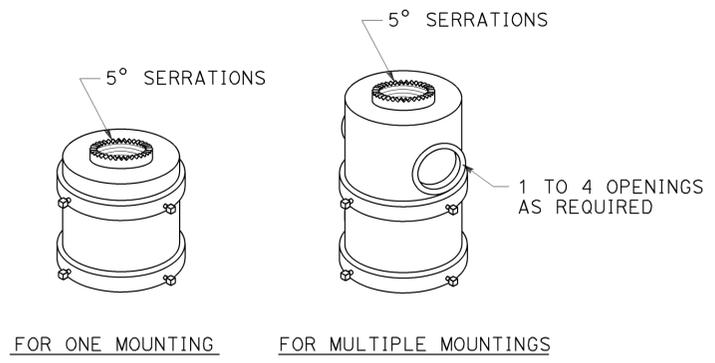
TO ACCOMPANY PLANS DATED 12-7-15



TYPE MAT
MAST ARM MOUNTING
For 2 NPS pipe, see Note 1.

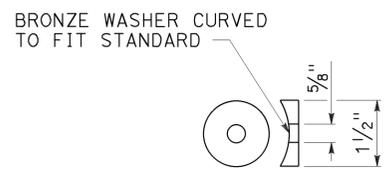


TYPE MAS
MAST ARM MOUNTING
For 2 NPS pipe, see Note 1.

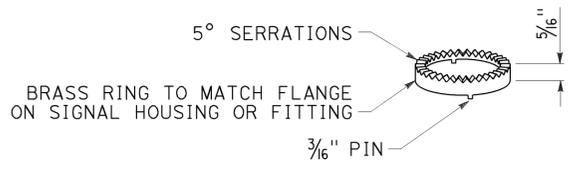


TOP MOUNTINGS
For 4 NPS pipe, see Note 2.

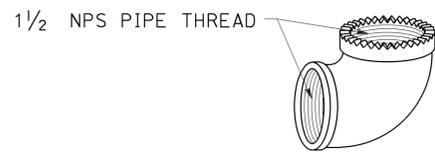
SIGNAL SLIP FITTERS



DETAIL C



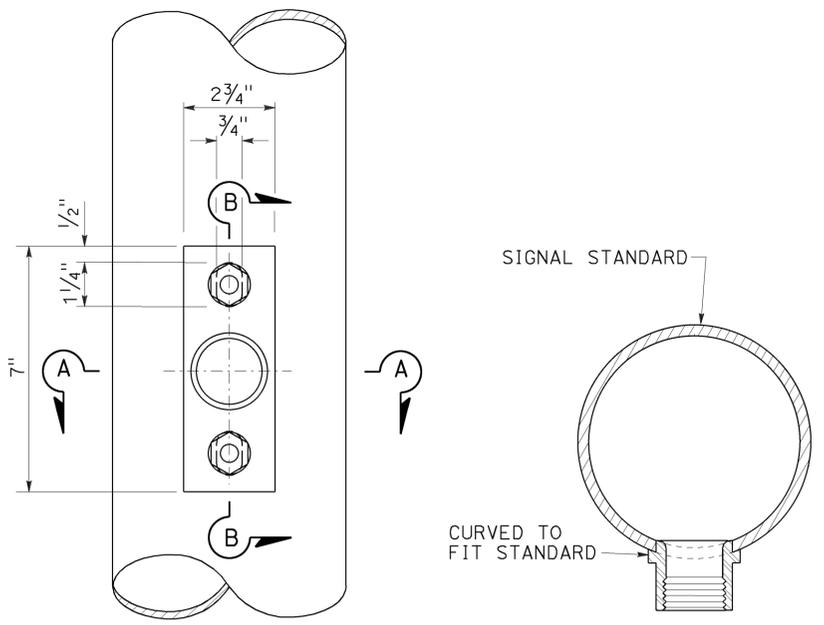
LOCK RING
Use where locking ring is not integral with signal housing or fitting.



SPECIAL 90° ELBOW
One for each signal head, except those with special slip fitter mounting

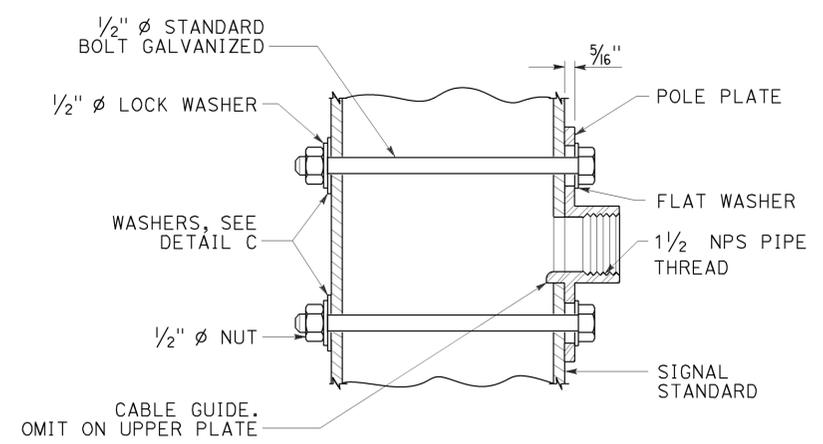
- NOTES:**
- After mast arm signal has been plumbed and secured, drill $\frac{1}{16}$ " hole through mast arm tenon in line with slip fitter hole. Place a cadmium plated $\frac{3}{8}$ " ϕ galvanized bolt with washer under bolt head through hole and secure with washer, nut, and locknut. Seal openings between mast arm mountings and mast arm with mastic.
 - (A) Threaded top mounted slip fitter openings shall be $1\frac{1}{2}$ NPS.
(B) Serrations in fittings shall match those on bottom of signal heads or in lock ring.
(C) Top opening shall be offset when backplate is used.
 - Wireway shall have a cross section area of 0.95 square inch minimum. Minimum width of $\frac{1}{2}$ ".

MISCELLANEOUS MOUNTING HARDWARE

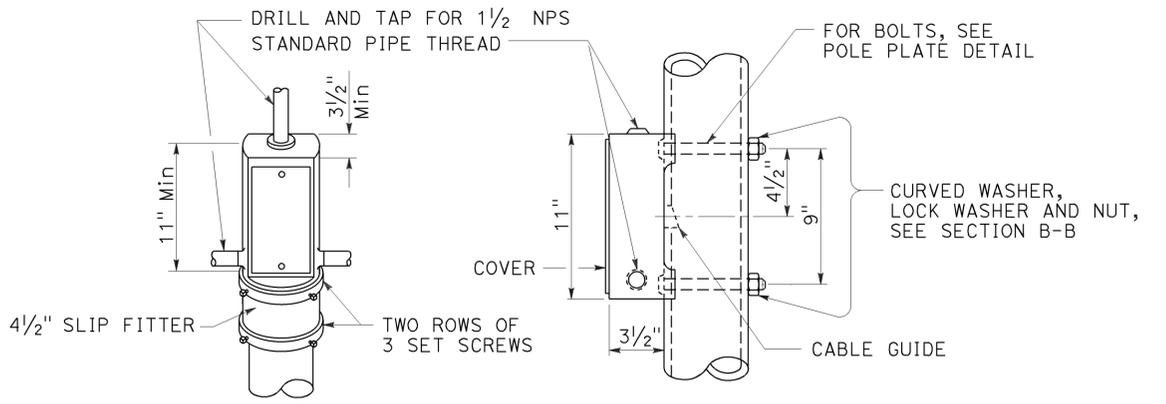


TOP VIEW **SECTION A-A**

POLE PLATE FOR SIDE MOUNTED SIGNAL HEAD WITHOUT TERMINAL COMPARTMENT



SECTION B-B



TOP MOUNTING **SIDE MOUNTING**
TERMINAL COMPARTMENT

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(SIGNAL HEAD MOUNTING)
NO SCALE

RSP ES-4D DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-4D DATED MAY 20, 2011 - PAGE 446 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-4D

2010 REVISED STANDARD PLAN RSP ES-4D

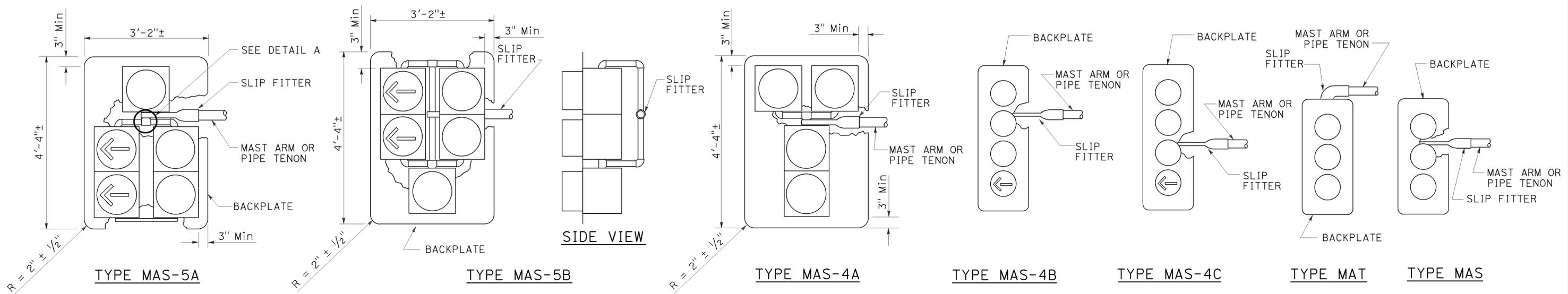
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	512	786

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE

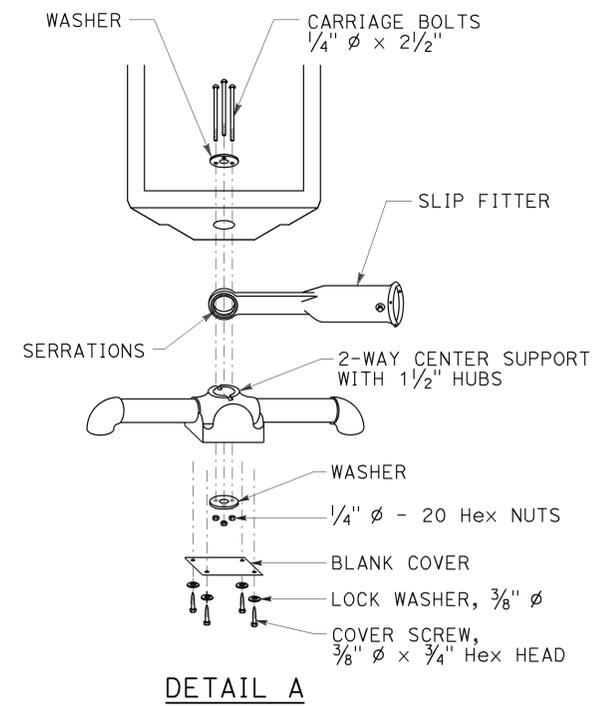
REGISTERED PROFESSIONAL ENGINEER
 Theresa
 Aziz Gabriel
 No. E15129
 Exp. 6-30-16
 ELECTRICAL
 STATE OF CALIFORNIA

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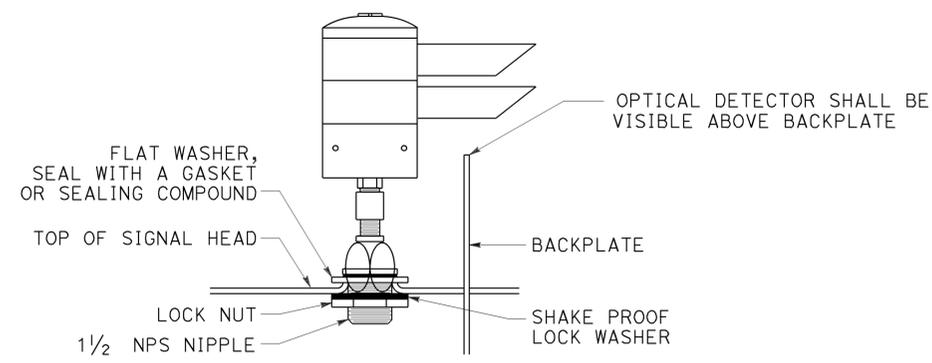
TO ACCOMPANY PLANS DATED 12-7-15



MAST ARM MOUNTINGS



DETAIL A



**OPTICAL DETECTOR MOUNTING FOR
EMERGENCY VEHICLE DETECTION**

DETAIL B

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (SIGNAL HEADS AND
 OPTICAL DETECTOR MOUNTING)**

NO SCALE

RSP ES-4E DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-4E DATED JULY 19, 2013 AND STANDARD PLAN ES-4E DATED MAY 20, 2011 - PAGE 447 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-4E

2010 REVISED STANDARD PLAN RSP ES-4E

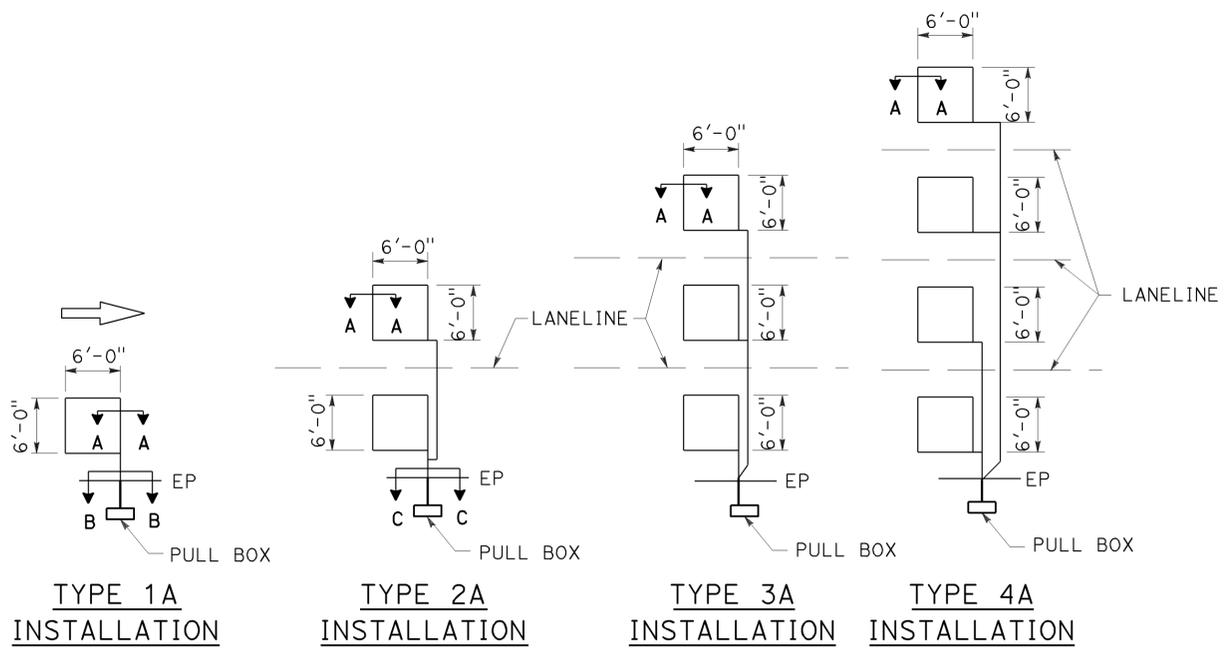
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	513	786

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 Theresa
 Aziz Gabriel
 No. E15129
 Exp. 6-30-16
 ELECTRICAL
 STATE OF CALIFORNIA

October 30, 2015
 PLANS APPROVAL DATE

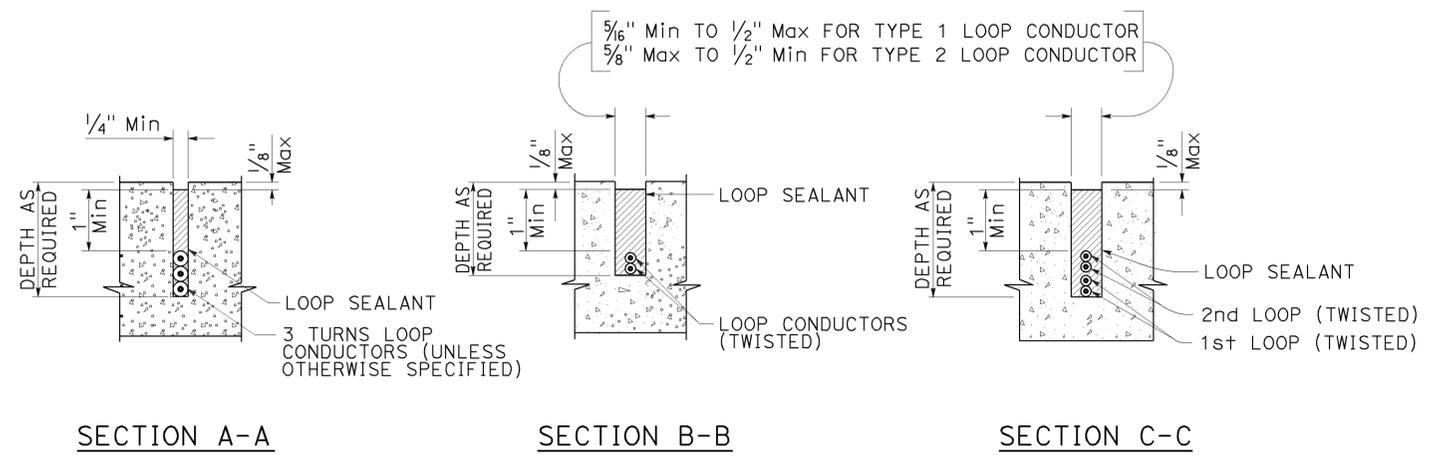
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TO ACCOMPANY PLANS DATED 12-7-15

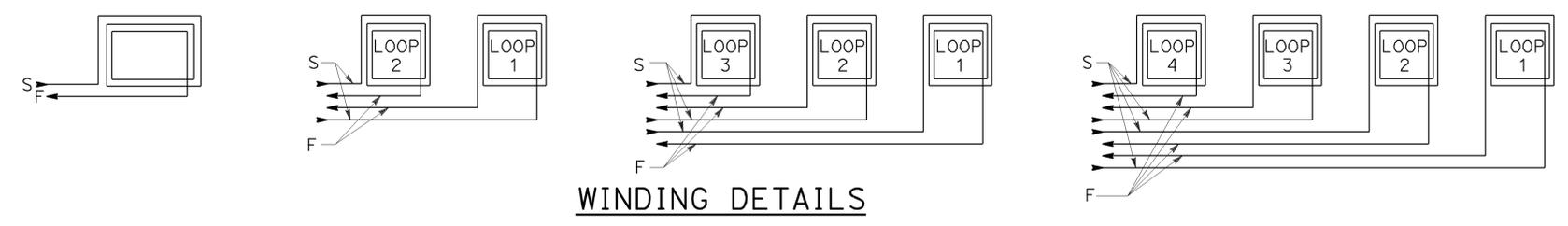


SAWCUT DETAILS

- Type A loop detector configurations illustrated
- 1A thru 4A = 1 Type A loop configuration in each lane.
 - 1B thru 4B = 1 Type B loop configuration in each lane.
 - 1C = 1 Type C loop configuration entering lanes as required.
 - 1D thru 4D = 1 Type D loop configuration in each lane.
 - 1E thru 4E = 1 Type E loop configuration in each lane.
 - 1Q thru 4Q = 1 Type Q loop configuration in each lane.
- Use Type A, B, C, D, E or Q loop detector configurations only when specified or shown on plans.

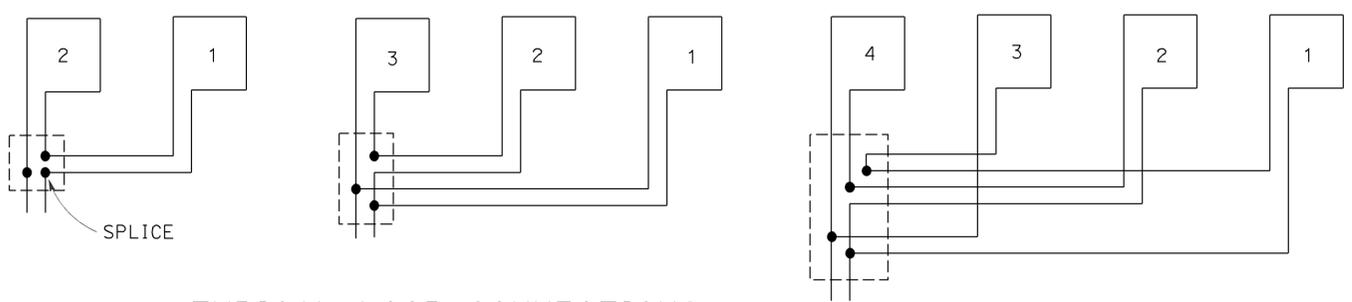


SLOT DETAILS - TYPE 1 AND TYPE 2 LOOP CONDUCTOR



WINDING DETAILS

ABBREVIATIONS:
 S - START
 F - FINISH



TYPICAL LOOP CONNECTIONS
 Dashed lines represent the pull box

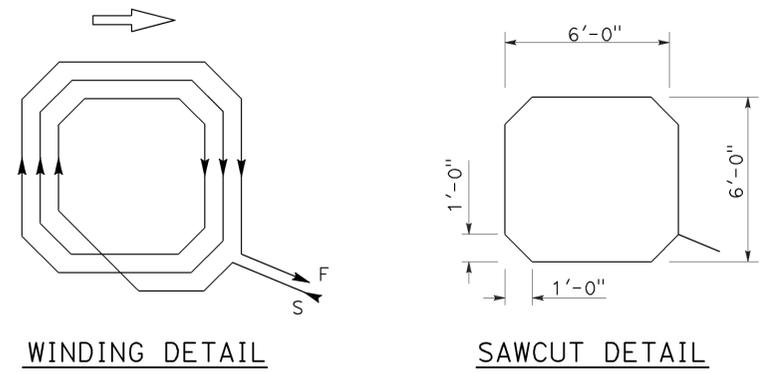
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (LOOP DETECTORS)**
 NO SCALE

RSP ES-5A DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-5A DATED MAY 20, 2011 - PAGE 448 OF THE STANDARD PLANS BOOK DATED 2010.

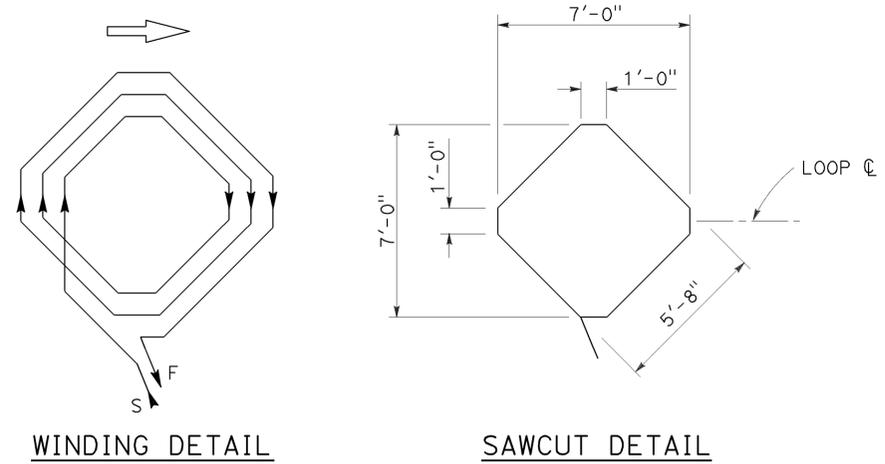
REVISED STANDARD PLAN RSP ES-5A

2010 REVISED STANDARD PLAN RSP ES-5A

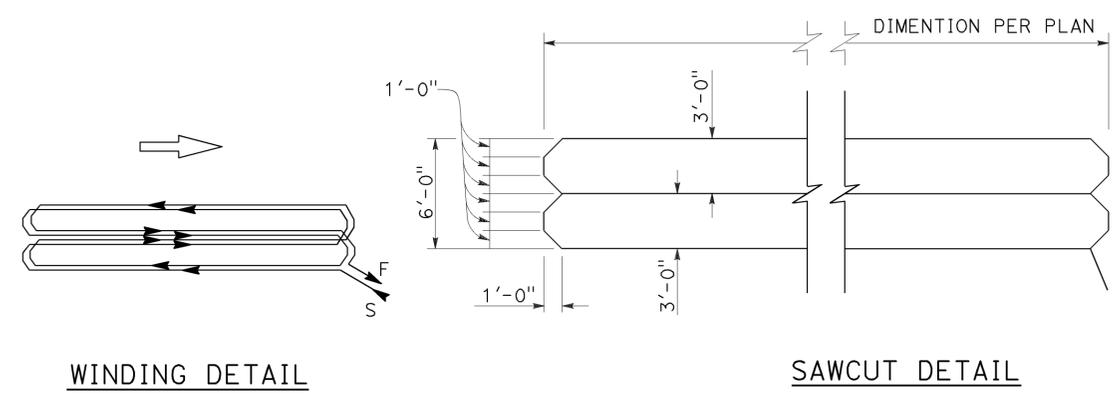
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	514	786
<i>Theresa Gabriel</i> REGISTERED ELECTRICAL ENGINEER October 30, 2015 PLANS APPROVAL DATE <small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					
TO ACCOMPANY PLANS DATED <u>12-7-15</u>					



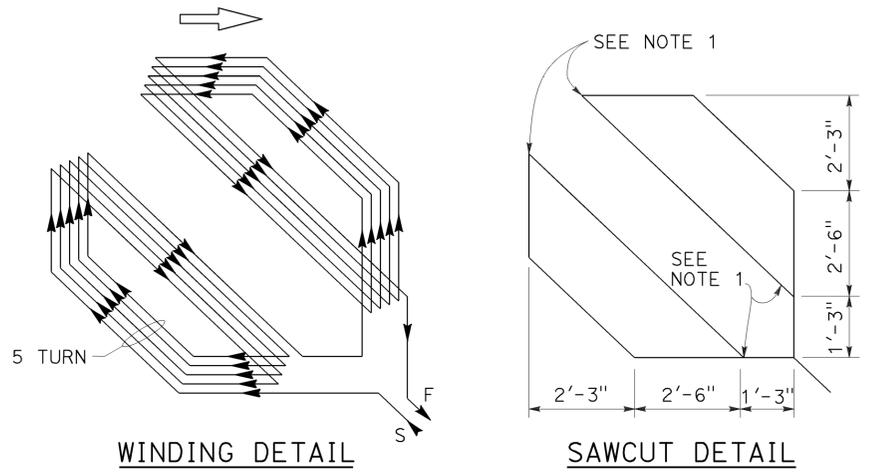
WINDING DETAIL
SAWCUT DETAIL
TYPE A LOOP DETECTOR CONFIGURATION



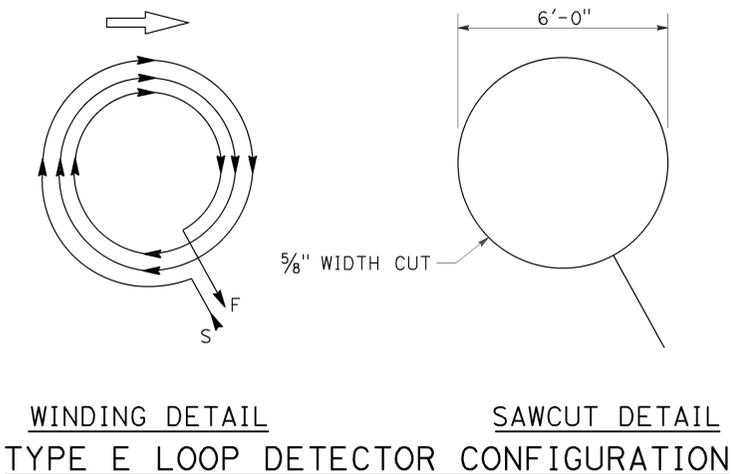
WINDING DETAIL
SAWCUT DETAIL
TYPE B LOOP DETECTOR CONFIGURATION



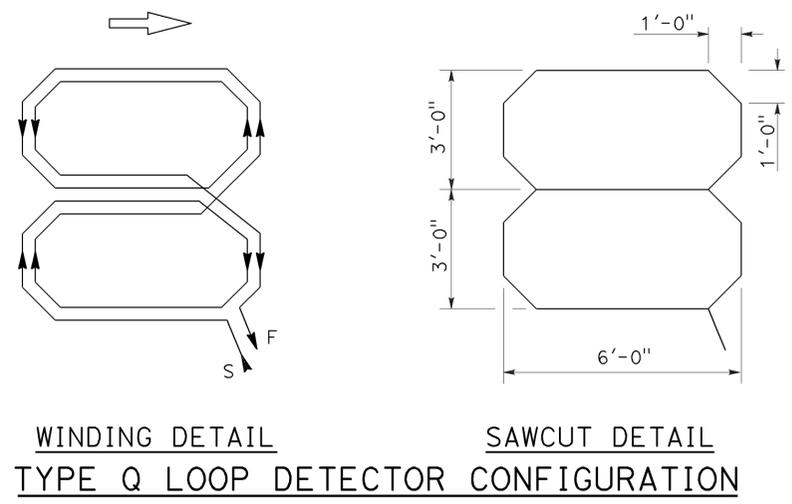
WINDING DETAIL
SAWCUT DETAIL
TYPE C LOOP DETECTOR CONFIGURATION



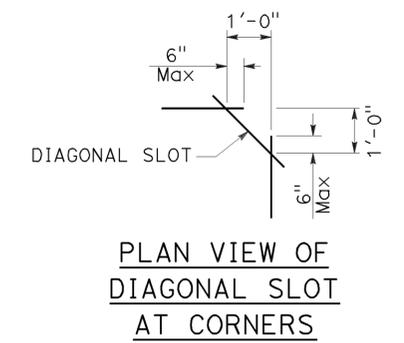
WINDING DETAIL
SAWCUT DETAIL
TYPE D LOOP DETECTOR CONFIGURATION



WINDING DETAIL
SAWCUT DETAIL
TYPE E LOOP DETECTOR CONFIGURATION



WINDING DETAIL
SAWCUT DETAIL
TYPE Q LOOP DETECTOR CONFIGURATION



PLAN VIEW OF DIAGONAL SLOT AT CORNERS

- NOTES:**
1. Round corners of acute angle sawcuts to prevent damage to conductors.
 2. Typical distance separating loops from edge to edge is 10' for Type A, B, D and E installation in single lane.
 3. Use Type D loops for limit line detector installations in left turn and bicycle lanes.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS (DETECTORS)
NO SCALE

RSP ES-5B DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-5B DATED JULY 19, 2013 AND STANDARD PLAN ES-5B DATED MAY 20, 2011 - PAGE 449 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-5B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	515	786

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

October 30, 2015
PLANS APPROVAL DATE

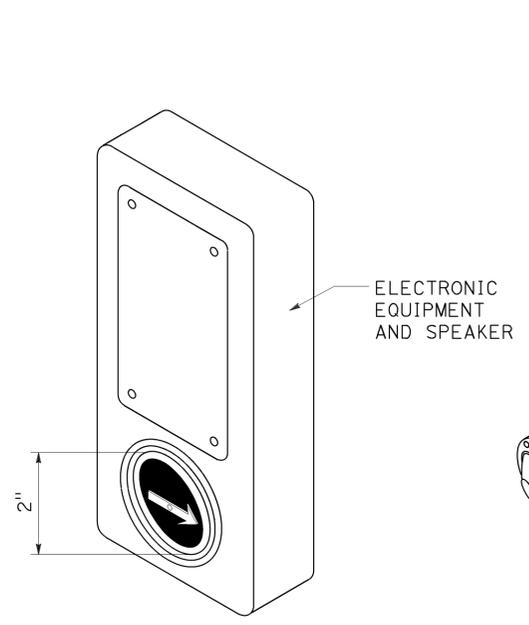
Theresa
Aziz Gabriel
No. E15129
Exp. 6-30-16
ELECTRICAL
STATE OF CALIFORNIA

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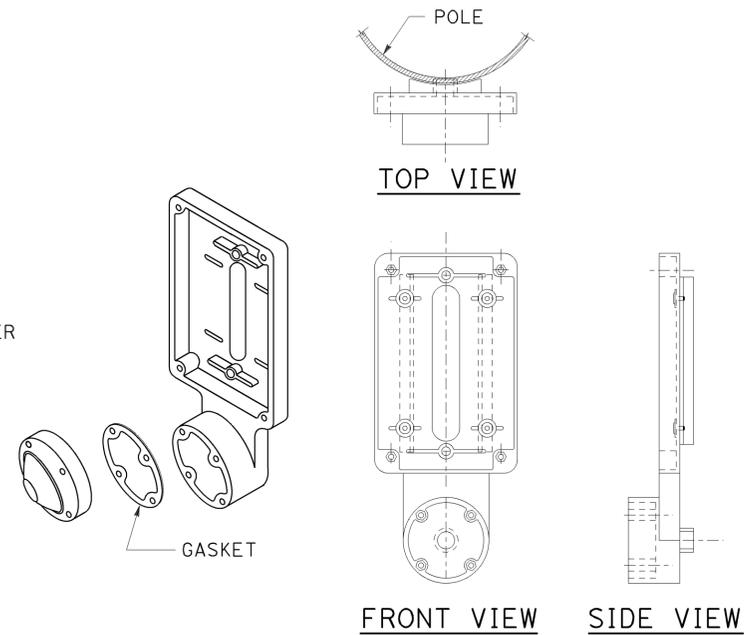
TO ACCOMPANY PLANS DATED 12-7-15

NOTES:

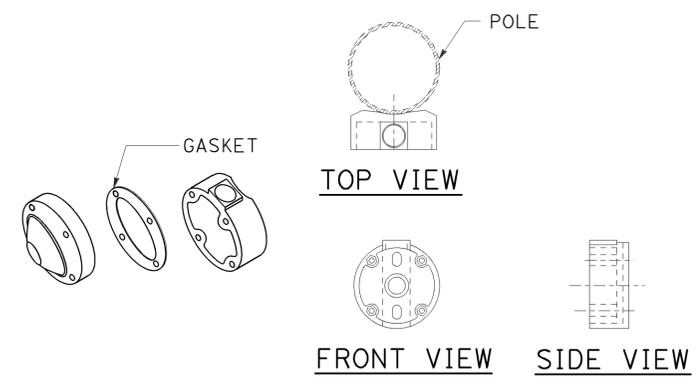
1. Back casting shape to fit curvature of pole.
2. Provide cover fitting for top of post, when PBA is mounted on push button assembly post.
3. Install push button on crosswalk side of standard.
4. Use R10 series regulatory signs and plaques for pedestrian and bicycle facilities.



ACCESSIBLE PEDESTRIAN SIGNAL
DETAIL A



TYPE B PUSH BUTTON ASSEMBLY
DETAIL B



TYPE C PUSH BUTTON ASSEMBLY
DETAIL C

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(ACCESSIBLE PEDESTRIAN SIGNAL
AND PUSH BUTTON ASSEMBLIES)**

NO SCALE

RSP ES-5C DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-5C DATED JULY 19, 2013 AND STANDARD PLAN ES-5C DATED MAY 20, 2011 - PAGE 450 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-5C

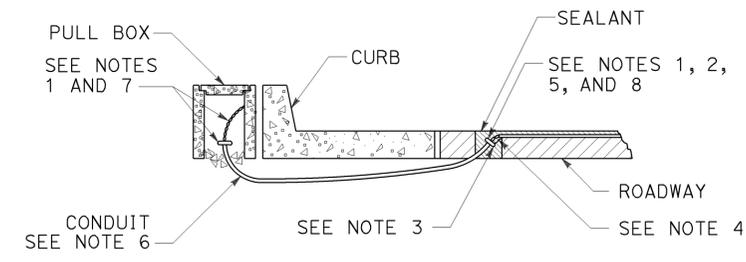
2010 REVISED STANDARD PLAN RSP ES-5C

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	516	786

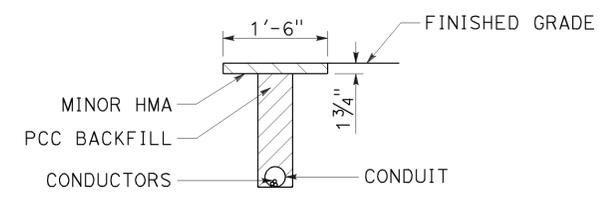
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
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TO ACCOMPANY PLANS DATED 12-7-15

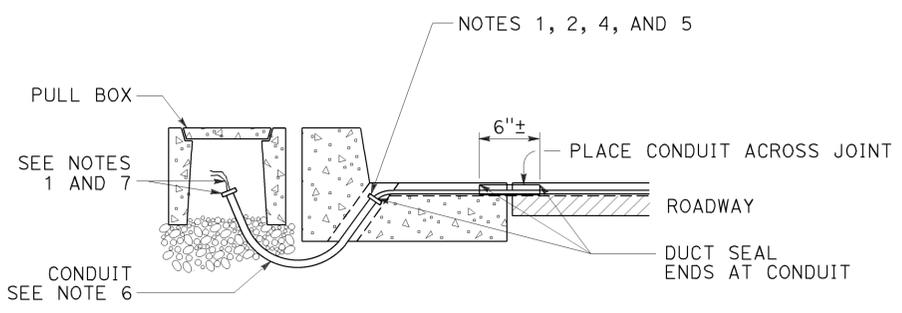
2010 REVISED STANDARD PLAN RSP ES-5D



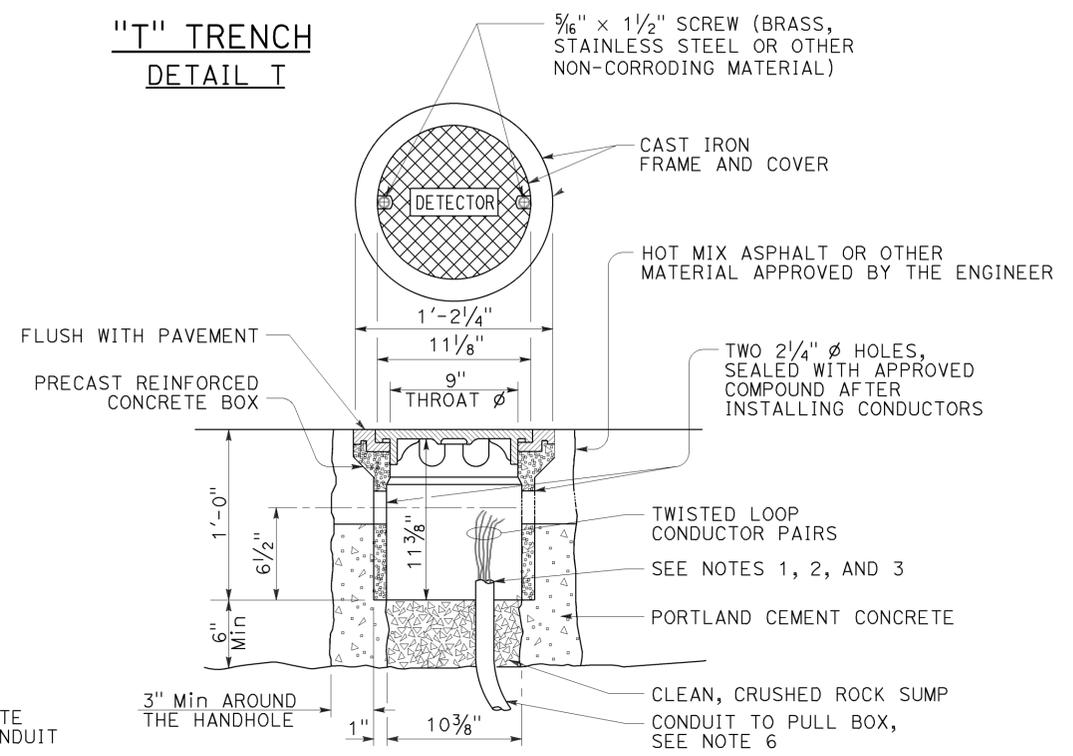
TYPE A
CURB TERMINATION DETAIL



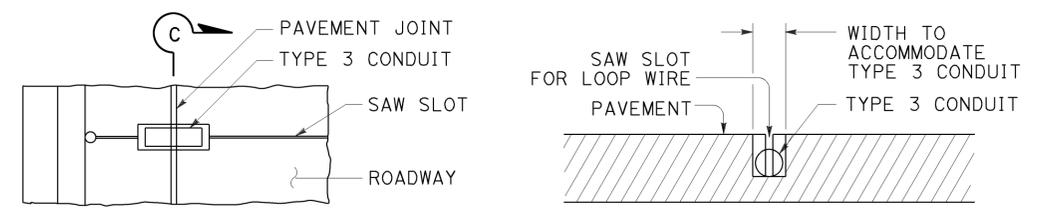
"T" TRENCH
DETAIL 1



CROSS SECTION



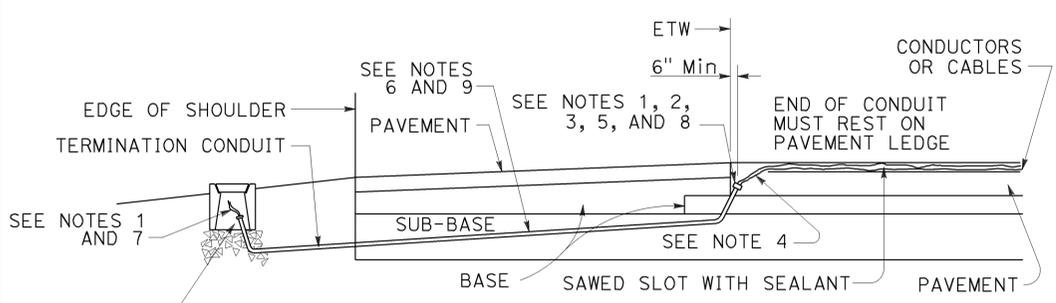
DETECTOR HANDHOLE DETAIL



PLAN VIEW

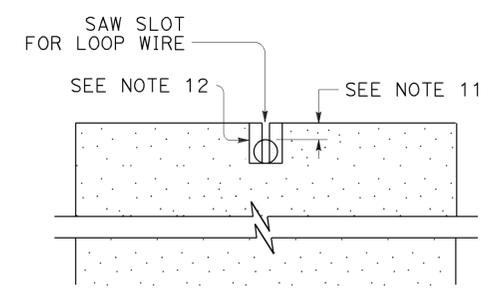
SECTION C-C

TYPE B
CURB TERMINATION DETAIL

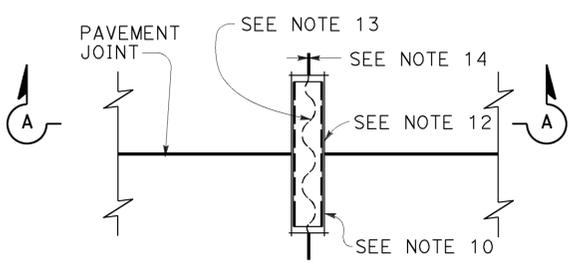


CROSS SECTION

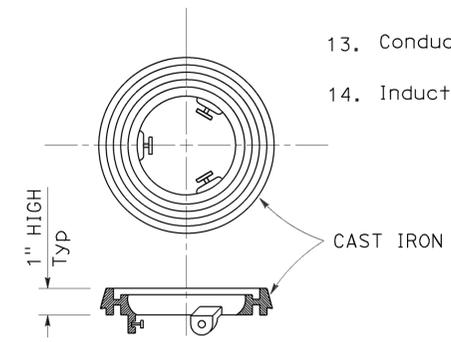
PLAN VIEW
SHOULDER TERMINATION DETAILS



SECTION A-A



PLAN VIEW
TYPICAL LOOP LEAD-IN DETAIL
AT PAVEMENT JOINT



LOCKING GRADE RING

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS
(CURB AND SHOULDER TERMINATION,
TRENCH, AND HANDHOLE DETAILS)

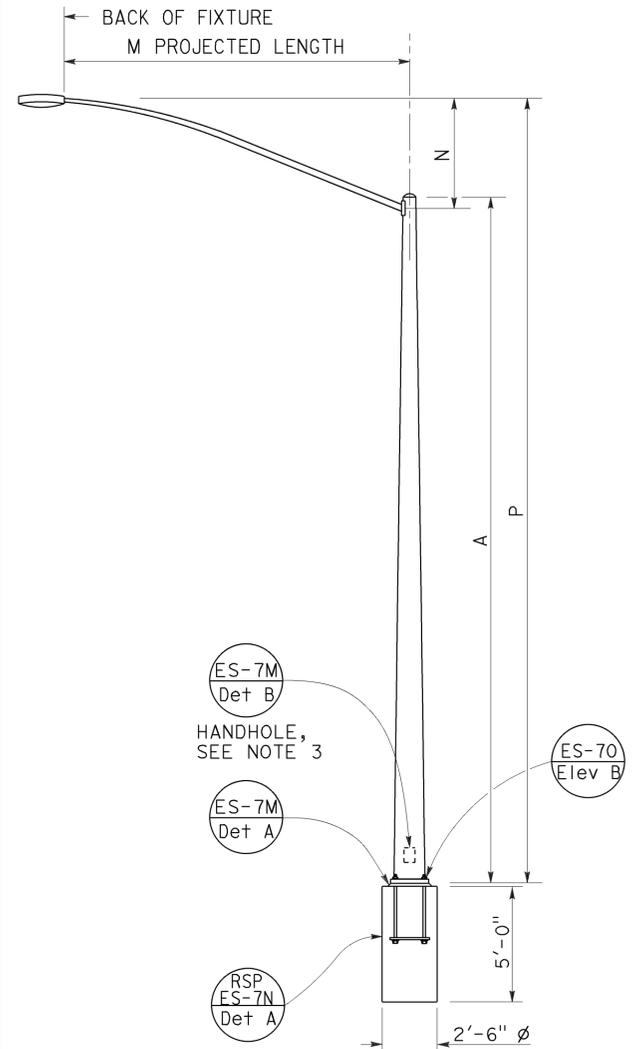
NO SCALE

RSP ES-5D DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-5D DATED JULY 19, 2013 AND STANDARD PLAN ES-5D DATED MAY 20, 2011 - PAGE 451 OF THE STANDARD PLANS BOOK DATED 2010.

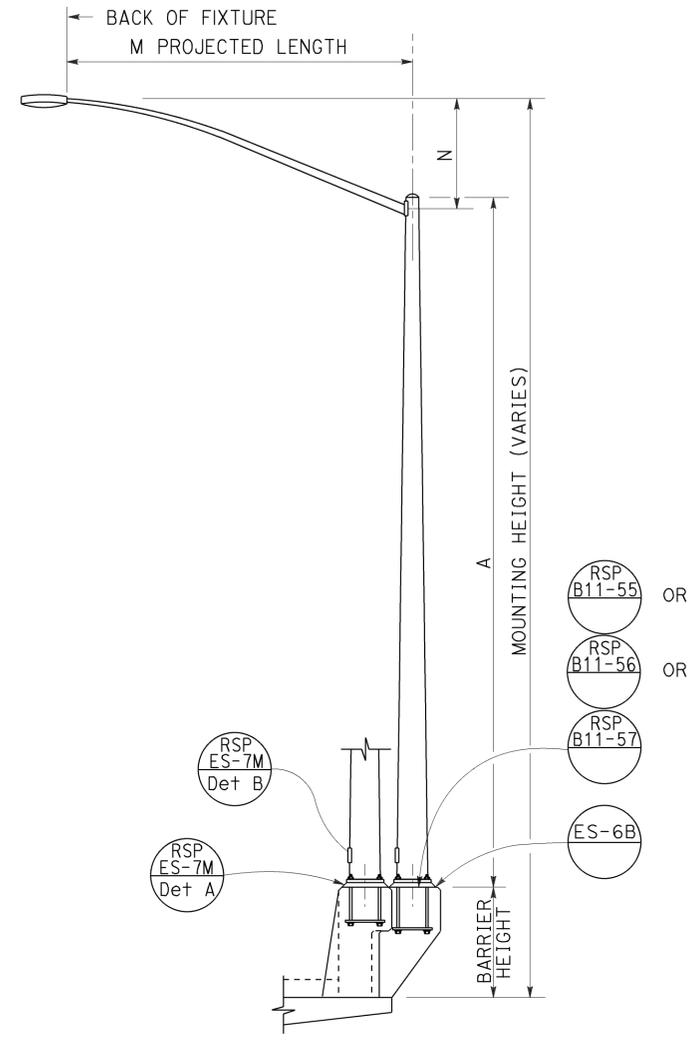
REVISED STANDARD PLAN RSP ES-5D

NOTES:

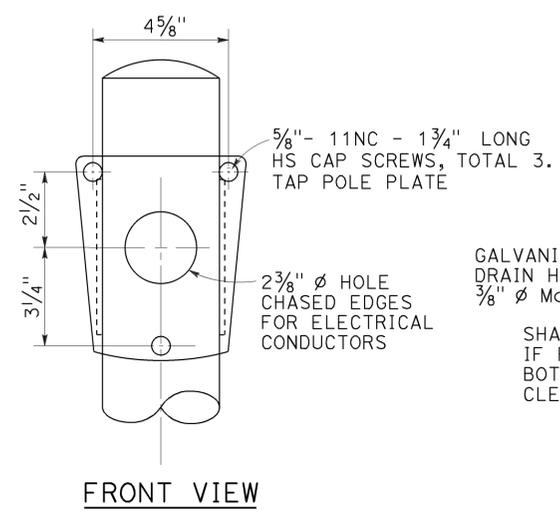
- Bushing shall be used at end of conduit.
- Tape detector conductors or cables 3" each side of bushings.
- Install duct seal compound to each end of termination conduit before installing sealant.
- Round all sharp edges where detector conductors or cables have to pass.
- End of conduit shall be 3/8" below roadway surface.
- Conduit size Loop conductors
1"C minimum 1 to 2 pairs
1 1/2"C minimum 3 to 4 pairs
2"C minimum 5 or more pairs
- Splice detector conductors or cables to detector lead-in-cable.
- Location of detector handhole when shown on plans.
- When the shoulder and traveled way are paved with the same material and there is no joint between them, the conduit shall extend only 2'-0" into the shoulder pavement.
- 3/4"C, Type 3 conduit 6" long minimum, plug both ends with duct compound to keep out sealant.
- 1/2" Minimum between top of conduit and pavement surface.
- Sawcut shall not exceed 1" in width and 1/8" longer than conduit to be installed.
- Conductors with 1/2" minimum slack inside conduit.
- Inductive loop detector saw slot.



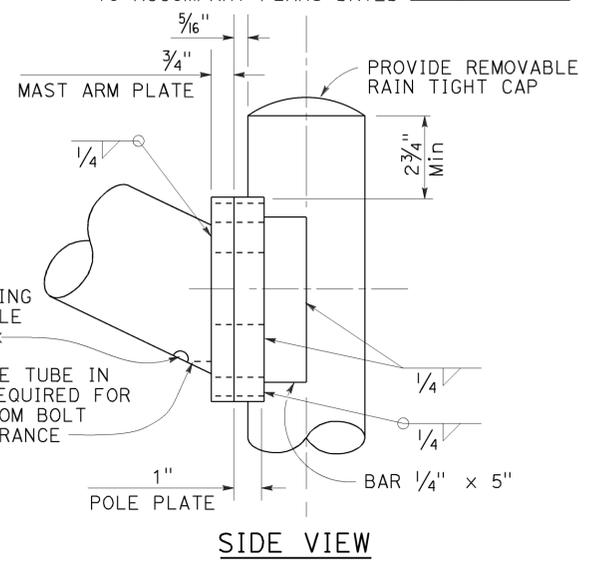
**TYPE 15 AND TYPE 21
ELEVATION A**



**TYPE 15 AND TYPE 21 BARRIER RAIL MOUNTED
ELEVATION B**

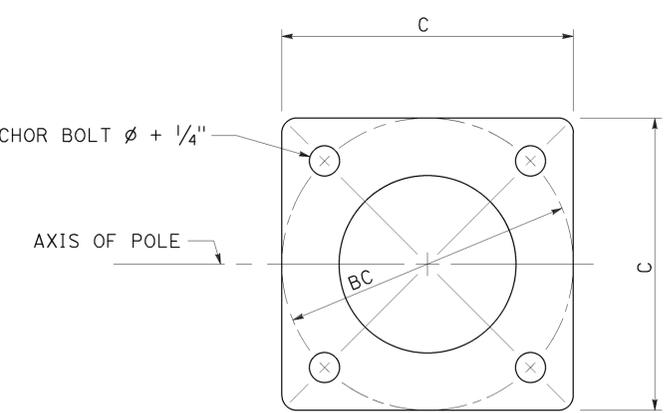


FRONT VIEW



SIDE VIEW

**LUMINAIRE MAST ARM CONNECTION
DETAIL R**



**BASE PLATE
DETAIL A**

POLE TYPE	POLE DATA			BASE PLATE DATA			
	A HEIGHT	Min OD BASE	WALL THICKNESS TOP	C	BC = BOLT CIRCLE	THICKNESS	ANCHOR BOLT SIZE
15	30'-0"	8"	0.1196"	1'-0"	1'-0"	2"	1" Ø x 3'-0" *
21	35'-0"	8 5/8"	0.1793"	1'-0"	1'-0"	2"	1 1/4" Ø x 3'-0" *

* FOR BARRIER RAIL BOLTS, SEE STANDARD PLAN ES-6B.

LUMINAIRE MAST ARM DATA					
M PROJECTED LENGTH	N RISE	Min OD AT POLE	NOMINAL THICKNESS	P	
				TYPE 15	TYPE 21
6'-0"	2'-0"±	3/4"	0.1196"	31'-6"±	36'-6"±
8'-0"	2'-6"±	3/2"		32'-0"±	37'-0"±
10'-0"	3'-3"±	3 7/8"		32'-9"±	37'-9"±
12'-0"	4'-3"±			33'-9"±	38'-9"±
15'-0"	4'-9"±	4 1/4"		34'-3"±	39'-3"±

NOTES:

- Indicates mast arm length to be used unless otherwise noted on the plans.
- For Type 15-SB, use Type 15 standard with Type 30 slip base plate details, see Revised Standard Plan RSP ES-6F.
- Handhole shall be located on the downstream side of traffic.
- For additional notes and details, see Revised Standard Plans RSP ES-7M and RSP ES-7N.

**ELECTRICAL SYSTEMS
(LIGHTING STANDARD,
TYPES 15 AND 21)**

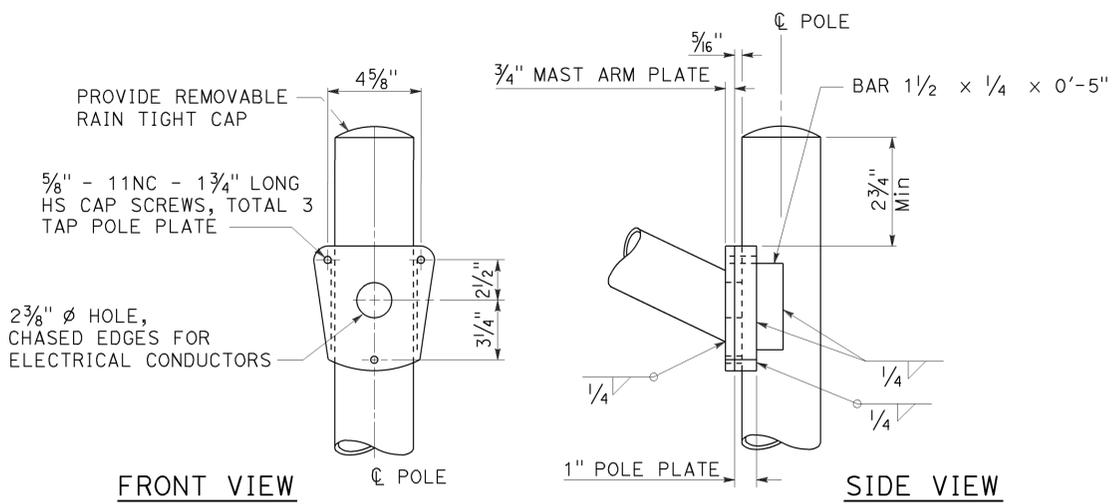
NO SCALE

RSP ES-6A DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-6A DATED MAY 20, 2011 - PAGE 452 OF THE STANDARD PLANS BOOK DATED 2010.

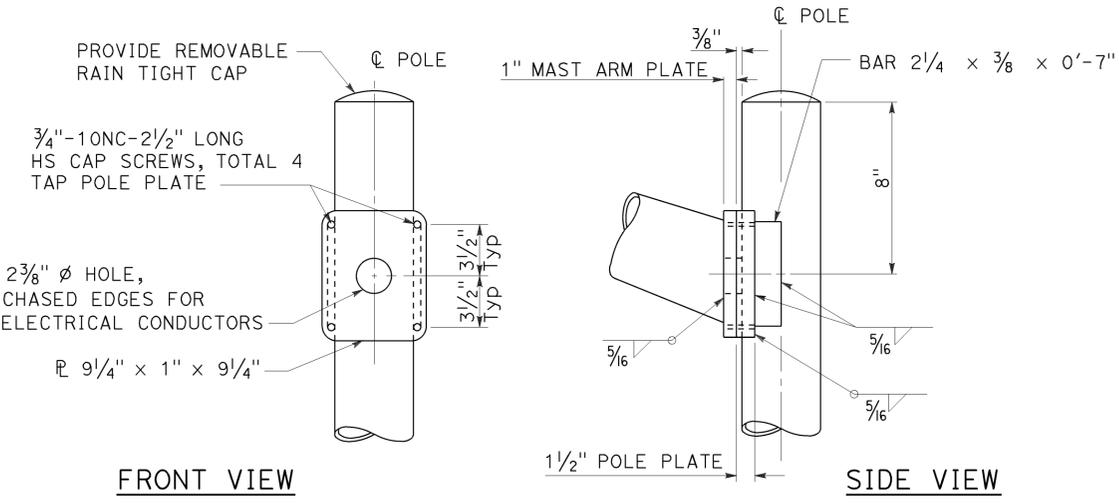
2010 REVISED STANDARD PLAN RSP ES-6A

LUMINAIRE MAST ARM DATA			
PROJECTED LENGTH	THICKNESS	MINIMUM OD AT POLE	MOUNTING HEIGHT
* 6'-0"	0.1196"	3 1/4"	36'-9"±
* 8'-0"		3 1/2"	37'-3"±
* 10'-0"		3 3/4"	38'-0"±
* 12'-0"		4 1/4"	39'-0"±
** 20'-0"	0.1793"	5"	37'-0"±

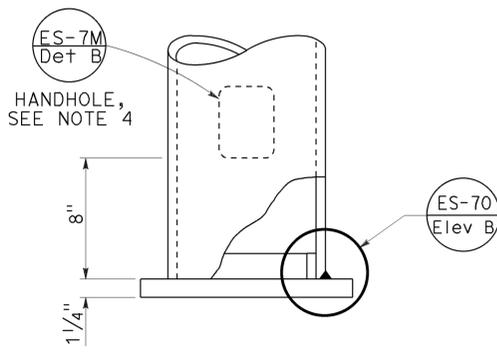
* TYPE 30
 ** TYPE 31



**TYPE 30
DETAIL A**



**TYPE 31
DETAIL B**

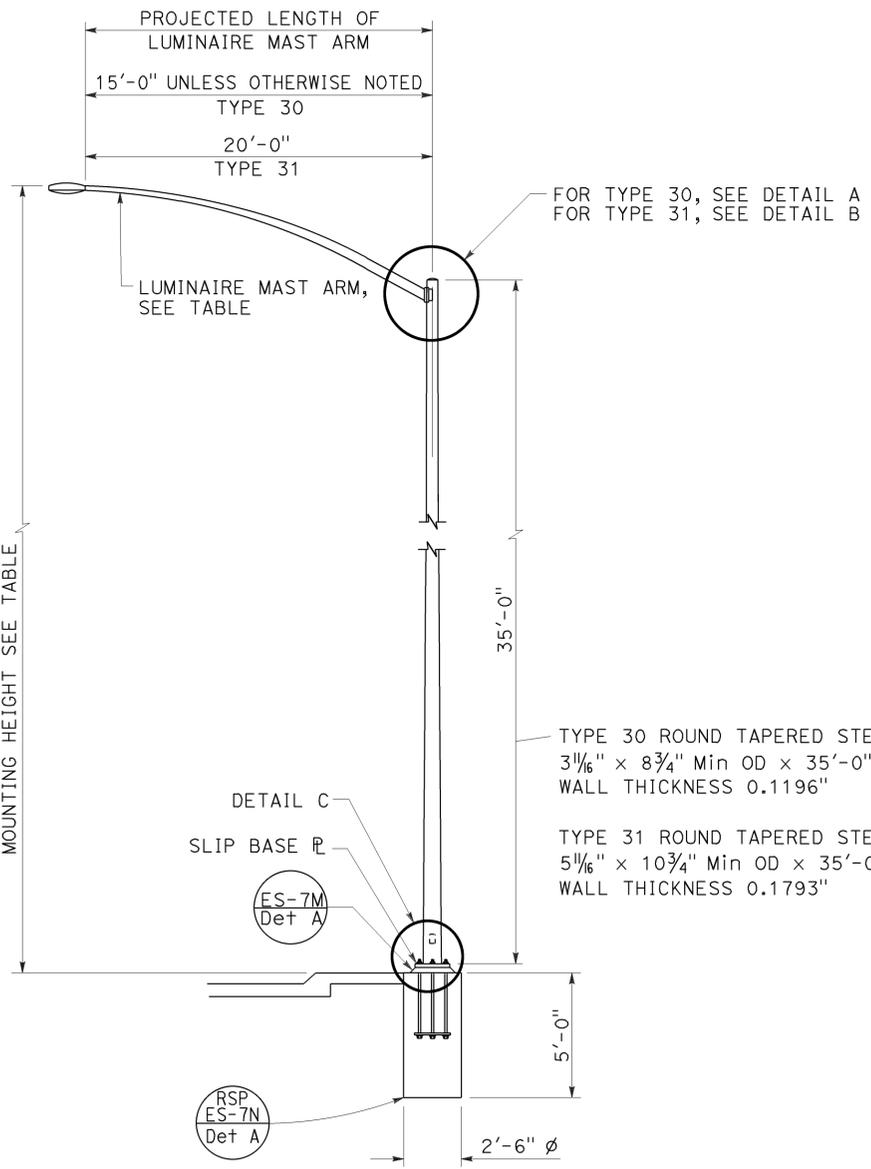


DETAIL C

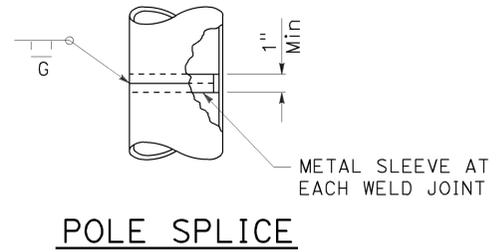
NOTES:

1. For slip base plate details, see Revised Standard Plan RSP ES-6F.
2. For Type 30 fixed base use Type 15 base plate and foundation shown on Revised Standard Plan RSP ES-6A. Use 1 1/4" Dia x 3'-6" anchor bolts.
3. For Type 31 fixed base use Type 32 base plate, anchor bolts and foundation on Revised Standard Plan RSP ES-6G.
4. Handhole shall be located on the downstream side of traffic.
5. For additional notes and details, see Revised Standard Plans RSP ES-7M and RSP ES-7N.

TO ACCOMPANY PLANS DATED 12-7-15



ELEVATION A



STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (LIGHTING STANDARD,
 TYPES 30 AND 31)**
 NO SCALE

RSP ES-6E DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-6E DATED MAY 20, 2011 - PAGE 456 OF THE STANDARD PLANS BOOK DATED 2010.

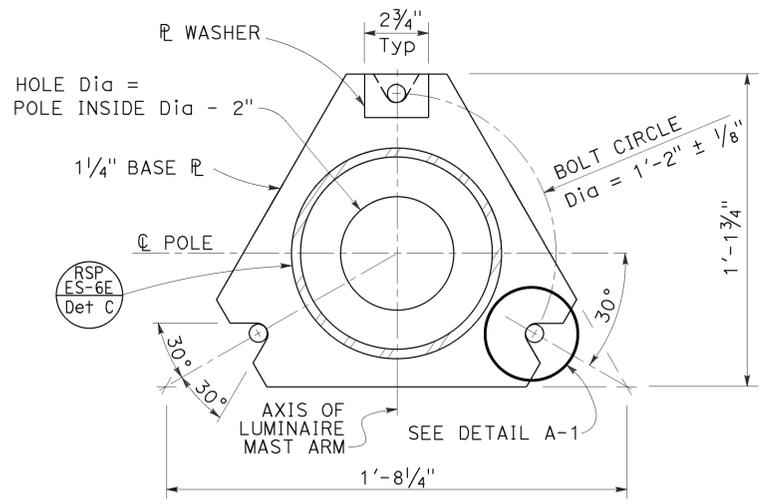
2010 REVISED STANDARD PLAN RSP ES-6E

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	519	786

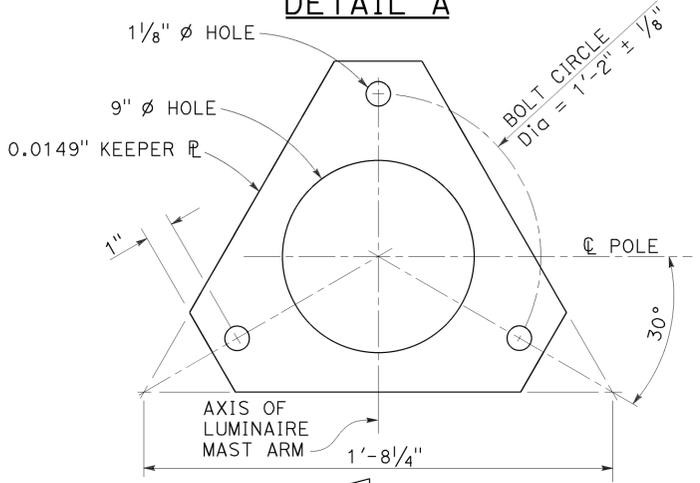
Stanley P. Johnson
 REGISTERED CIVIL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

Stanley P. Johnson	REGISTERED PROFESSIONAL ENGINEER
No. C57793	CIVIL
Exp. 3-31-16	

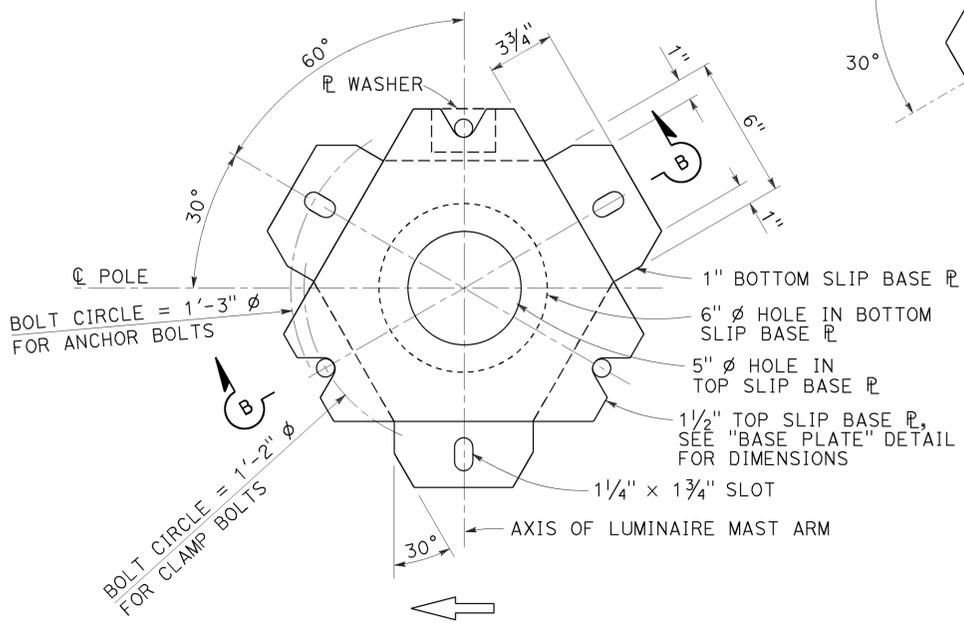
2010 REVISED STANDARD PLAN RSP ES-6F



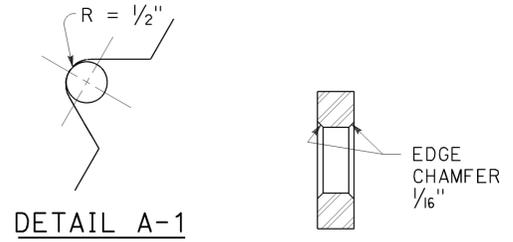
**BASE PLATE
DETAIL A**



**KEEPER PLATE
DETAIL B**

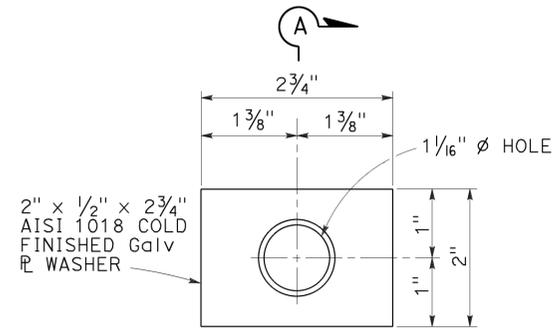


**BOTTOM PLATE
DETAIL C**

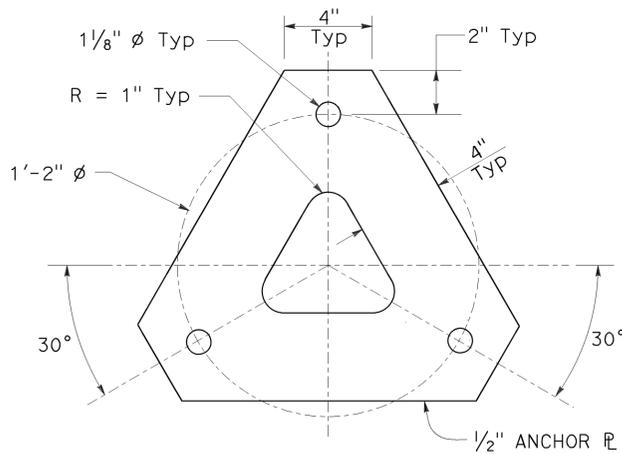


DETAIL A-1

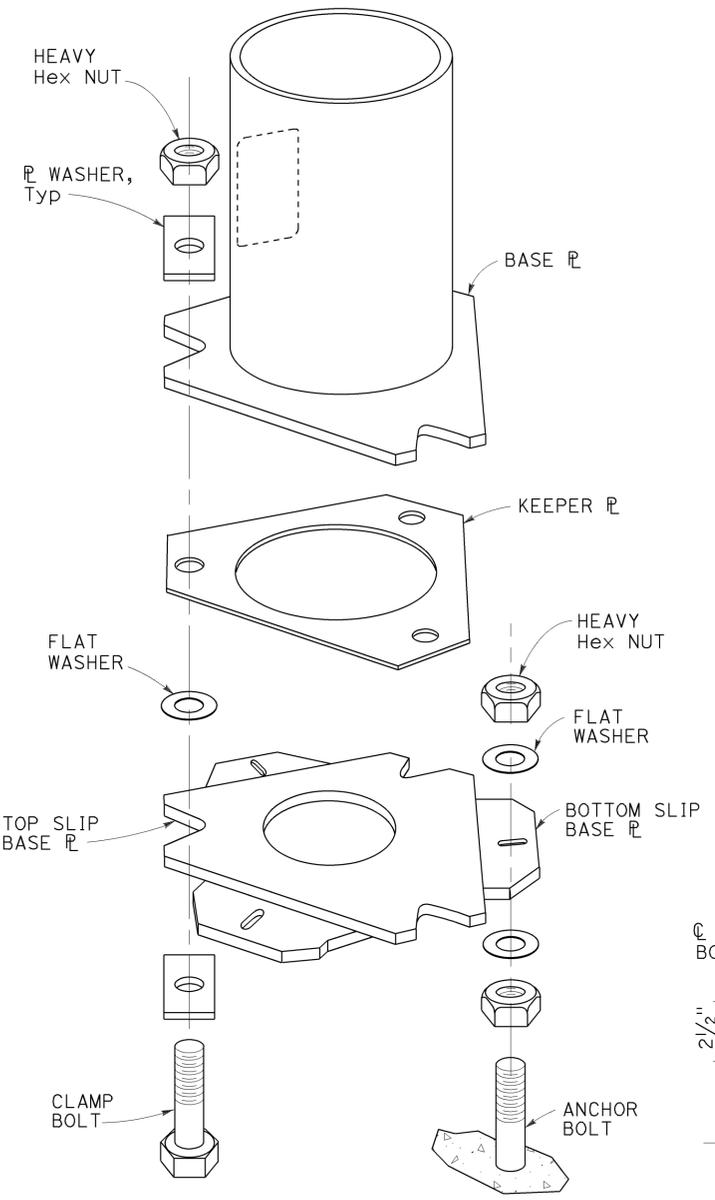
SECTION A-A



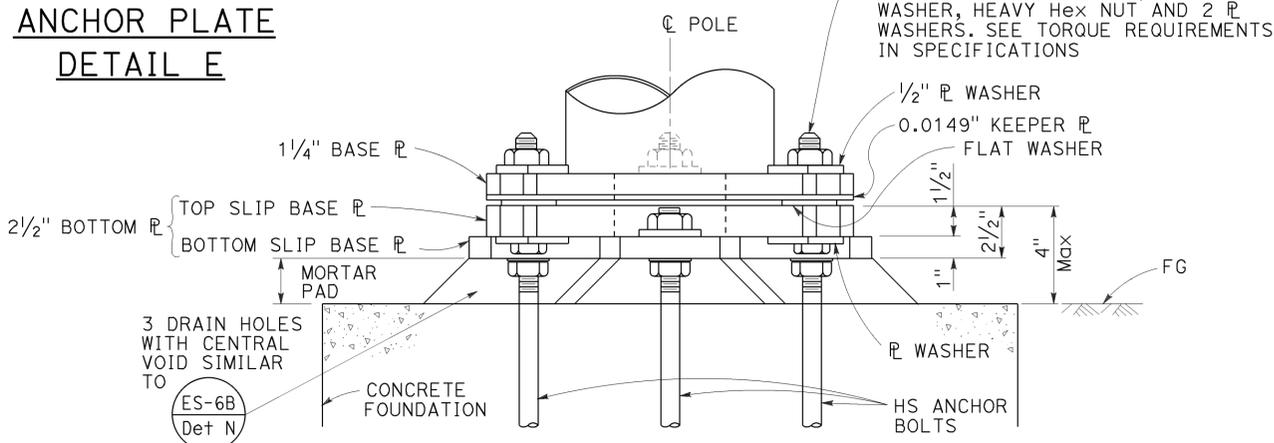
**PLATE WASHER
DETAIL D**



**ANCHOR PLATE
DETAIL E**

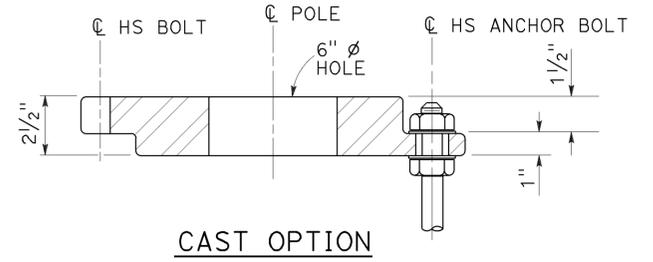


**SLIP BASE DETAIL
DETAIL F**

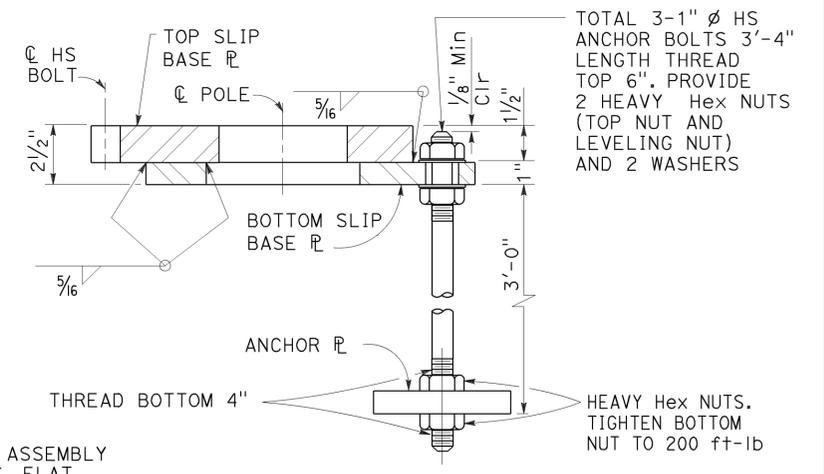


**SLIP BASE
ELEVATION A**

- NOTES:** TO ACCOMPANY PLANS DATED 12-7-15
1. 1" \varnothing HS anchor bolts. For clamp bolts, see specifications.
 2. Conduit shall not protrude more than 2" above top of foundation.
 3. Handhole shall be located on the downstream side of traffic.
 4. For Type 30 fixed base and for Type 31 fixed base, see Notes 3 and 4 on Revised Standard Plan RSP ES-6E.



CAST OPTION



WELDED OPTION

SECTION B-B

**ELECTRICAL SYSTEMS
(LIGHTING STANDARD,
SLIP BASE PLATE)**

NO SCALE

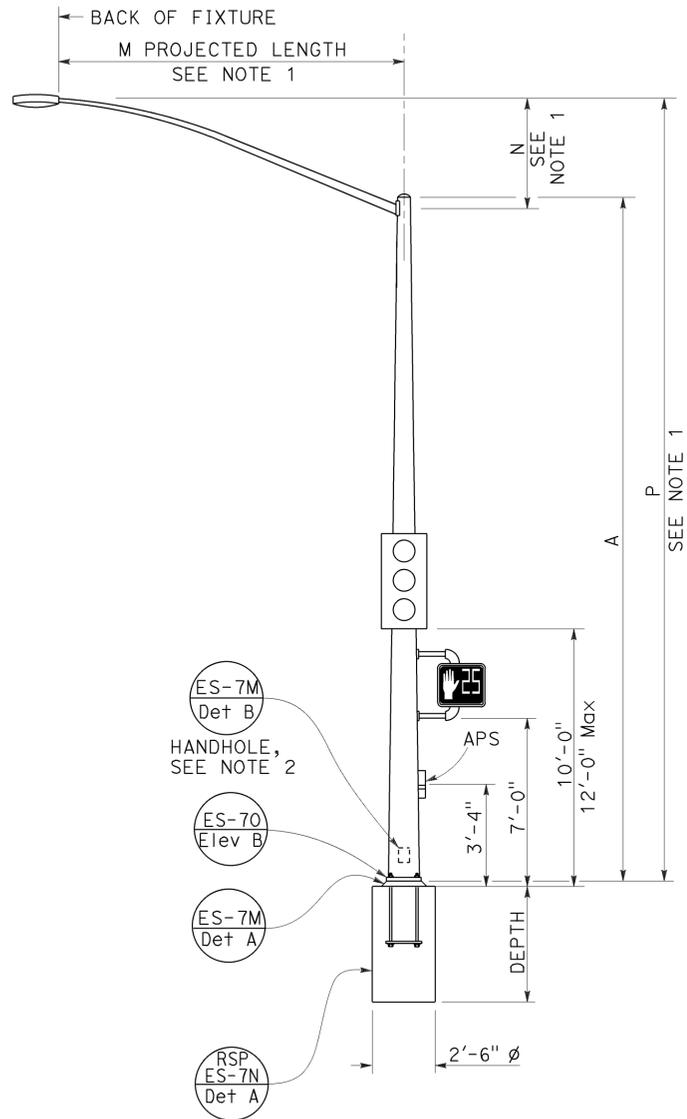
RSP ES-6F DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-6F DATED MAY 20, 2011 - PAGE 457 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-6F

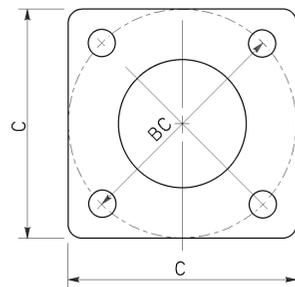
NOTES:

- For additional notes, details and data for Type 15TS and Type 21TS Standards, see Revised Standard Plan RSP ES-6A.
- Handhole shall be located on the downstream side of traffic.

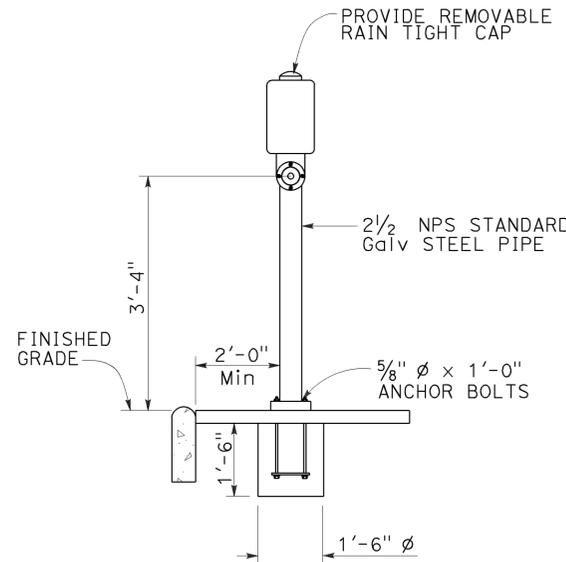
TO ACCOMPANY PLANS DATED 12-7-15



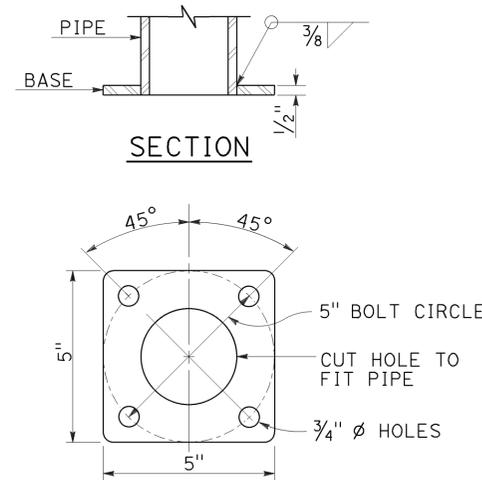
TYPE 15TS AND 21TS STANDARD
ELEVATION A
 (See Note 1)



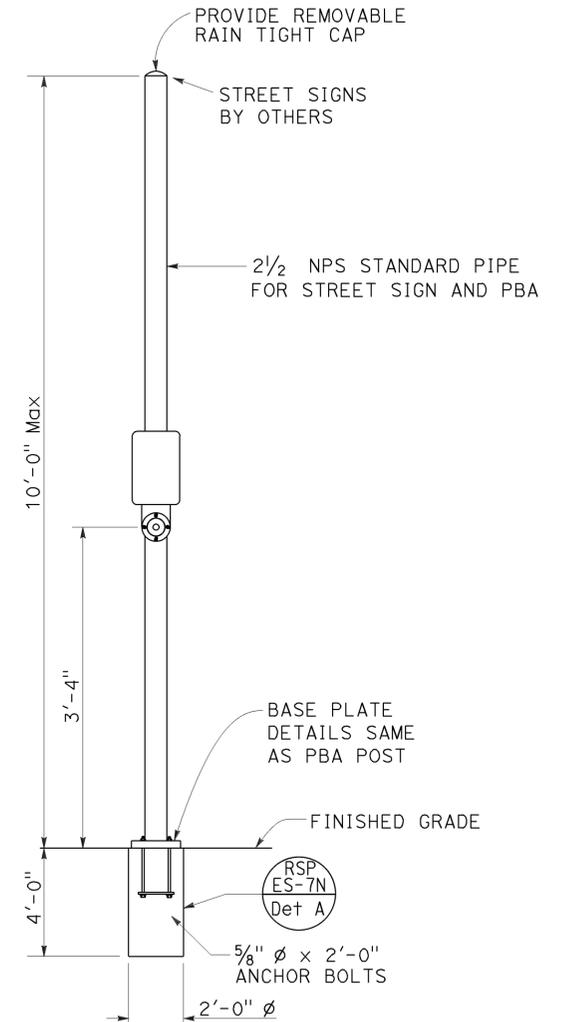
BASE PLATE
TYPE 15TS AND 21TS
DETAIL A



PUSH BUTTON ASSEMBLY POST
DETAIL B



BASE PLATE
PBA POST



COMBINED STREET SIGN
PUSH BUTTON ASSEMBLY POST
DETAIL C

POLE TYPE	POLE DATA			WALL THICKNESS	BASE PLATE DATA			CIDH DEPTH
	A HEIGHT	Min OD			C	BC = BOLT CIRCLE	THICKNESS	
15TS	30'-0"	8"	3 1/16"	0.1793"	1'-1 1/2"	1'-0"	1 1/2" Ø x 42"	7'-6"
21TS	35'-0"	9 3/8"	3 3/16"		1'-3"	1'-2"		8'-6"

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS
(SIGNAL AND LIGHTING STANDARD, TYPE TS,
AND PUSH BUTTON ASSEMBLY POST)

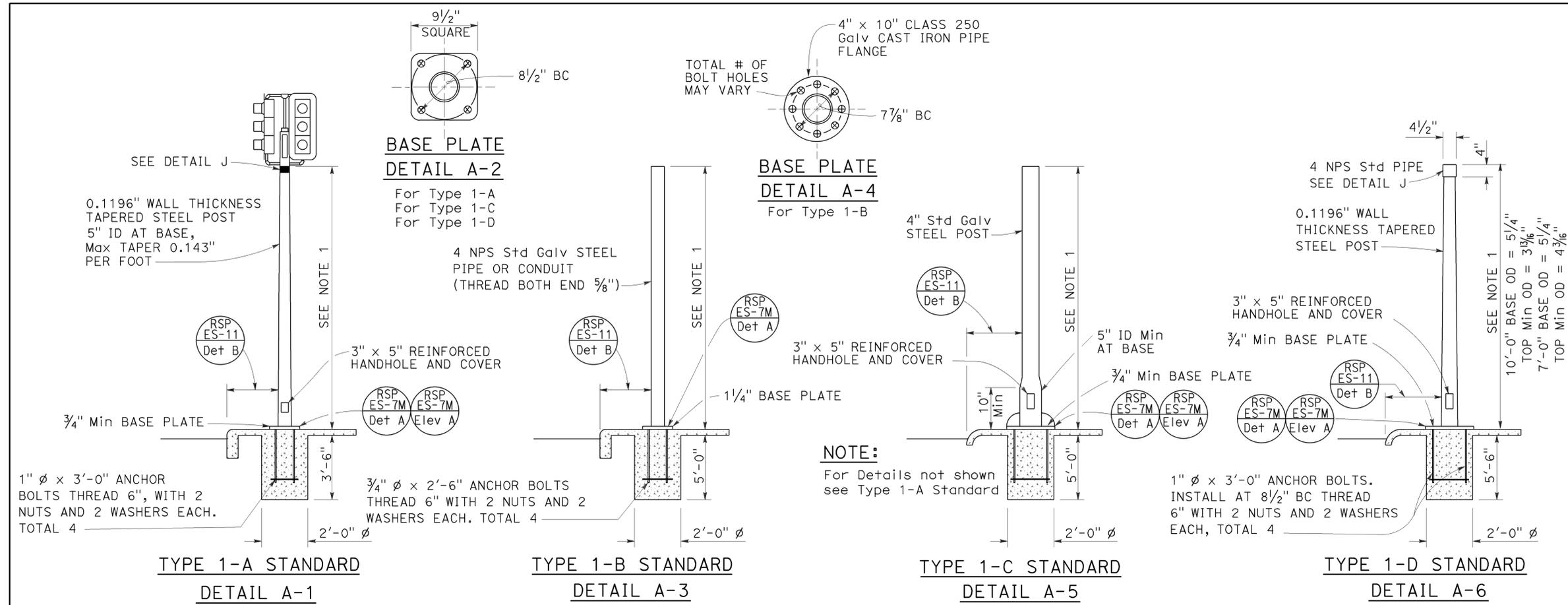
NO SCALE

RSP ES-7A DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-7A DATED JULY 19, 2013 AND STANDARD PLAN ES-7A DATED MAY 20, 2011 - PAGE 462 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-7A

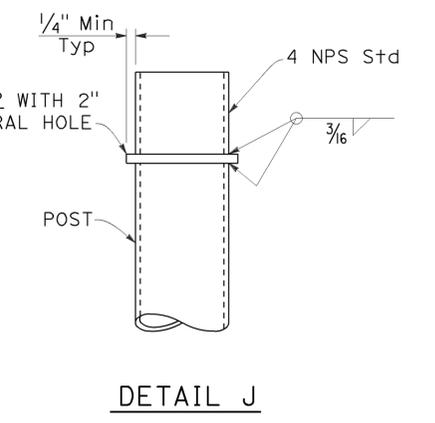
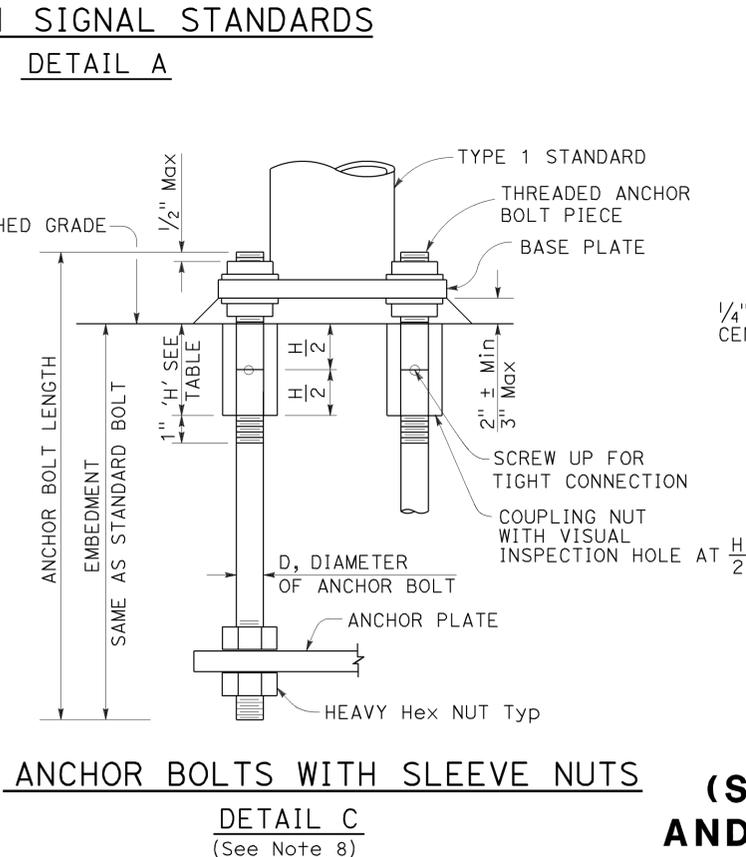
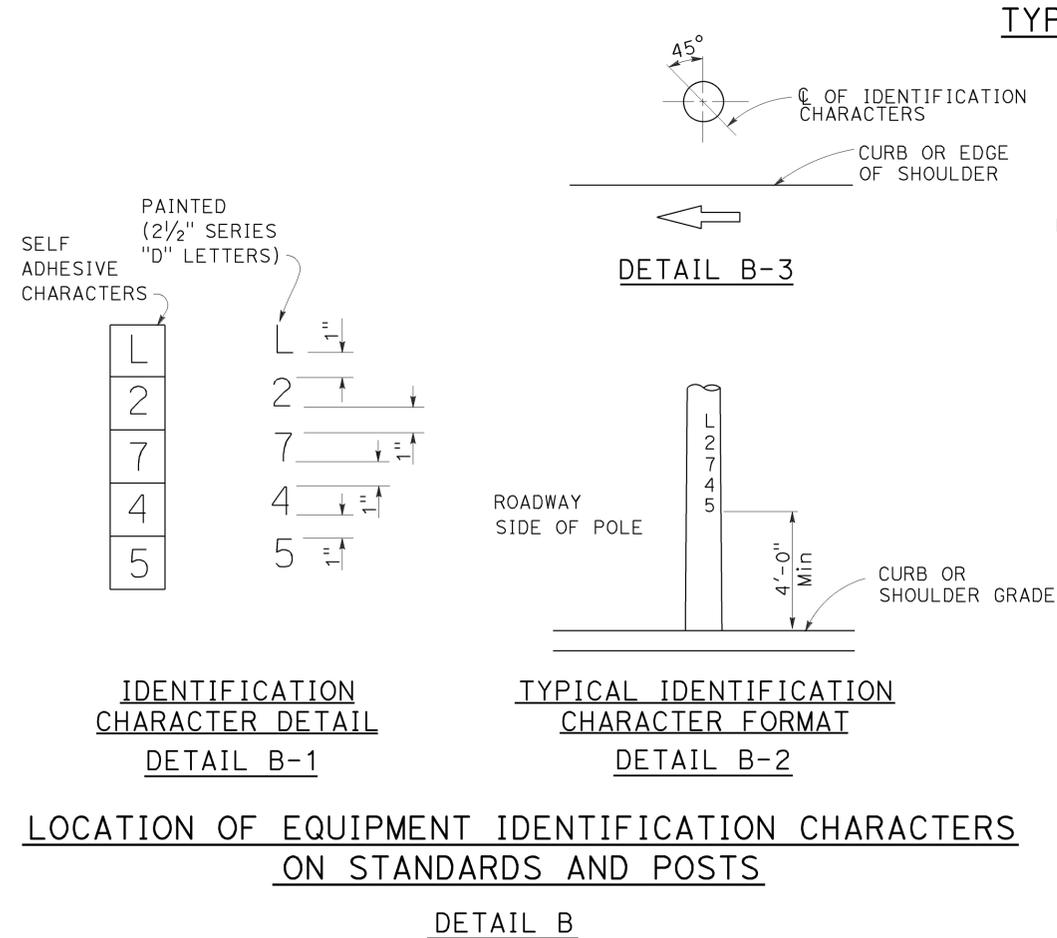
2010 REVISED STANDARD PLAN RSP ES-7A

2010 REVISED STANDARD PLAN RSP ES-7B



NOTE:
For Details not shown see Type 1-A Standard

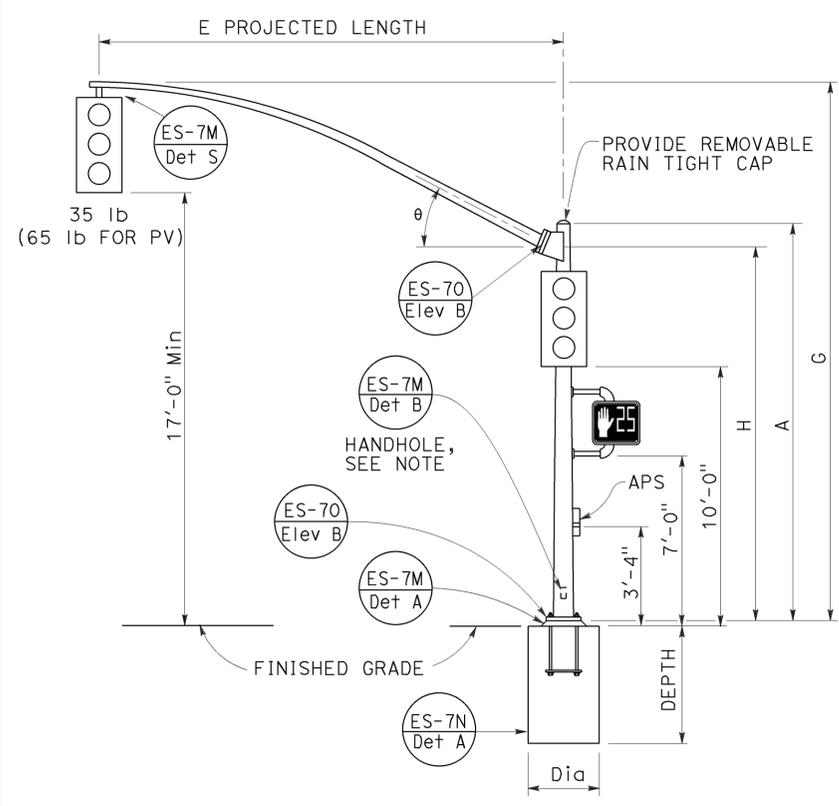
- NOTES:**
- Standards shall be 10'-0" \pm 2" for vehicle signals and 7'-0" \pm 2" for pedestrian signals unless shorter pole is noted on project plans.
 - Top of standards shall be 4 1/2" OD.
 - Conduits shall extend 2" maximum above finished surface of foundation and for Types 1-A, 1-C and 1-D shall be sloped toward handhole.
 - Anchor bolts shall be bonded to conduit or grounding conductor.
 - For additional notes and details, see Revised Standard Plans RSP ES-7M and RSP ES-7N.
 - Pour foundation concrete against undisturbed soil.
 - For standards with handhole, locate in the downstream side of traffic.
 - Coupling nuts to be used only when shown or specified on project plans.



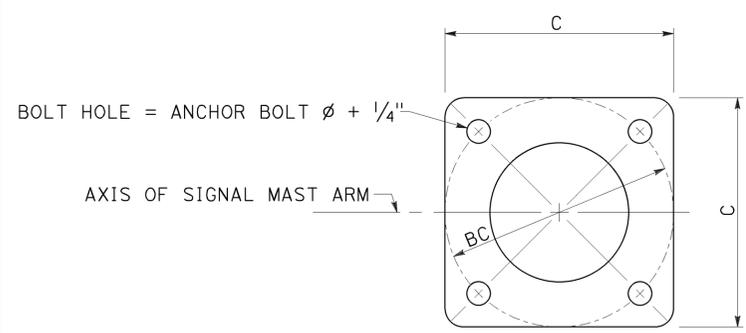
BOLT DIAMETER	NUT TABLE THICKNESS 'H'
3/4"	2 1/4"
1"	3"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

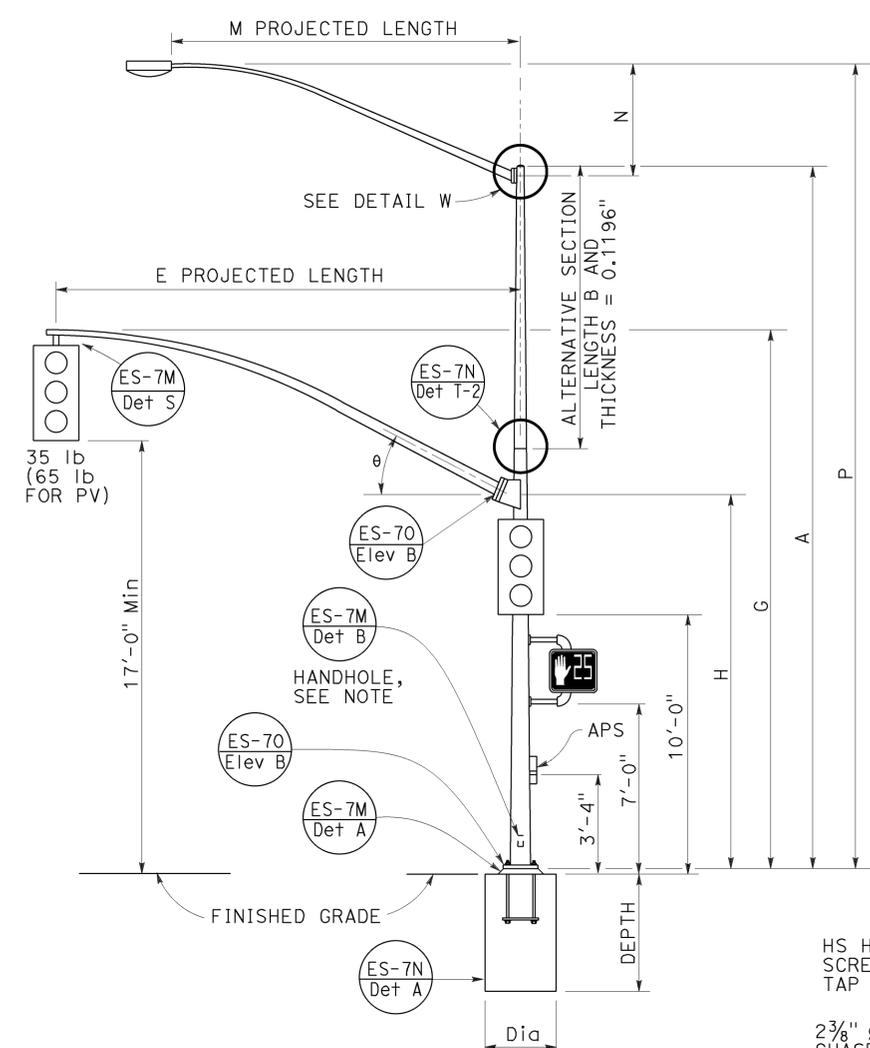
**ELECTRICAL SYSTEMS
(SIGNAL AND LIGHTING STANDARD, TYPE 1
AND EQUIPMENT IDENTIFICATION CHARACTERS)**



TYPE 16-1-100, 18-1-100
ELEVATION A



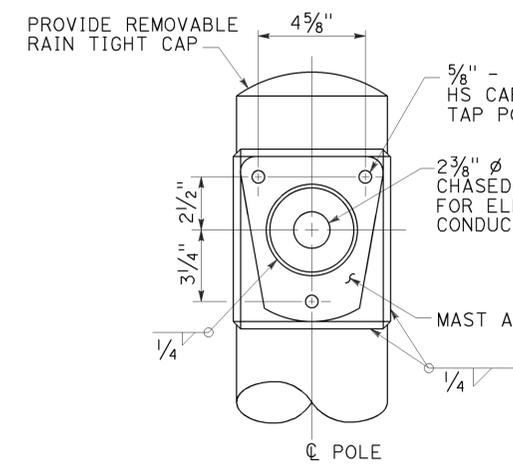
BASE PLATE
DETAIL D



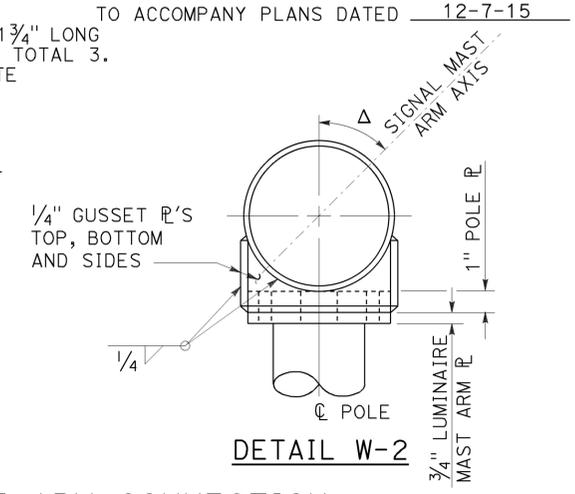
TYPE 19-1-100, 19A-1-100
ELEVATION B

Δ = LUMINAIRE MAST ARM SKEW -90° TO $+90^\circ$
DEFAULT 0°

NOTE:
Handhole shall be located on the downstream side of traffic.

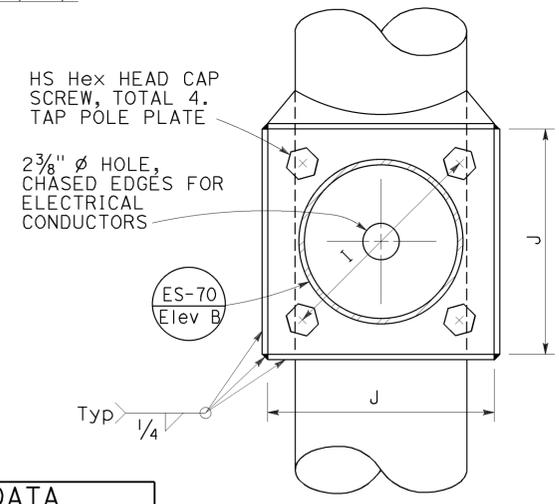


DETAIL W-1

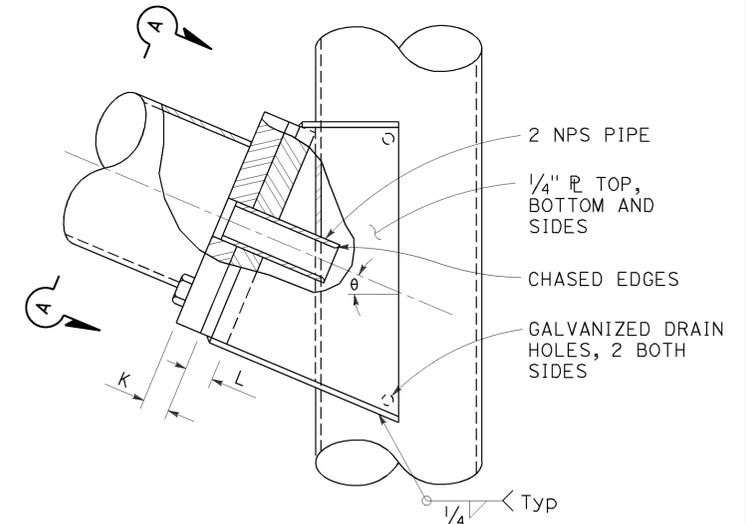


DETAIL W-2

LUMINAIRE MAST ARM CONNECTION
DETAIL W



VIEW A-A



ELEVATION C

SIGNAL MAST ARM CONNECTION
DETAIL C

E PROJECTED LENGTH	G MOUNTING HEIGHT	H	Min OD AT POLE	THICKNESS	I BOLT CIRCLE	HS CAP SCREWS	J PLATE SIZE	K MAST ARM ϕ THICKNESS	L POLE ϕ THICKNESS	θ
15'-0"	21'-8"±	17'-6"	7 3/8"	0.1196"	12"	1 1/4"-7NC-3"	1'-0"	1 1/4"	1 1/2"	23°
20'-0"	22'-8"±	16'-0"								
25'-0"	23'-0"±		8"							

M PROJECTED LENGTH	N RISE	Min OD AT POLE	THICKNESS	P MOUNTING HEIGHT
6'-0"	2'-0"±	3 1/4"	0.1196"	30'-0" POLE
8'-0"	2'-6"±	3 1/2"		35'-0" POLE
10'-0"	3'-3"±	3 3/8"		32'-9"±
12'-0"	4'-3"±	3 7/8"		37'-9"±
15'-0"	4'-9"±	4 1/4"		33'-9"±
				38'-9"±
				34'-3"±
				39'-3"±

POLE TYPE	LOAD CASE	WIND VELOCITY (mph)	POLE DATA				BASE PLATE DATA				CIDH PILE FOUNDATION							
			A HEIGHT	Min OD		THICKNESS	ALTERNATIVE SECTION			C	BC = BOLT CIRCLE	THICKNESS	ANCHOR BOLT SIZE	LUMINAIRE MAST ARM	SIGNAL MAST ARM	DIAMETER	DEPTH	REINFORCED
				BASE	TOP		B	BOTTOM	TOP									
16-1-100	1	100	18'-6"	8 1/16"	0.1793"	None			1'-5 1/2"	1'-5 1/2"	3"	1 1/2" ϕ x 42"	NONE	15'-0", [20'-0"]	2'-6"	9'-0"	YES	
18-1-100			17'-0"	8 3/16"		None							NONE					
19-1-100			30'-0"	6 7/16"		10'-0"	7 7/8"	6 7/16"					6'-15' [12'-0"]	25'-0", [30'-0"]				
19A-1-100			35'-0"	5 1/16"		15'-0"	5 1/16"	6'-15' [15'-0"]										

INDICATES MAST ARM LENGTH TO BE USED UNLESS OTHERWISE NOTED ON PLANS.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

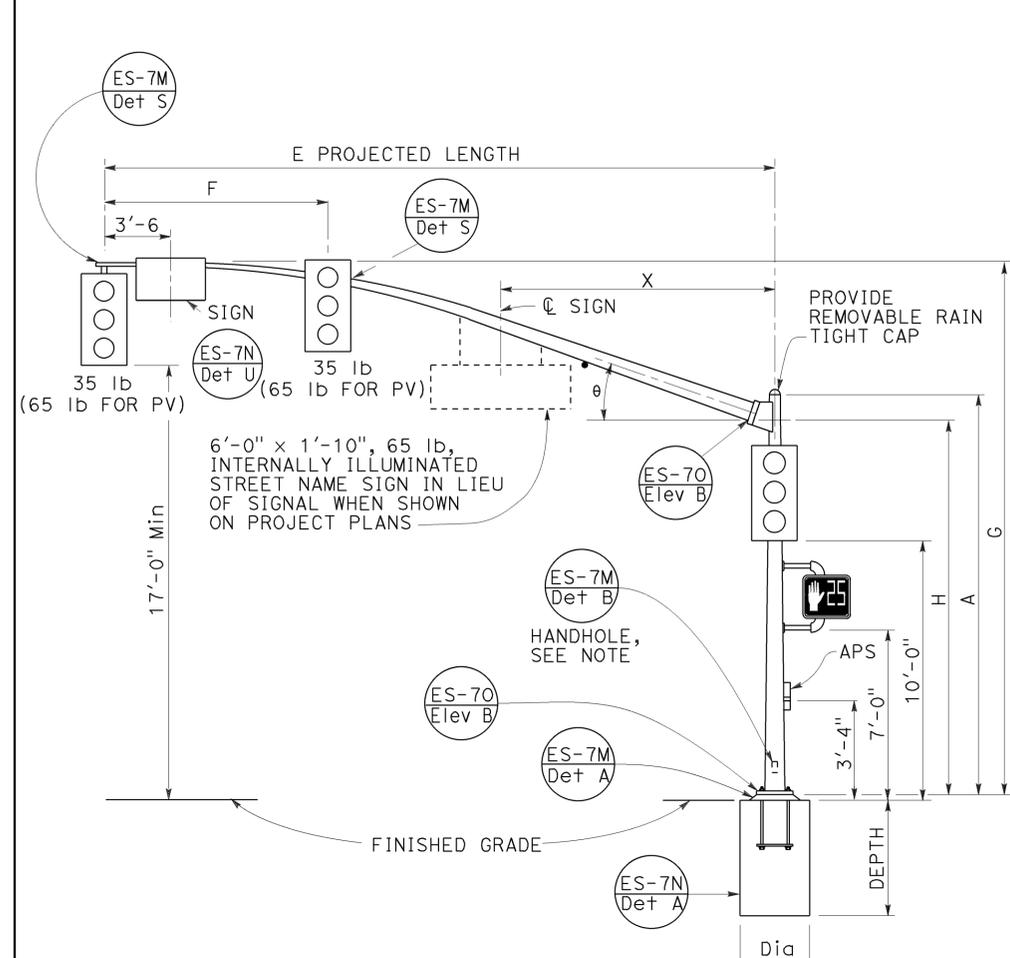
ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD, CASE 1 SIGNAL MAST ARM LOADING, WIND VELOCITY = 100 MPH AND SIGNAL MAST ARM LENGTHS 15' TO 30')

NO SCALE

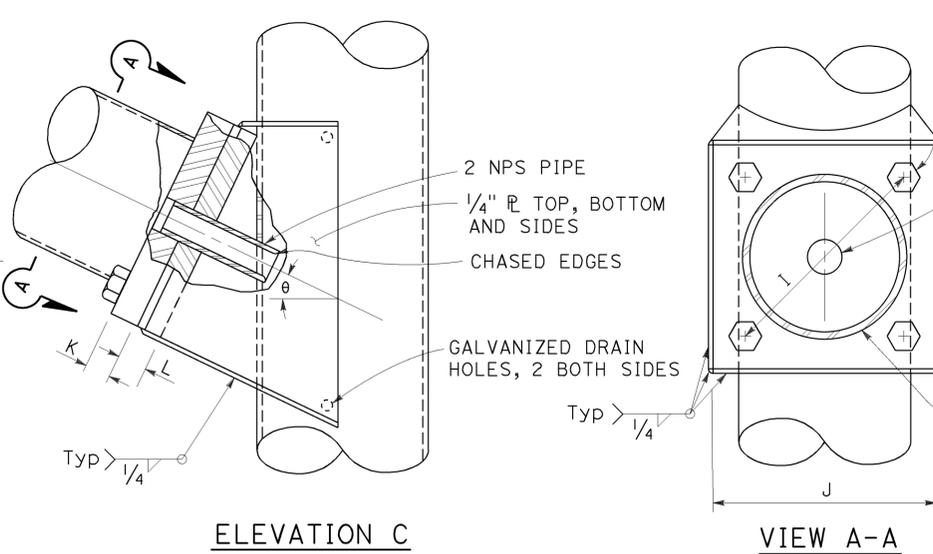
RSP ES-7C DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-7C DATED JULY 19, 2013 AND STANDARD PLAN ES-7C DATED MAY 20, 2011 - PAGE 464 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-7C

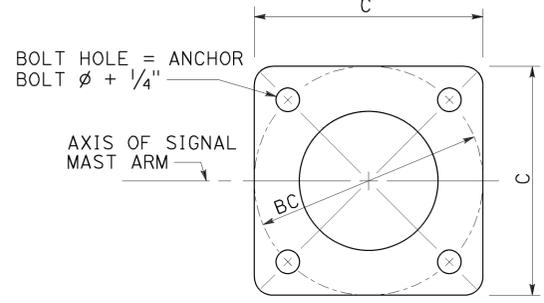
2010 REVISED STANDARD PLAN RSP ES-7C



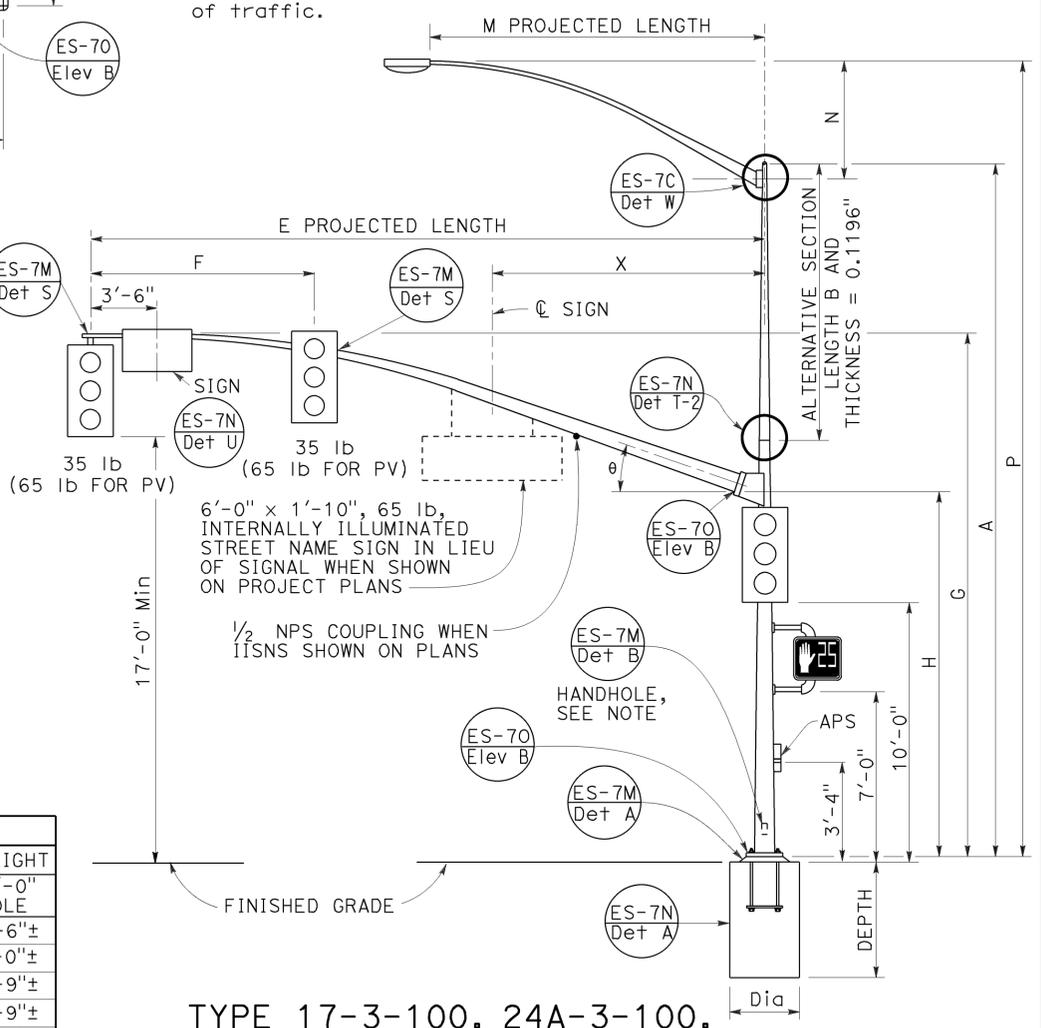
**TYPE 16-3-100, 18-3-100,
 23-3-100, 27-3-100**
ELEVATION A



SIGNAL MAST ARM CONNECTION
DETAIL A



BASE PLATE
DETAIL B



**TYPE 17-3-100, 24A-3-100,
 19-3-100, 26-3-100,
 19A-3-100, 26A-3-100, 24-3-100**
ELEVATION B

E PROJECTED LENGTH	F Min SPACING	G MOUNTING HEIGHT	H	Min OD AT POLE	THICKNESS	I BOLT CIRCLE	HS CAP SCREWS	J PLATE SIZE	K MAST ARM R THICKNESS	L POLE R THICKNESS	θ	X Max
15'-0"	8'-0"	21'-8"±	17'-6"	7 3/8"	0.1793"							
20'-0"		21'-8"±		7 3/8"		12"		1'-0"	1 1/4"	1 1/2"	23°	
25'-0"		22'-8"±		7 3/8"								
30'-0"	12'-0"	22'-8"±		8"			1 1/4"-7NC-3"					10'-6"
35'-0"	14'-0"	23'-0"±	16'-0"	8 3/4"	0.2391"						21°	
40'-0"				9 3/8"		13"		1'-1"	1 1/2"	1 3/4"	15°	13'-0"
45'-0"	15'-0"	23'-8"±		10 1/16"								

M PROJECTED LENGTH	N RISE	Min OD AT POLE	THICKNESS	P MOUNTING HEIGHT
6'-0"	2'-0"±	3 1/4"		30'-0" POLE 35'-0" POLE
8'-0"	2'-6"±	3 1/2"		31'-6"± 36'-6"±
10'-0"	3'-3"±	3 3/8"	0.1196"	32'-0"± 37'-0"±
12'-0"	4'-3"±	3 7/8"		32'-9"± 37'-9"±
15'-0"	4'-9"±	4 1/4"		33'-9"± 38'-9"±
				34'-3"± 39'-3"±

POLE TYPE	LOAD CASE	WIND VELOCITY (mph)	POLE DATA					BASE PLATE DATA				CIDH PILE FOUNDATION						
			A HEIGHT	Min OD		THICKNESS	ALTERNATIVE SECTION			C	BC = BOLT CIRCLE	THICKNESS	ANCHOR BOLT SIZE	LUMINAIRE MAST ARM	SIGNAL MAST ARM	DIAMETER	DEPTH	REINFORCED
				BASE	TOP		B LENGTH	BOTTOM	TOP									
16-3-100			18'-6"		8 1/16"	0.1793"	NONE							NONE	15'-0"		8'-6"	
17-3-100			30'-0"	10 3/4"	6 7/16"		10'-0"	7 7/8"	6 7/16"	1'-5 1/2"			1 1/2" ø x 42"	6'-15' [12'-0"]	20'-0"			
18-3-100			17'-0"		8 5/16"		NONE							NONE			9'-6"	
19-3-100			30'-0"		7 1/16"		10'-0"		7 1/16"					6'-15' [12'-0"]	25'-0"			
19A-3-100			35'-0"		6 5/16"		15'-0"	9 1/8"	6 5/16"					6'-15' [15'-0"]	30'-0"			
23-3-100	3	100	17'-0"	1'-0"	9 9/16"	0.2391"	NONE			1'-7"	1'-5 1/2"	3"	2" ø x 42"	NONE	35'-0"	3'-0"	11'-0"	YES
24-3-100			30'-0"		7 1/16"		10'-0"	9 1/8"	7 1/16"					6'-15' [12'-0"]				
24A-3-100			35'-0"		6 5/16"		15'-0"		6 5/16"					6'-15' [15'-0"]				
26-3-100			30'-0"		7 13/16"		10'-0"	9 1/4"	7 13/16"					6'-15' [12'-0"]	40'-0"			
26A-3-100			35'-0"	1'-2"	7 1/16"	0.3125"	15'-0"		7 1/16"	1'-11"	1'-9"		2 1/2" ø x 42"	6'-15' [15'-0"]	45'-0"	3'-6"	12'-0"	
27-3-100			17'-0"		9 1/16"		NONE							NONE				

[] INDICATES MAST ARM LENGTH TO BE USED UNLESS OTHERWISE NOTED ON PLANS.

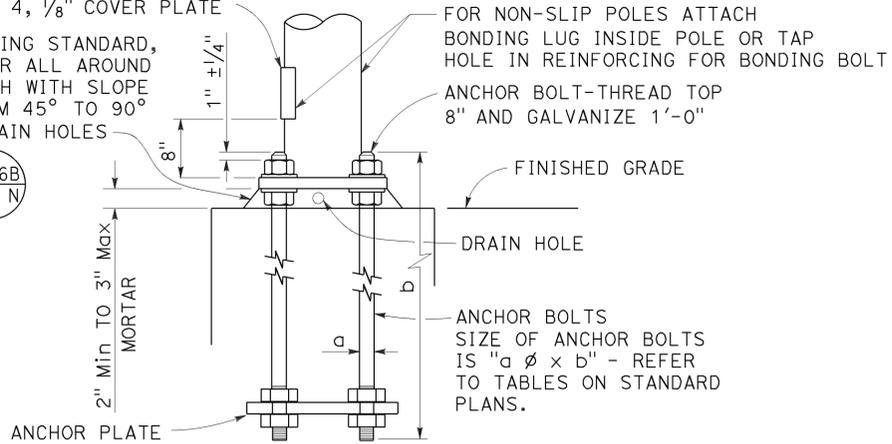
2010 REVISED STANDARD PLAN RSP ES-7E

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(SIGNAL AND LIGHTING STANDARD,
CASE 3 SIGNAL MAST ARM LOADING,
WIND VELOCITY=100 MPH AND SIGNAL
MAST ARM LENGTHS 15' TO 45')
 NO SCALE
 RSP ES-7E DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-7E DATED JULY 19, 2013 AND
 ES-7E DATED MAY 20, 2011 - PAGE 466 OF THE STANDARD PLANS BOOK DATED 2010.

4" x 6 1/2" ROUNDED RECTANGLE HANDHOLE REINFORCED WITH RING WELDED TO OUTSIDE OF POLE. SEE NOTE 4, 1/8" COVER PLATE

AFTER PLUMBING STANDARD, PLACE MORTAR ALL AROUND BOLTS. FINISH WITH SLOPE RANGING FROM 45° TO 90° INCLUDES DRAIN HOLES

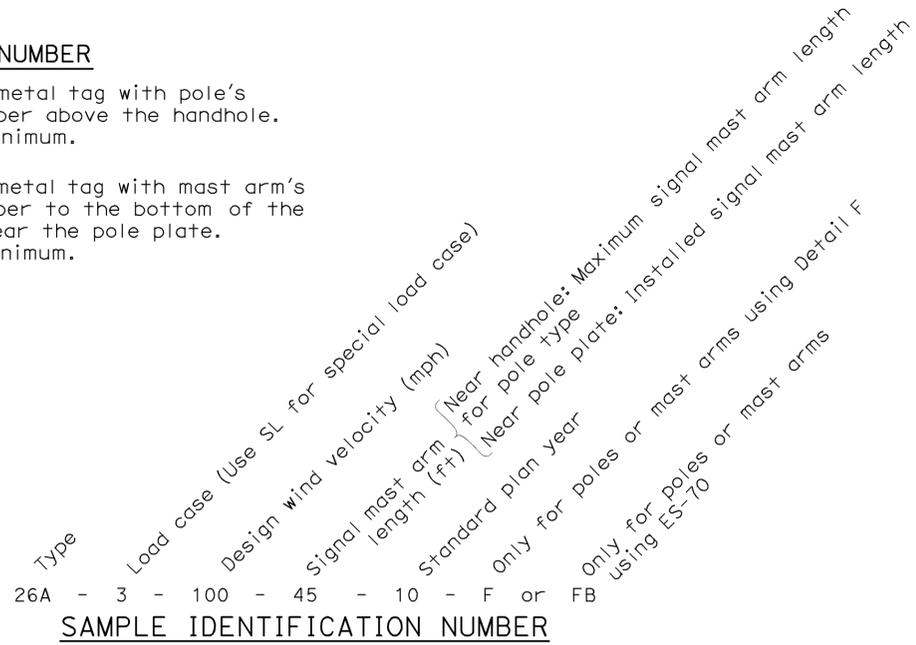
4 SIDES ES-6B Det N



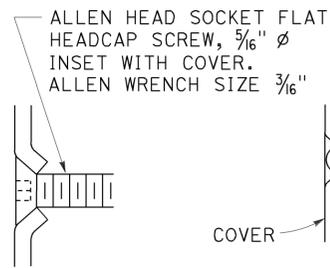
HANDHOLE AND ANCHORAGE
DETAIL A

IDENTIFICATION NUMBER

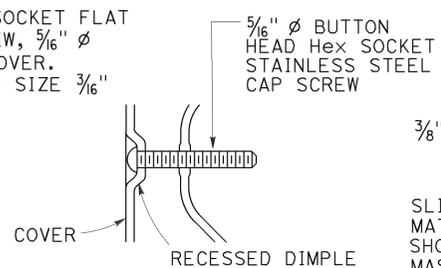
1. Attach a stamped metal tag with pole's identification number above the handhole. 1/4" high number, minimum.
2. Attach a stamped metal tag with mast arm's identification number to the bottom of the signal mast arm near the pole plate. 1/4" high number, minimum.



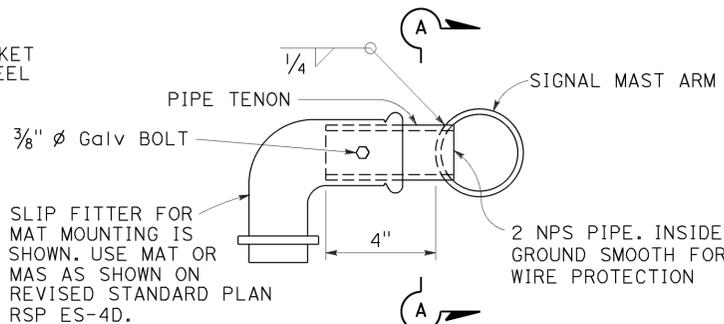
SAMPLE IDENTIFICATION NUMBER



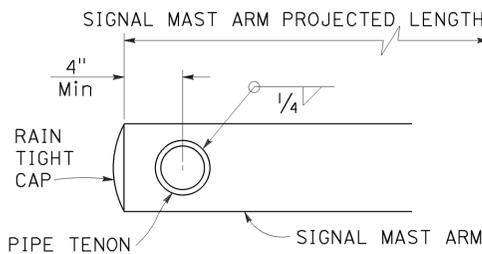
TYPICAL DETAIL
DETAIL B-1



ALTERNATIVE DETAIL
DETAIL B-2



SIDE TENON
DETAIL S-1

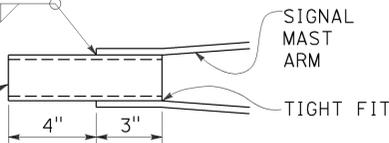


SECTION A-A

PIPE TENONS
DETAIL S

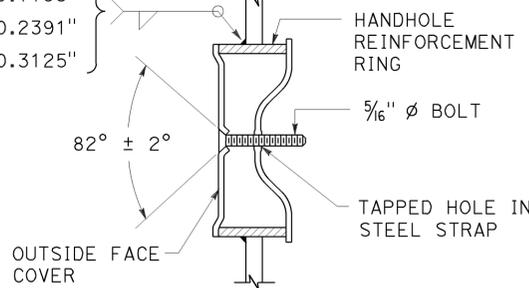
WELD SIZE	WALL THICKNESS
1/8"	0.1196"
3/16"	0.1793"
1/4"	0.2391"

2 NPS PIPE, CHASED FOR WIRE PROTECTION SEE NOTE 2

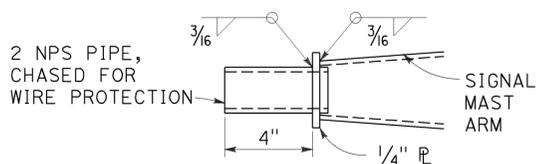


TIP TENON
DETAIL TS

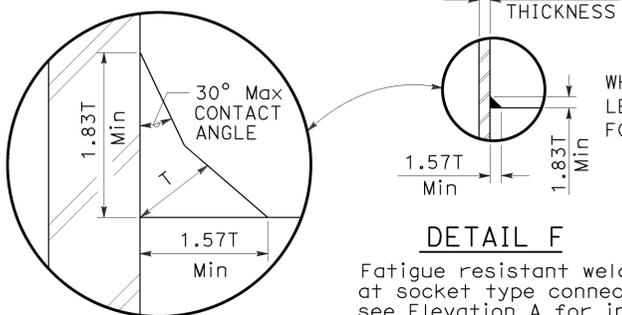
WELD SIZE	WALL THICKNESS
3/16"	0.1196"
1/4"	0.1793"
5/16"	0.2391"
3/8"	0.3125"



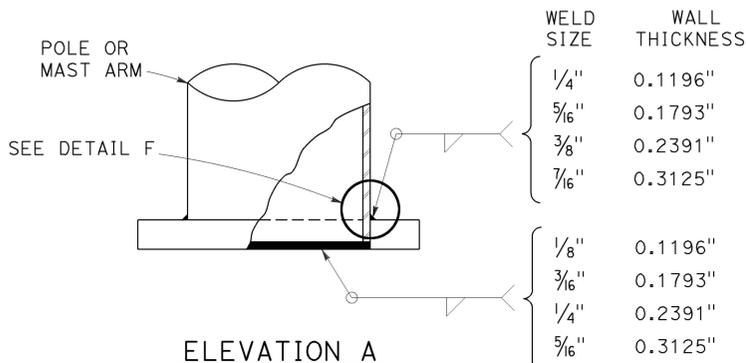
TAMPER RESISTANT HANDHOLE COVER
DETAIL B



TIP TENON
DETAIL TL
This detail supersedes Detail S when so designated



DETAIL F
Fatigue resistant weld at socket type connection see Elevation A for inner weld



ELEVATION A

NOTES:

1. Provide a Hex nut, leveling nut and 2 washers for each bolt.
2. Luminaire mast arms shall be round, tapered steel tubes, taper of 0.1375" to 0.143-inch per foot with an end section 2 3/8" OD for mounting hardware. Extensions of 2 NPS Standard pipe and 7" long may be used at the option of the manufacturer. When low pressure sodium luminaires are required, the extension shall be 1'-3".
3. Signal mast arms shall be round, tapered steel tubes, maximum taper 0.143-inch per foot.
4. Handhole reinforcement ring shall be 1/4" x 2" for 0.1196" to 0.2391" thick poles, 3/8" x 2" for 0.3125" thick poles.
5. Handholes shall be located on the downstream side of traffic.
6. Detail F, fatigue resistant weld, is required at socket welded signal mast arm plate and pole base plate.
7. Cap screws shall be tightened by the turn-of-nut method 1/3 turn from a snug tight condition. No washer will be required.
8. Outside diameter, wall thickness, and corresponding section properties of poles and mast arms as shown in the Standard Plans are minimums. Unless otherwise specified, alternative sections shall require approval by the Engineer.
9. Wind Loading (3 seconds gust): 100 mph
10. Unit Stresses (Structural steel):
fy = 55,000 psi (tapered steel tube and anchor bolts)
fy = 50,000 psi (unless otherwise noted)
11. Unit Stresses (Reinforced concrete):
f'c = 3,625 psi
fy = 60,000 psi

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS
(SIGNAL AND LIGHTING STANDARD,
DETAIL No. 1)
NO SCALE

RSP ES-7M DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-7M DATED MAY 20, 2011 - PAGE 474 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-7M

TO ACCOMPANY PLANS DATED 12-7-15

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	525	786

Stanley P. Johnson
REGISTERED CIVIL ENGINEER

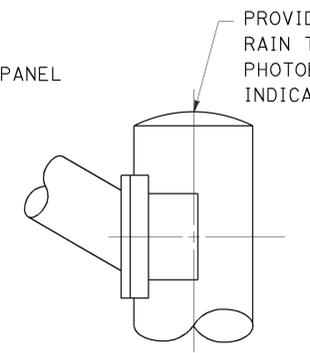
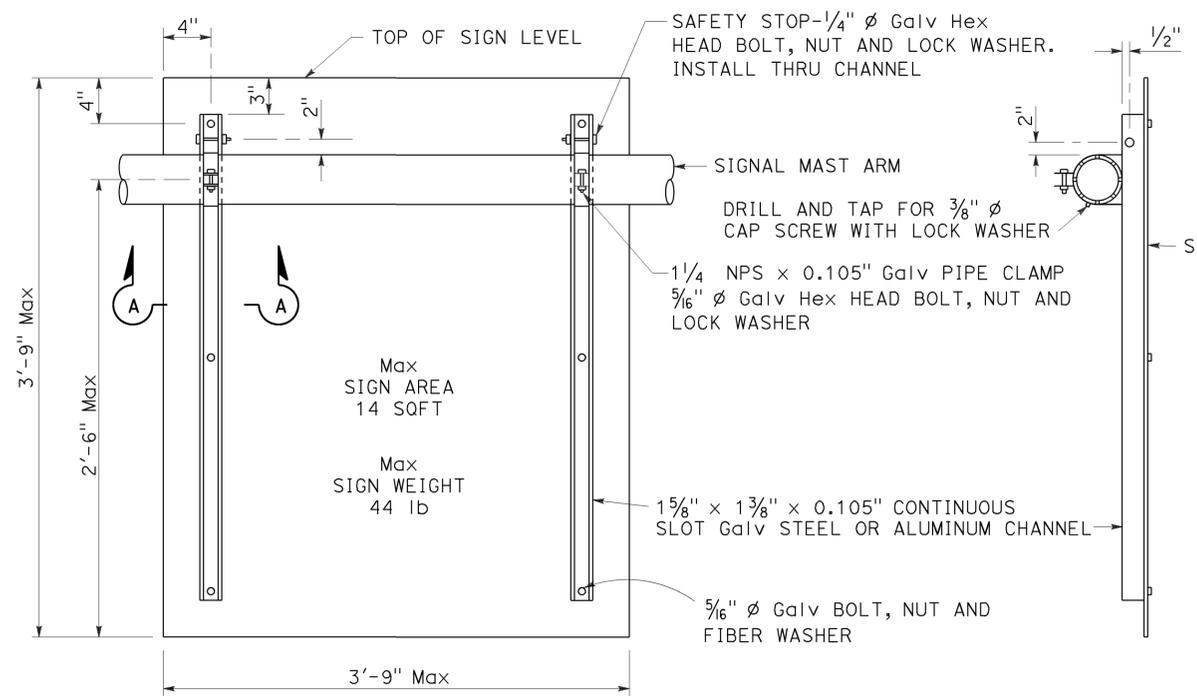
October 30, 2015
PLANS APPROVAL DATE

Stanley P. Johnson
No. C57793
Exp. 3-31-16
CIVIL
STATE OF CALIFORNIA

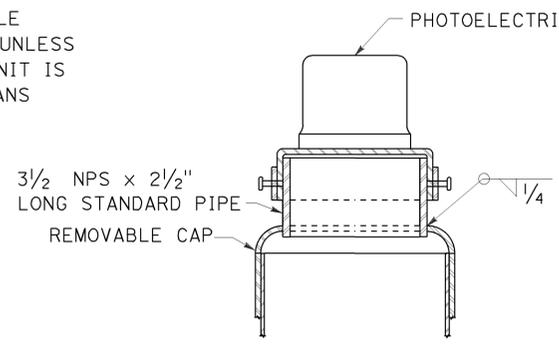
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

2010 REVISED STANDARD PLAN RSP ES-7M

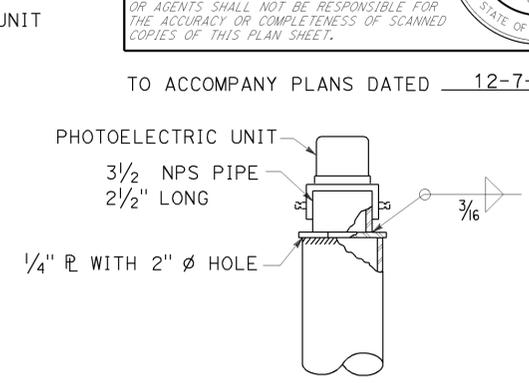
2010 REVISED STANDARD PLAN RSP ES-7N



STANDARD TOP
DETAIL B-1



MOUNTING ADAPTER FOR
PHOTOELECTRIC UNIT
DETAIL B-2



ALTERNATIVE
MOUNTING ADAPTER
DETAIL B-3

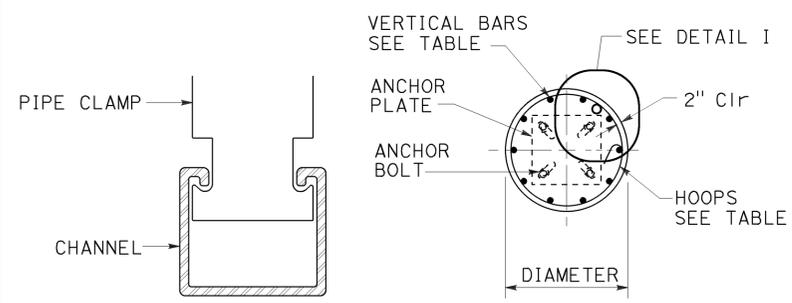
POLE TOP DETAILS
DETAIL B

TO ACCOMPANY PLANS DATED 12-7-15

REAR VIEW

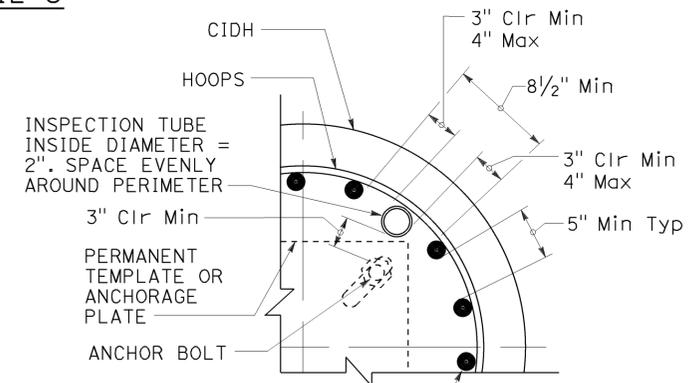
SIDE VIEW

SIGN MOUNTING DETAILS
DETAIL U



SECTION A-A

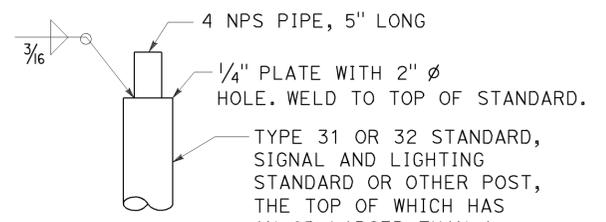
SECTION B-B



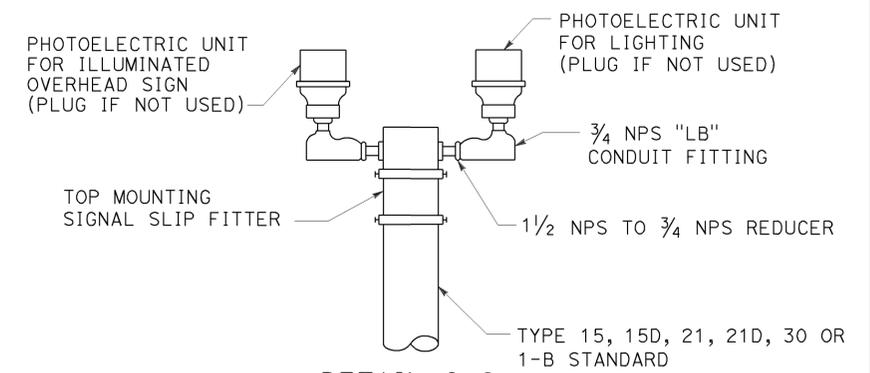
INSPECTION TUBE PLACEMENT
DETAIL I

CIDH DIAMETER	VERTICAL BARS	HOOPS (WELDED)	INSPECTION TUBE
2 ft	8-#5	#4 AT 6	2
2.5 ft	10-#6		4*
3 ft	12-#7	#5 AT 6	
3.5 ft	14-#8		4
4 ft	18-#9	2-#4 AT 7	5
5 ft	22-#10	2-#5 AT 7	6
6 ft	26-#11	2-#6 AT 7	7

* FOR SLIP BASE VERSIONS WITH 3 ANCHOR BOLTS USE 3 INSPECTION TUBES.



DETAIL C-1



DUAL PHOTOELECTRIC UNIT MOUNTING DETAIL
DETAIL C

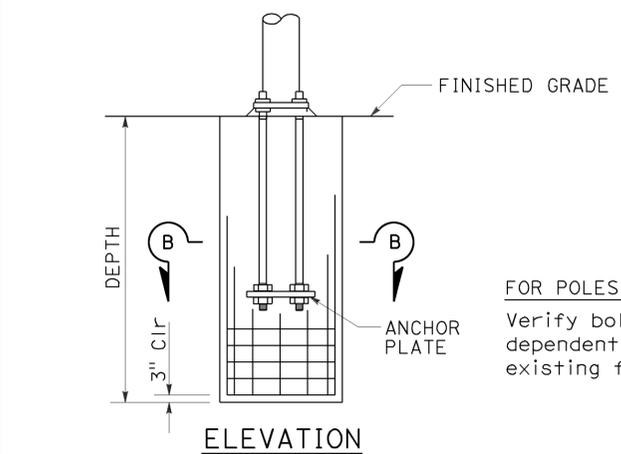
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(SIGNAL AND LIGHTING STANDARD,
DETAIL No. 2)**

NO SCALE

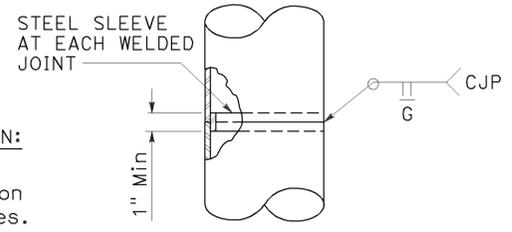
RSP ES-7N DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-7N DATED MAY 20, 2011 - PAGE 475 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-7N

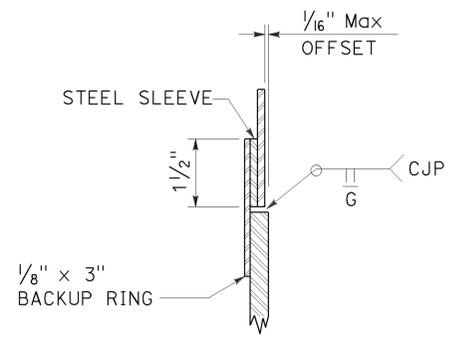


ELEVATION

CAST-IN-DRILLED-HOLE PILE FOUNDATION,
REINFORCED PILE
DETAIL A



FOR UNIFORM TUBE THICKNESS
DETAIL T-1



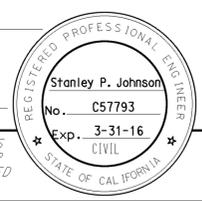
AT TUBE THICKNESS CHANGE
DETAIL T-2

POLE SPLICES
DETAIL T

FOR POLES TO BE INSTALLED ON EXISTING FOUNDATION:
Verify bolt circles, anchor bolt sizes and dependent dimensions for poles to be installed on existing foundations before fabricating the poles.

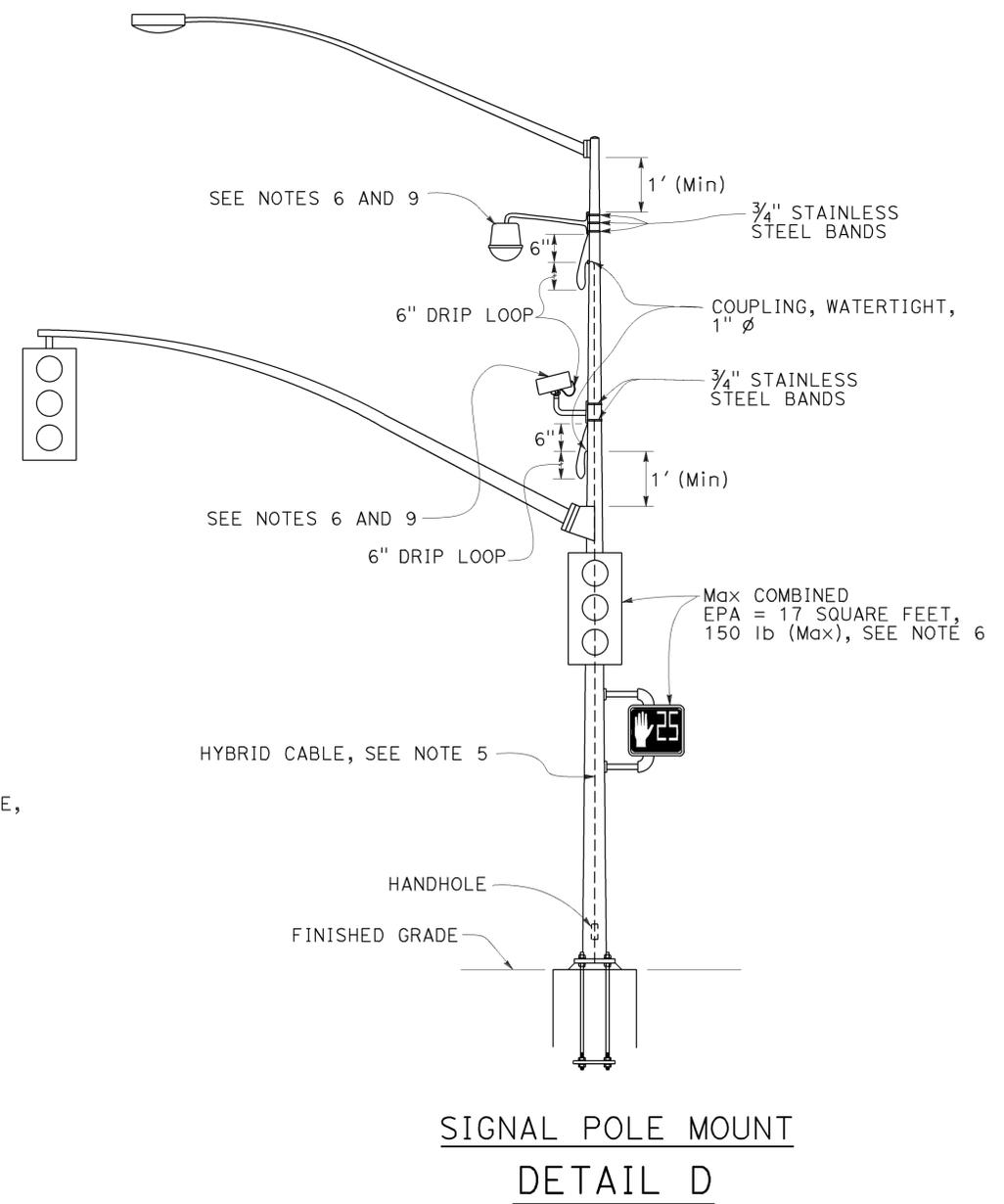
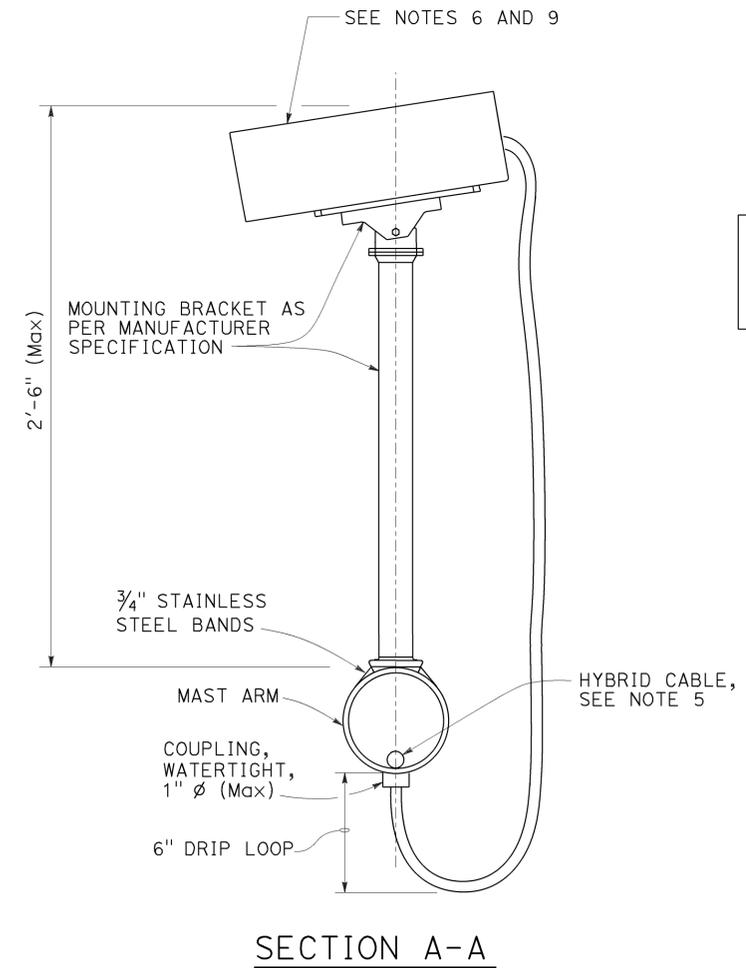
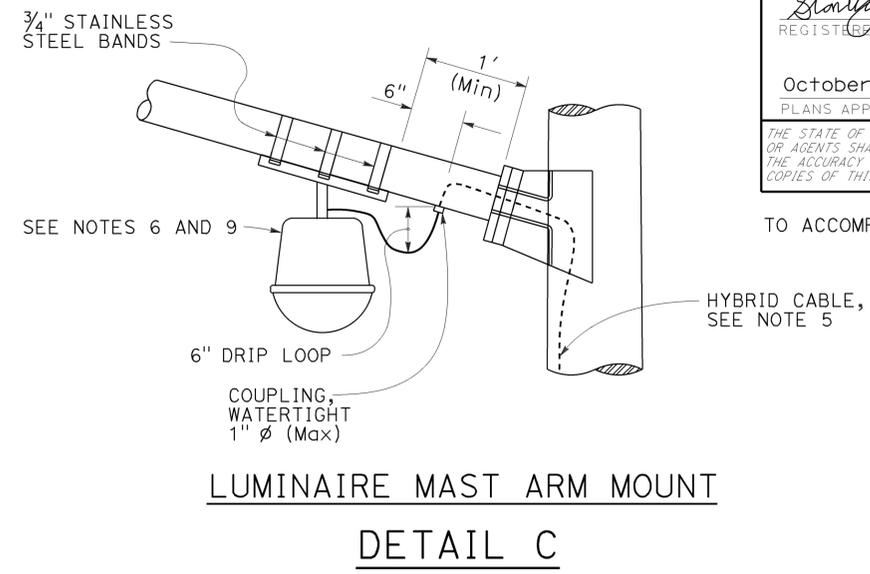
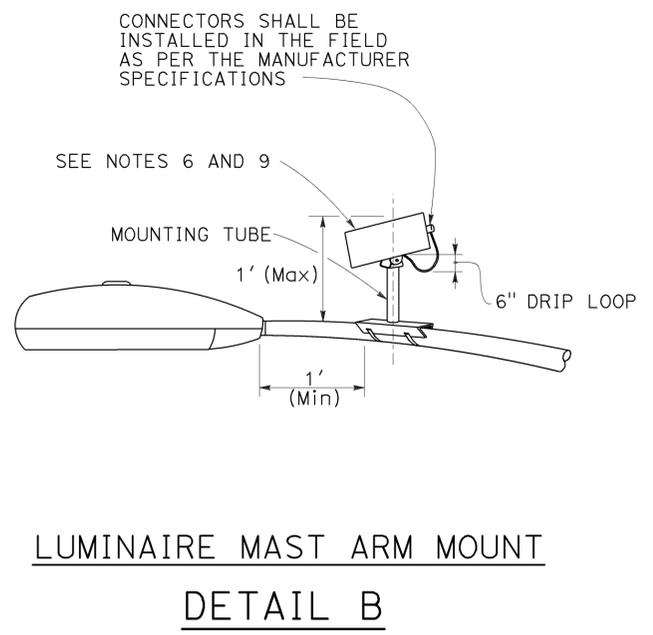
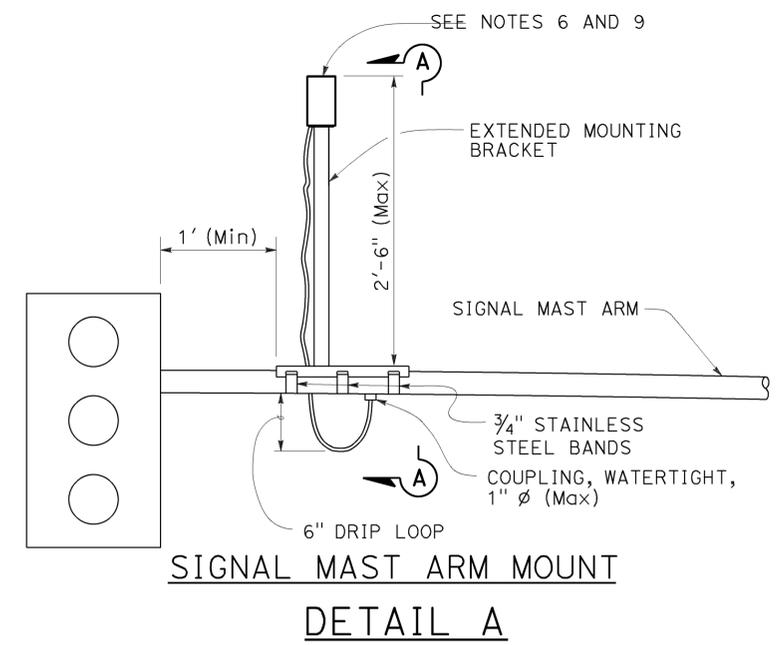
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	527	786

Stanley P. Johnson
 REGISTERED CIVIL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
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TO ACCOMPANY PLANS DATED 12-7-15

2010 REVISED STANDARD PLAN RSP ES-7R



NOTES:

- Exact mounting location of miscellaneous attachment and bracket shall be approved by the Engineer per manufacturer's recommendation.
- Location of cable entrances on signal pole shall be a minimum of 1' from any flange or base plate.
- Hybrid cable entrances on signal pole shall be drilled for weathertight coupling as required.
- Hybrid cable shall have a drip loop at the entrance into signal pole, luminaire mast arm and signal mast arm.
- A single hybrid cable shall run continuous and shall not be twisted from the miscellaneous attachment to the controller cabinet. No splices shall be allowed.
- Use the manufacturer's Effective Projected Area (EPA) for miscellaneous attachment. The maximum EPA for each miscellaneous attachment shall be 1.6 square feet with 10 lb Max.
- Maximum of two miscellaneous attachments per traffic signal standard.
- Maximum of one miscellaneous attachment per mast arm.
- Miscellaneous attachment shall be mounted using clamping devices.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (SIGNAL AND LIGHTING,
 MISCELLANEOUS ATTACHMENT)**
 NO SCALE

RSP ES-7R DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-7R DATED JULY 19, 2013 AND STANDARD PLAN ES-7R DATED MAY 20, 2011 - PAGE 479 OF THE STANDARD PLANS BOOK DATED 2010.

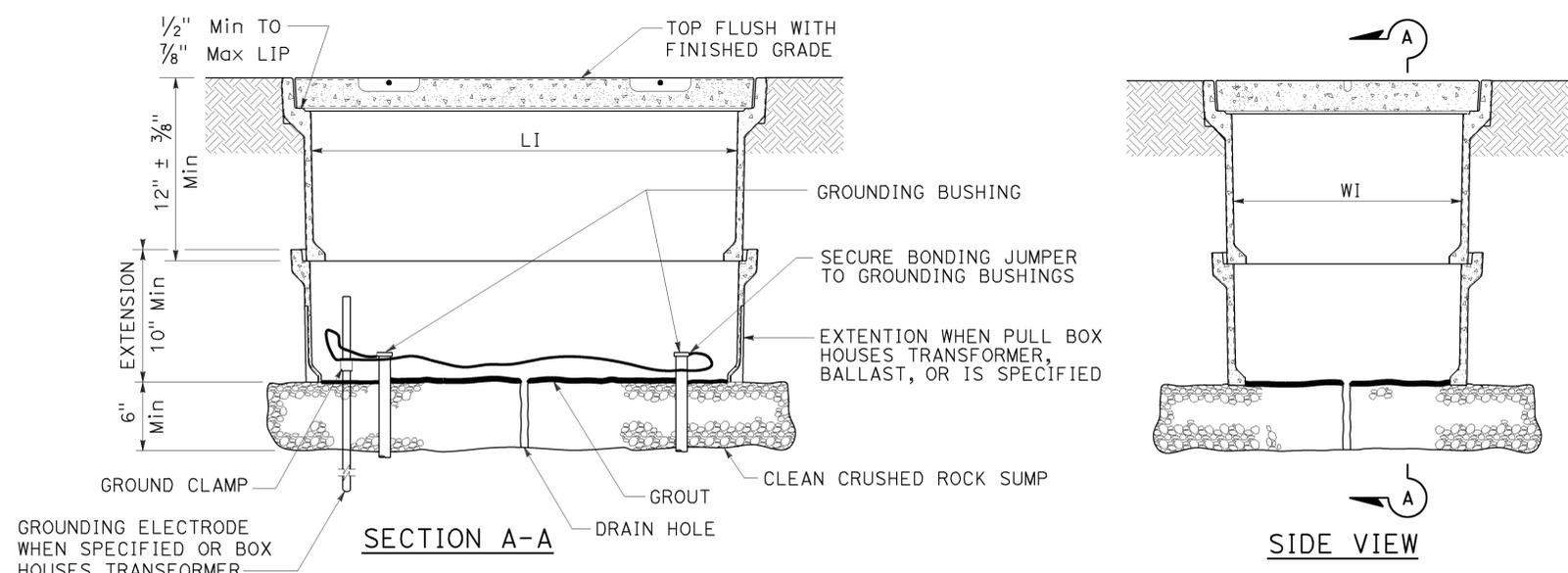
REVISED STANDARD PLAN RSP ES-7R

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SB	101	2.2/3.3	528	786

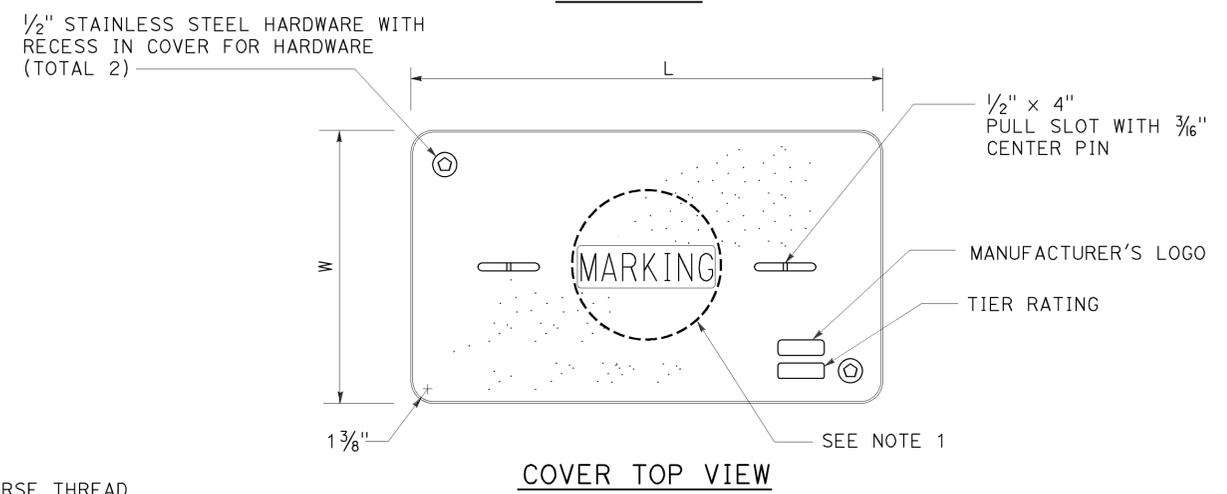
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Theresa Aziz Gabriel
 No. E15129
 Exp. 6-30-16
 ELECTRICAL
 STATE OF CALIFORNIA

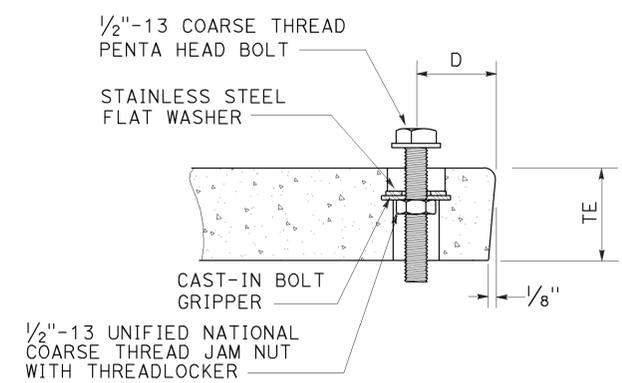
TO ACCOMPANY PLANS DATED 12-7-15



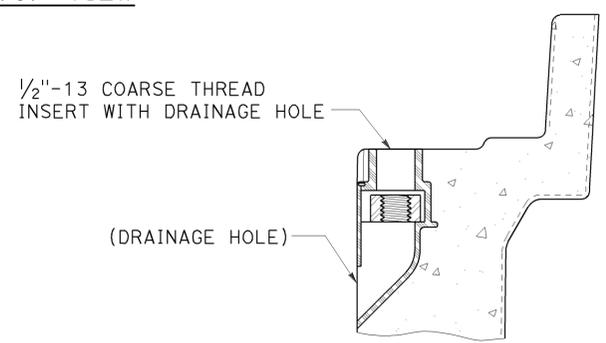
INSTALLATION DETAILS
DETAIL A



COVER TOP VIEW



TYPICAL COVER CAPTIVE BOLT
OR SIMILAR



TYPICAL THREADED INSERT
OR SIMILAR

NOTES:

- Pull box covers shall be marked as follows: "SERVICE" Service circuits between service point and service disconnect; "SPRINKLER-CONTROL" sprinkler control circuits, 50 V or less; "CALTRANS" on all pull boxes, except pull boxes marked "SPRINKLER-CONTROL"; and "TELEPHONE" Telephone service;
 - No. 3 1/2 pull box.
 - "SIGNAL" - Traffic signal circuits with or without lighting or sign lighting circuits.
 - "LIGHTING" - Lighting or sign lighting circuits where voltage is under 600 V.
 - No. 5, 6, 9 or 9A pull box.
 - "TRAFFIC SIGNAL" - Traffic signal circuits with or without lighting or sign lighting circuits.
 - "LIGHTING" - Lighting or sign lighting circuits where voltage is under 600 V.
 - "LIGHTING-HIGH VOLTAGE" - Lighting or sign lighting circuits where voltage is above 600 V.
 - "IRRIGATION" - Circuits to irrigation controller 120 V or more.
 - "RAMP METER" - Ramp meter circuits.
 - "COUNT STATION" - Count or speed monitor circuits.
 - "COMMUNICATIONS" - Communication circuits.
 - "TOS COMMUNICATIONS" - TOS communication line.
 - "TOS POWER" - TOS power.
 - "TDC POWER" - Telephone demarcation cabinet power.
 - "CCTV" - Closed circuit television circuits.
 - "TMS" - Traffic monitoring station circuits.
 - "CMS" - Changeable message sign circuits.
 - "HAR" - Highway advisory radio circuits.
 - "BOOSTER PUMP" - Booster pump circuit.
- The nominal dimensions of the opening in which the cover sets shall be the same as the cover dimensions except the length and width dimensions shall be 1/8 inch greater.
- Covers and boxes shall be interchangeable with California standard male and female gages. When interchanged with a standard male or female gage, the top surfaces shall be flush within 1/8 inch. Top outside radius of covers and pull boxes shall have a 1/8 inch radius.
- Pull box extension may be another pull box as long as the bottom edge of the pull box can fit into the cover opening.
- Dimensions for the cover for non-traffic pull box are nominal values.

DIMENSION TABLE										
PULL BOX	PULL BOX				COVER					
	MINIMUM DEPTH BOX	MINIMUM DEPTH EXTENSION	MINIMUM WEIGHT	LI Min	WI Min	TE	D	L	W	MINIMUM WEIGHT
No. 3 1/2	12"	N/A	40 lb	1' - 3"	9"	1 3/4"	1 3/4"	1'-3 1/4" - 1'-3 3/8"	10" - 10 1/8"	30 lb
No. 5	12"	10"	55 lb	1' - 8"	11"	2"	1 3/4"	1'-11 1/4"	1'-1 3/4"	60 lb
No. 6	12"	10"	70 lb	2' - 4 1/4"	1' - 3 1/4"	2"	2"	2'-6 1/2"	1'-5 1/2"	85 lb

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(NON-TRAFFIC PULL BOX)
 NO SCALE

RSP ES-8A DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-8A DATED JULY 19, 2013 AND RSP ES-8A DATED JANUARY 20, 2012 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-8A

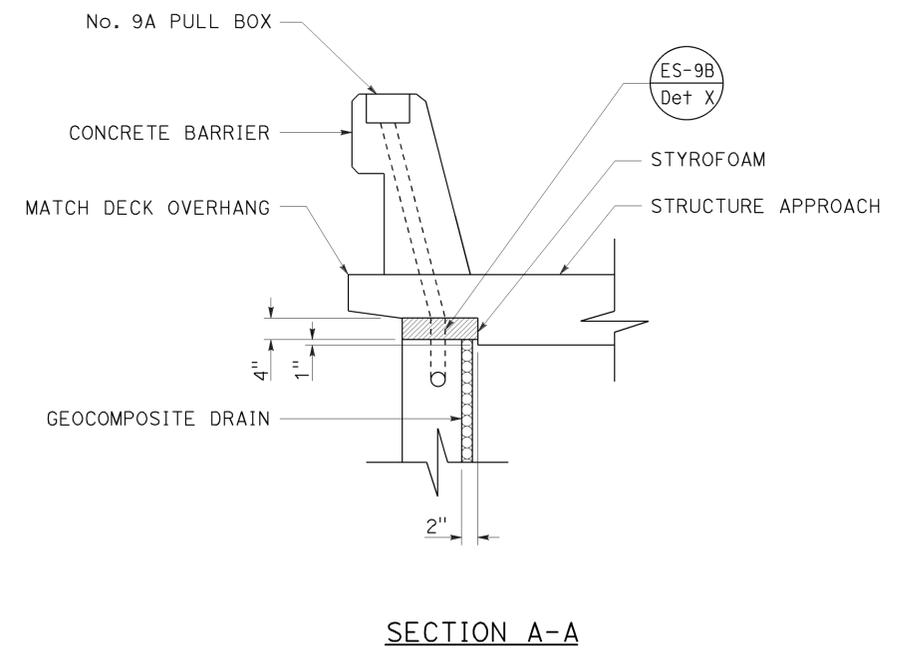
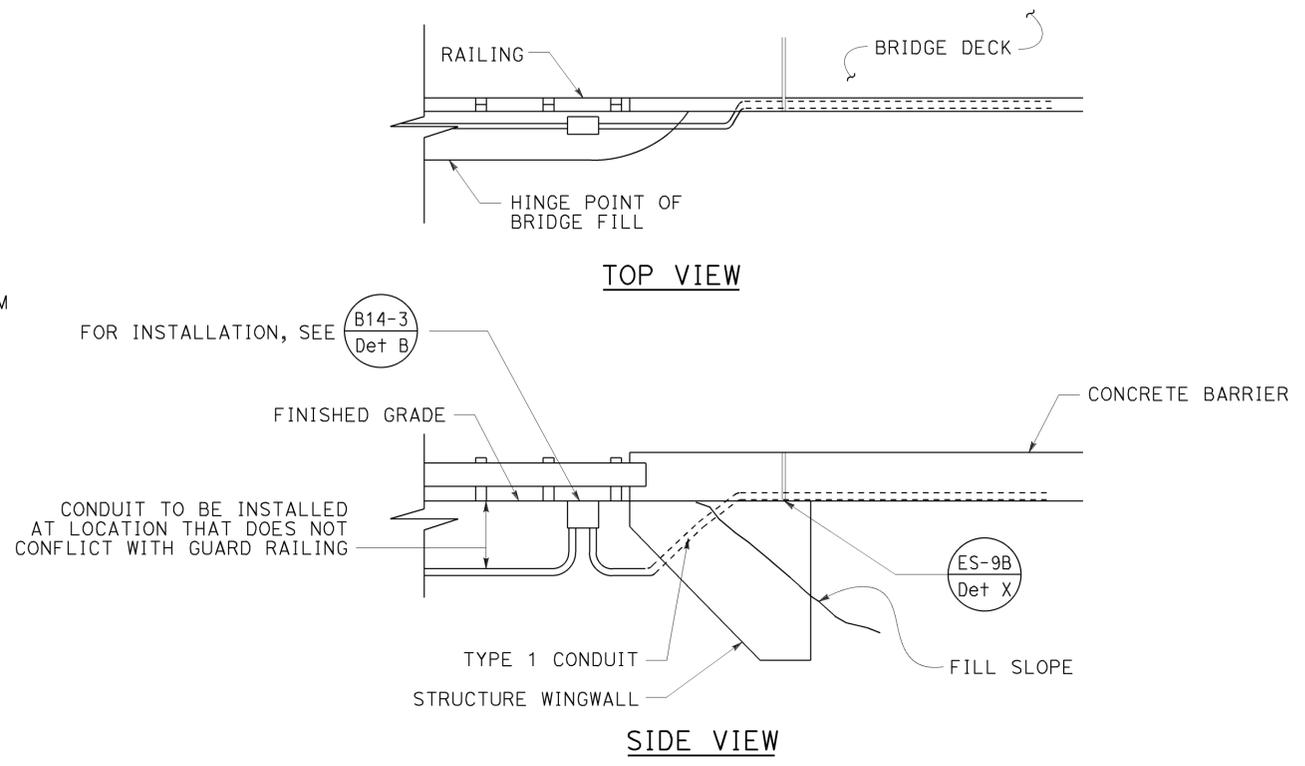
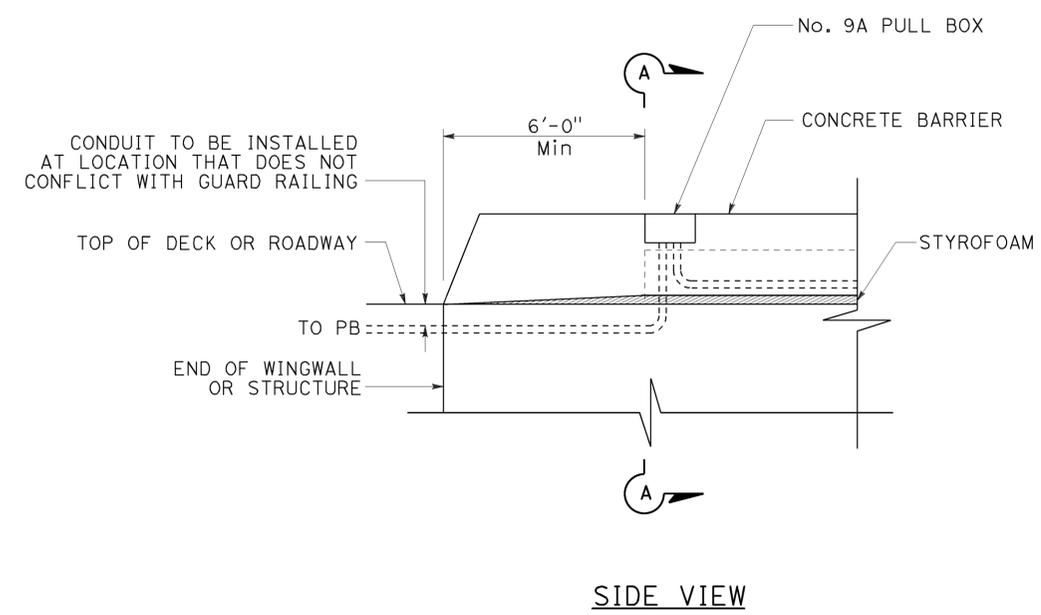
2010 REVISED STANDARD PLAN RSP ES-8A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	529	786

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 Theresa Aziz Gabriel
 No. E15129
 Exp. 6-30-16
 ELECTRICAL
 STATE OF CALIFORNIA

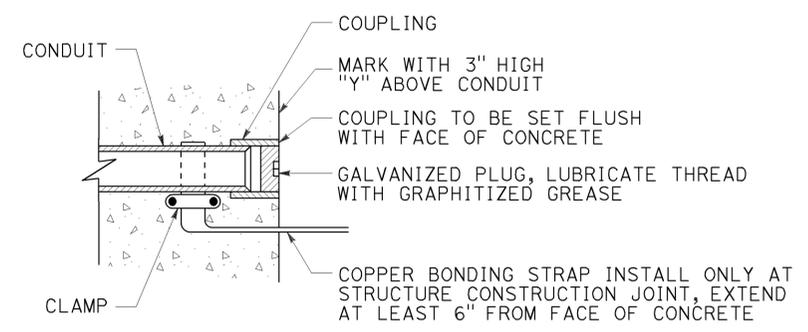
October 30, 2015
 PLANS APPROVAL DATE
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TO ACCOMPANY PLANS DATED 12-7-15



**CONDUIT TERMINATION
DETAIL A**

**CONDUIT TERMINATION
DETAIL I**



**CONDUIT TERMINATION
DETAIL C**

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(STRUCTURE PULL BOX
INSTALLATIONS)**

NO SCALE

RSP ES-9A DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-9A DATED MAY 20, 2011 - PAGE 481 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-9A

2010 REVISED STANDARD PLAN RSP ES-9A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	530	786

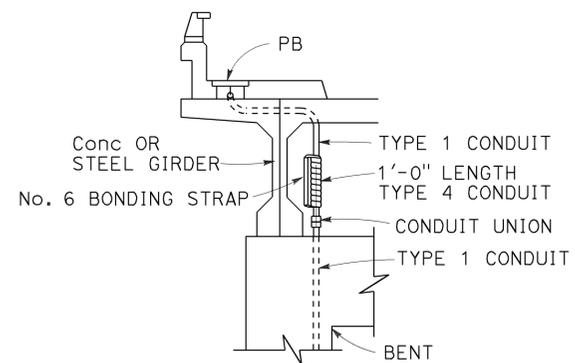
Jagwinder & Co
REGISTERED ELECTRICAL ENGINEER

October 30, 2015
PLANS APPROVAL DATE

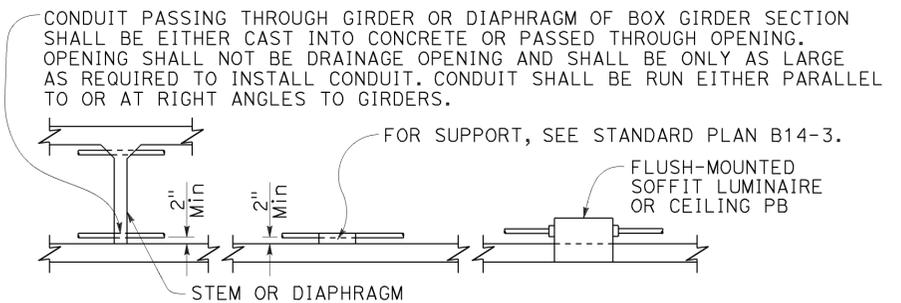
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No. E18551
Exp. 12-31-16
ELECTRICAL
STATE OF CALIFORNIA

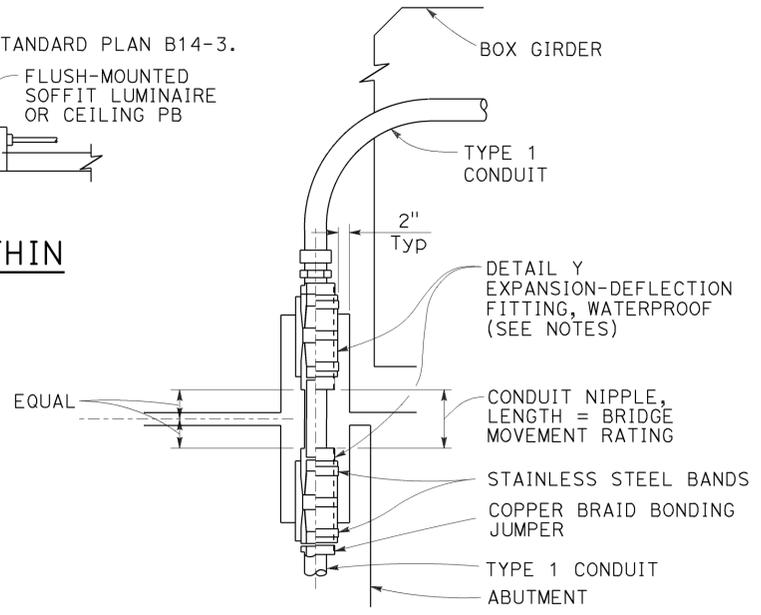
TO ACCOMPANY PLANS DATED 12-7-15



CONDUIT RISER CONNECTION
DETAIL R

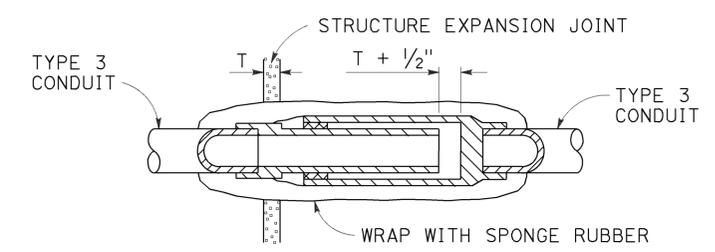


CONDUIT INSTALLATION WITHIN BOX GIRDER SECTIONS
DETAIL S

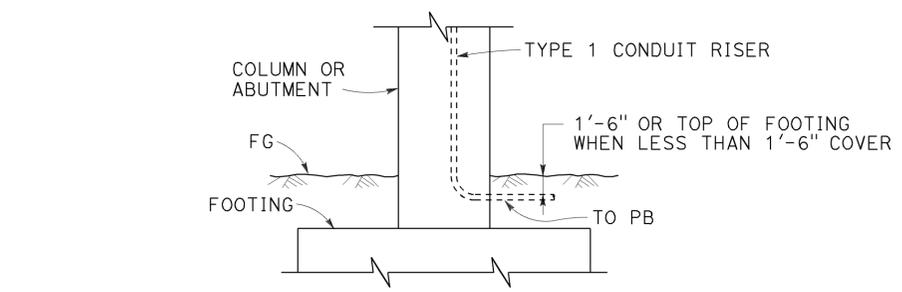


- NOTES:**
1. Fitting and pocket required only where movement can occur between girder and abutment.
 2. Fill pocket around fitting with resilient waterproof compound.

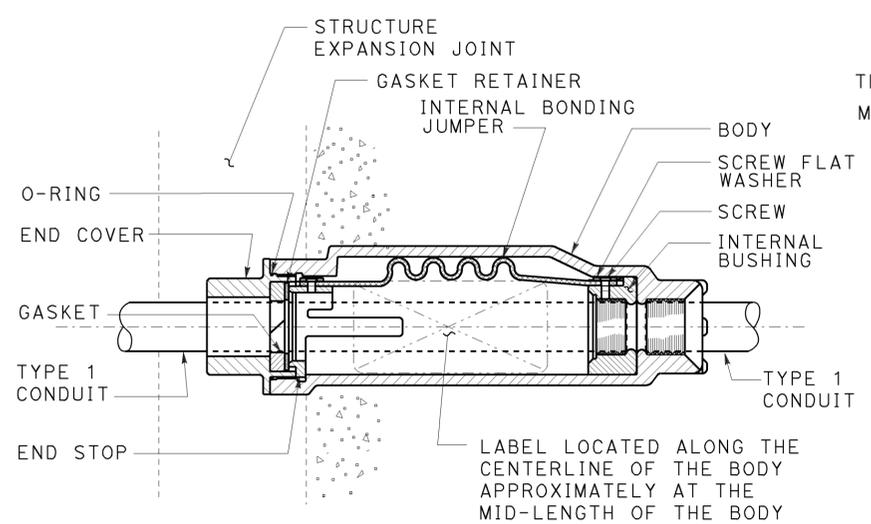
CONDUIT RISER CONNECTION AT COLUMN, ABUTMENT OR STRUCTURE WING WALL
DETAIL U



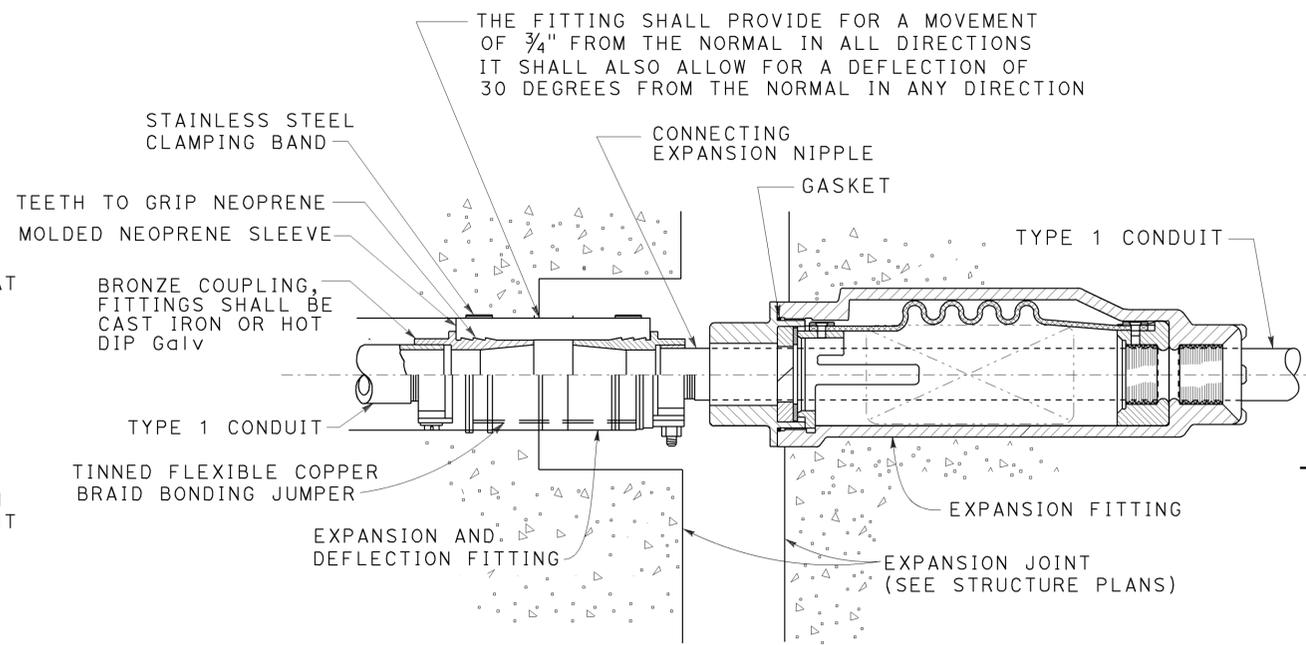
NON-METALLIC CONDUIT EXPANSION FITTING INSTALLATION DETAIL
DETAIL V
To be used only when shown or specified on Project Plans



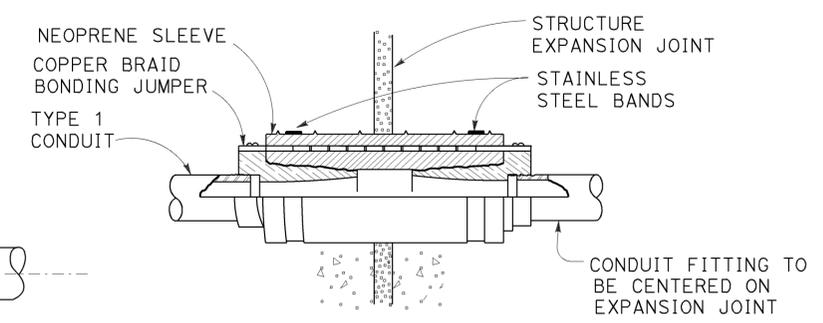
LOWER END OF CONDUIT RISER AT COLUMN OR ABUTMENT
DETAIL T



CONDUIT EXPANSION FITTING
DETAIL X



COMBINATION EXPANSION-DEFLECTION FITTINGS METALLIC CONDUIT INSTALLATION
DETAIL XY



CONDUIT EXPANSION-DEFLECTION FITTING
DETAIL Y

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS (CONDUIT RISER AND EXPANSION FITTING, STRUCTURE INSTALLATIONS)
NO SCALE

RSP ES-9B DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-9B DATED MAY 20, 2011 - PAGE 482 OF THE STANDARD PLANS BOOK DATED 2010.

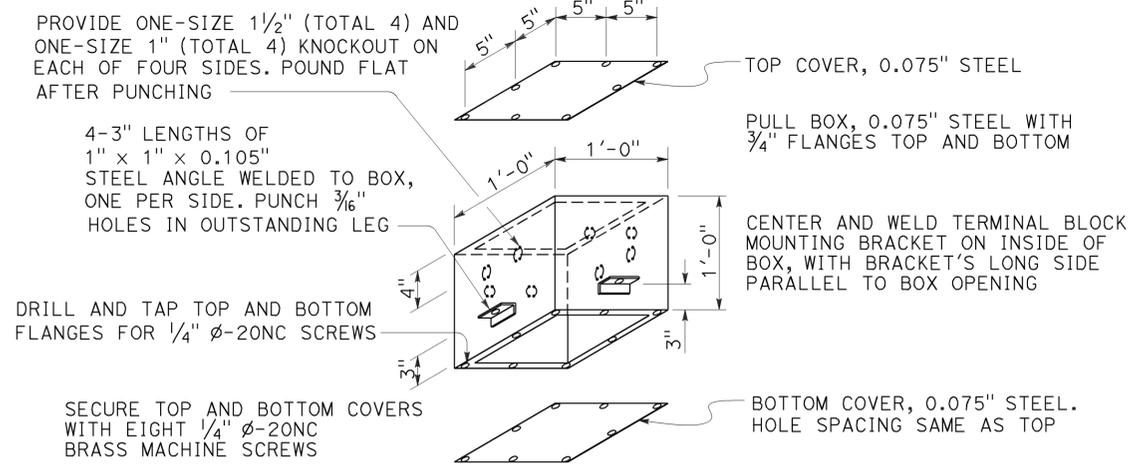
REVISED STANDARD PLAN RSP ES-9B

2010 REVISED STANDARD PLAN RSP ES-9B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	531	786

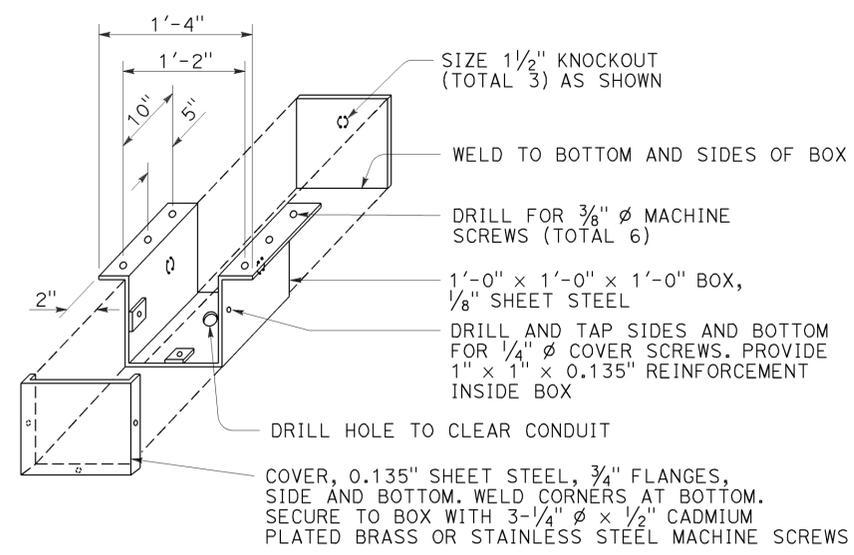
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Theresa Aziz Gabriel
 No. E15129
 Exp. 6-30-16
 ELECTRICAL
 STATE OF CALIFORNIA



No. 7 CEILING PULL BOX

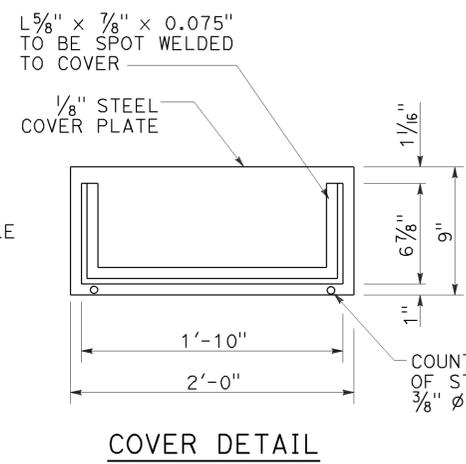
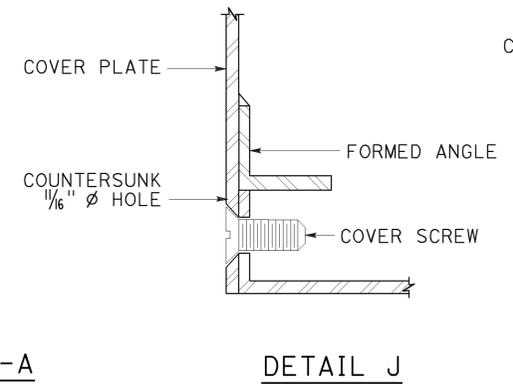
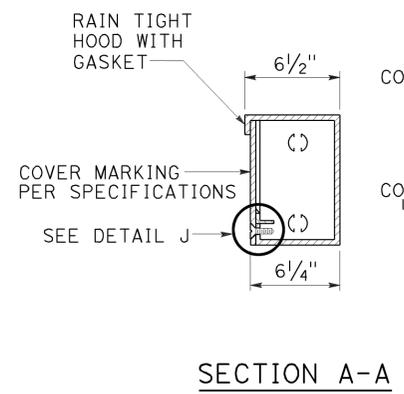
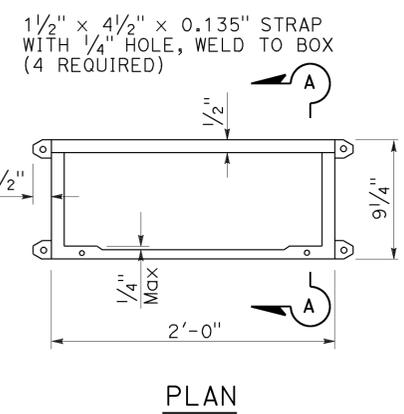
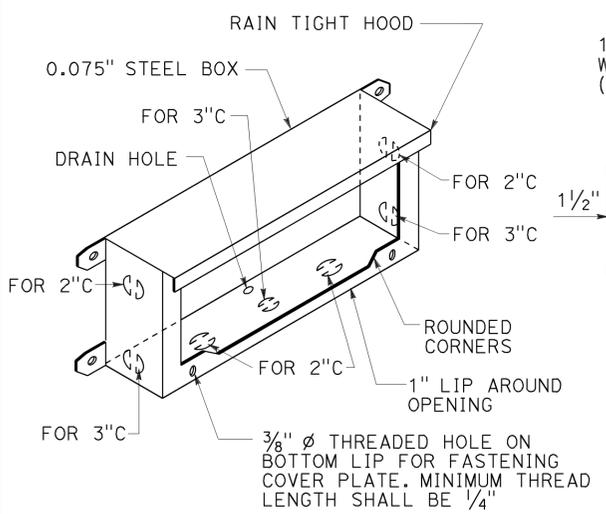
See Note 6



No. 8 PULL BOX

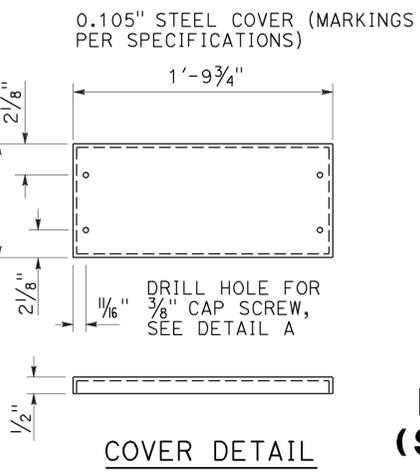
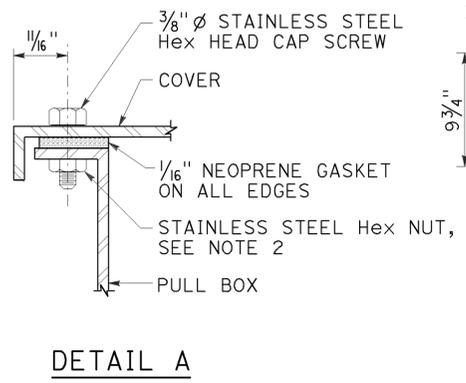
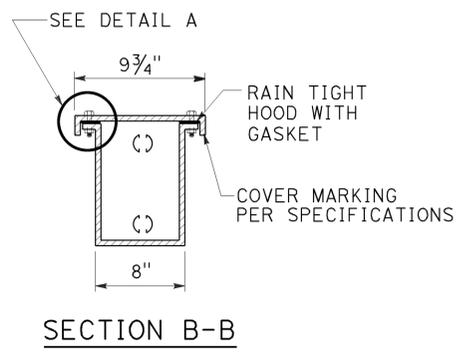
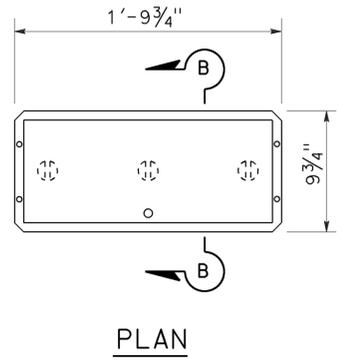
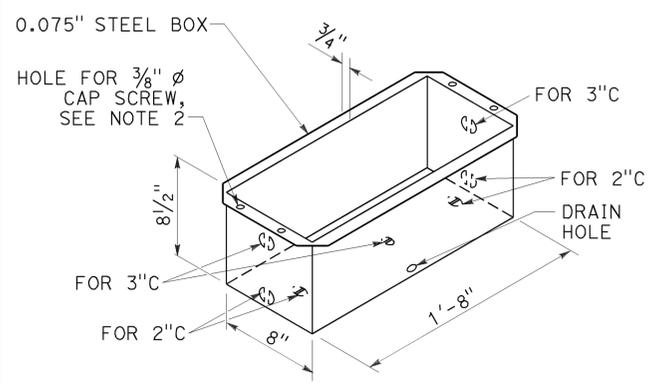
NOTES:

- Corner joints shall be lapped and secured by spot welding or riveting.
- Where cap screws are used to attach cover to box, either of the following methods of providing adequate threading may be used:
 - Tack weld stainless steel Hex nut to bottom of flange (total 4)
 - Tack weld a 1/4" x 5/8" x 8" bar beneath flange (total 2)
- Pound knockouts flat after punching.
- Multiple size knockouts (concentric) shall not be permitted.
- Pull box covers shall be marked as specified on Revised Standard Plans RSP ES-8A and RSP ES-8B.
- Installation of No. 7 pull box:
 - Install with bottom flange flush with concrete.
 - Both covers shall be on a box during pouring.
- Install box parallel to top of railing. Cover box during pouring with 1/4" plywood of sufficient size to provide 1:1 chamfer on 3 sides of cover. Upper edge of plywood shall fit against lower edge of rain tight hood.



No. 9 STRUCTURE PULL BOX

See Note 7



No. 9A STRUCTURE PULL BOX

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (STRUCTURE PULL BOX)

NO SCALE

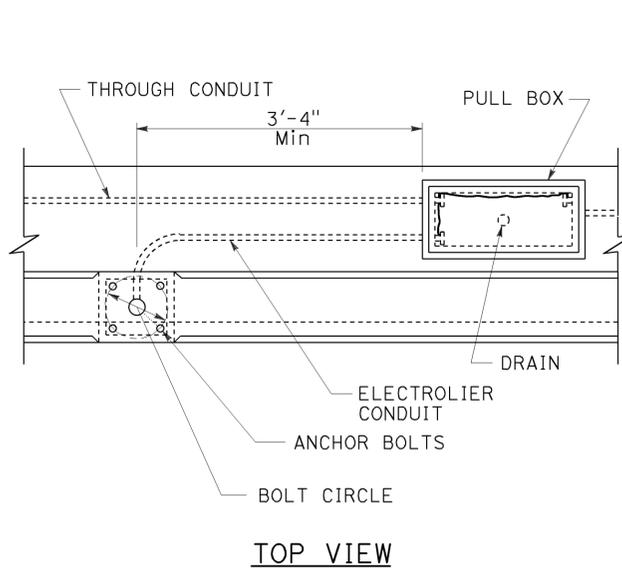
RSP ES-9C DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-9C DATED MAY 20, 2011 - PAGE 483 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-9C

2010 REVISED STANDARD PLAN RSP ES-9C

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	532	786

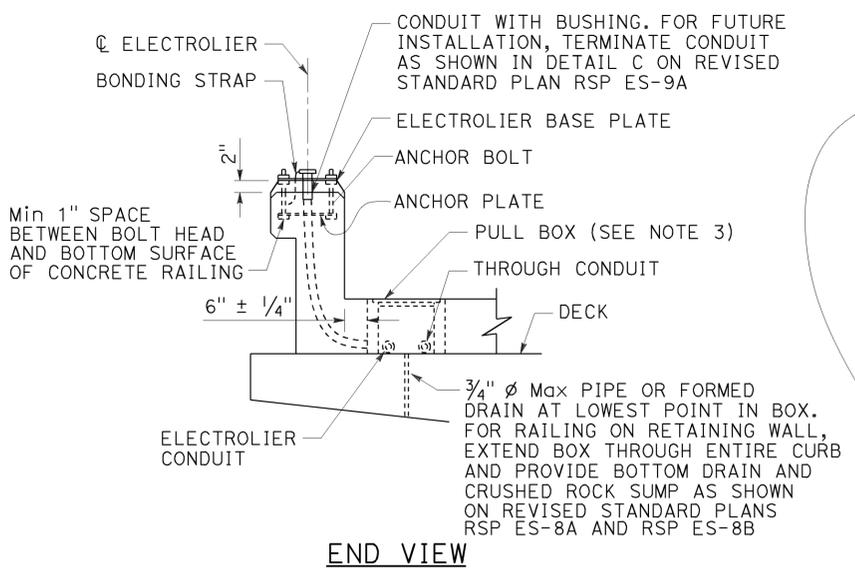
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
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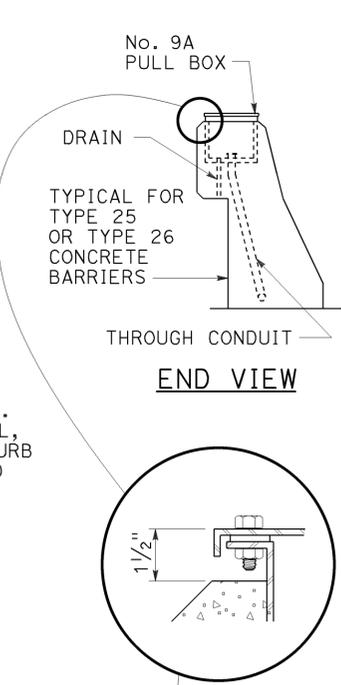
TOP VIEW

No. 3 1/2, 5, OR 6 PULL BOX INSTALLATION

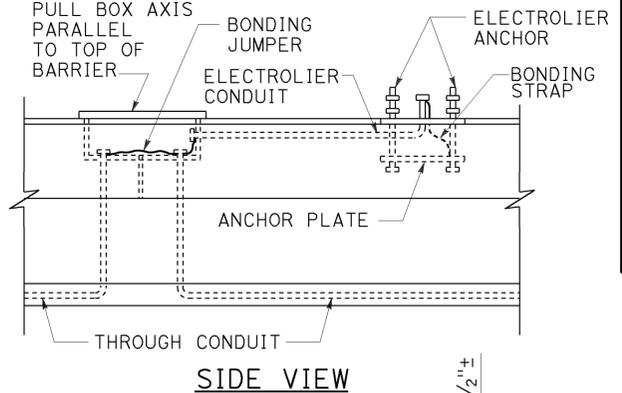
DETAIL A



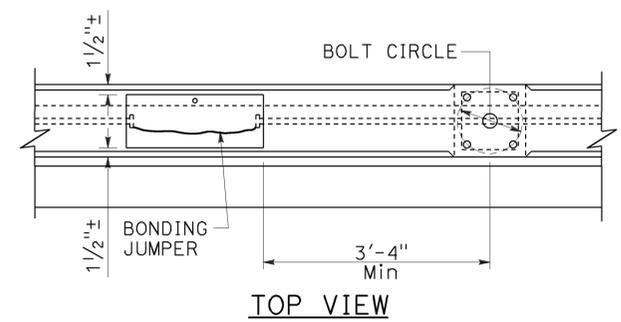
END VIEW



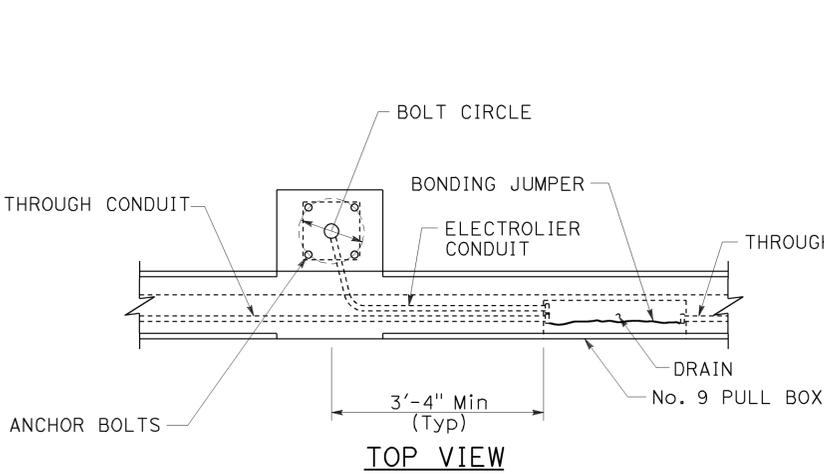
END VIEW



SIDE VIEW



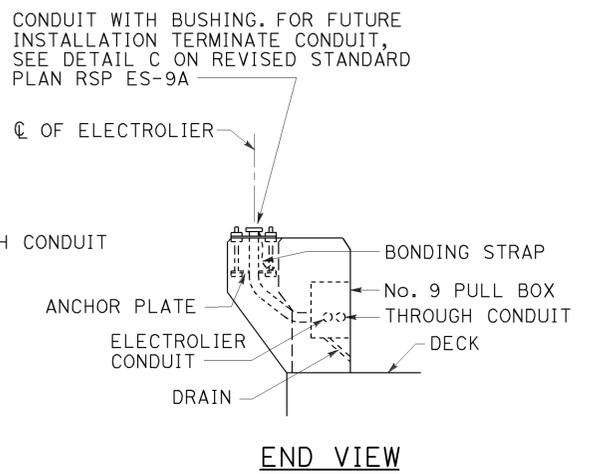
TOP VIEW



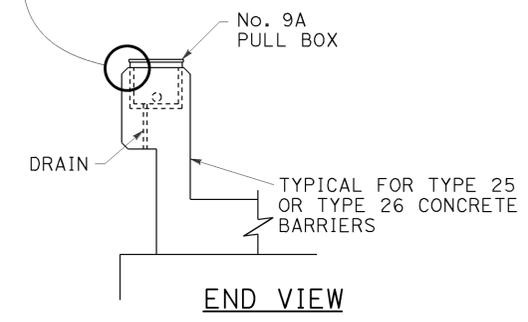
TOP VIEW

No. 9 PULL BOX INSTALLATION

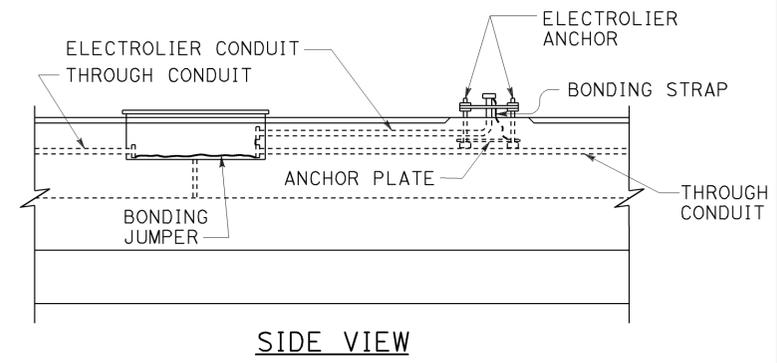
DETAIL B



END VIEW



END VIEW



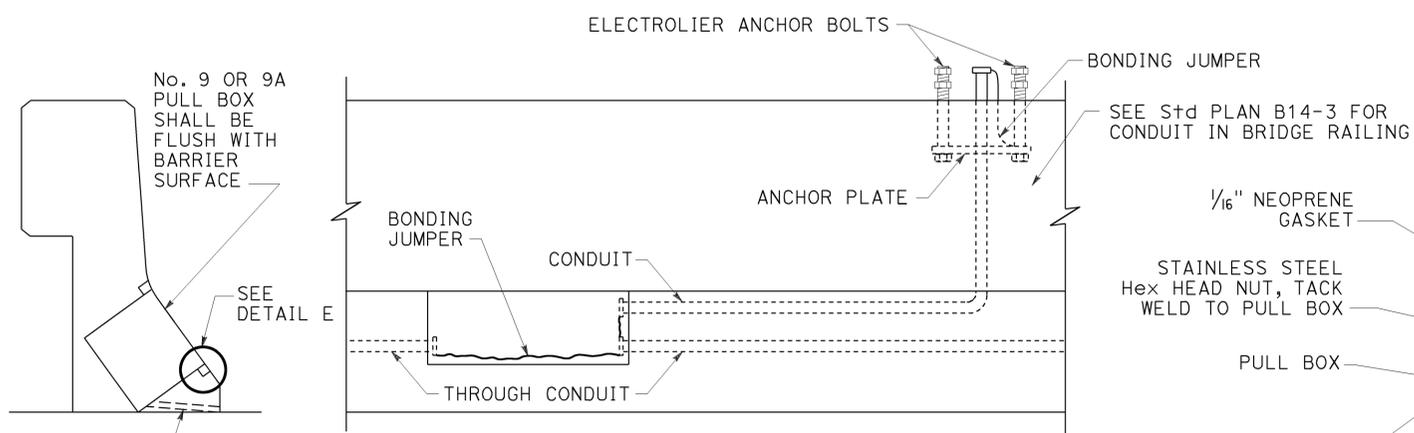
SIDE VIEW

No. 9A PULL BOX INSTALLATION

DETAIL C

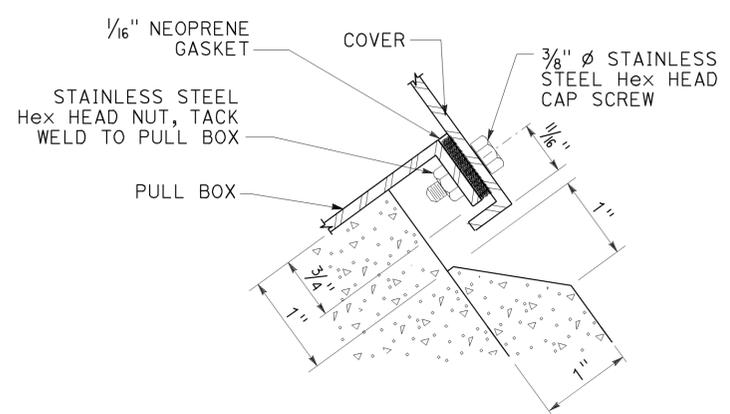
NOTES:

1. Axis of pull box shall be parallel to top of barrier, sidewalk or railing.
2. See railing sheet for reinforcement and structural details at electroliers and pull boxes.
3. Top of pull boxes in sidewalk areas shall be flush with sidewalk. Modify base of pull box as required.
4. Boxes inside of vertical barrier or railing shall be closed during pouring of PCC with 1/4" plywood of sufficient size to provide 1:1 chamfer on 3 sides of cover. Upper edge of plywood shall fit against lower edge of raintight hood.
5. Use drain in center if box is horizontal, or at low end if box is inclined. When box is mounted in sloping parapet 1/2" elongated drain hole inside at center or near end as required for drainage.
6. For electrolier anchorage bolts and grouting details, see Standard Plan ES-6B.
7. See Standard Plan B14-3 for conduit in concrete barrier.



INSTALLATION IN SLOPING PARAPETS

DETAIL D



DETAIL E

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(STRUCTURE PULL BOX
INSTALLATIONS)**

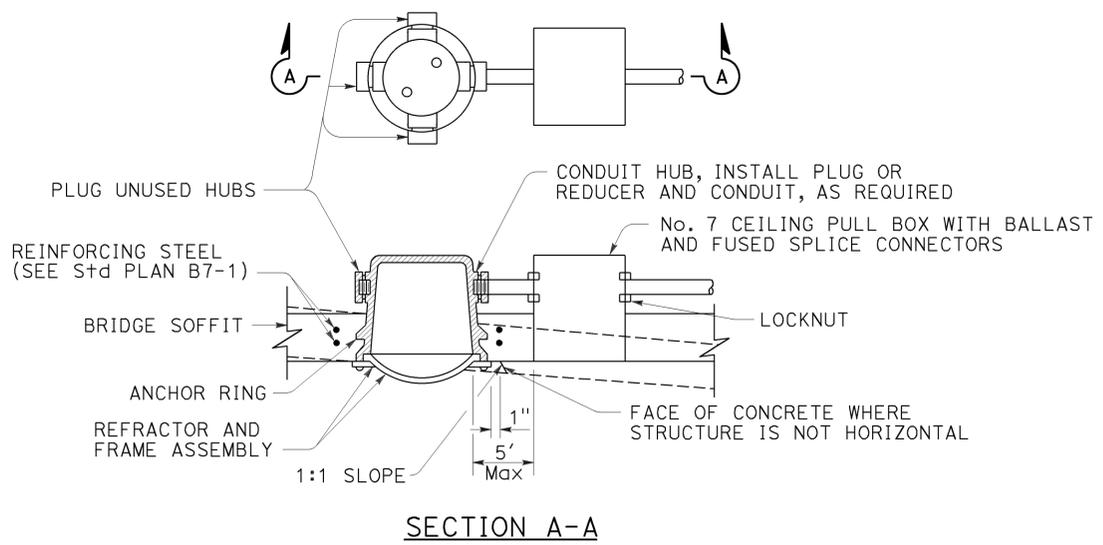
NO SCALE

RSP ES-9D DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-9D DATED MAY 20, 2011 - PAGE 484 OF THE STANDARD PLANS BOOK DATED 2010.

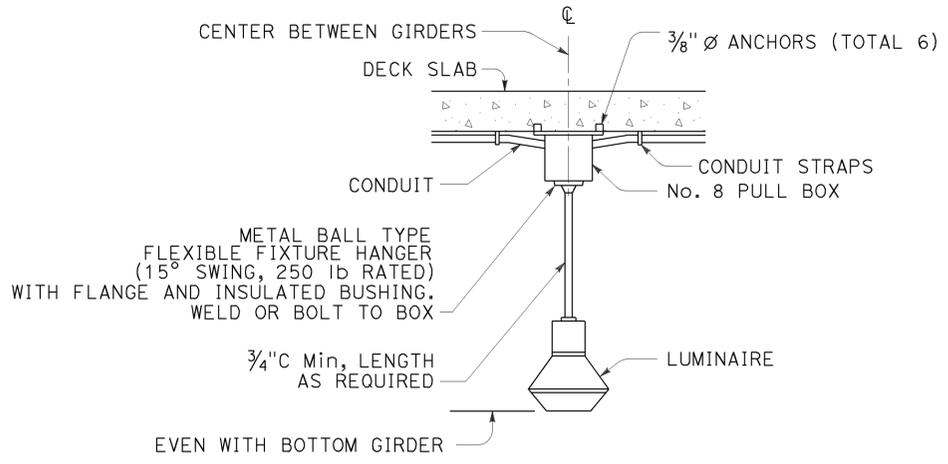
REVISED STANDARD PLAN RSP ES-9D

2010 REVISED STANDARD PLAN RSP ES-9D

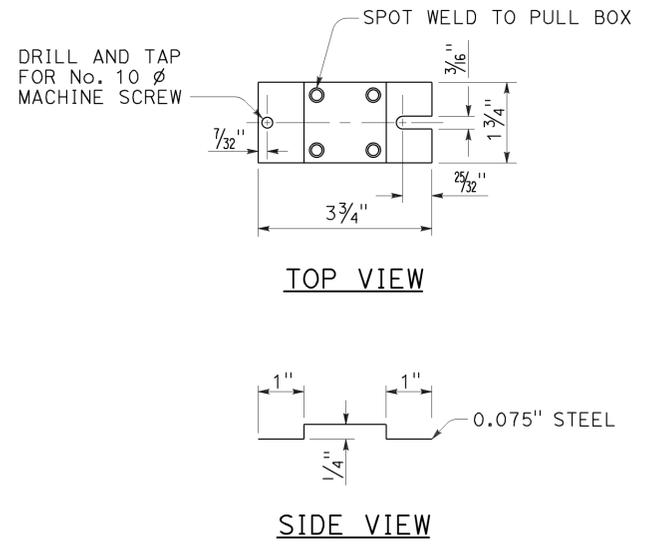
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	533	786
<i>Theresa Gabriel</i> REGISTERED ELECTRICAL ENGINEER October 30, 2015 PLANS APPROVAL DATE <small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					
TO ACCOMPANY PLANS DATED <u>12-7-15</u>					



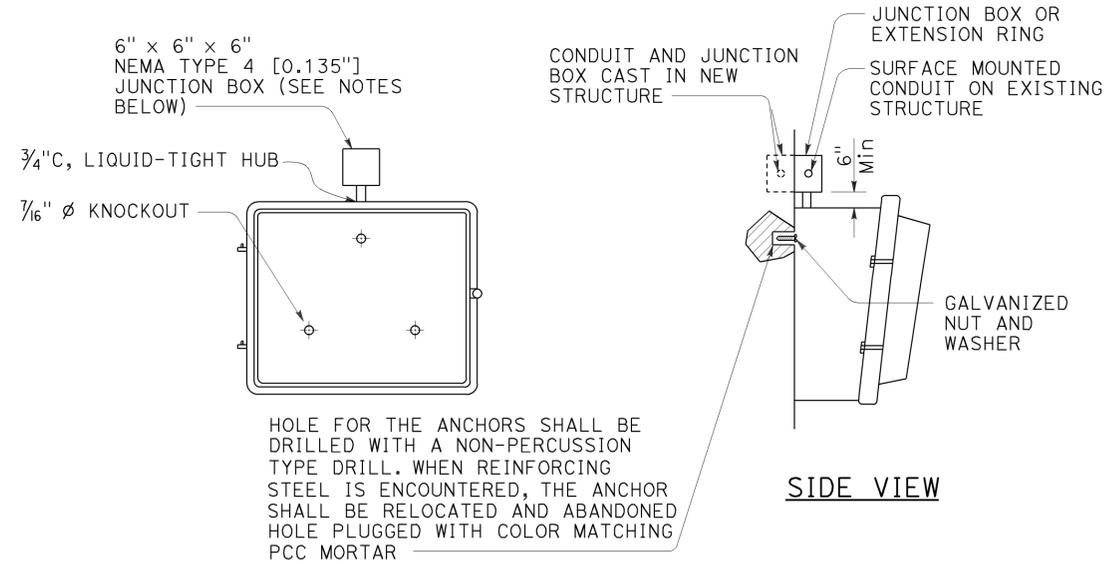
FLUSH-MOUNTED SOFFIT LUMINAIRE INSTALLATION
DETAIL F



PENDANT SOFFIT LUMINAIRE INSTALLATION
DETAIL P



TERMINAL BLOCK MOUNTING BRACKET
DETAIL T



WALL-MOUNTED LUMINAIRE INSTALLATION
DETAIL W

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(FLUSH-MOUNTED SOFFIT, PENDANT SOFFIT
AND WALL-MOUNTED LUMINAIRE
STRUCTURE INSTALLATIONS)

NO SCALE
 RSP ES-9E DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-9E DATED MAY 20, 2011 - PAGE 485 OF THE STANDARD PLANS BOOK DATED 2010.

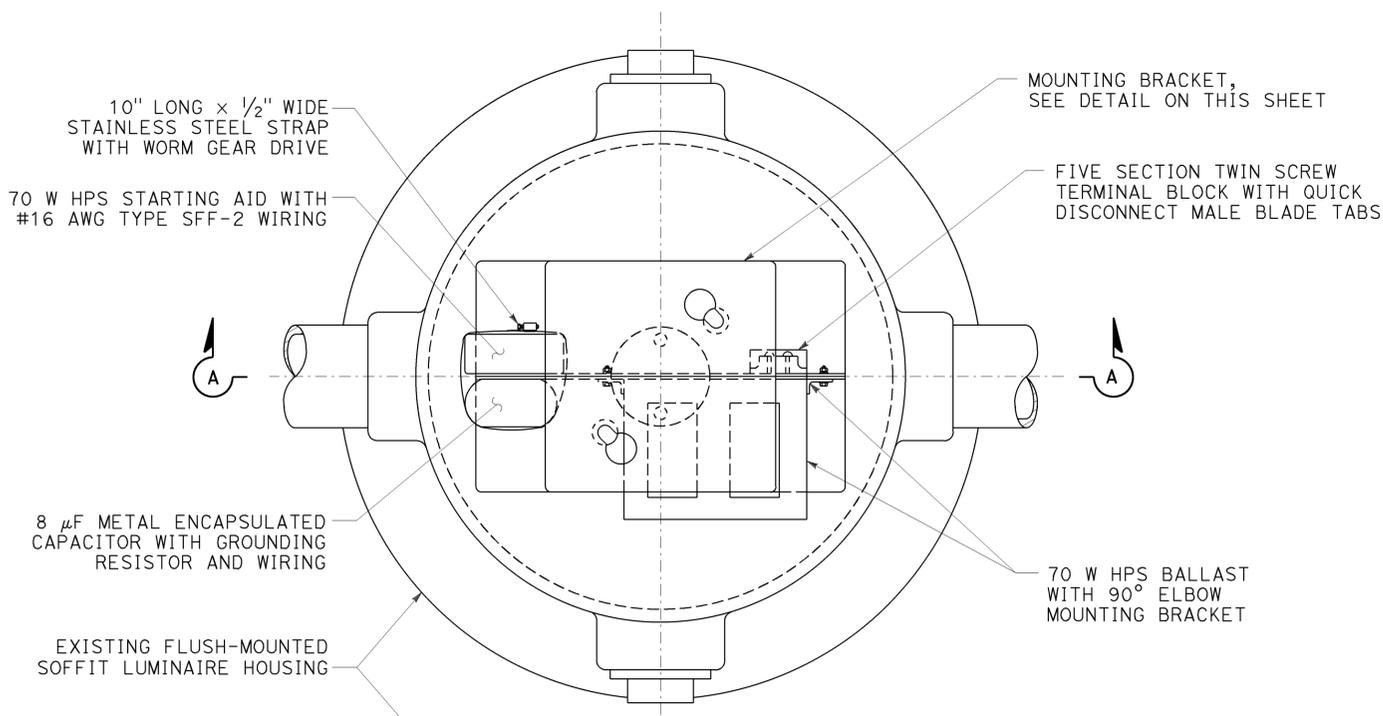
2010 REVISED STANDARD PLAN RSP ES-9E

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	534	786

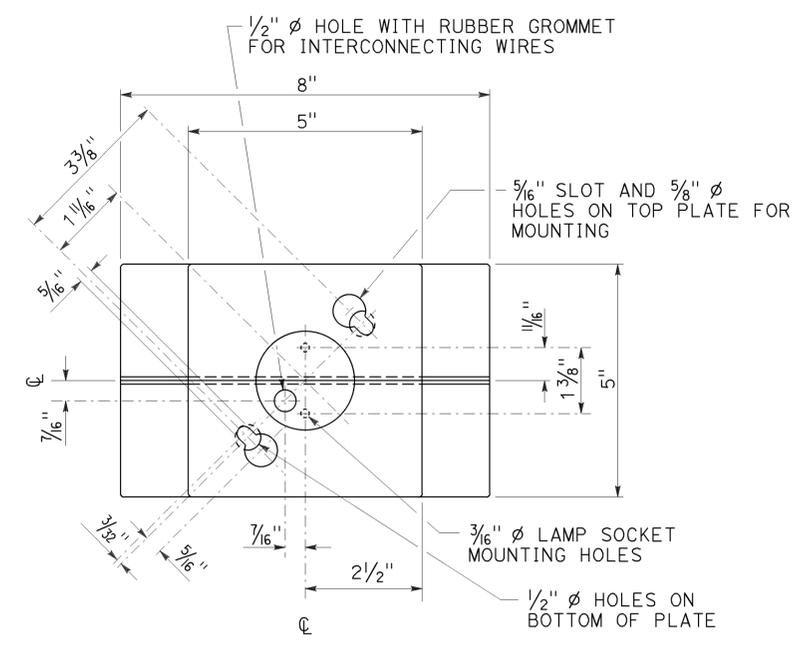
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
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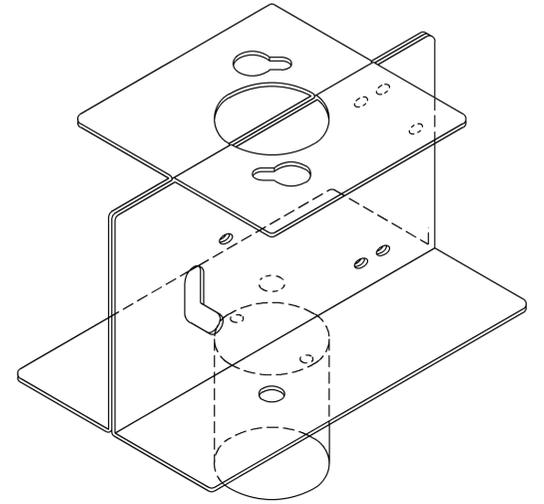
TO ACCOMPANY PLANS DATED 12-7-15



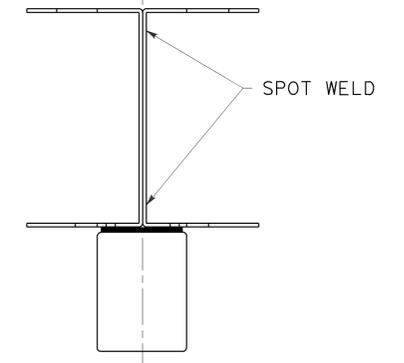
PLAN



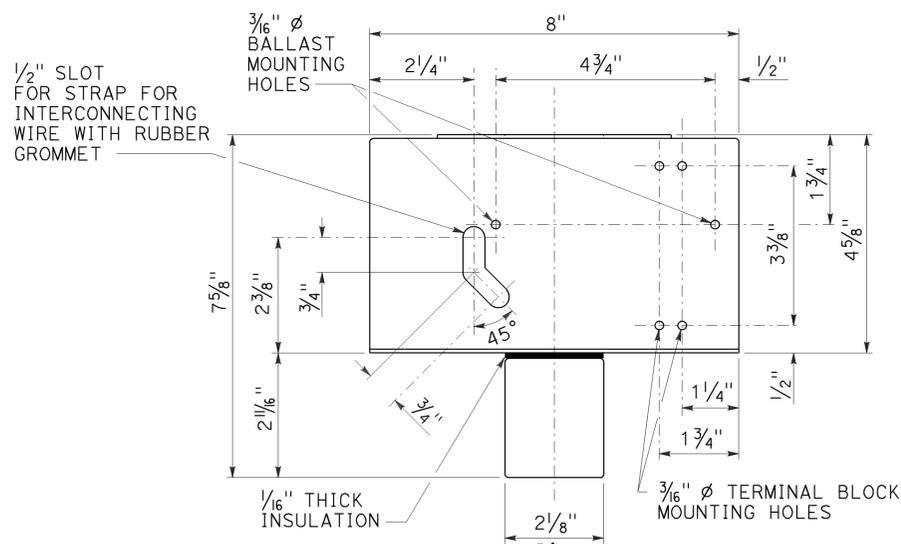
TOP VIEW



PREFORM TWO SHEETS 1/16" MILD STEEL AS SHOWN, SPOTWELD TOGETHER IN EACH CORNER WITH FOUR SPOTWELDS.

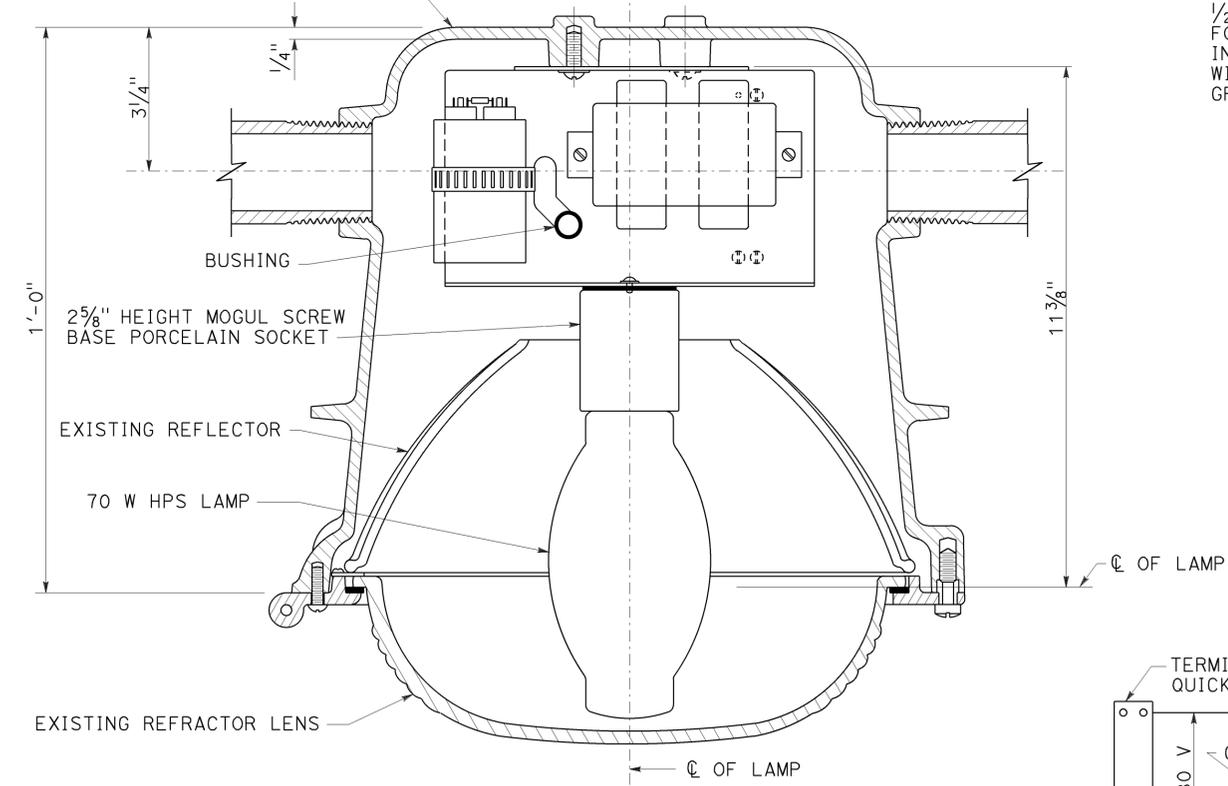


SIDE VIEW



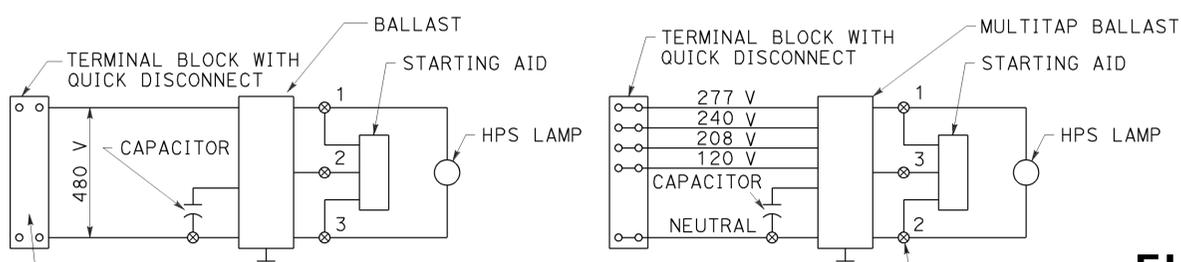
FRONT VIEW

MOUNTING BRACKET DETAILS



SECTION A-A

FLUSH-MOUNTED SOFFIT LUMINAIRE ASSEMBLY



WIRING DIAGRAM

- NOTES:**
1. Use No. 8 Ø machine screws, lockwashers and nuts for mounting ballast and terminal strips.
 2. In-line fuse as required on Standard Plan ES-13B.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (FLUSH-MOUNTED SOFFIT
 LUMINAIRE DETAILS)**
 NO SCALE

RSP ES-9F DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-9F DATED MAY 20, 2011 - PAGE 486 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-9F

2010 REVISED STANDARD PLAN RSP ES-9F

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	535	786

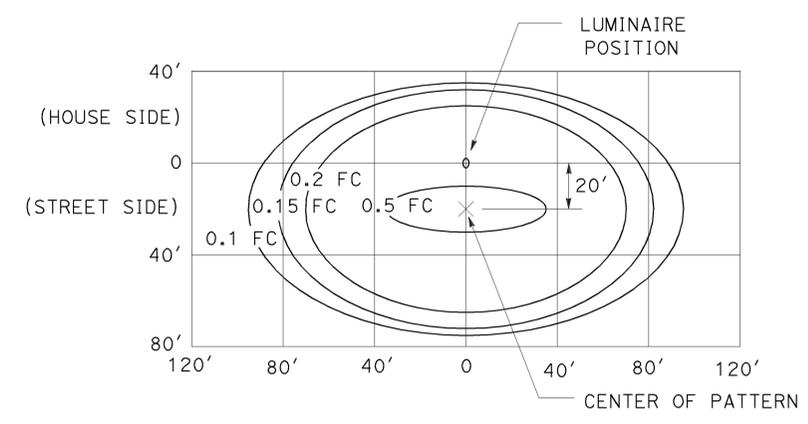
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 Theresa Aziz Gabriel
 No. E15129
 Exp. 6-30-16
 ELECTRICAL
 STATE OF CALIFORNIA

October 30, 2015
 PLANS APPROVAL DATE

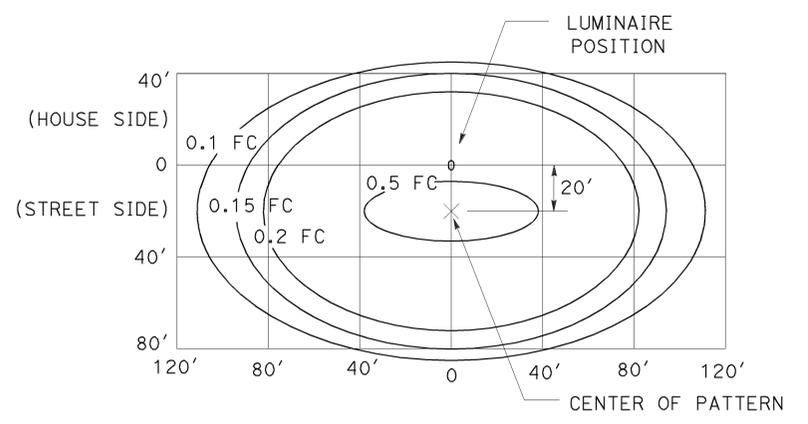
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TO ACCOMPANY PLANS DATED 12-7-15

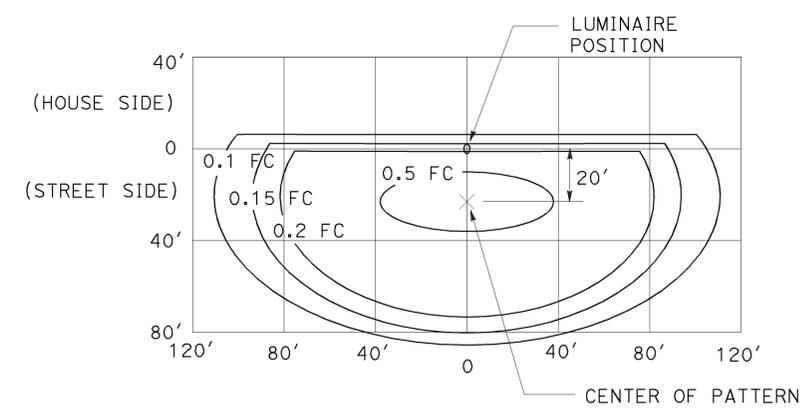
NOTE:
Curves represent the minimum footcandle (FC).



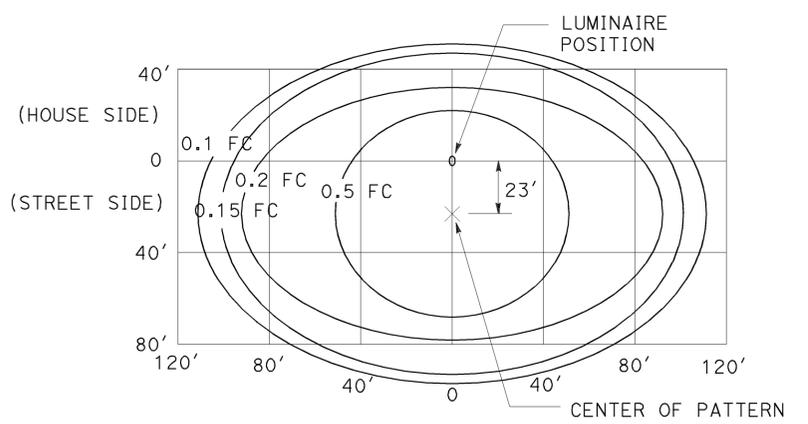
LED LUMINAIRE 165 W
34' Mounting Height



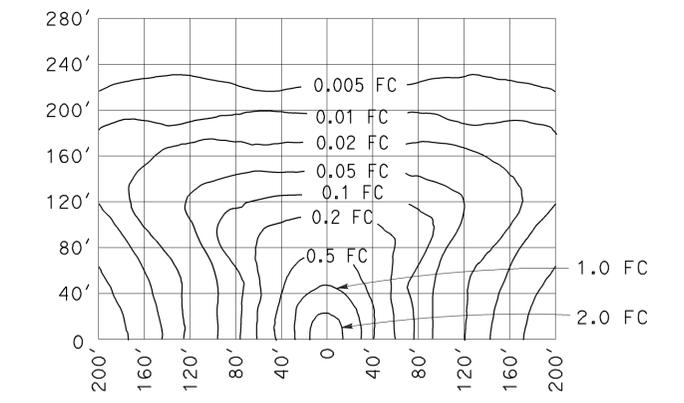
LED LUMINAIRE 235 W
40' Mounting Height



LED LUMINAIRE 235 W
40' Mounting Height
with back side control



LED LUMINAIRE 300 W
40' Mounting Height



LOW-PRESSURE SODIUM LUMINAIRE 180 W
40' Mounting Height
Lamp operated at 33,000 lm

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(ISOFOOTCANDLE CURVES)**

NO SCALE

RSP ES-10A DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-10A DATED JULY 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-10A

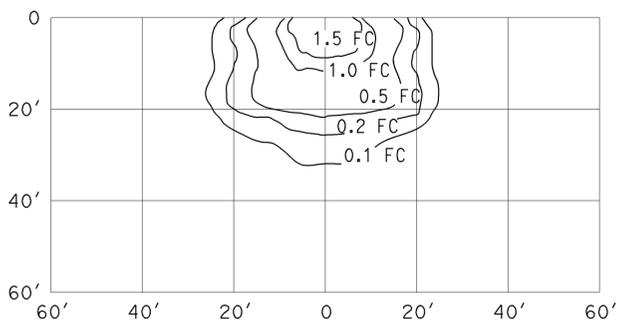
2010 REVISED STANDARD PLAN RSP ES-10A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	536	786

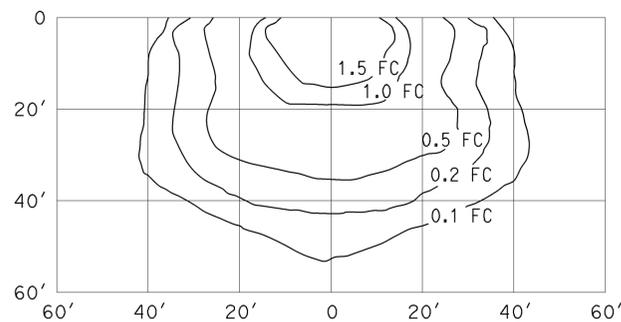
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 12-7-15

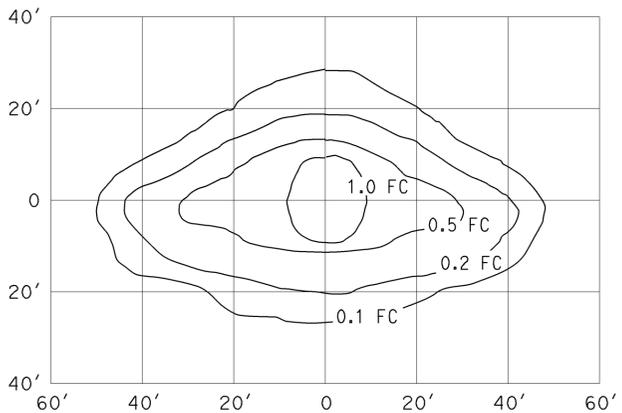
NOTE:
Curves represent the minimum footcandle (FC).



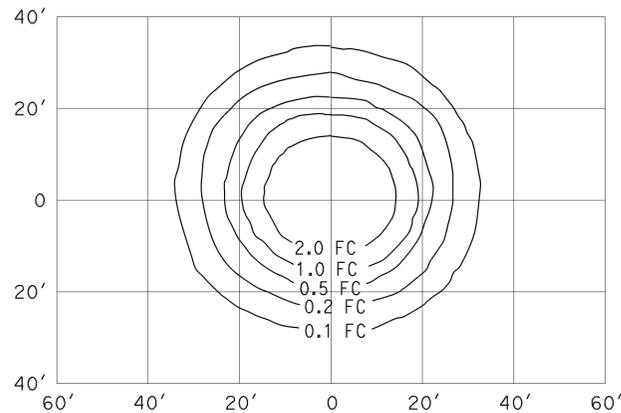
**HIGH-PRESSURE SODIUM
WALL-MOUNTED LUMINAIRE 70 W**
 15' Mounting Height
 ANSI Designation S62
 Lamp operated at 5,800 lm



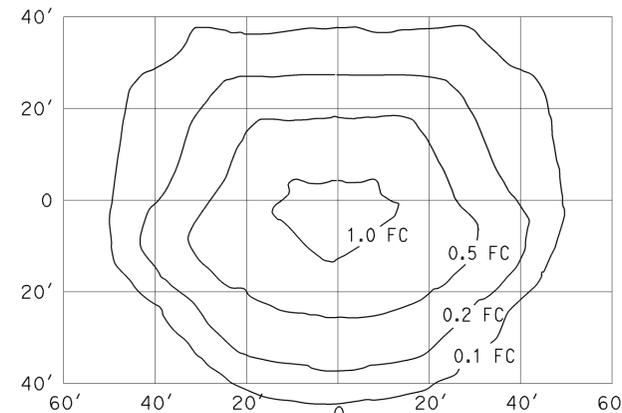
**HIGH-PRESSURE SODIUM
WALL-MOUNTED LUMINAIRE 100 W**
 15' Mounting Height
 ANSI Designation S54
 Lamp operated at 9,500 lm



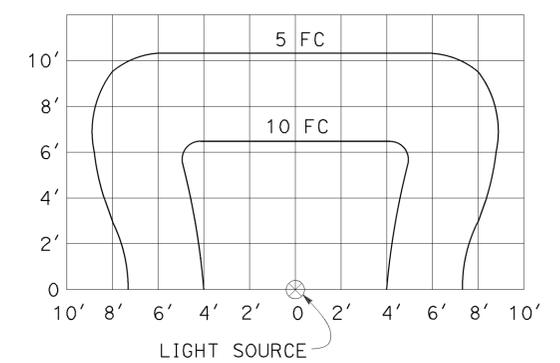
**HIGH-PRESSURE SODIUM
PENDANT SOFFIT LUMINAIRE 70 W
TYPE III SHORT**
 17' Mounting Height
 ANSI Designation S62
 Lamp operated at 5,800 lm



**HIGH-PRESSURE SODIUM
PENDANT SOFFIT LUMINAIRE 70 W**
 17' Mounting Height
 ANSI Designation S62
 Lamp operated at 5,800 lm



**HIGH-PRESSURE SODIUM
FLUSH-MOUNTED SOFFIT LUMINAIRE 70 W**
 17' Mounting Height
 ANSI Designation S62
 Lamp operated at 5,800 lm



**INDUCTION SIGN
LIGHTING FIXTURE 85 W**

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(ISOFOOTCANDLE CURVES)**

NO SCALE

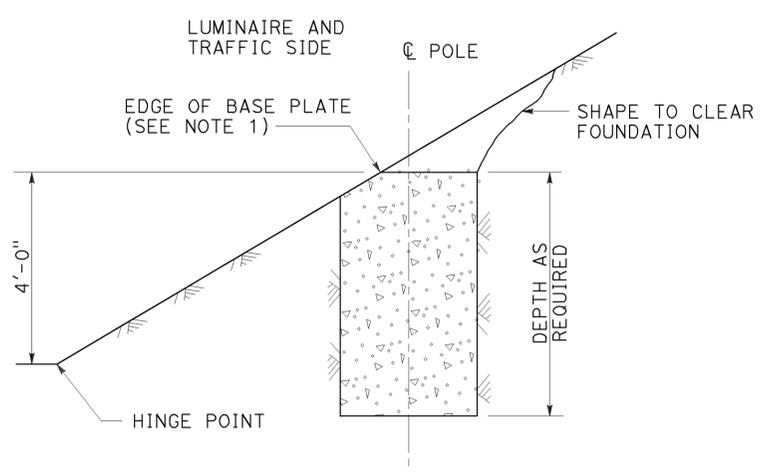
RSP ES-10B DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-10B DATED JULY 20, 2012 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-10B

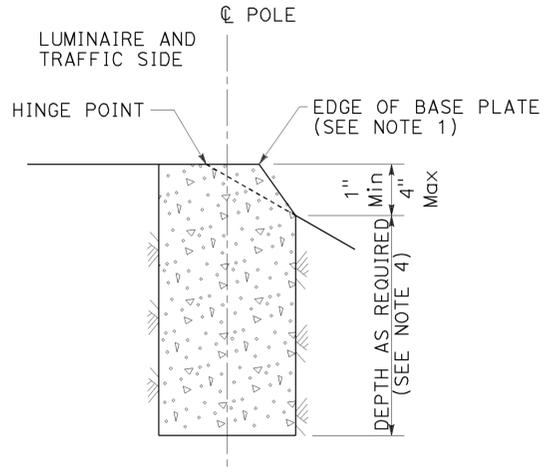
2010 REVISED STANDARD PLAN RSP ES-10B

TO ACCOMPANY PLANS DATED 12-7-15

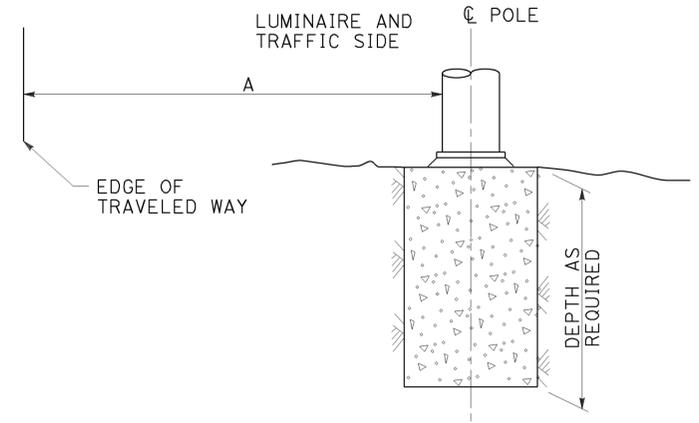
STANDARD TYPE	SETBACK (DIMENSION A)
32	30'-0" (Min)
31	20'-0" (Min)
15, 15D, 15-SB, 21, 21D, 30	ARM LENGTH (Min)



CUT SLOPES
STEEPER THAN 4:1,
LESS THAN 2:1
DETAIL A-1
 See Note 2 and 3



FILL SLOPES
STEEPER THAN 4:1,
LESS THAN 2:1
DETAIL A-2
 See Note 2 and 3

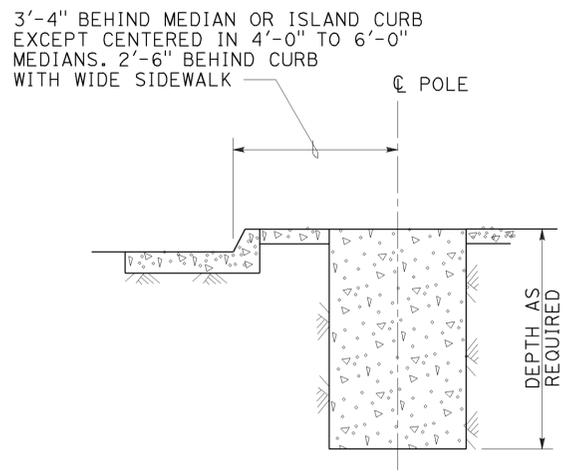


FLAT SECTIONS, CUT OR FILL SLOPES
4:1 OR FLATTER
DETAIL A-3
 See Note 2

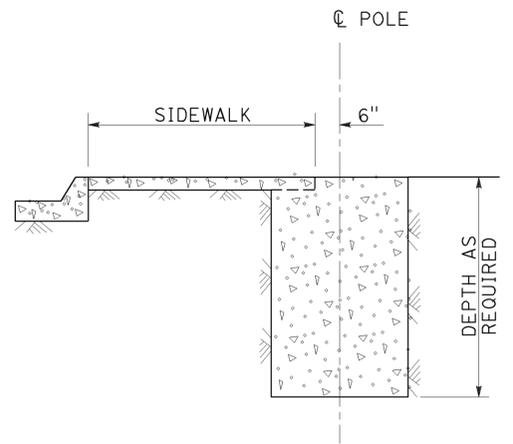
FOUNDATIONS ADJACENT TO ALL ROADWAYS EXCEPT
IN SIDEWALK, MEDIAN AND ISLAND AREAS
DETAIL A

NOTES:

1. Where a portion of the foundation is above grade, the top edges shall have a 1" chamfer.
2. Slopes shall be horizontal to vertical ratio (Horizontal : Vertical).
3. Horizontal setbacks on cut and fill slopes steeper than 4:1 shall not exceed the distance shown for flat sections.
4. CIDH embedment depth shall be increased beyond standard depths by the diameter of the CIDH.



MEDIAN, ISLAND
OR WIDE SIDEWALK
DETAIL B-1
 7' Wide and wider



NARROW SIDEWALK
DETAIL B-2
 Less than 7' wide

FOUNDATIONS IN SIDEWALK, MEDIAN AND ISLAND AREAS
DETAIL B

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(FOUNDATION INSTALLATIONS)
 NO SCALE

RSP ES-11 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-11
 DATED MAY 20, 2011 - PAGE 488 OF THE STANDARD PLANS BOOK DATED 2010.

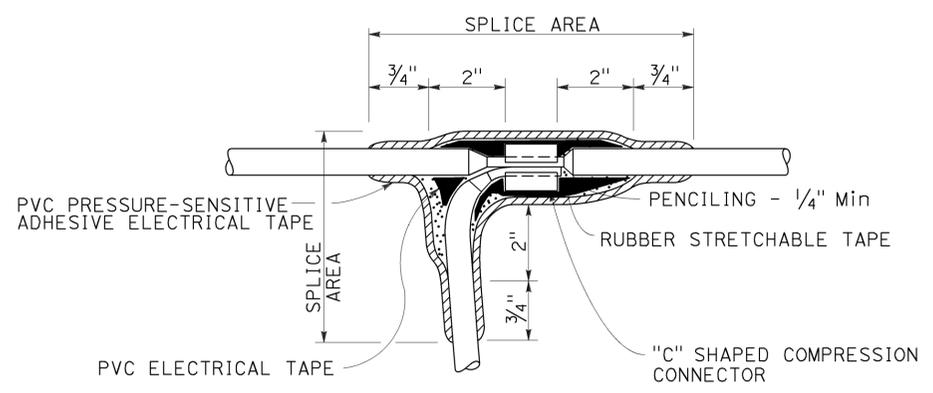
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	538	786

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 Theresa
 Aziz Gabriel
 No. E15129
 Exp. 6-30-16
 ELECTRICAL
 STATE OF CALIFORNIA

October 30, 2015
 PLANS APPROVAL DATE

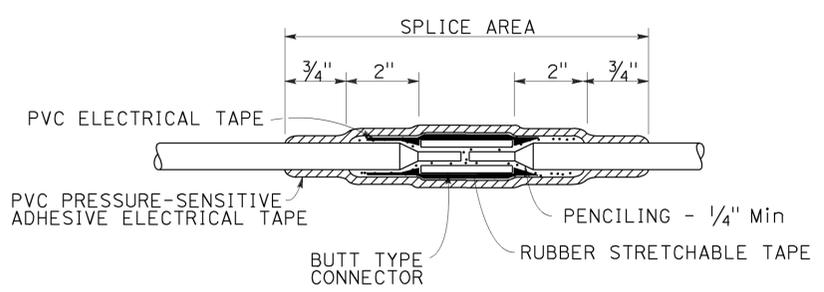
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TO ACCOMPANY PLANS DATED 12-7-15



TYPE C SPLICE

See Note 3

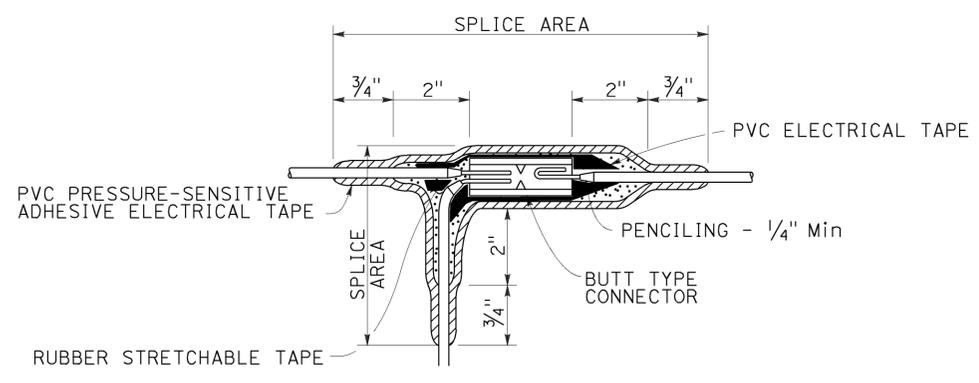


TYPE S SPLICE

See Note 4

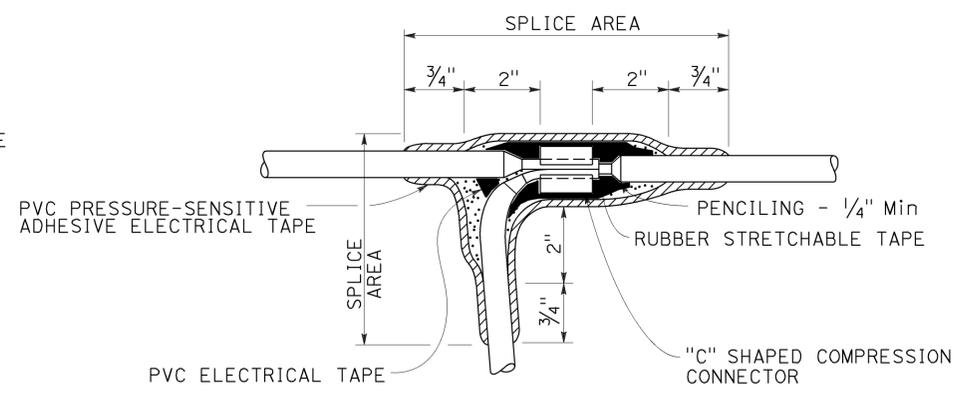
NOTES:

1. Dimensions are minimum.
2. Rubber tapes shall be rolled after application.
3. Between 1 free-end and 1 through conductor.
4. Between 2 free-end conductors.
5. Between 3 free-end conductors.



TYPE ST SPLICE

See Note 5



TYPE T SPLICE

See Note 5

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (SPlicing DETAILS)**
 NO SCALE

RSP ES-13A DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-13A DATED MAY 20, 2011 - PAGE 491 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-13A

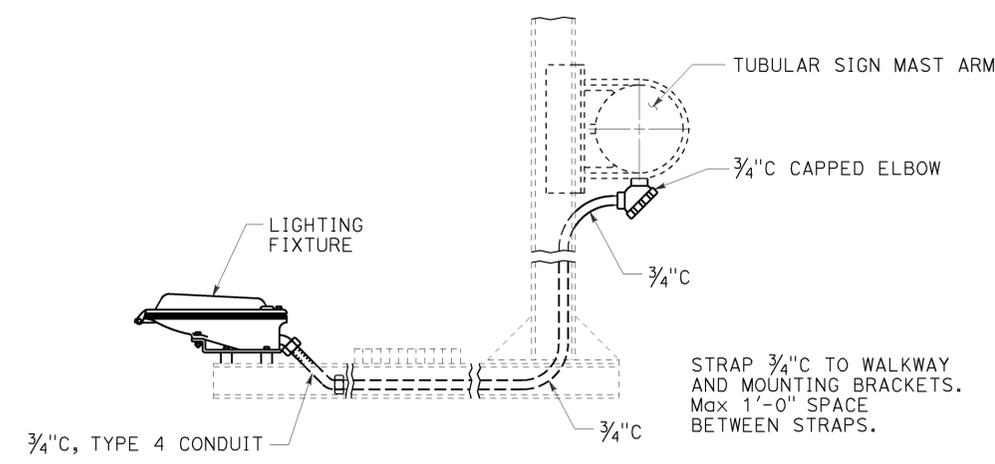
2010 REVISED STANDARD PLAN RSP ES-13A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	539	786

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
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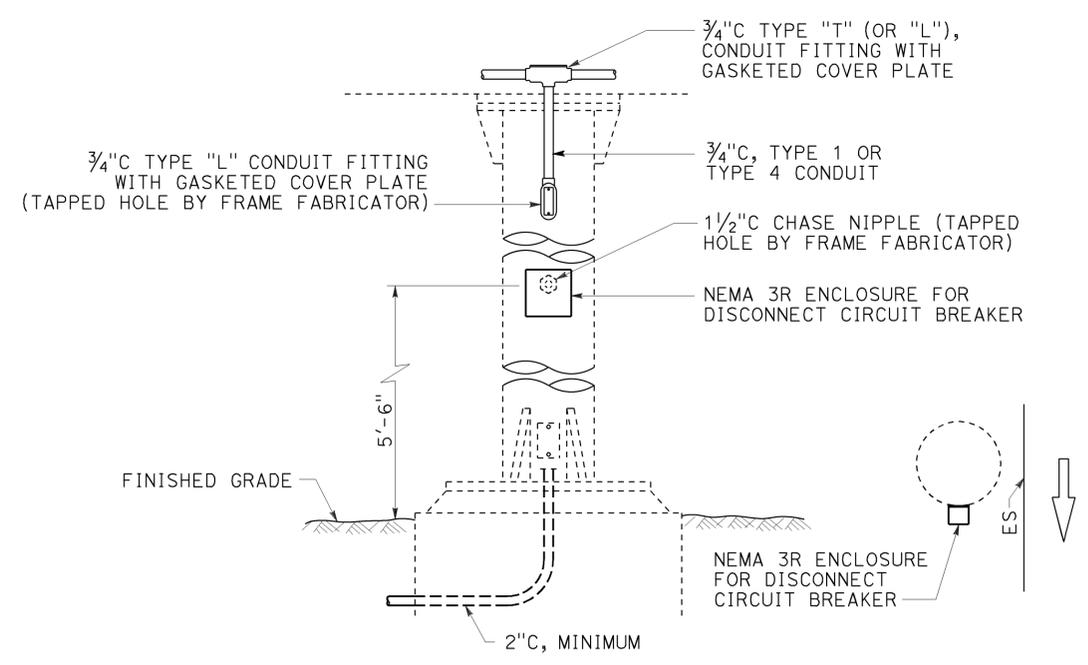


TO ACCOMPANY PLANS DATED 12-7-15



**TYPICAL SIGN ILLUMINATION EQUIPMENT
INSTALLATION FOR OVERHEAD SIGNS TUBULAR**

DETAIL A

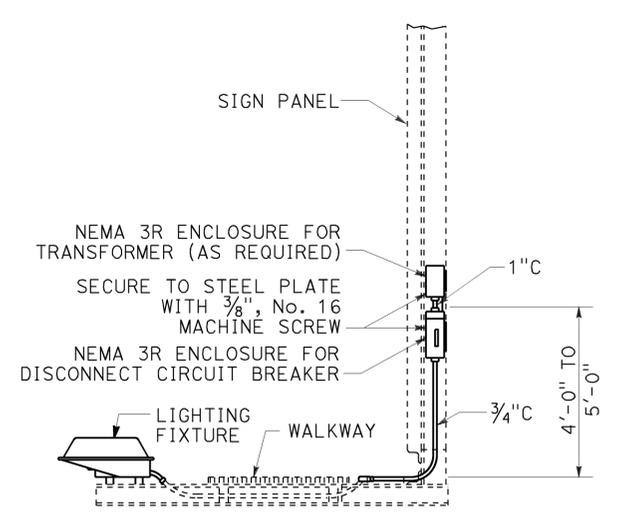


**TYPICAL SIGN ILLUMINATION EQUIPMENT
INSTALLATION FOR OVERHEAD SIGNS ROUND POST**

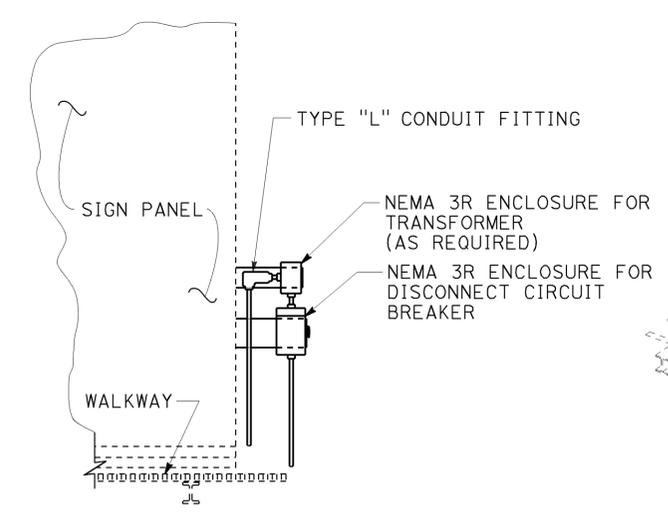
DETAIL B

NOTES:

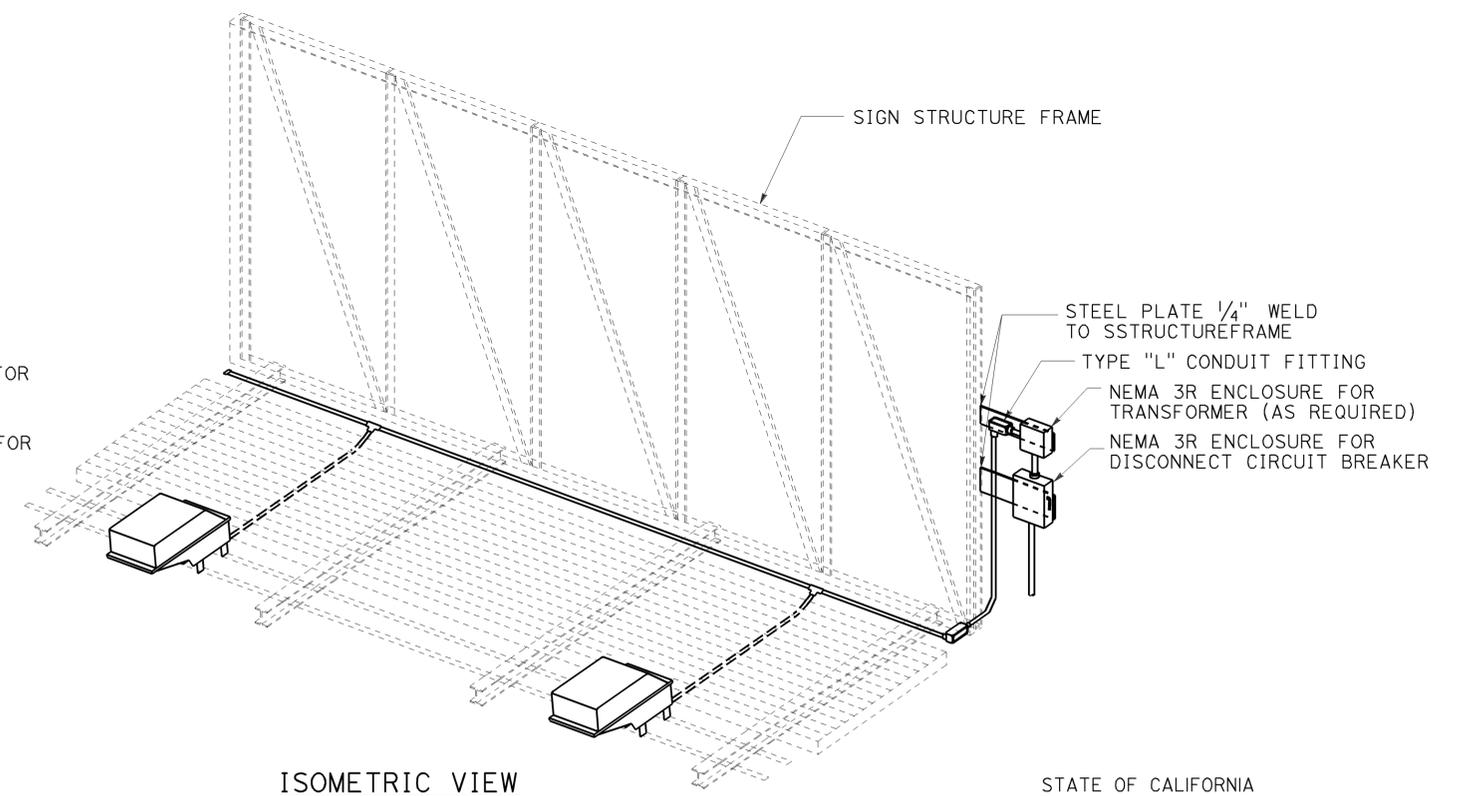
1. Type 4 conduit shall be secured to the nearest walkway bracket using one-hole galvanized malleable iron or steel straps and brass machine screws tapped into the bracket.
2. See Overhead Signs Standard Plans for overhead signs and frame juncture details for photoelectric unit installation.
3. Enclosures and straps shall be secured by 3/8" maximum size screws.
4. The Contactor and test switch enclosures shall be readily accessible from the sign walkway.



SIDE VIEW



FRONT VIEW



ISOMETRIC VIEW

**TYPICAL SIGN ILLUMINATION EQUIPMENT
INSTALLATION FOR OVERHEAD SIGNS
BRIDGE MOUNTED**

DETAIL C
See Note 4

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
(SIGN ILLUMINATION EQUIPMENT)**

NO SCALE

RSP ES-15C DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-15C DATED MAY 20, 2011 - PAGE 498 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-15C

2010 REVISED STANDARD PLAN RSP ES-15C

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	540	786

Theresa Gabriel
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 Theresa Aziz Gabriel
 No. E15129
 Exp. 6-30-16
 ELECTRICAL
 STATE OF CALIFORNIA

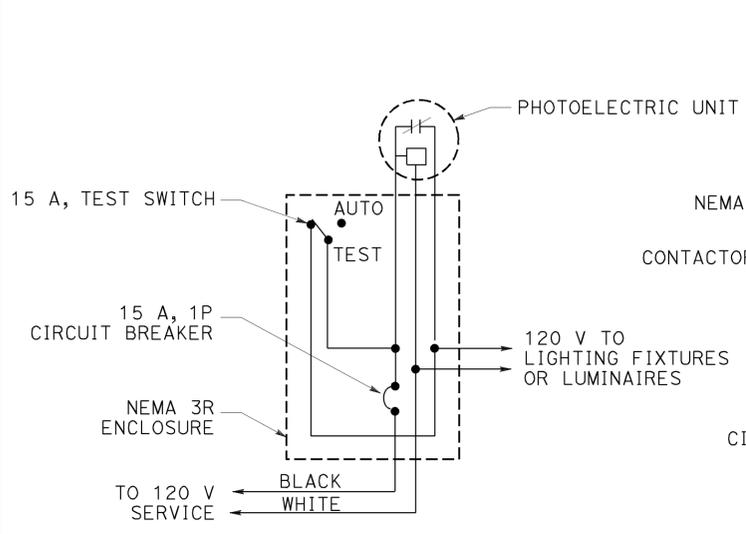
October 30, 2015
 PLANS APPROVAL DATE
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TO ACCOMPANY PLANS DATED 12-7-15

2010 REVISED STANDARD PLAN RSP ES-15D

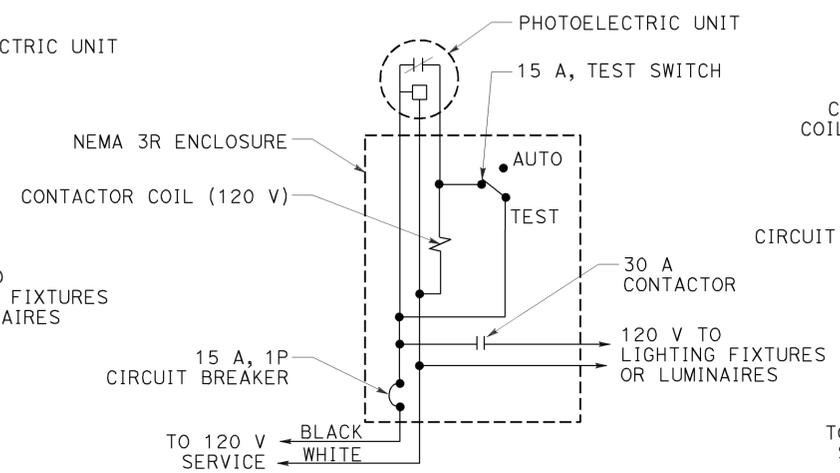
NOTE:

Type SC1A, SC2A, SC3A controls are similar to Types SC1, SC2 and SC controls respectively except test switch and wiring are not required.



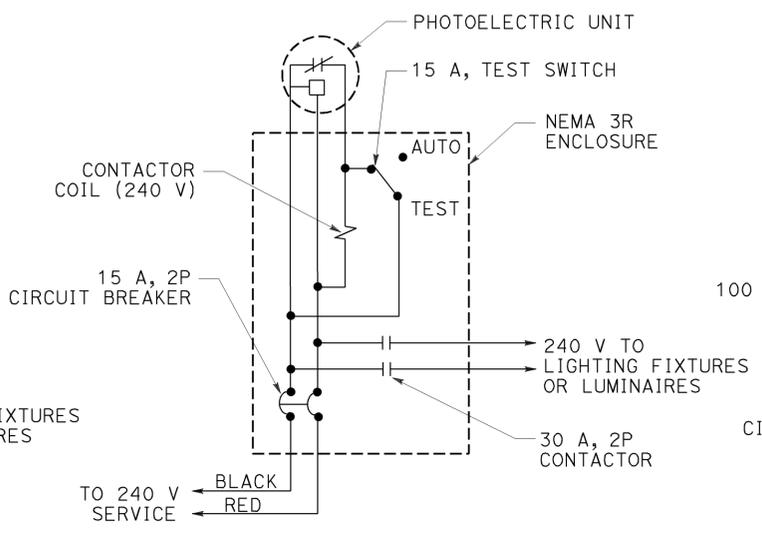
TYPE LC1 CONTROL

For 120 V unswitched circuit with no more than 1000 W load.



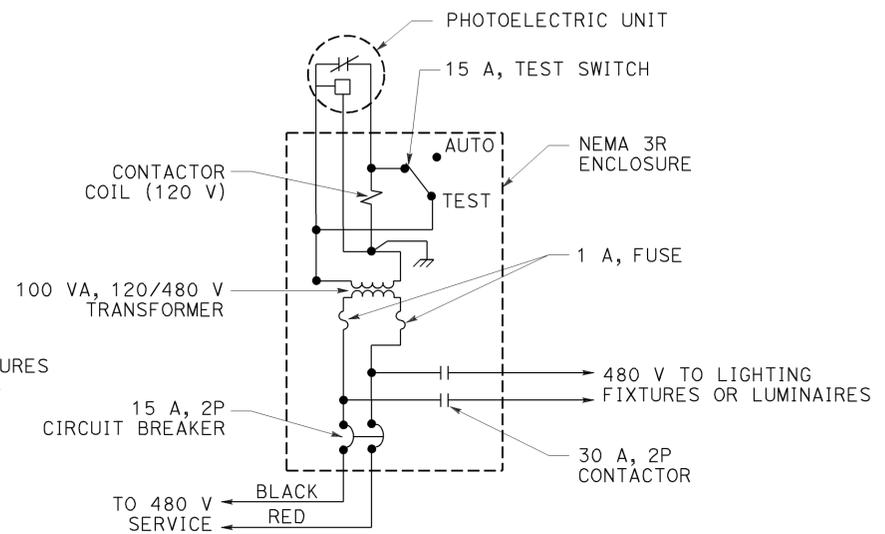
TYPE LC2 CONTROL

For 120 V unswitched circuit



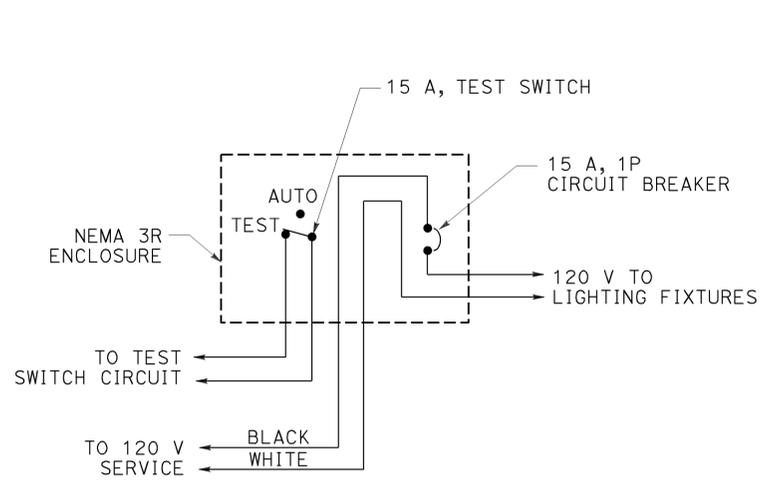
TYPE LC3 CONTROL

For 240 V unswitched circuits



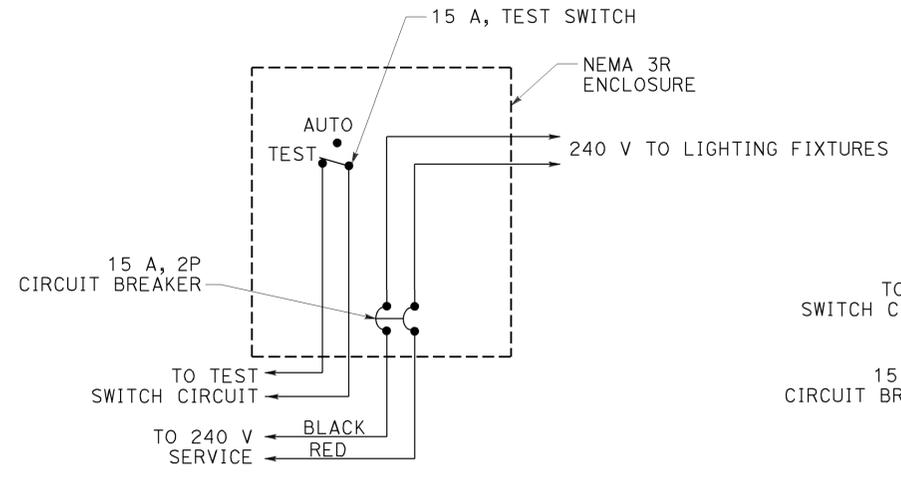
TYPE LC4 CONTROL

For 480 V unswitched circuits



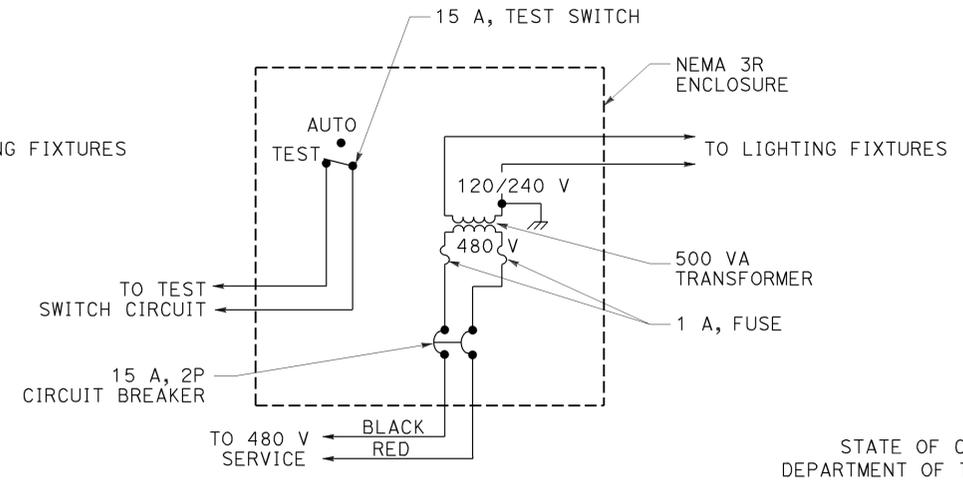
TYPE SC1 CONTROL

For 120 V switched circuit, see Note 1 for Type SC1A



TYPE SC2 CONTROL

For 240 V switched circuit, see Note 1 for Type SC2A



TYPE SC3 CONTROL

For 480 V switched sign circuit, see Note 1 for Type SC3A

ELECTRICAL SYSTEMS (LIGHTING AND SIGN ILLUMINATION CONTROL)

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

NO SCALE

RSP ES-15D DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-15D DATED MAY 20, 2011 - PAGE 499 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-15D

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	541	786


 REGISTERED CIVIL ENGINEER
 October 30, 2015
 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.

Stanley P. Johnson
 No. C57793
 Exp. 3-31-16
 CIVIL
 STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 12-7-15

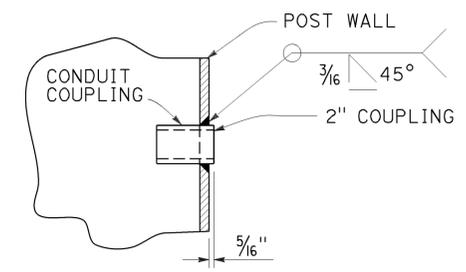
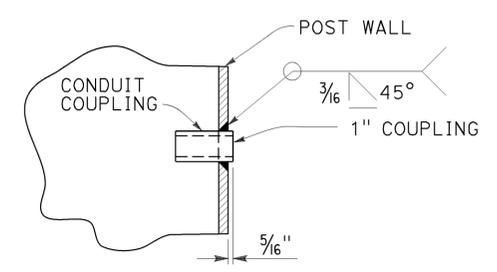
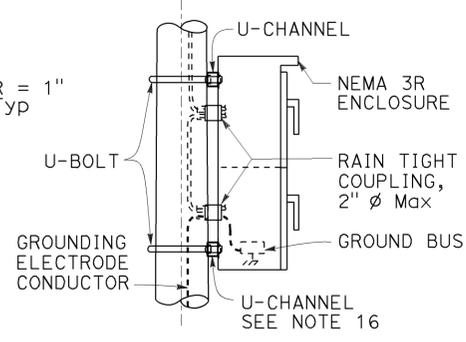
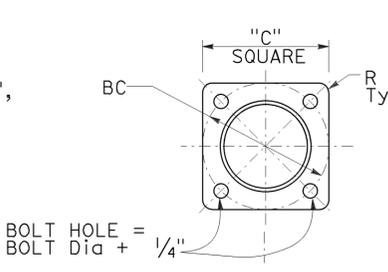
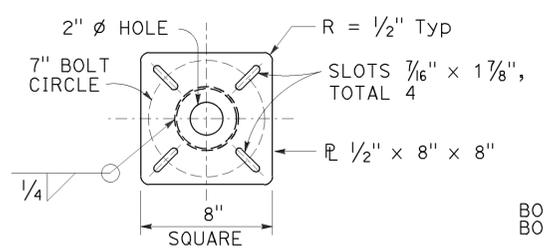
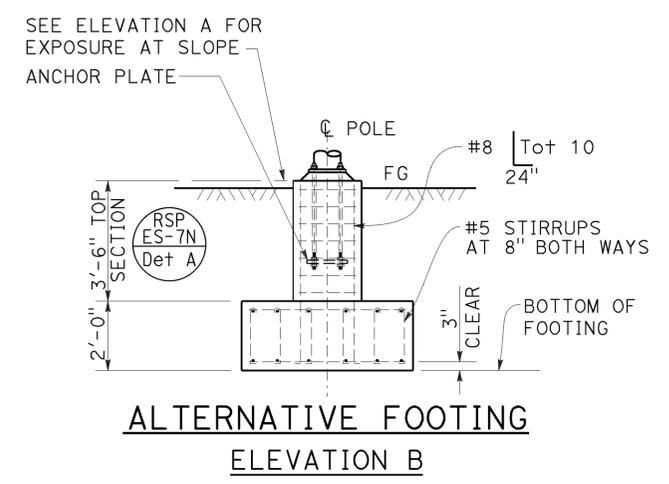
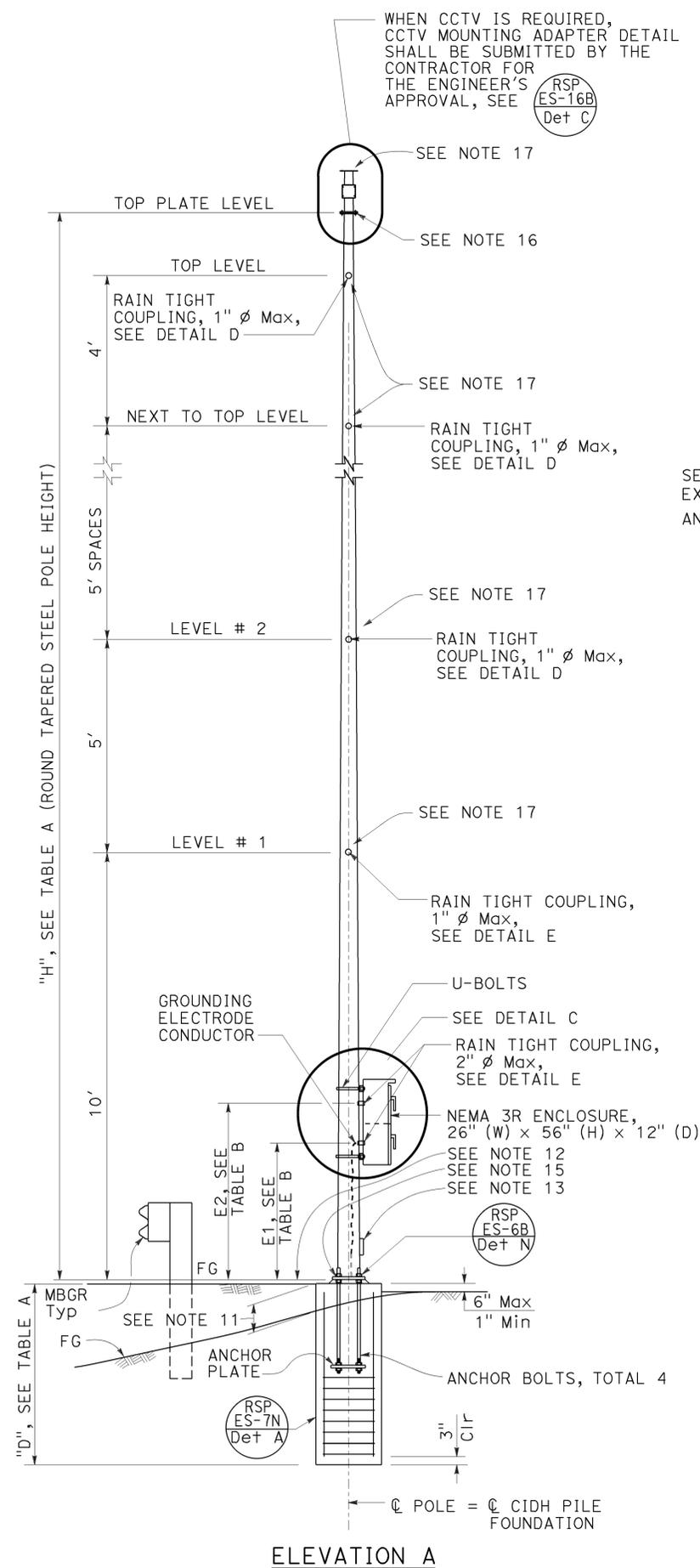
POLE TYPE	POLE DATA			BASE PLATE DATA			"D" 2'-6" ϕ CIDH Pile			
	HEIGHT "H"	Min OD		THICKNESS	"C"	THICKNESS	ANCHOR BOLTS SIZE	BC = BOLT CIRCLE	LEVEL GROUND	UP TO 2:1
		BASE	TOP							
VDS 30	30'	8"		0.1793"	1'-1 1/2"			1'-1 1/2"	11'-0"	13'-0"
VDS 35	35'	8 5/8"	3 7/8"	0.1793"	1'-2"	1/2"	1 1/2" ϕ x 3'-0"	1'-2"	11'-0"	
VDS 40	40'	9 3/8"			1'-3"			1'-3"	12'-0"	14'-0"

POLE TYPE	COUPLING	
	E1(Max)	E2(Max)
VDS 30		
VDS 35	3'-6"	4'-9"
VDS 40		

SPREAD FOOTING		
GROUND LEVEL	FOOTING SIZE (LENGTH x WIDTH x DEPTH)	REINFORCEMENT TOP & BOTTOM
UP TO 2:1	10'-0" x 10'-0" x 2'-0"	15 - #5 EW

LOCATION	MAXIMUM TOTAL EPA PER LEVEL (SQUARE FEET)	MAXIMUM TOTAL WEIGHT (lb)
LEVEL #1	14	200
LEVEL #2		
LEVEL #3		
LEVEL #4 (VDS 35 AND VDS 40 ONLY)	2.5	50
LEVEL #5 (VDS 40 ONLY)		
NEXT TO TOP LEVEL		
TOP LEVEL		
ON TOP PLATE LEVEL **		

* MAXIMUM HORIZONTAL EXTENT BEYOND POLE FACE IS 4 FEET.
 ** MAXIMUM EXTENT ABOVE TOP PLATE IS 3 FEET.
 *** 14 IF LEVEL #1 IS ZERO.



- NOTES:**
- All steel shall be galvanized after fabrication.
 - The foundation shall be treated as level ground condition if the slope inclination is flatter than 4 : 1 (Horizontal : Vertical)
 - For devices mounted and mounting heights, see TABLE B.
 - Design Specification: AASHTO Standard Specification for structural support for highway signs, luminaires and traffic signal dated 2001.
 - Wind Loadings: 100 mph (3-second gust)
 - Unit Stresses (Structural Steel):
 - fy = 55,000 psi (tapered steel tube)
 - fy = 50,000 psi (unless otherwise noted)
 - Anchor bolts: fy = 55,000 psi
 - Unit Stresses (Reinforced Concrete):
 - f'c = 3,600 psi
 - fy = 60,000 psi
 - Verify all controlling field dimensions before ordering of fabricating any material.
 - When no barriers are used, the NEMA 3R enclosure shall be located on the downstream side and perpendicular to the roadway.
 - 1'-3" (Max) for sloped finished grade.
 - Bottom of base plate.
 - Handhole. RSP ES-7M Det B, RSP ES-7M Det A
 - Top plate. Install a blank flange on the top plate when closed circuit television is not used.
 - ES-70 Elev B
 - U-channel with bracket.
 - Use the manufacturer's Effective Projected Area (EPA) for attachments. Assign attachments to nearest level and sum each level, see Table D for limitations.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (CLOSED CIRCUIT TELEVISION WITH
 VEHICLE DETECTION SYSTEM,
 30' TO 40' POLE)**
 NO SCALE

RSP ES-16D DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-16D DATED JULY 19, 2013 AND
 STANDARD PLAN ES-16D DATED MAY 20, 2011 - PAGE 503 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-16D

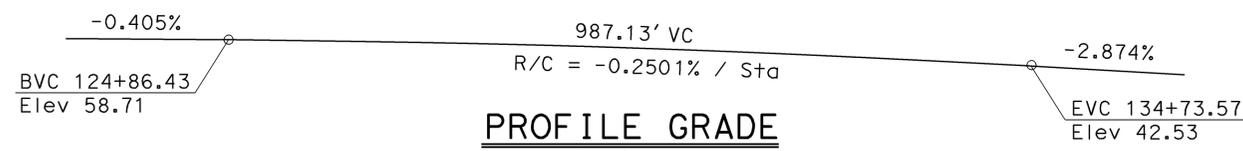
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	542	786

Rakesh Deo 5-23-14
 REGISTERED CIVIL ENGINEER DATE

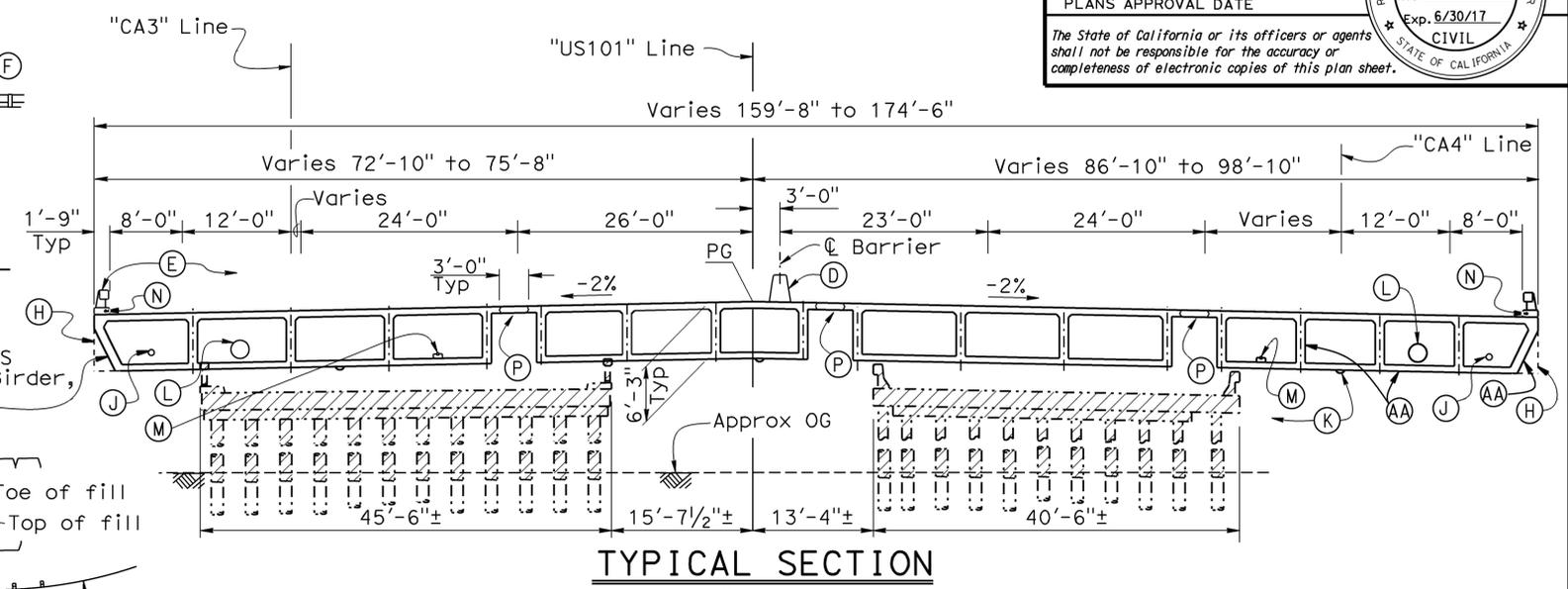
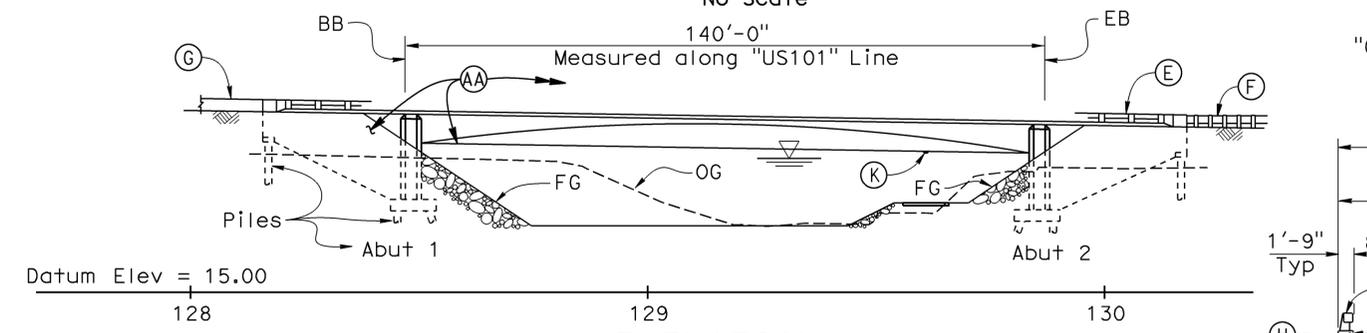
12-7-15
 PLANS APPROVAL DATE

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
Rakesh Deo
 No. C73814
 Exp. 6/30/17
 CIVIL
 STATE OF CALIFORNIA



NOTE: For Quantities, See "DECK CONTOURS" sheet.



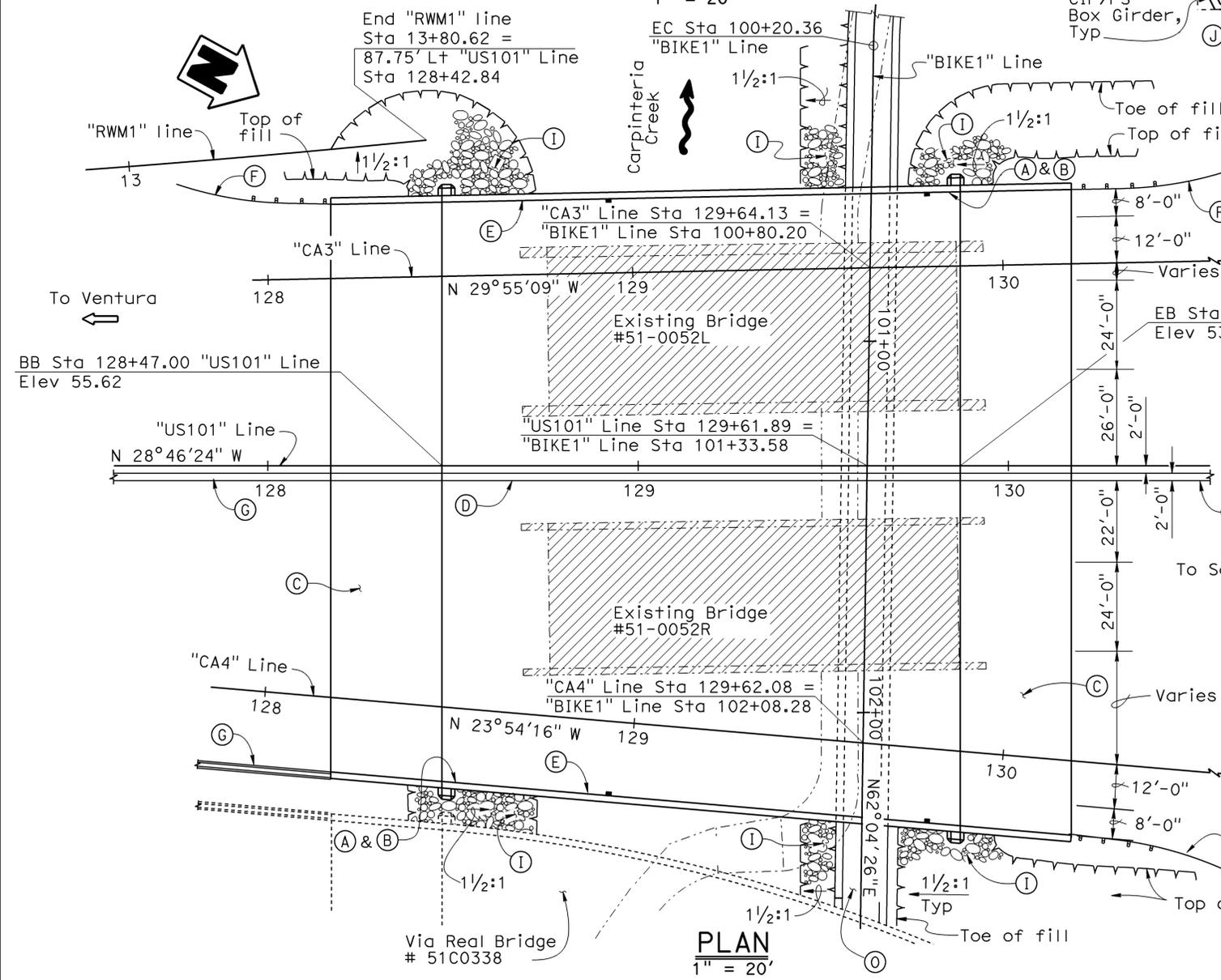
TYPICAL SECTION
1" = 10'-0"

NOTES:

- (A) Paint "Carpinteria Creek Bridge"
- (B) Paint "Br. No. 51-0342"
- (C) Structure Approach Slab Type N(30S)
- (D) Concrete Barrier (Type 60 Modified)
- (E) Concrete Barrier (Type 80 Modified)
- (F) MGS, see "Roadway Plans"
- (G) Type 60 Barrier, see "Roadway Plans". For barrier transition details, see "Concrete Barrier Details No.1" and "Concrete Barrier Details No.2" sheets.
- (H) Architectural arch, see "BRIDGE GEOMETRICS" sheet.
- (I) Rock Slope Protection (RSP), see "Roadway Plans"
- (J) Deck Drainage pipe
- (K) Soffit lights, see "GIRDER LAYOUT NO. 1" and "GIRDER LAYOUT NO. 2" sheets.
- (L) Future Utility
- (M) 3" Water Supply Line (bridge)
- (N) 2" * Electric Conduit (Irrigation), see "Roadway Plans"
- (O) Bike Path, see "Roadway Plans"
- (P) Closure pour
- (AA) Integrally colored abutments and superstructure soffit slab and girders

NOTES:

1. For Index To Plans, Standard Plans, General Notes and Pile Data Table, see "INDEX TO PLANS" sheet
2. For Hydrologic/Hydraulic Summary, see "FOUNDATION PLAN" sheet.



PLAN
1" = 20'

LEGEND:

- Indicates existing structure
- ▨ Indicates limits of bridge removal
- Indicates Deck Drain Type D-1

DESIGN	BY: Sujan Talukder	CHECKED: Minh Vo	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE
DETAILS	BY: A.V. / B.J. / G.D.	CHECKED: Minh Vo	LAYOUT	BY: S. Talukder
QUANTITIES	BY: Tracy Sanderson	CHECKED: Renee Anderson	SPECIFICATIONS	BY: Dave Klein

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

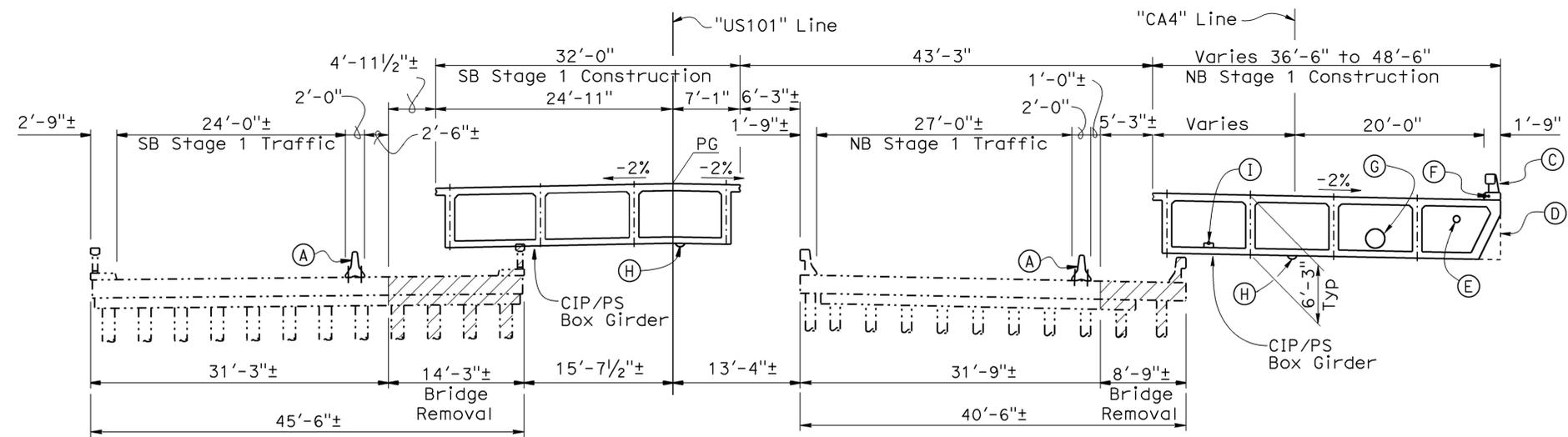
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO. 51-0342
POST MILE 2.44

CARPINTERIA CREEK BRIDGE (REPLACE)
GENERAL PLAN

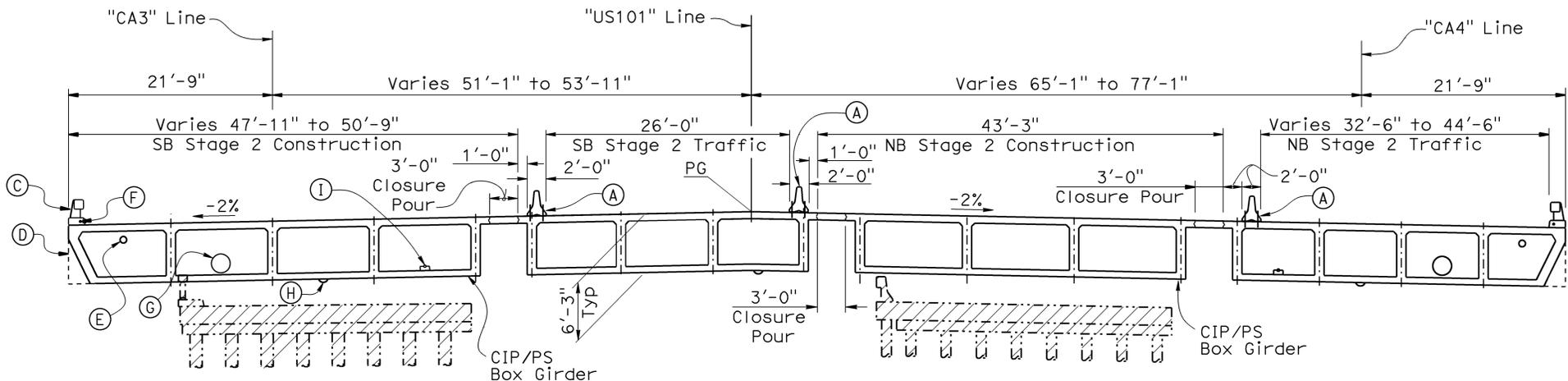
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	543	786

Rakesh Deo 5-23-14
 REGISTERED CIVIL ENGINEER DATE
 12-7-15
 PLANS APPROVAL DATE
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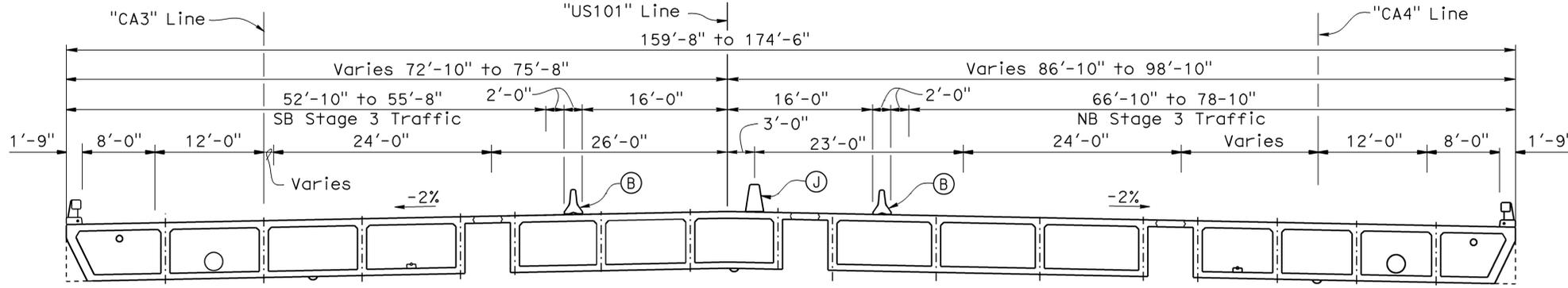
STAGE 1 CONSTRUCTION

1/8" = 1'-0"



STAGE 2 CONSTRUCTION

1/8" = 1'-0"



STAGE 3 CONSTRUCTION

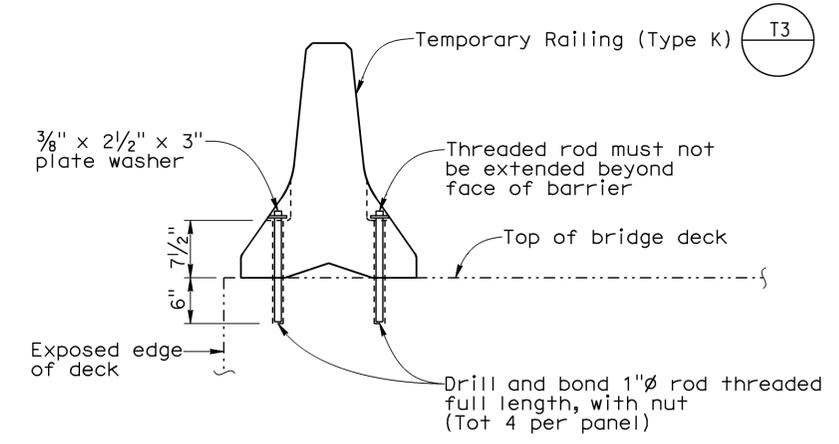
1/8" = 1'-0"

LEGEND:

- Indicates existing structure
- ▨ Indicates limits of bridge removal

NOTES:

- (A) Temporary Railing, Type K anchored to bridge deck, see "TEMPORARY RAILING (TYPE K) ATTACHMENT DETAILS" and "ROADWAY PLANS"
- (B) Temporary Railing, Type K, see "ROADWAY PLANS"
- (C) Concrete Barrier (Type 80 Modified)
- (D) Architectural arch, See "BRIDGE GEOMETRICS" sheet
- (E) Deck Drainage pipe
- (F) 2" x Electric Conduit (Irrigation), see "ROADWAY PLANS"
- (G) Future Utility
- (H) Soffit lights, see "GIRDER LAYOUT NO. 1" and "GIRDER LAYOUT NO. 2" sheets.
- (I) 3" Water Supply Line (bridge)
- (J) Concrete Barrier (Type 60 Modified)



TEMPORARY RAILING (TYPE K) ATTACHMENT DETAIL

No Scale

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

DESIGN	BY Sujan Talukder	CHECKED Minh Vo
DETAILS	BY Bruno Jenko	CHECKED Minh Vo
QUANTITIES	BY Tracy Sanderson	CHECKED Renee Anderson

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO.	51-0342
POST MILE	2.44

CARPINTERIA CREEK BRIDGE (REPLACE)
STAGE CONSTRUCTION

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	544	786

Rakesh Deo 5-23-14
REGISTERED CIVIL ENGINEER DATE

12-7-15
PLANS APPROVAL DATE

Rakesh Deo
No. C73814
Exp. 6/30/17
CIVIL
STATE OF CALIFORNIA

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GENERAL NOTES LOAD AND RESISTANCE FACTOR DESIGN

DESIGN: AASHTO LRFD Bridge Design Specifications, 4th edition and the Caltrans Amendments, preface dated December 2011.

SEISMIC DESIGN : Caltrans Seismic Design Criteria (SDC) Version 1.6 dated November 2010

SEISMIC LOAD : Acceleration Response Spectrum for soil profile D (M=7.4) Peak Bedrock Acceleraton = 0.57g
 $V_{S100} = 679 \frac{ft}{s}$

DEAD LOAD: Includes 35 psf for future wearing surface.

LIVE LOADING: HL93 and P-15 permit design vehicle

REINFORCED CONCRETE:
 $f_y = 60 \text{ ksi}$
 $f'_c = 3.6 \text{ ksi}$
 $n = 8$

PRESTRESSED CONCRETE: See "Prestressing Notes" on "GIRDER LAYOUT NO. 1" and "GIRDER LAYOUT NO. 2" sheets.

Location	Pile Type	Nominal Resistance (kips)		Design Tip Elevation (ft)	Specified Tip Elevation (ft)	Nominal Driving Resistance (kips)
		Compression	Tension			
Abut 1	Class 200 Alt "W"	400	0	-19(a), -16(c) -7.33(d)	-19.33	400
Abut 2	Class 200 Alt "W"	440	0	-13(a), 0 (c) -9.58(d)	-13.58	440
WW Abut 1 Lt	Class 200 Alt "W"	180	0	28(a), 8.73(d)	8.73	180
WW Abut 1 Rt	Class 200 Alt "W"	230	0	34(a), 8.49(d)	8.49	230
WW Abut 2 Lt	Class 200 Alt "W"	460	0	31(a), 5.68(d)	5.68	460
WW Abut 2 Rt	Class 200 Alt "W"	450	0	30(a), 5.18(d)	5.18	450

NOTES:

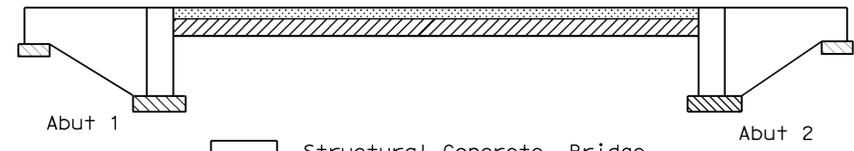
- Design tip elevations for Abutments are controlled by: (a) Compression, (c) Settlement, (d) Lateral Load.
- The specified tip elevation must not be raised above the design tip elevations for lateral load and tolerable settlement.

INDEX TO PLANS

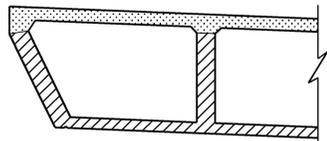
SHEET NO.	TITLE	SHEET NO.	TITLE
1.	GENERAL PLAN	16.	GIRDER LAYOUT NO. 2
2.	STAGE CONSTRUCTION	17.	GIRDER DETAILS
3.	INDEX TO PLANS	18.	GIRDER REINFORCEMENT NO. 1
4.	DECK CONTOURS	19.	GIRDER REINFORCEMENT NO. 2
5.	FOUNDATION PLAN	20.	DECK DRAINAGE DETAILS
6.	ABUTMENT LAYOUT NO. 1	21.	STRUCTURE APPROACH, TYPE N(30S)
7.	ABUTMENT LAYOUT NO. 2	22.	STRUCTURE APPROACH DETAILS
8.	ABUTMENT DETAILS NO. 1	23.	STRUCTURE APPROACH DRAINAGE DETAILS
9.	ABUTMENT DETAILS NO. 2	24.	CONCRETE BARRIER DETAILS NO. 1
10.	ABUTMENT DETAILS NO. 3	25.	CONCRETE BARRIER DETAILS NO. 2
11.	ABUTMENT DETAILS NO. 4	26.	LOG OF TEST BORINGS 1 OF 5
12.	BRIDGE GEOMETRICS	27.	LOG OF TEST BORINGS 2 OF 5
13.	TYPICAL SECTION NO. 1	28.	LOG OF TEST BORINGS 3 OF 5
14.	TYPICAL SECTION NO. 2	29.	LOG OF TEST BORINGS 4 OF 5
15.	GIRDER LAYOUT NO. 1	30.	LOG OF TEST BORINGS 5 OF 5

STANDARD PLANS DATED 2010

- A10A ABBREVIATIONS (SHEET 1 OF 2)
- RSP A10B ABBREVIATIONS (SHEET 2 OF 2)
- A10C LINES AND SYMBOLS (SHEET 1 OF 3)
- A10D LINES AND SYMBOLS (SHEET 2 OF 3)
- A10E LINES AND SYMBOLS (SHEET 3 OF 3)
- A10F LEGEND-SOIL (SHEET 1 OF 2)
- A10G LEGEND-SOIL (SHEET 2 OF 2)
- A10H LEGEND-ROCK
- A62B LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL - BRIDGE SURCHARGE AND WALL CONCRETE BARRIER TYPE 60
- A76A
- B0-1 BRIDGE DETAILS
- B0-3 BRIDGE DETAILS
- B0-5 BRIDGE DETAILS
- B0-13 BRIDGE DETAILS
- B2-8 PILE DETAILS - CLASS 200
- B6-21 JOINT SEAL (MAXIMUM MOVEMENT RATING = 2")
- B7-1 BOX GIRDER DETAILS
- B7-6 DECK DRAINS - TYPE D-1 AND D-2
- RSP B7-8 DECK DRAINAGE DETAILS
- RSP B7-10 UTILITY OPENING BOX GIRDER
- RSP B8-5 CAST-IN-PLACE PRESTRESSED GIRDER DETAILS
- B11-60 CONCRETE BARRIER TYPE 80 (SHEET 1 OF 2)
- B11-61 CONCRETE BARRIER TYPE 80 (SHEET 2 OF 2)
- B14-3 COMMUNICATION AND SPRINKLER CONTROL CONDUITS (CONDUIT LESS THAN 4")
- B14-4 WATER SUPPLY LINE (BRIDGE) (PIPE SIZES LESS THAN 4")
- B14-5 WATER SUPPLY LINE (DETAILS)(PIPE SIZES LESS THAN 4")
- ES-9E ELECTRICAL SYSTEMS (FLUSH SOFFIT, PENDANT SOFFIT AND WALL LUMINAIRE STRUCTURE INSTALLATIONS)
- T3A TEMPORARY RAILING (TYPE K)
- T3B TEMPORARY RAILING (TYPE K)



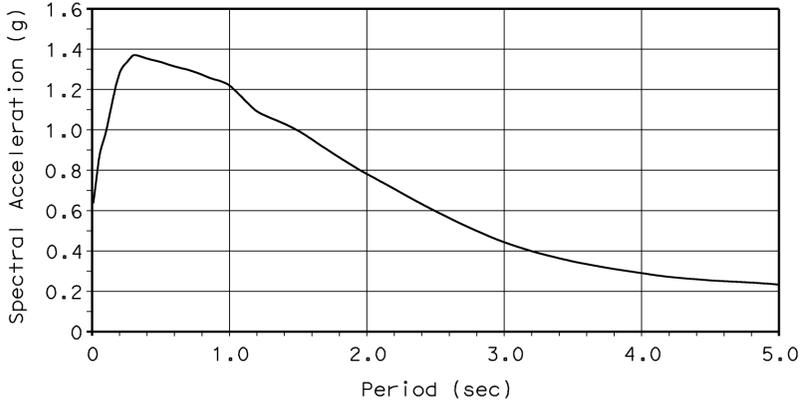
Structural Concrete, Bridge
 Structural Concrete, Bridge (5.5 Ksi at 28 days)
 Structural Concrete, Bridge Footing
 Structural Concrete, Bridge (Polymer Fiber) (5.5 Ksi at 28 days)



PART TYPICAL SECTION

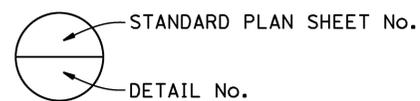
CONCRETE STRENGTH AND TYPE LIMITS

No Scale



ACCELERATION RESPONSE SPECTRUM

NOTE: Structural concrete, bridge must be integrally colored concrete except where shown. For details, see "TYPICAL SECTION NO. 1" and "TYPICAL SECTION NO. 2" sheets.



<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">DESIGN</td> <td style="width: 30%;">BY Sujan Talukder</td> <td style="width: 30%;">CHECKED Minh Vo</td> </tr> <tr> <td>DETAILS</td> <td>BY B. Jenko / Y. Feng</td> <td>CHECKED Minh Vo</td> </tr> <tr> <td>QUANTITIES</td> <td>BY Tracy Sanderson</td> <td>CHECKED Renee Anderson</td> </tr> </table>	DESIGN	BY Sujan Talukder	CHECKED Minh Vo	DETAILS	BY B. Jenko / Y. Feng	CHECKED Minh Vo	QUANTITIES	BY Tracy Sanderson	CHECKED Renee Anderson	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO. 51-0342 POST MILE 2.44	CARPINTERIA CREEK BRIDGE (REPLACE) INDEX TO PLANS
DESIGN	BY Sujan Talukder	CHECKED Minh Vo											
DETAILS	BY B. Jenko / Y. Feng	CHECKED Minh Vo											
QUANTITIES	BY Tracy Sanderson	CHECKED Renee Anderson											
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3592 PROJECT NO. & PHASE: 05000005431	CONTRACT NO.: 05-4482U4	DISREGARD PRINTS BEARING EARLIER REVISION DATES									
		0 1 2 3	1-28-12 9-30-13 9-11-15	SHEET 3 OF 30									

08:49
TIME PLOTTED =>
04-DEC-2015
DATE PLOTTED =>
8:11:57:55
USERNAME =>

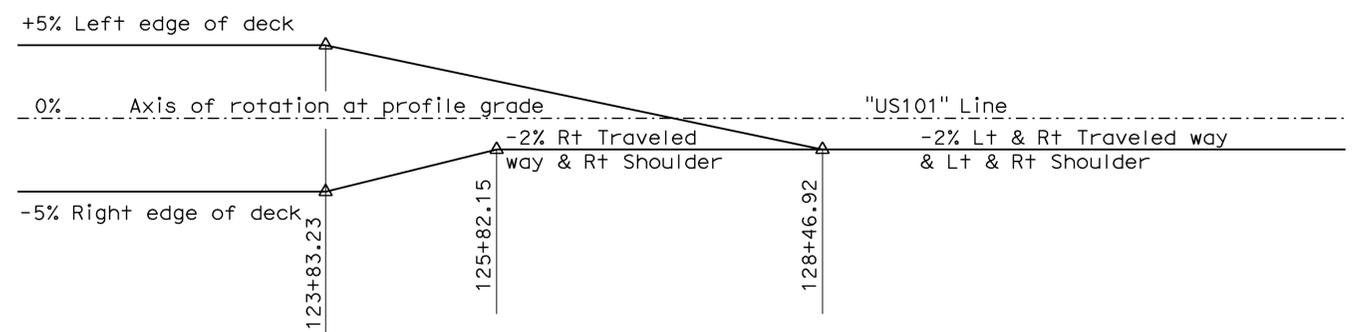
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	545	786

Rakesh Deo 5-23-14
REGISTERED CIVIL ENGINEER DATE

12-7-15
PLANS APPROVAL DATE

Rakesh Deo
REGISTERED PROFESSIONAL ENGINEER
No. C73814
Exp. 6/30/17
CIVIL
STATE OF CALIFORNIA

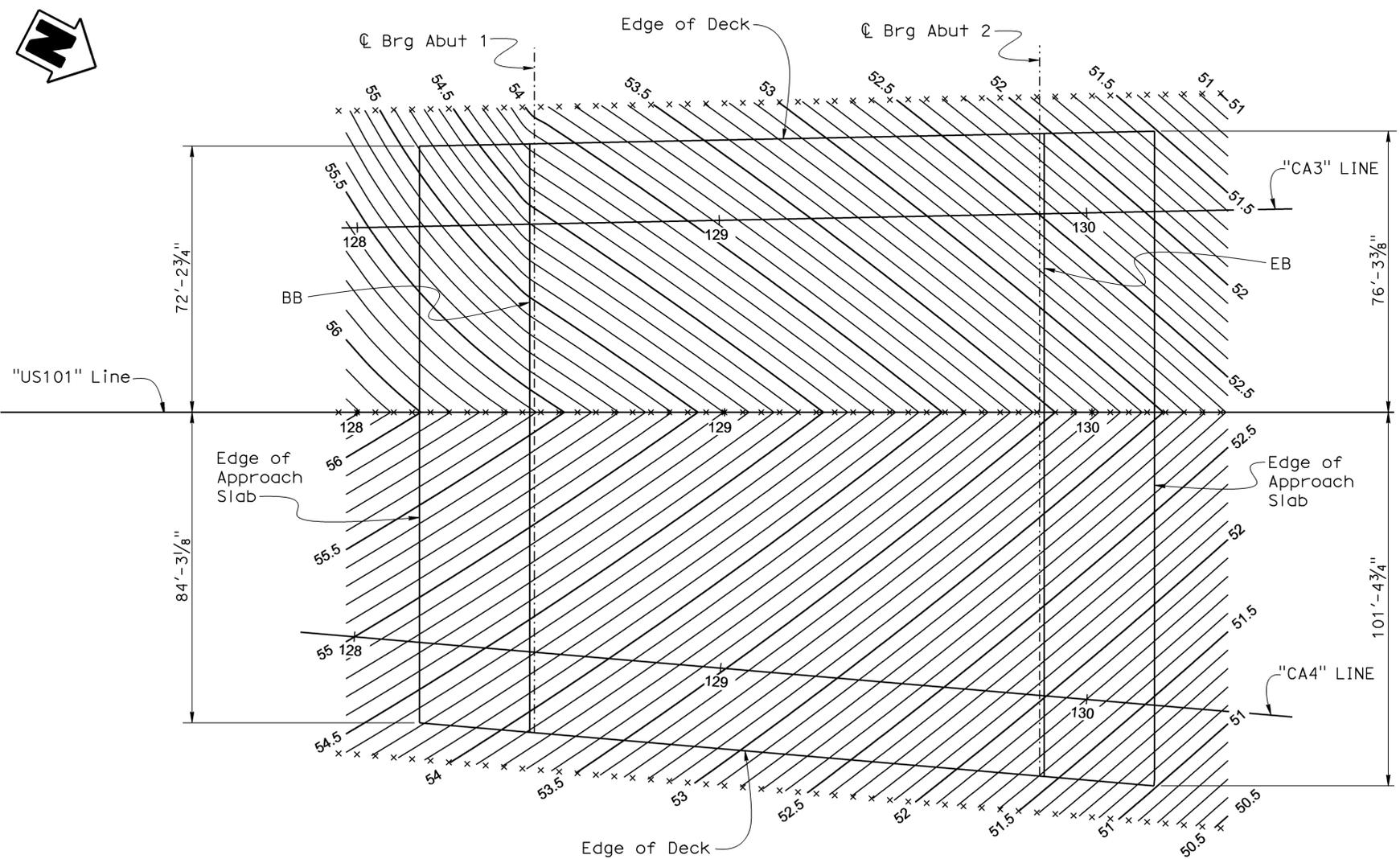
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SUPERELEVATION DIAGRAM
No Scale

QUANTITIES

BRIDGE REMOVAL, LOCATION A	LUMP	SUM
STRUCTURE EXCAVATION (BRIDGE)	1,772	CY
STRUCTURE EXCAVATION (TYPE D)	1,854	CY
STRUCTURE BACKFILL (BRIDGE)	1,280	CY
3" SUPPLY LINE (BRIDGE)	420	LF
FURNISH PILING (CLASS 200) (ALTERNATIVE W)	7,530	LF
DRIVE PILE (CLASS 200) (ALTERNATIVE W)	154	EA
PRESTRESSING CAST-IN-PLACE CONCRETE	LUMP	SUM
STRUCTURAL CONCRETE, BRIDGE FOOTING	327	CY
STRUCTURAL CONCRETE, BRIDGE	2,099	CY
STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER)	564	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	371	CY
JOINT SEAL (MR 1")	329	LF
BAR REINFORCING STEEL (BRIDGE)	628,602	LB
PREPARE AND STAIN CONCRETE	1,600	SQFT
WELDED STEEL PIPE CASING (BRIDGE)	158	LF
BRIDGE DECK DRAINAGE SYSTEM	5,000	LB
CONCRETE BARRIER (TYPE 60 MODIFIED)	200	LF
CONCRETE BARRIER (TYPE 80 MODIFIED)	402	LF
CONCRETE BARRIER (TYPE 60 TRANSITION MODIFIED)	15	LF



PLAN
1" = 20'

NOTES:

- × Indicates 5'-0' intervals along station line
- Contours do not include camber
- Contour interval = 0.1'

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Sujan Talukder	CHECKED Minh Vo	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO.	CARPINTERIA CREEK BRIDGE (REPLACE)						
	DETAILS	BY Yingjue Feng	CHECKED Minh Vo			51-0342							
	QUANTITIES	BY Tracy Sanderson	CHECKED Renee Anderson			POST MILE		2.44					
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3592	PROJECT NUMBER & PHASE: 05000005431	CONTRACT NO.: 05-4482U4	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF		
					0	1	2	3	5-24-12	10-14-13	12-05-12	4	30

FILE => 51-0342-d-dc01.dgn

CURVE DATA

No.	R	Δ	T	L
Ⓐ	3000.00	3°11'29"	83.57	167.10
Ⓑ	300.00	66°16'42"	195.86	347.03
Ⓒ	425.00	25°48'29"	97.37	191.44
Ⓓ	140.00	11°20'26"	13.90	27.71
Ⓔ	140.00	07°13'18"	8.83	17.65

HYDROLOGIC SUMMARY

Drainage Area: 14.9 mi²

	Design Flood	Base Flood
Frequency	50 years	100 years
Discharge	9500 cfs	13,400 cfs
Water Surface Elevations at Bridge	41.8 ft	44.2 ft
Velocities	7.8 ft/sec	9.3 ft/sec
Minimum soffit Elev	N/A	45.2 ft
Recommended free board	N/A	1 ft
Abutment scour	5.5 ft	
Contraction scour	1 ft	
Total potential scour depth at Abutment	6 ft	
Total potential scour Elev in 75 years	32 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.

Notes:
All Elevations are based on NAVD 88.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	546	786

Rakesh Deo
REGISTERED CIVIL ENGINEER
No. C73814
Exp. 6/30/17
CIVIL

5-23-14
DATE

12-7-15
PLANS APPROVAL DATE

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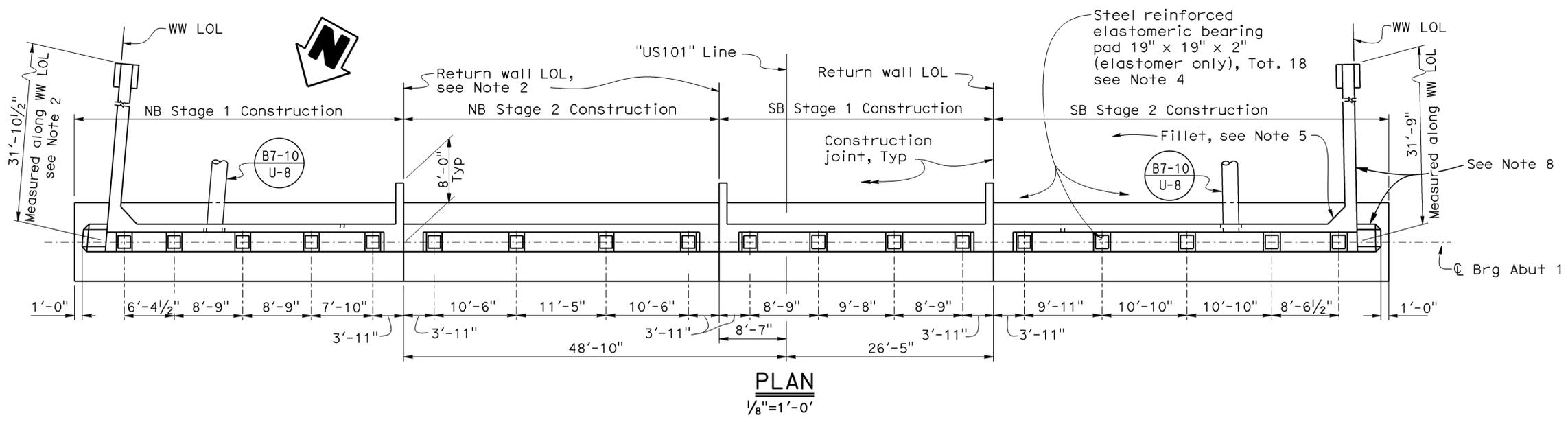
SURVEY CONTROL
SB101 PM2.43 (Not Shown)
Fnd 1" IP w/Caltrans Control PP w/Nail
300.37 Rt. "US101" Line, C Rte 101
Sta. 127+82.01
N 1,969,332.70
E 6,106,522.27
EL.=40.09
SB101 PM2.47
Fnd 1" IP w/Caltrans Control PP w/Nail
2.53 Rt. "US101" Line, C Rte 101
Sta. 130+88.10
N 1,969,457.63
E 6,106,113.87
EL.=41.63

NOTES:
1. Not all piles shown

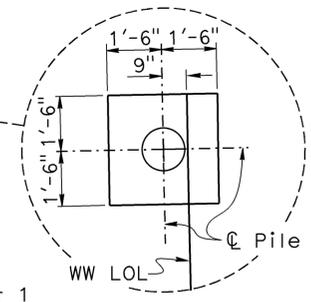
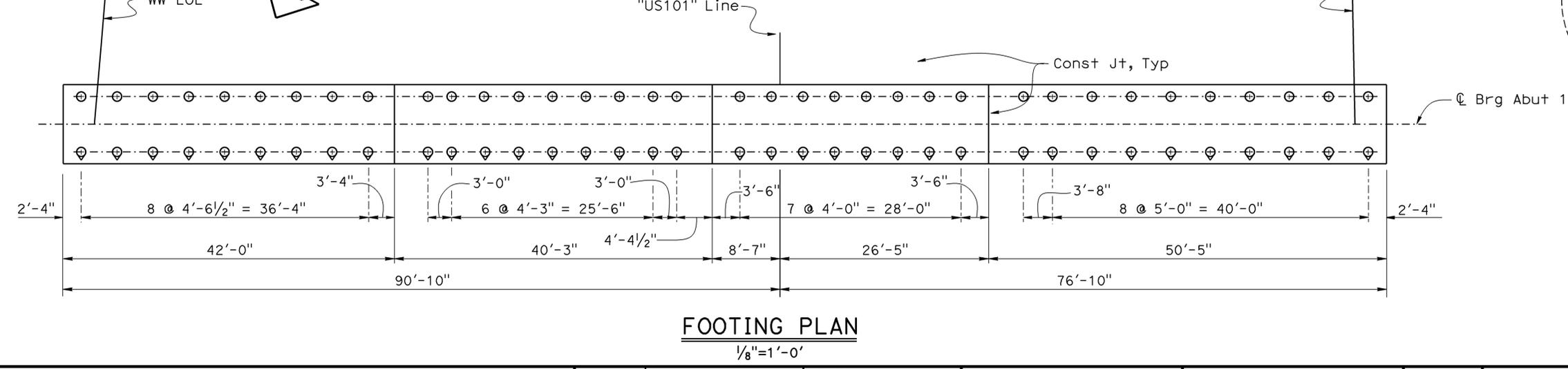
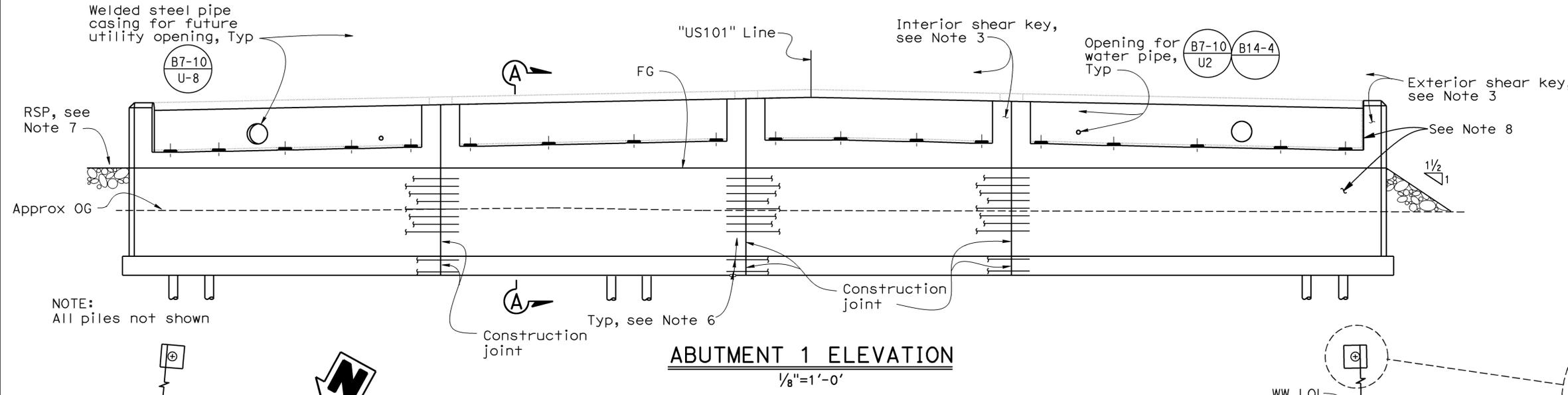
LEGEND:
□ Indicates bottom of footing elevation

PRELIMINARY INVESTIGATION SECTION				DESIGN BY: Sujan Talukder	CHECKED: Minh Vo	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO.: 51-0342	CARPINTERIA CREEK BRIDGE (REPLACE) FOUNDATION PLAN				
SCALE: VERT. DATUM NAVD88	PHOTOGRAMMETRY AS OF: X	SURVEYED BY: District	CHECKED BY: D.Ivy	DATE: 09/2010	POST MILE: 2.44							
1"=20'	HORIZ. DATUM NAD83 (1991.35)	DRAFTED BY: Sharon Zheng	CHECKED BY: T.Zolnikov	DATE: 09/2010	CONTRACT NO.: 05-4482U4							
STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)						ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3646	PROJECT NUMBER & PHASE: 05000005431	CONTRACT NO.: 05-4482U4	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 5 OF 30

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	547	786
Rakesh Deo REGISTERED CIVIL ENGINEER No. C73814 Exp. 6/30/17 CIVIL STATE OF CALIFORNIA			5-23-14 DATE 12-7-15 PLANS APPROVAL DATE		
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- NOTES:
- For "SECTION A-A", see "ABUTMENT DETAILS NO. 1" sheet
 - For Wingwall and Return Wall, see "ABUTMENT DETAILS NO. 3" and "ABUTMENT DETAILS NO. 4" sheets
 - For Interior and Exterior Shear Key details, see "ABUTMENT DETAILS NO. 2" sheet
 - For Elastomeric Bearing Pad details, see "ABUTMENT DETAILS NO. 1" sheet
 - For fillet details, see "ABUTMENT DETAILS NO. 2 and NO. 3" sheets
 - Extend Stage 1 Reinforcement 2'-0" into Stage 2 Construction
 - For grading and RSP, see "ROADWAY PLANS"
 - Use integrally colored concrete on all abutment elements above the top of footing, excluding the back wall



NOTE:
Left side shown,
Right side similar

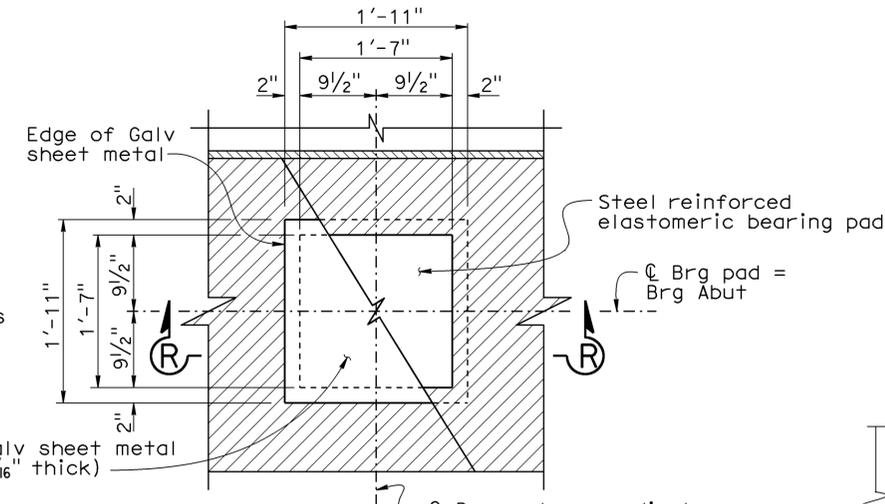
- LEGEND:
- ⊙ Indicates vertical pile
 - ⊕ Indicates 1:3 battered pile

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	DESIGN	BY Sujan Talukder	CHECKED Minh Vo	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO.	51-0342	CARPINTERIA CREEK BRIDGE (REPLACE) ABUTMENT LAYOUT NO. 1
	DETAILS	BY B. Jenko / G. Dickerson	CHECKED Minh Vo			POST MILE	2.44	
	QUANTITIES	BY Tracy Sanderson	CHECKED Renee Anderson			UNIT: 3592	PROJECT NUMBER & PHASE: 05000005431	
				DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES 1-12-12, 11-22-12, 04-16-14		SHEET 6 OF 30

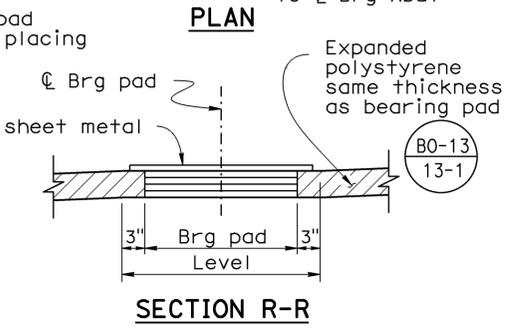
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	549	786
			Rakesh Deo REGISTERED CIVIL ENGINEER DATE 5-23-14 PLANS APPROVAL DATE 12-7-15 No. C73814 Exp. 6/30/17 CIVIL STATE OF CALIFORNIA		

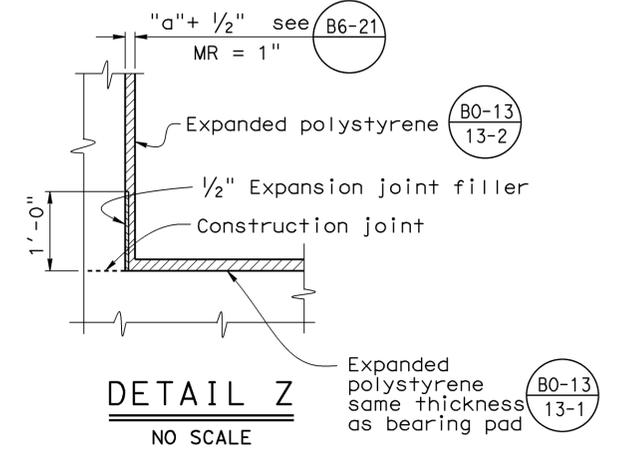
- NOTES:
1. Backwall must be placed after stressing
 2. For Structure Approach Slab, see "STRUCTURE APPROACH TYPE N(30S)" sheet
 3. For Geocomposite Drain, see "STRUCTURE APPROACH DRAINAGE DETAILS" sheet
 4. Extend Stage 1 reinforcement 2'-6" into Stage 2 Construction
 5. For location of "SECTION A-A", see "ABUTMENT 1 LAYOUT" sheet
 6. Embankment surcharge placed at both abutments during Stage 1 only. For limits of embankment surcharge, see A62B
 7. Integrally colored concrete on Abutment Stem Wall, see "ABUTMENT 1 ELEVATION" on "ABUTMENT LAYOUT NO. 1" sheet



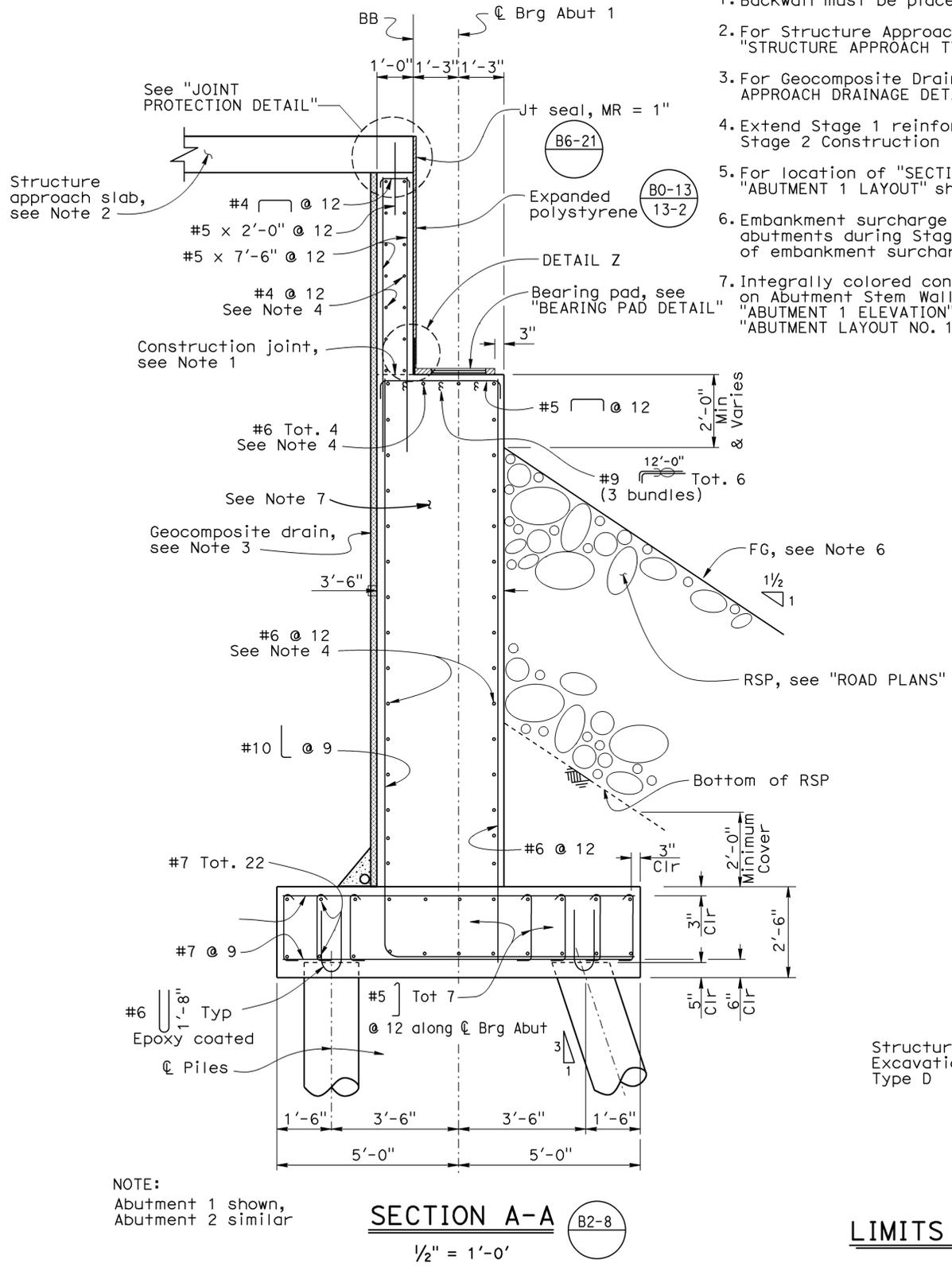
Note:
Coat top of bearing pad with grease prior to placing sheet metal.



BEARING PAD DETAIL
NO SCALE

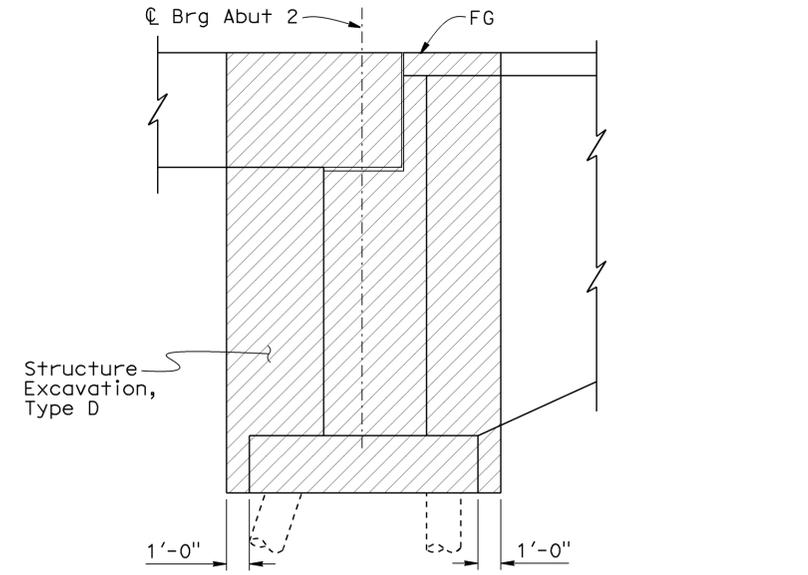


DETAIL Z
NO SCALE



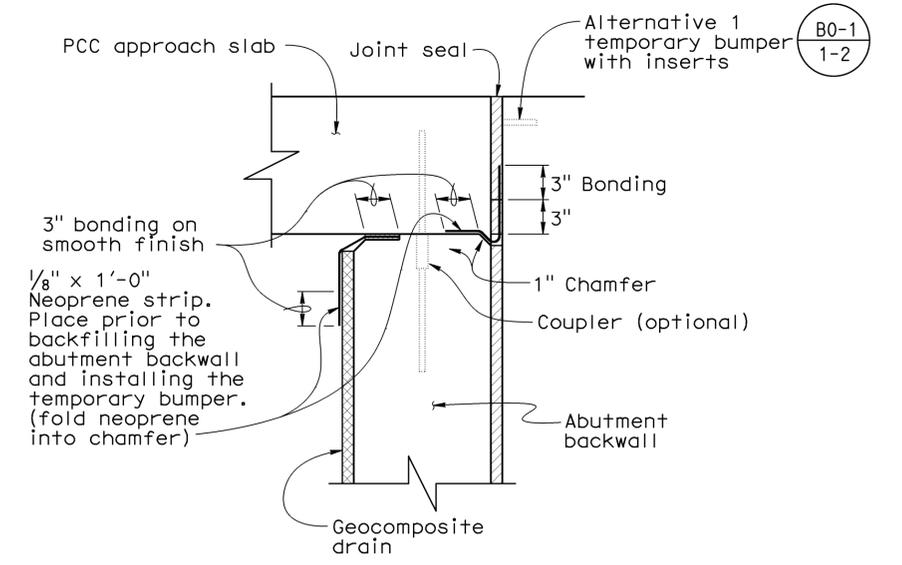
NOTE:
Abutment 1 shown, Abutment 2 similar

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



LIMITS OF STRUCTURE EXCAVATION, TYPE D
No Scale

Note:
Abutment 2 shown, Abutment 1 similar.



JOINT PROTECTION DETAIL
NO SCALE

DESIGN	BY Sujan Talukder	CHECKED Minh Vo
DETAILS	BY B. Jenko	CHECKED Minh Vo
QUANTITIES	BY Tracy Sanderson	CHECKED Renee Anderson

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

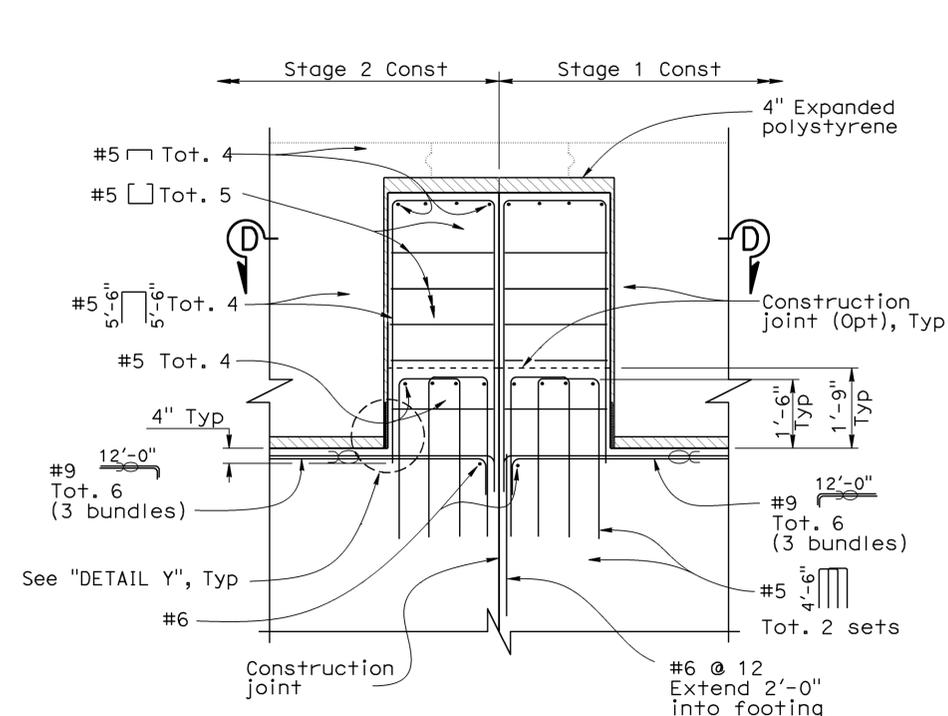
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO.	51-0342
POST MILE	2.44

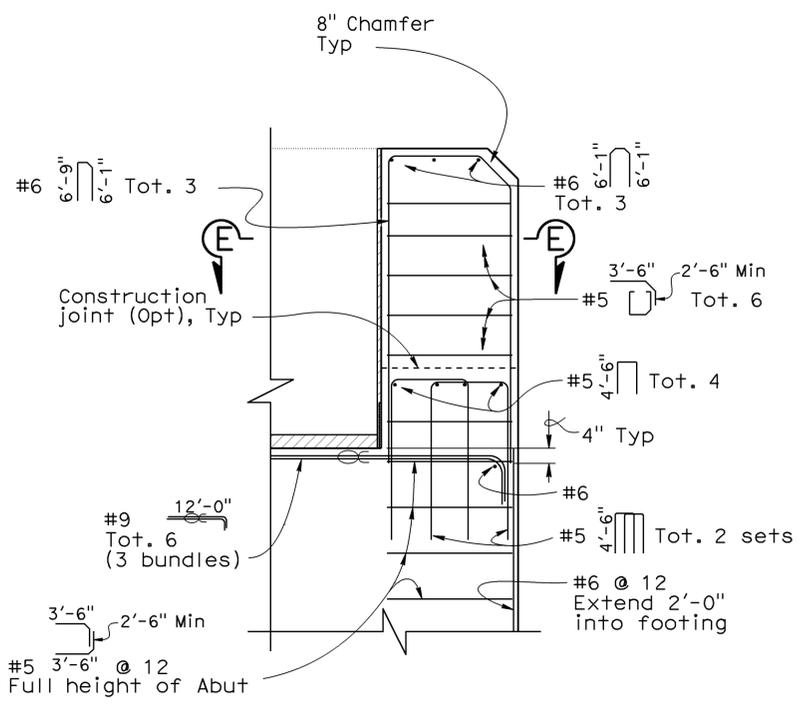
CARPINTERIA CREEK BRIDGE (REPLACE)
ABUTMENT DETAILS NO. 1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	550	786

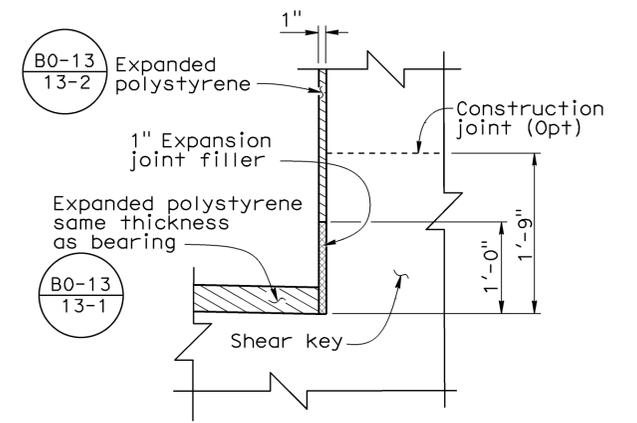
Rakesh Deo 5-23-14
 REGISTERED CIVIL ENGINEER DATE
 12-7-15
 PLANS APPROVAL DATE
 Rakesh Deo
 No. C73814
 Exp. 6/30/17
 CIVIL
 STATE OF CALIFORNIA
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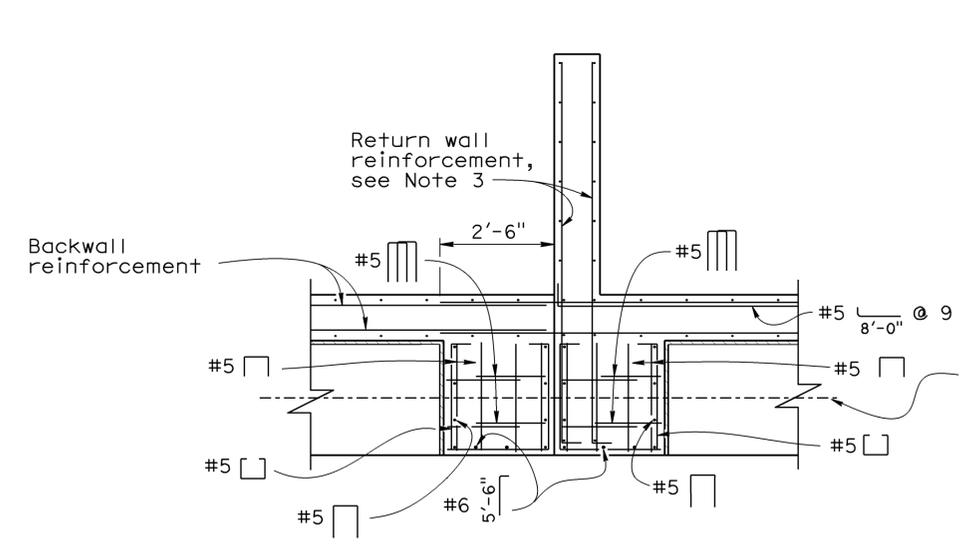
TYPICAL INTERIOR SHEAR KEY
 $\frac{1}{2}'' = 1'-0''$



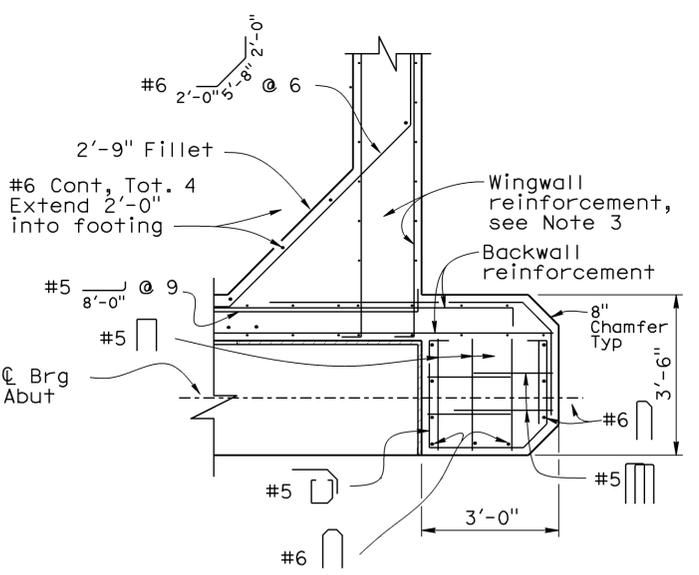
TYPICAL EXTERIOR SHEAR KEY
 $\frac{1}{2}'' = 1'-0''$



DETAIL Y TYPICAL AT ALL SHEAR KEYS
 NO SCALE



SECTION D-D
 $\frac{1}{2}'' = 1'-0''$



SECTION E-E
 $\frac{1}{2}'' = 1'-0''$

- NOTES:
1. For Abutment Reinforcement, see "ABUTMENT DETAILS NO. 1" sheet
 2. Shear Keys at Abutment 1 shown, similar at Abutment 2
 3. For Wingwall and Return Wall Reinforcement, see "ABUTMENT DETAILS NO. 3" and "ABUTMENT DETAILS NO. 4" sheets
 4. For limits of integrally colored concrete, see "ABUTMENT 1 ELEVATION" on "ABUTMENT NO. 1 LAYOUT" sheet

DESIGN	BY S. Talukder	CHECKED Minh Vo
DETAILS	BY G. Dickerson / B. Jenko	CHECKED Minh Vo
QUANTITIES	BY Tracy Sanderson	CHECKED Renee Anderson

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

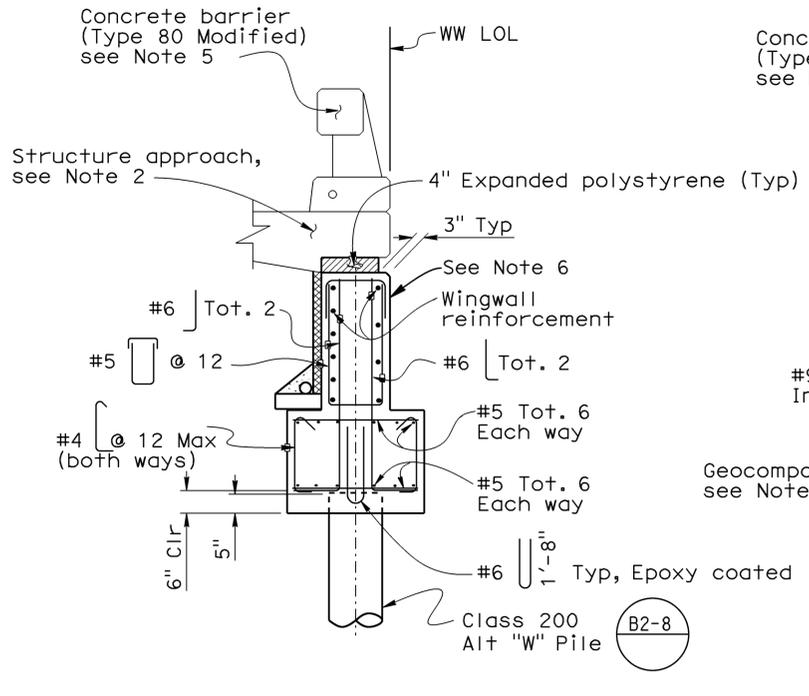
DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO.	51-0342
POST MILE	2.44

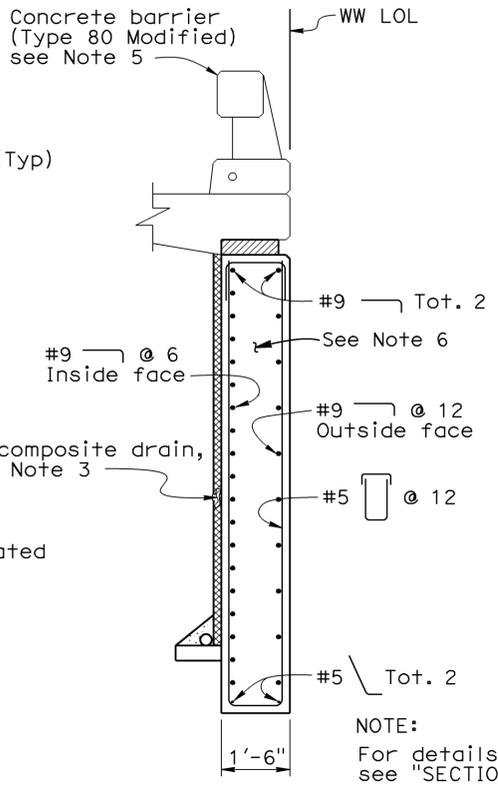
CARPINTERIA CREEK BRIDGE (REPLACE)
ABUTMENT DETAILS NO. 2

REVISION DATES	SHEET	OF
8-13-12 04-16-14 12-03-12	9	30

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	551	786
Rakesh Deo REGISTERED CIVIL ENGINEER			5-23-14 DATE		
12-7-15 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>					

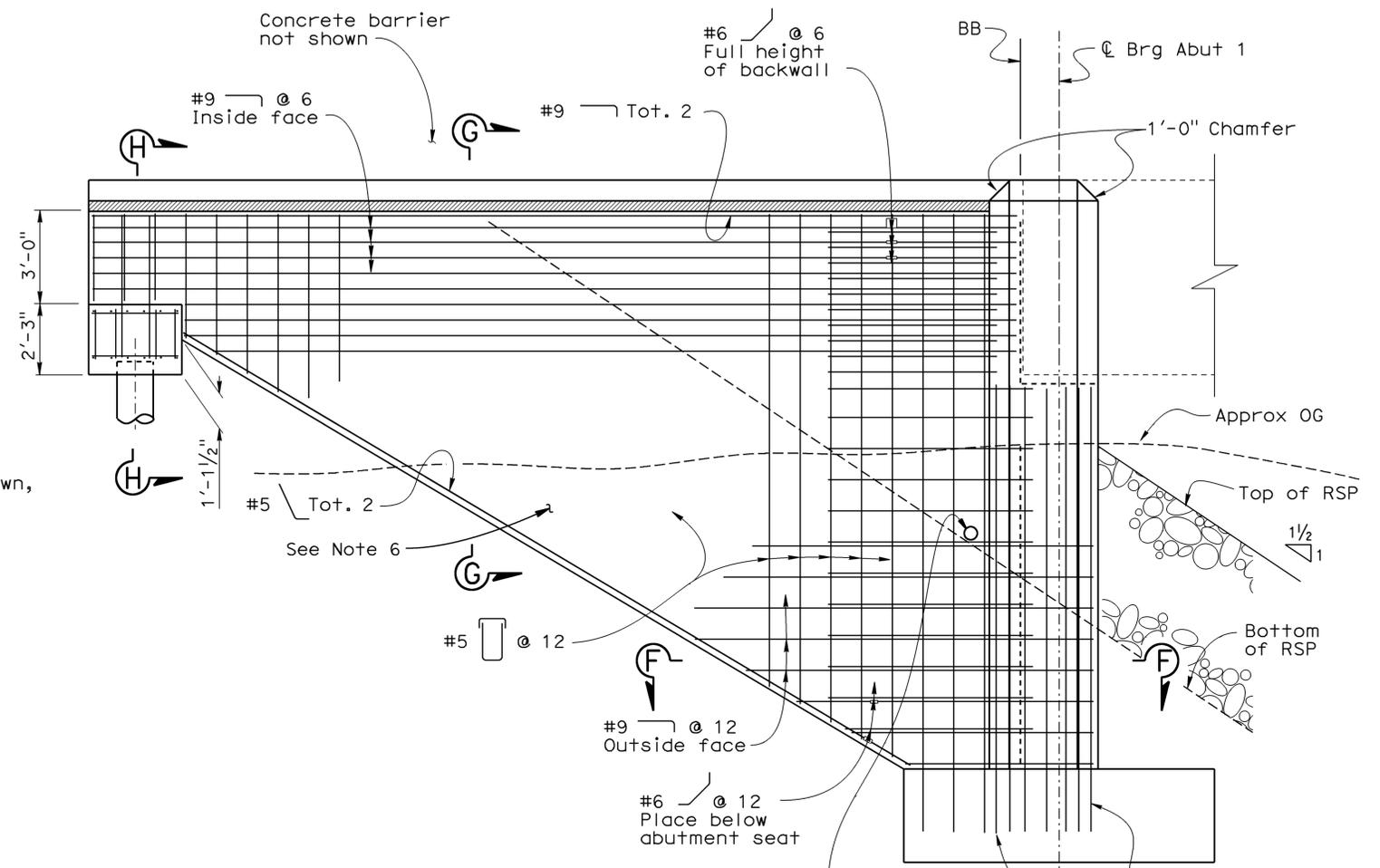


SECTION H-H
1/2" = 1'-0"



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

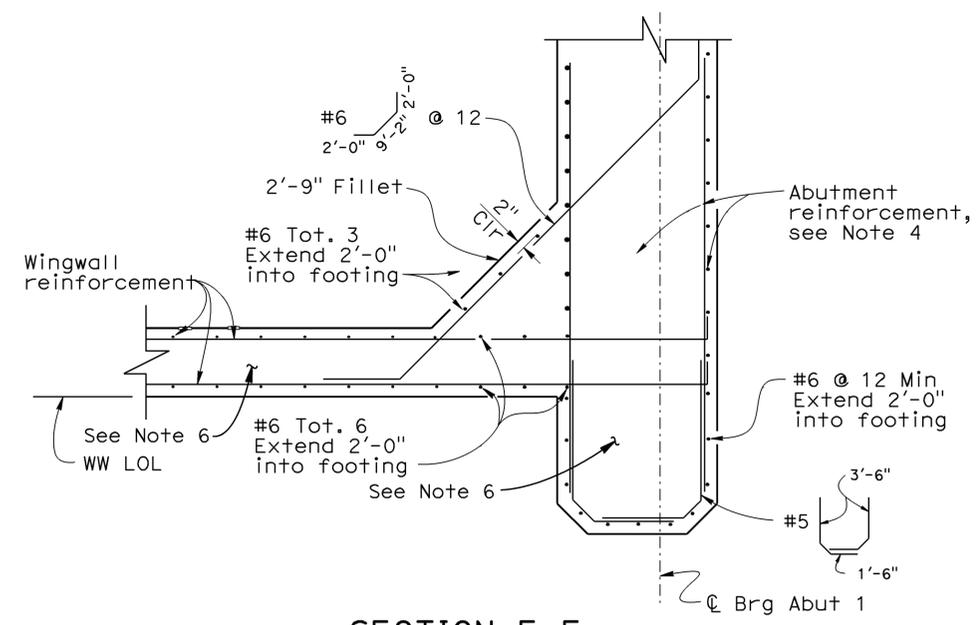
NOTE:
For details not shown, see "SECTION H-H"



WINGWALL ELEVATION
3/8" = 1'-0"

NOTE:
Abutment piles not shown
All reinforcement not shown for clarity

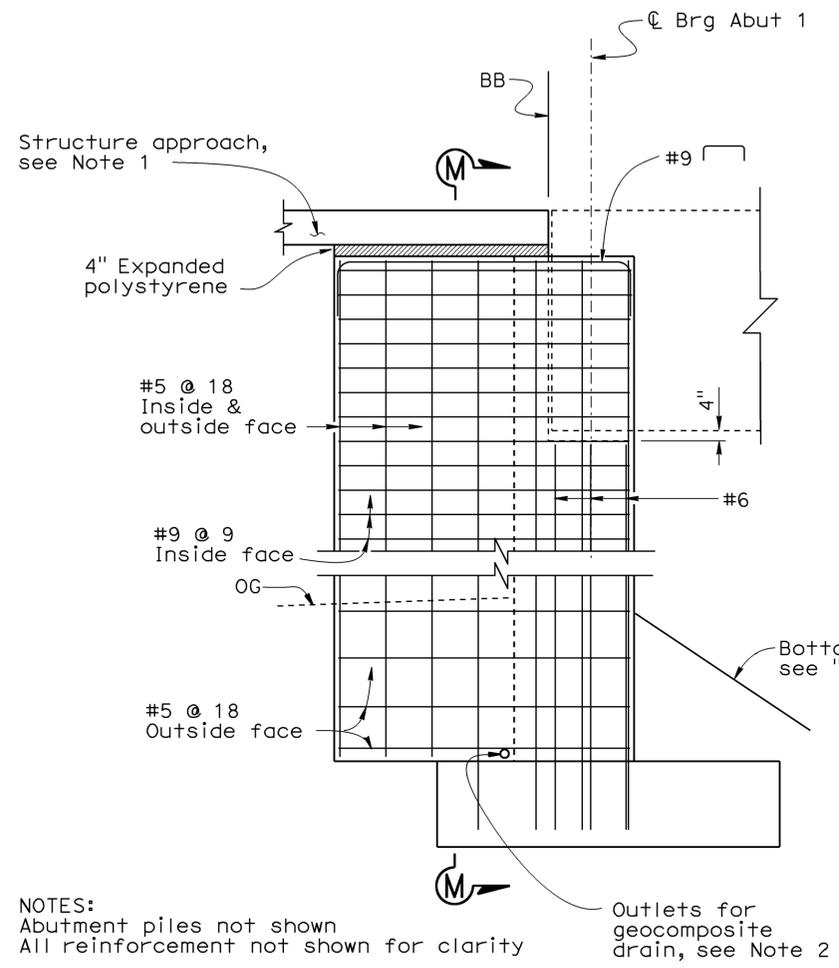
- NOTES:
1. Abutment 1 right wingwall shown, others similar.
 2. For Structure Approach slab, see "STRUCTURE APPROACH TYPE N(30S)" sheet.
 3. For Geocomposite Drain, see "STRUCTURE APPROACH DRAINAGE DETAILS" sheet.
 4. For abutment reinforcement, see "ABUTMENT DETAILS NO. 1" sheet.
 5. For concrete barrier (Type 80 Modified), see "STRUCTURE APPROACH DETAILS" sheet
 6. Use integrally colored concrete, see "ABUTMENT 1 ELEVATION" on "ABUTMENT LAYOUT NO. 1" sheet



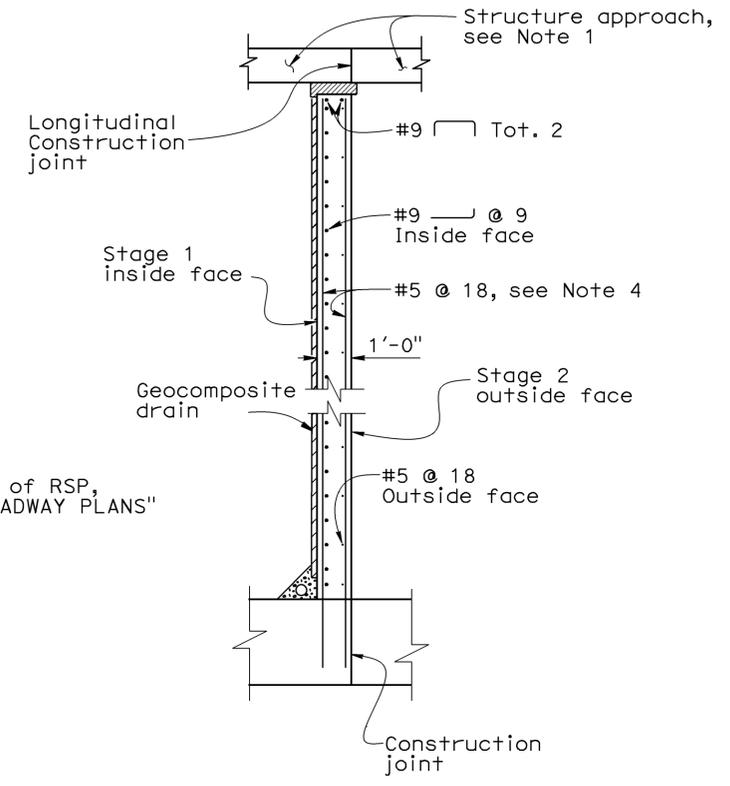
SECTION F-F
1/2" = 1'-0"

DESIGN BY S. Talukder CHECKED Minh Vo DETAILS BY G. Dickerson / B Jenko CHECKED Minh Vo QUANTITIES BY Tracy Sanderson CHECKED Renee Anderson	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO.	CARPINTERIA CREEK BRIDGE (REPLACE) ABUTMENT DETAILS NO. 3	
			51-0342		
			POST MILE		
			2.44		
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3592 PROJECT NUMBER & PHASE: 05000005431 CONTRACT NO.: 05-4482U4	
			DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES 7-19-12 12-04-12 04-16-14
					SHEET 10 OF 30

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	552	786
<i>Rakesh Deo</i> REGISTERED CIVIL ENGINEER			5-23-14 DATE		
12-7-15 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>					



RETURN WALL ELEVATION
 $\frac{3}{8}'' = 1'-0''$



SECTION M-M
 $\frac{3}{8}'' = 1'-0''$

NOTES:
 Abutment piles not shown
 All reinforcement not shown for clarity
 Outlets for geocomposite drain, see Note 2

- NOTES:
1. For Structure Approach slab, see "STRUCTURE APPROACH TYPE N(30S)" sheet.
 2. For Geocomposite Drain, see "STRUCTURE APPROACH DRAINAGE DETAILS" sheet.
 3. Abutment 1 shown, Abutment 2 similar.
 4. Embed 2'-0" into footing.

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN BY: Sujan Talukder CHECKED: Minh Vo	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO.: 51-0342	CARPINTERIA CREEK BRIDGE (REPLACE) ABUTMENT DETAILS NO. 4
	DETAILS BY: G. Dickerson / B. Jenko CHECKED: Minh Vo			POST MILE: 2.44	
	QUANTITIES BY: Tracy Sanderson CHECKED: Renee Anderson	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3	UNIT: 3592 PROJECT NUMBER & PHASE: 05000005431	CONTRACT NO.: 05-4482U4	DISREGARD PRINTS BEARING EARLIER REVISION DATES
				REVISION DATES: 7-19-12, 04-16-14, 11-02-12	SHEET 11 OF 30

FILE => 51-0342-f-adt04.dgn

USERNAME => s115755 DATE PLOTTED => 04-DEC-2015 TIME PLOTTED => 08:49

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	553	786

Rakesh Deo 5-23-14
 REGISTERED CIVIL ENGINEER DATE

12-7-15
 PLANS APPROVAL DATE

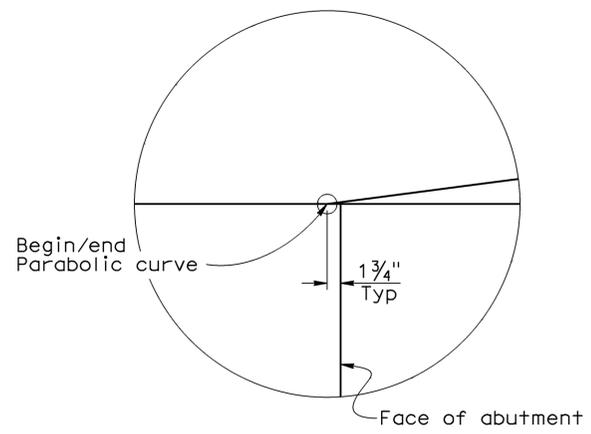
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REGISTERED PROFESSIONAL ENGINEER
 Rakesh Deo
 No. C73814
 Exp. 6/30/17
 CIVIL
 STATE OF CALIFORNIA

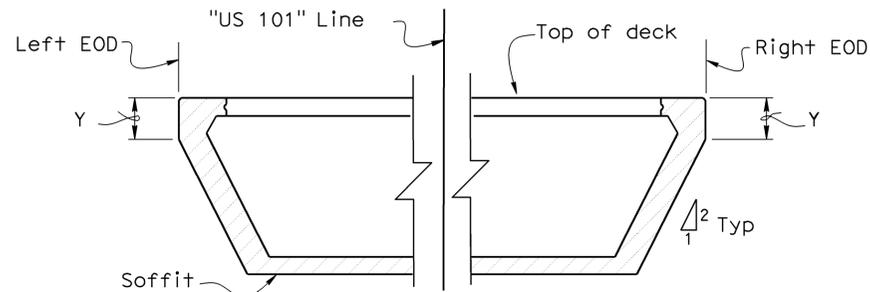
- NOTES:
1. Longitudinal reinforcement to be extended 2'-0" into end diaphragm.
 2. Field bend angle for proper placement of reinforcement.
 3. For reinforcement not shown, see "PART TYPICAL SECTION" on "TYPICAL SECTION NO 1" and "TYPICAL SECTION NO 2" sheets.

LEGEND:

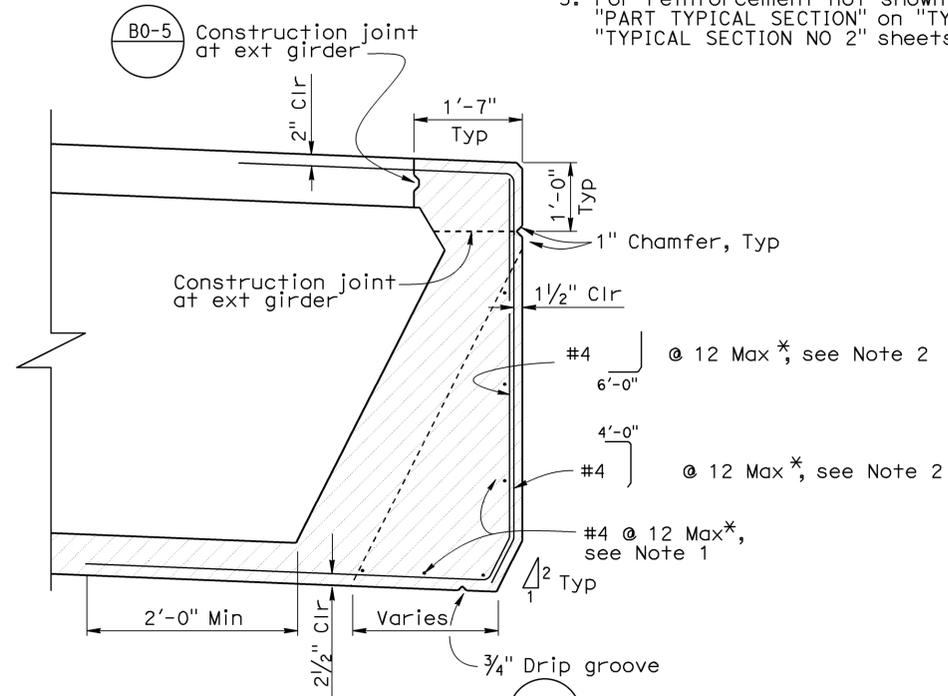
 Indicates Integrally colored concrete



DETAIL A
1" = 1'-0"

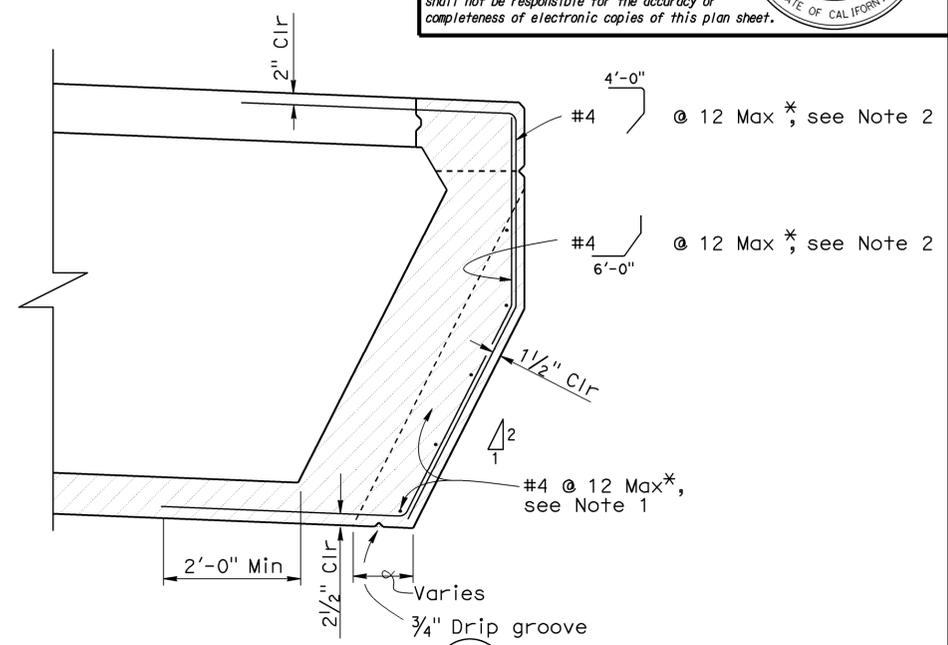


SUPERSTRUCTURE SECTION
No scale



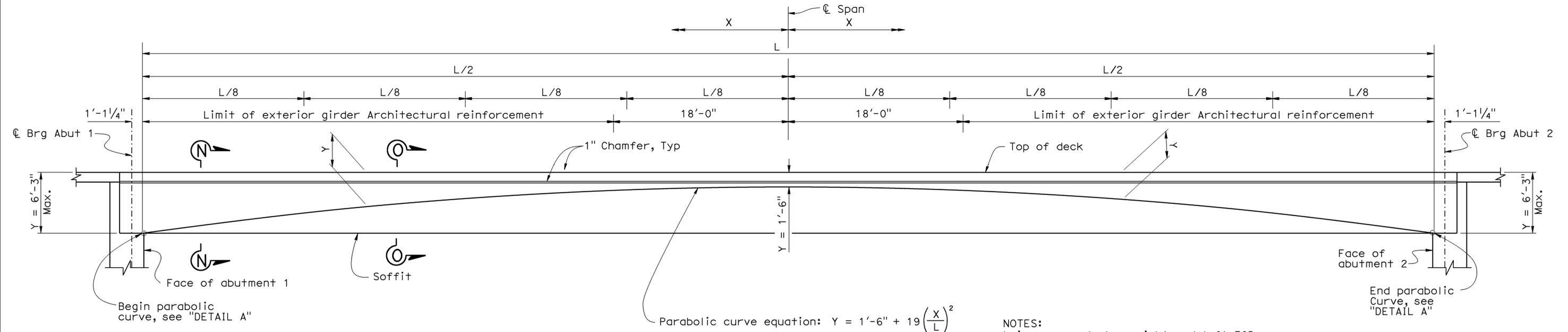
SECTION N-N
3/4" = 1'-0"

* Designates architectural reinforcement



SECTION O-O
3/4" = 1'-0"

* Designates architectural reinforcement



**DEVELOPED ELEVATION
RIGHT AND LEFT EDGE OF DECK**
1" = 5'

- NOTES:
- L is measured along right and left EOD
 - X is measured along EOD from ϕ Span
 - Y is measured from top of deck

DESIGN	BY Sujan Talukder	CHECKED Minh Vo	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO.	CARPINTERIA CREEK BRIDGE (REPLACE) BRIDGE GEOMETRICS
DETAILS	BY Yingjue Feng	CHECKED Minh Vo			51-0342	
QUANTITIES	BY Tracy Sanderson	CHECKED Renee Anderson			POST MILE 2.44	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)			ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3592	PROJECT NUMBER & PHASE: 05000005431	CONTRACT NO.: 05-4482U4
				DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 12 OF 30

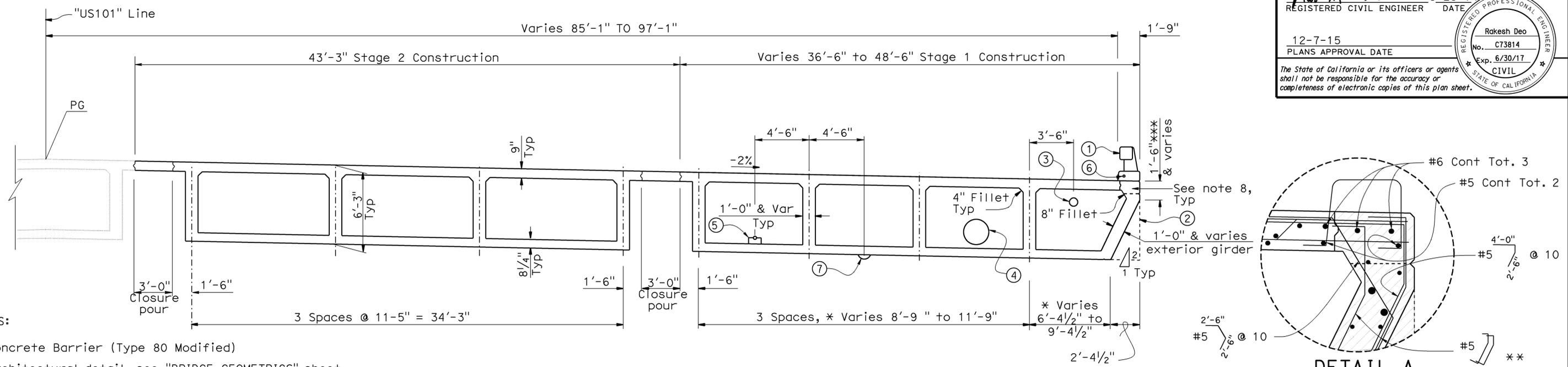
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	554	786

Rakesh Deo 5-23-14
REGISTERED CIVIL ENGINEER DATE

12-7-15
PLANS APPROVAL DATE

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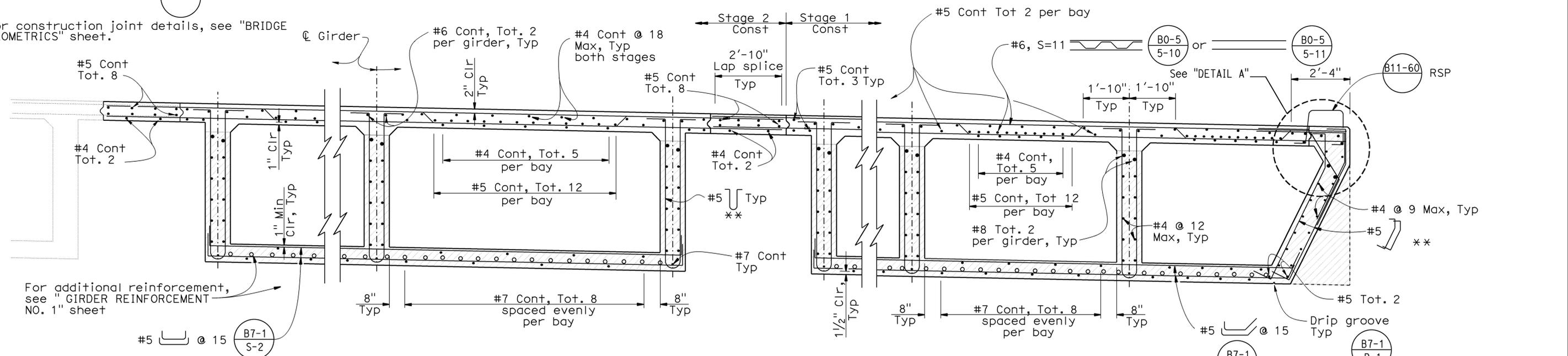
Rakesh Deo
No. C73814
Exp. 6/30/17
CIVIL
STATE OF CALIFORNIA



- NOTES:
- ① Concrete Barrier (Type 80 Modified)
 - ② Architectural detail, see "BRIDGE GEOMETRICS" sheet
 - ③ Deck drainage pipe, see "DECK DRAINAGE DETAILS" sheet
 - ④ Future utility
 - ⑤ 3" water supply line (bridge), galvanized
 - ⑥ 2"Ø Electric conduit, see "ROADWAY PLANS"
 - ⑦ Soffit light, see "GIRDER LAYOUT NO. 1" sheet.
 - ⑧ For construction joint details, see "BRIDGE GEOMETRICS" sheet.

TYPICAL SECTION NORTHBOUND
1/4" = 1'-0"

LEGEND:
 Indicates Integrally colored concrete



PART TYPICAL SECTION NORTHBOUND
1/2" = 1'-0"

* For details see, "GIRDER LAYOUT NO. 1" sheet
*** Use 1'-6" dimension for all reinforcement in stem wall

** For stirrup spacing, see "GIRDER LAYOUT NO. 1" sheet

DESIGN	BY: Sujan Talukder	CHECKED: Minh Vo
DETAILS	BY: Bruno Jenko	CHECKED: Minh Vo
QUANTITIES	BY: Tracy Sanderson	CHECKED: Renee Anderson

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO. 51-0342
POST MILE 2.44
CARPINTERIA CREEK BRIDGE (REPLACE)
TYPICAL SECTION NO. 1

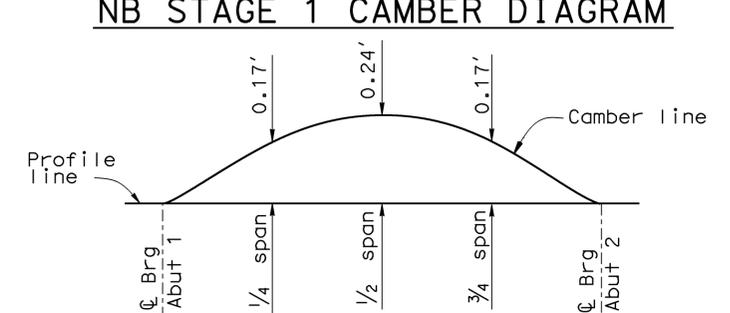
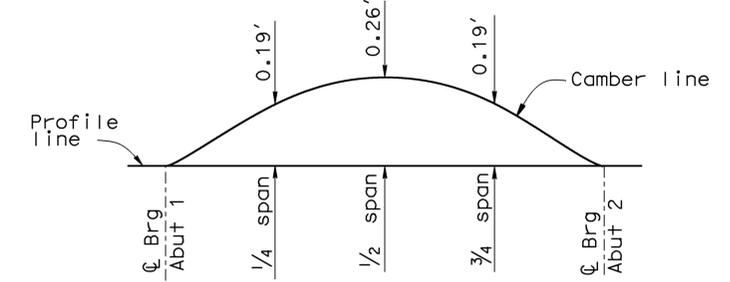
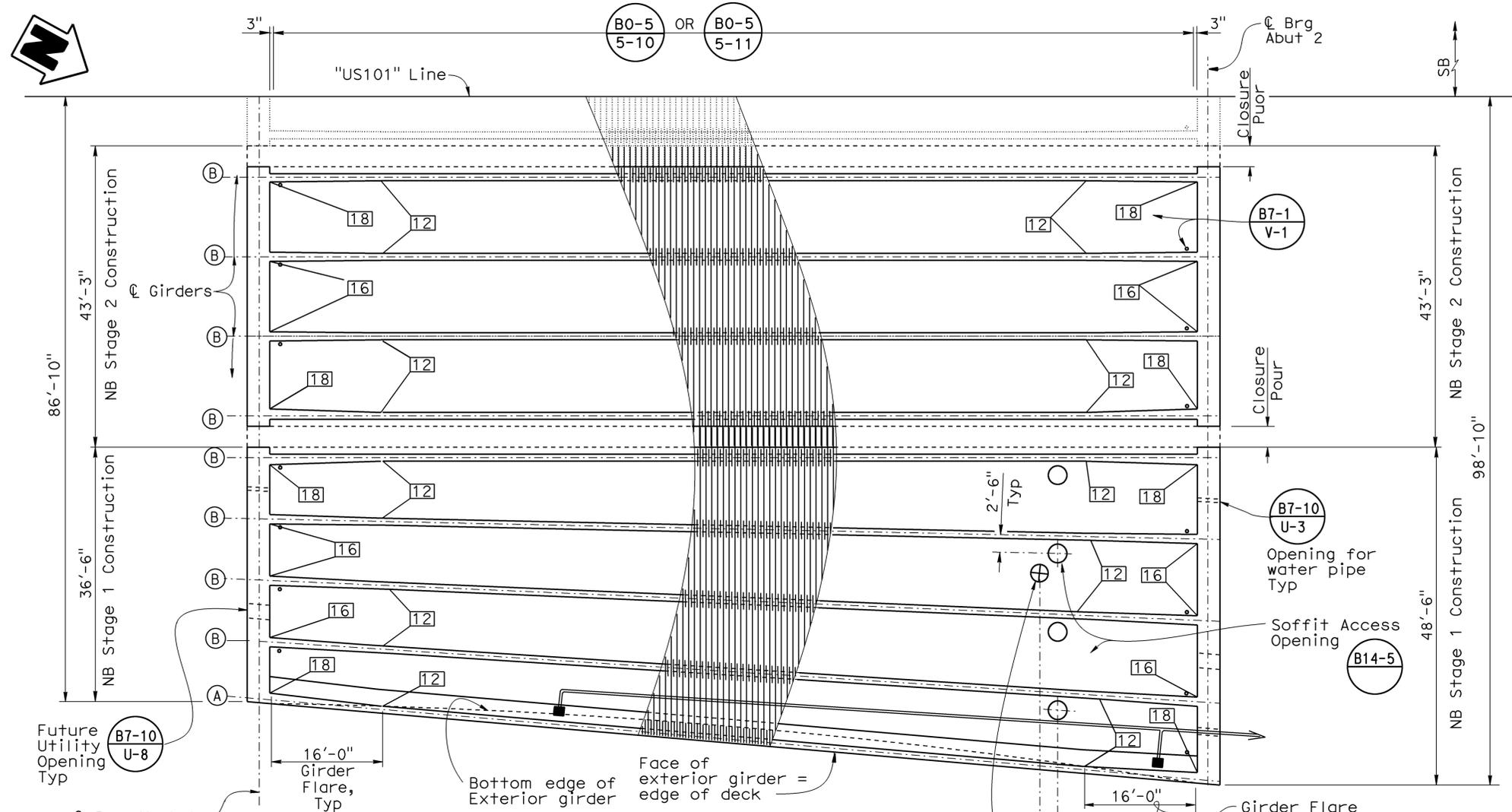
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	556	786

Rakesh Deo 5-23-14
REGISTERED CIVIL ENGINEER DATE

12-7-15
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REGISTERED PROFESSIONAL ENGINEER
Rakesh Deo
No. C73814
Exp. 6/30/17
CIVIL
STATE OF CALIFORNIA



NB STAGE 2 CAMBER DIAGRAM
No Scale
Does not include allowance of falsework settlement.

PRESTRESSING NOTES

270 KSI Low Relaxation Strands:

NB STAGE 1
 $P_{jack} = 13,500$ kips
Total Number of Girders = 5

NB STAGE 2
 $P_{jack} = 11,300$ kips
Total Number of Girders = 4

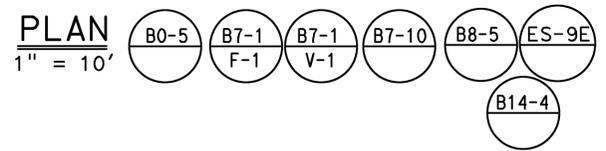
Anchor set = $\frac{3}{8}$ inch
Friction Curvature Coefficient, $\mu = 15 \times 10^{-2} (\frac{1}{rad})$
Friction Wobble Coefficient, $K = 0.0002 (\frac{1}{ft})$

The final force ratio (Larger divided by smaller) between any two girders must not exceed in ratio of 10 to 9

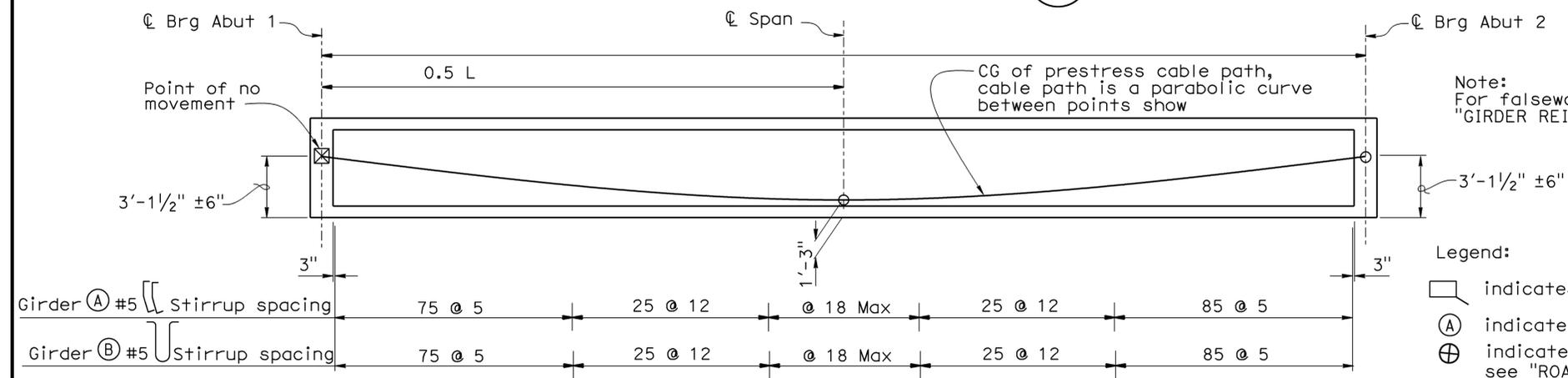
Concrete: $f'_c = 5.5$ ksi @ 28 days
 $f'_{ci} = 3.5$ ksi @ time of stressing

Contractor must submit elongation calculations based on initial stress at $\alpha = 0.9579$ times jacking stress.

One end stressing must be performed from Abutment 2



* for drainage system information, see "DECK DRAINAGE DETAILS" sheet



LONGITUDINAL SECTION
No Scale

Note:
For falsework release notes, see "GIRDER REINFORCEMENT NO. 1" sheet.

- Legend:
- indicates girder width
 - Ⓐ indicates girder designation
 - ⊕ indicates soffit light, see "ROADWAY PLANS"
 - indicates Deck Drain Type D-1

DESIGN	BY Sujan Talukder	CHECKED Minh Vo	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO.	CARPINTERIA CREEK BRIDGE (REPLACE) GIRDER LAYOUT NO. 1
DETAILS	BY Bruno Jenko	CHECKED Minh Vo			51-0342	
QUANTITIES	BY Tracy Sanderson	CHECKED Renee Anderson			POST MILE	

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: 3592 PROJECT NUMBER & PHASE: 05000005431 CONTRACT NO.: 05-4482U4

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
5-22-12	15	30

DATE PLOTTED => 08:50 USERNAME => s115755 DATE PLOTTED => 04-DEC-2015

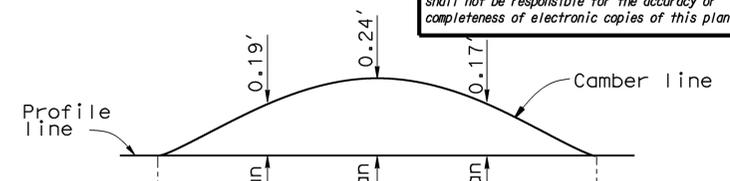
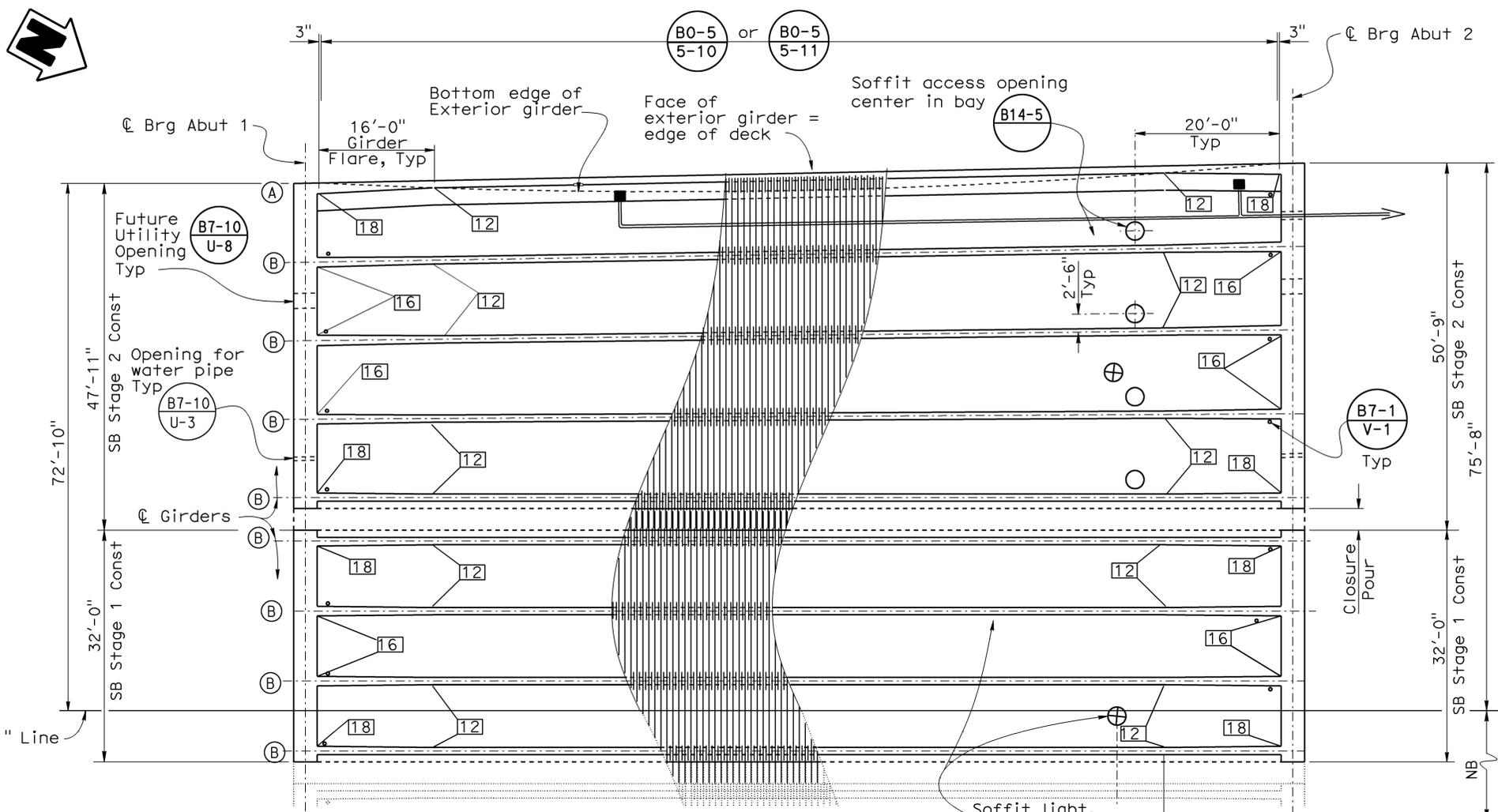
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	557	786

Rakesh Deo 5-23-14
 REGISTERED CIVIL ENGINEER DATE

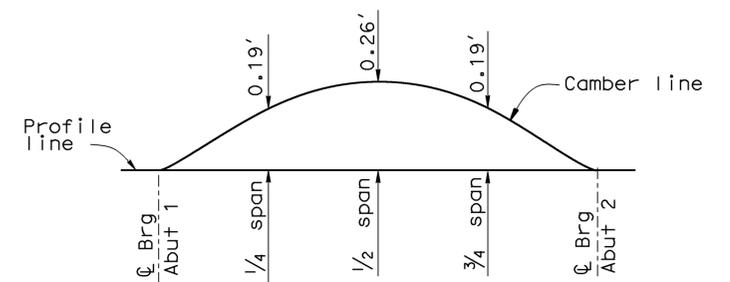
12-7-15
 PLANS APPROVAL DATE

Rakesh Deo
 No. C73814
 Exp. 6/30/17
 CIVIL
 STATE OF CALIFORNIA

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SB STAGE 1 CAMBER DIAGRAM
 No Scale



SB STAGE 2 CAMBER DIAGRAM
 No Scale
 Does not include allowance of falsework settlement.

PRESTRESSING NOTES

270 KSI Low Relaxation Strands:

SB STAGE 1
 $P_{jack} = 10,600$ kips
 Total Number of Girders = 4

SB STAGE 2
 $P_{jack} = 14,250$ kips
 Total Number of Girders = 5

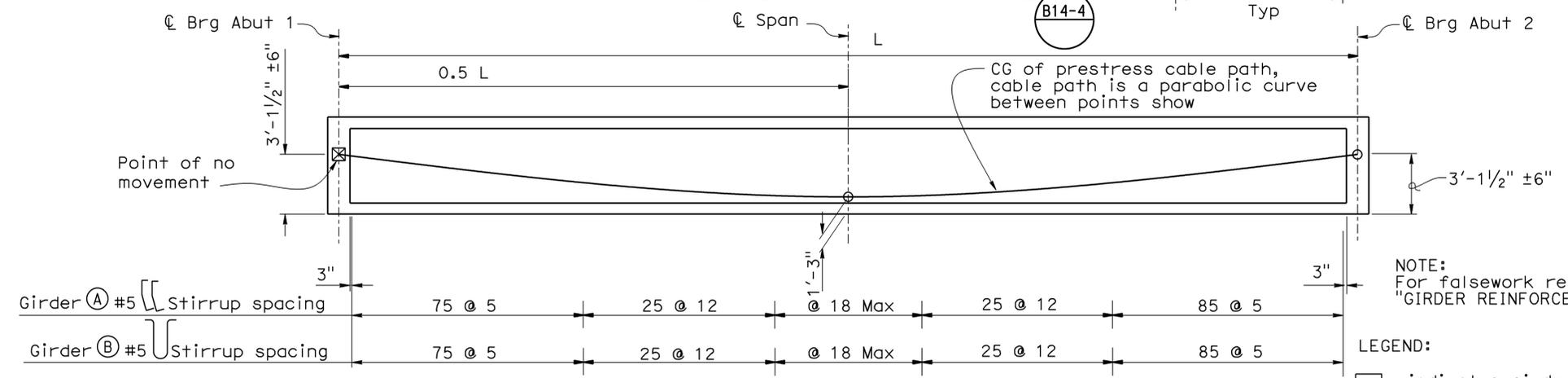
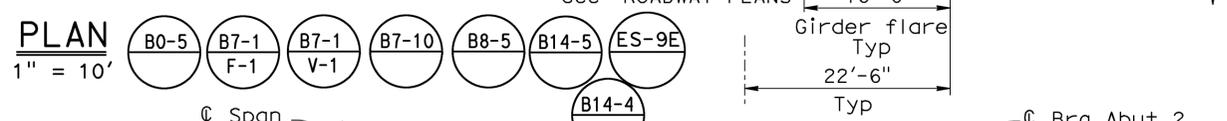
Anchor set = $\frac{3}{8}$ inch
 Friction Curvature Coefficient, $\mu = 15 \times 10^{-2} \left(\frac{1}{rad}\right)$
 Friction Wobble Coefficient, $K = 0.0002 \left(\frac{1}{ft}\right)$

The final force ratio (Larger divided by smaller) between any two girders must not exceed in ratio of 10 to 9

Concrete: $f'_c = 5.5$ ksi @ 28 days
 $f'_{ci} = 3.5$ ksi @ time of stressing

Contractor must submit elongation calculations based on initial stress at $\lambda = 0.9579$ times jacking stress.

One end stressing must be performed from Abutment 2



LONGITUDINAL SECTION
 No Scale

NOTE:
 For falsework release notes, see "GIRDER REINFORCEMENT NO. 2" sheet.

LEGEND:
 □ indicates girder width
 (A) indicates girder designation
 ⊕ indicates soffit light, see "ROADWAY PLANS"
 ■ indicates Deck Drain Type D-1

DESIGN	BY Sujan Talukder	CHECKED Minh Vo
DETAILS	BY B. Jenko / G. Dickerson	CHECKED Minh Vo
QUANTITIES	BY Tracy Sanderson	CHECKED Renee Anderson

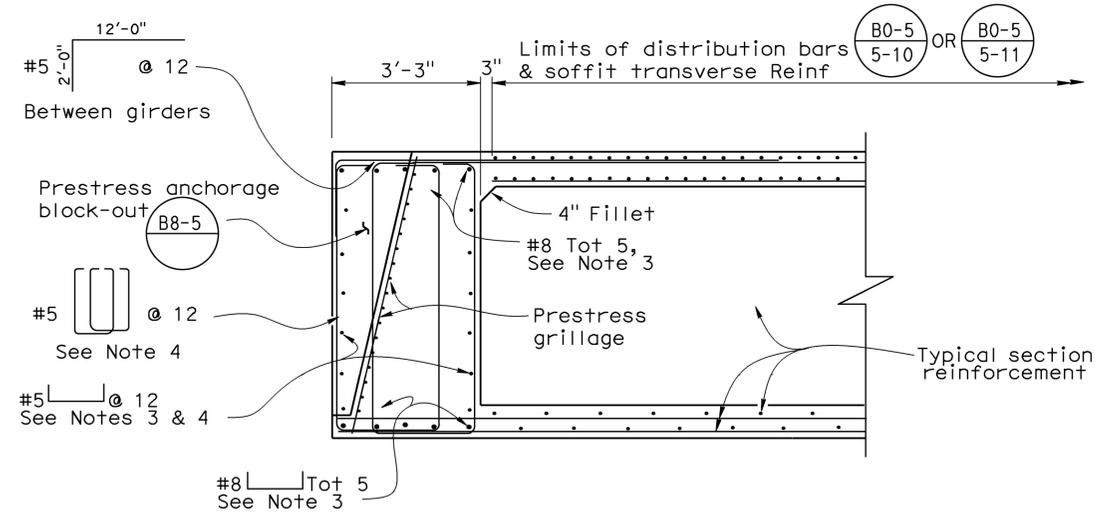
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO.	51-0342
POST MILE	2.44

CARPINTERIA CREEK BRIDGE (REPLACE)
GIRDER LAYOUT NO. 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	558	786
<i>Rakesh Deo</i> REGISTERED CIVIL ENGINEER			5-23-14 DATE		
12-7-15 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>					



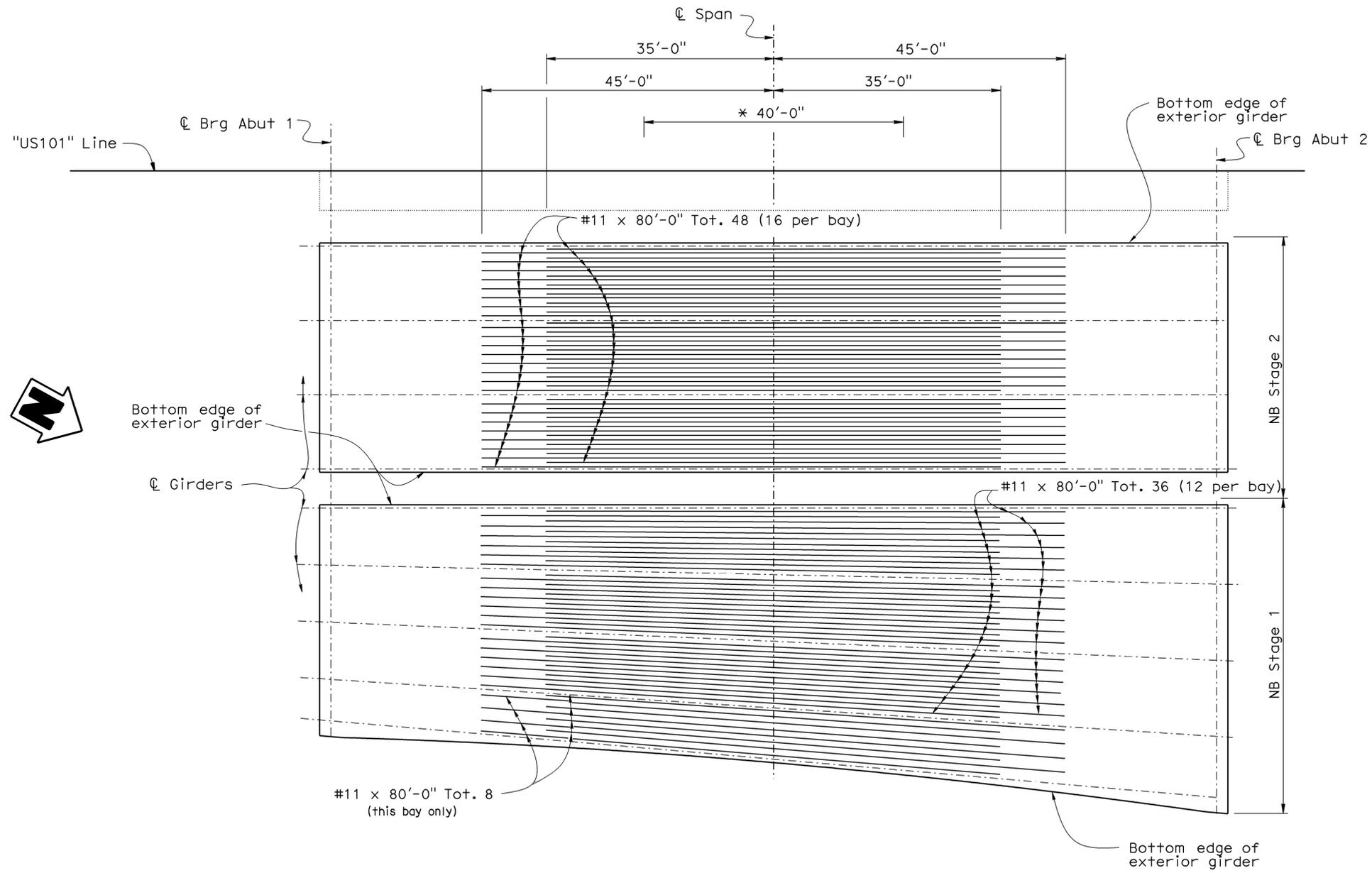
END DIAPHRAGM
 $\frac{1}{2}'' = 1'-0''$

- Notes:
- End diaphragm at Abut 1 SB shown, Abut 1 NB, Abut 2 NB and Abut 2 SB similar.
 - For utility openings, see "ABUTMENT LAYOUT NO.1" and "ABUTMENT LAYOUT NO. 2" sheets. For utility opening reinforcement, see **B7-10**.
 - Reinf to be service spliced at the closure pour, splices to be staggered @ 1'-6".
 - Reinforcement may be adjusted to clear prestressing anchorage if authorized. Where Reinf conflicts with utility opening, stop Reinf 2" from sides of opening.

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Sujan Talukder	CHECKED Minh Vo	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO.	51-0342	CARPINTERIA CREEK BRIDGE (REPLACE) GIRDER DETAILS						
	DETAILS	BY Bruno Jenko	CHECKED Minh Vo			POST MILE	2.44							
QUANTITIES	BY Tracy Sanderson	CHECKED Renee Anderson												
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0	1	2	3	UNIT: 3592	PROJECT NUMBER & PHASE: 05000005431	CONTRACT NO.: 05-4482U4	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 17	OF 30
<small>FILE => 51-0342-1-gd101.dgn</small>														

USERNAME => s115755 DATE PLOTTED => 04-DEC-2015 TIME PLOTTED => 08:50

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	559	786
<i>Rakesh Deo</i> REGISTERED CIVIL ENGINEER			5-23-14 DATE		
12-7-15 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>					



FALSEWORK RELEASE:

- Alternative 1:**
 Falsework must be released as soon as permitted by the specifications. Closure pour must not be placed sooner than 60 days after falsework has been released.
- Alternative 2:**
 Falsework must not be released less than 28 days after the last concrete has been placed. Closure pour must not be placed sooner than 14 days after the falsework has been released. When falsework release Alternative 2 is used, Camber values are 0.75 times those shown.

LEGEND:
 * Indicates "No Splice Zone", centered about \O Span.

- NOTES:**
- Splices in additional reinforcement where allowed to be staggered.
 - Reinforcement bars must be spaced equally within each bay

ADDITIONAL BOTTOM REINFORCEMENT NORTHBOUND

No scale

DESIGN	BY Sujan Talukder	CHECKED Minh Vo
DETAILS	BY B. Jenko	CHECKED Minh Vo
QUANTITIES	BY Tracy Sanderson	CHECKED Renee Anderson

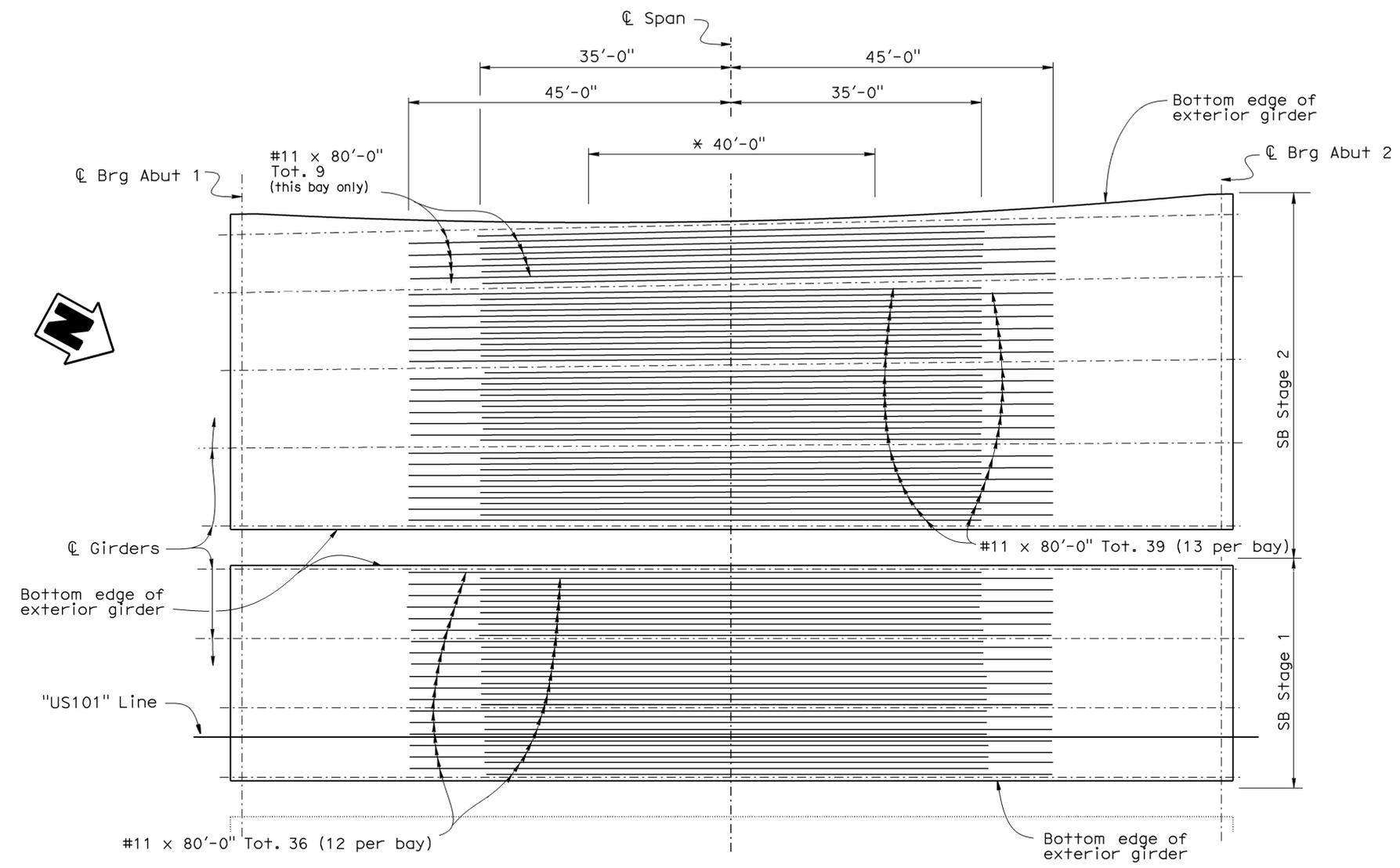
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO.	51-0342
POST MILE	2.44

CARPINTERIA CREEK BRIDGE (REPLACE)
GIRDER REINFORCEMENT NO. 1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	560	786
<i>Rakesh Deo</i> REGISTERED CIVIL ENGINEER			5-23-14 DATE		
12-7-15 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>					



**ADDITIONAL BOTTOM REINFORCEMENT
SOUTHBOUND**
No scale

FALSEWORK RELEASE:

- Alternative 1:**
Falsework must be released as soon as permitted by the specifications. Closure pour must not be placed sooner than 60 days after falsework has been released.
- Alternative 2:**
Falsework must not be released less than 28 days after the last concrete has been placed. Closure pour must not be placed sooner than 14 days after the falsework has been released. When falsework release Alternative 2 is used, Camber values are 0.75 times those shown.

LEGEND:

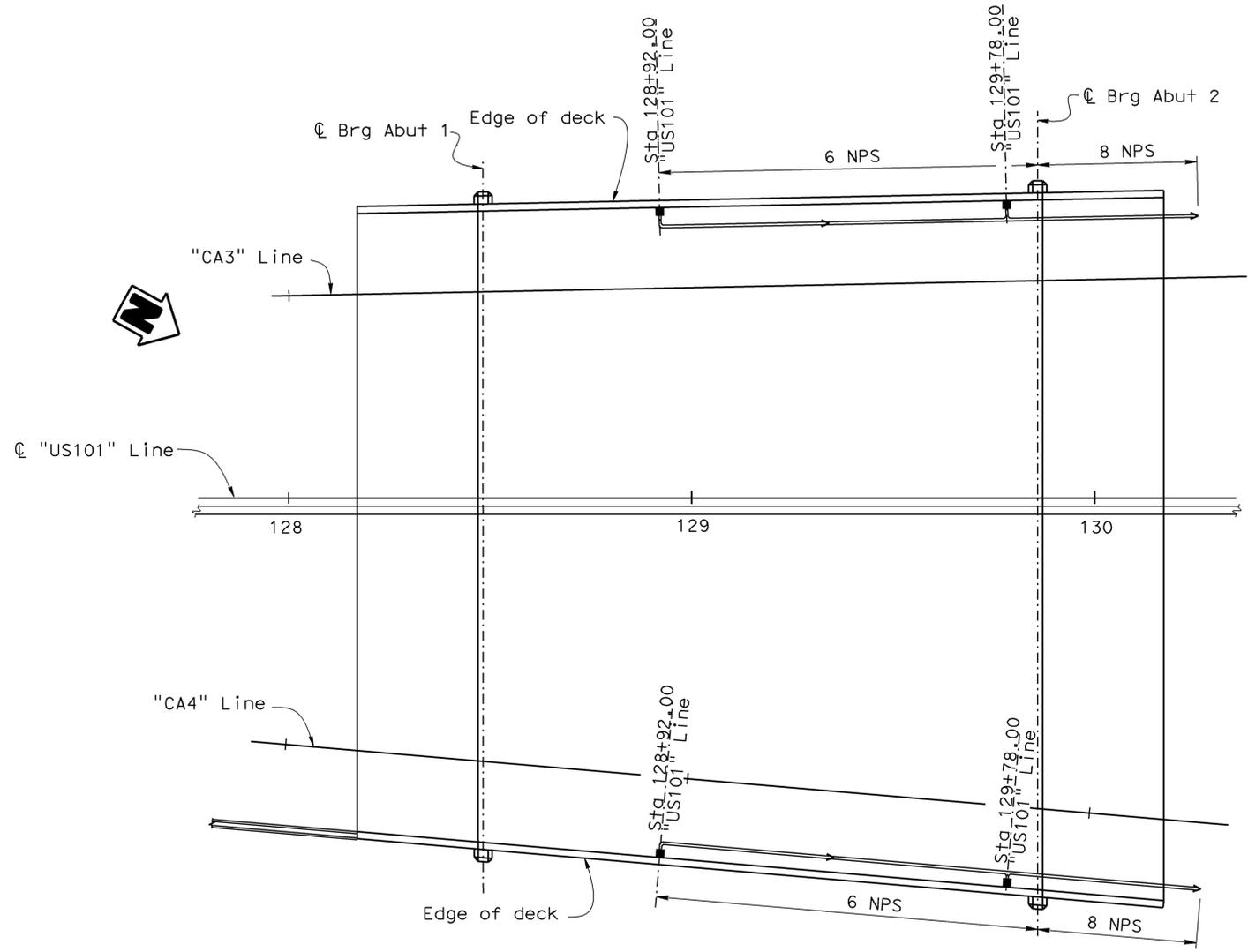
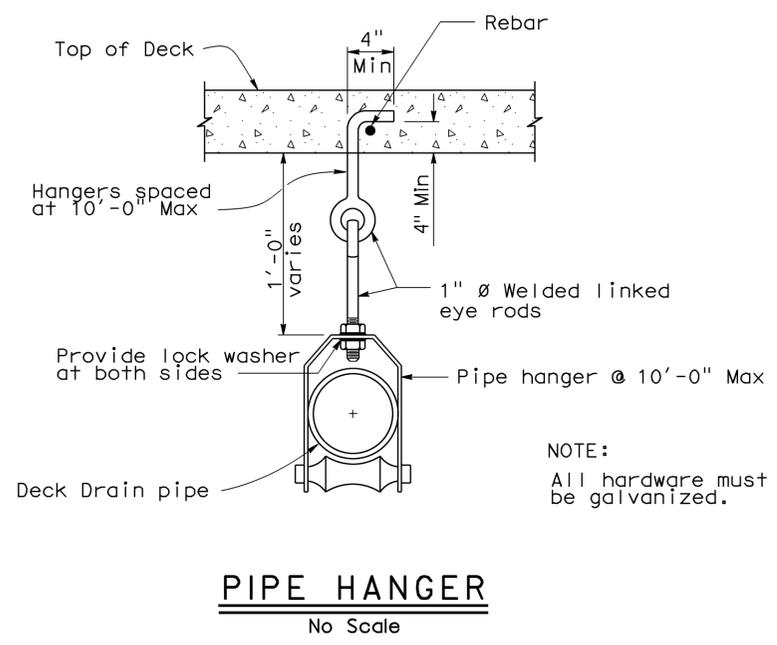
* Indicates "No Splice Zone", centered about $\text{\textcircled{C}}$ Span.

NOTES:

- Splices in additional reinforcement where allowed to be staggered.
- Reinforcement bars must be spaced equally within each bay

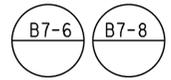
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Sujan Talukder	CHECKED Minh Vo	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO.	51-0342	CARPINTERIA CREEK BRIDGE (REPLACE) GIRDER REINFORCEMENT NO. 2				
	DETAILS	BY B. Jenko	CHECKED Minh Vo			POST MILE	2.44					
	QUANTITIES	BY Tracy Sanderson	CHECKED Renee Anderson									
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3592	PROJECT NUMBER & PHASE: 05000005431		CONTRACT NO.: 05-4482U4	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 7-09-12 8-16-12 9-06-12 10-10-13	SHEET 19	OF 30

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	561	786
Rakesh Deo REGISTERED CIVIL ENGINEER			5-23-14	DATE	
12-7-15 PLANS APPROVAL DATE			Rakesh Deo No. C73814 Exp. 6/30/17 CIVIL STATE OF CALIFORNIA		
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PLAN
No scale

NOTE:
 ■ - Indicates Deck drain Type D-1
 Drain pipe - 2% slope minimum



- NOTES:
1. All hardware must be galvanized.
 2. Deck Drain pipe detail at Abutment 2, see



STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Sujan Talukder	CHECKED Mario Guadamuz	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO.	CARPINTERIA CREEK BRIDGE (REPLACE) DECK DRAINAGE DETAILS
	DETAILS	BY Bruno Jenko	CHECKED Mario Guadamuz			51-0342	
	QUANTITIES	BY Tracy Sanderson	CHECKED Renee Anderson			POST MILE 2.44	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				UNIT: 3592	PROJECT NUMBER & PHASE: 05000005431	CONTRACT NO.: 05-4482U4	DISREGARD PRINTS BEARING EARLIER REVISION DATES
				0 1 2 3	FILE => 51-0342-r-dd0101.dgn	REVISION DATES	SHEET 20 OF 30

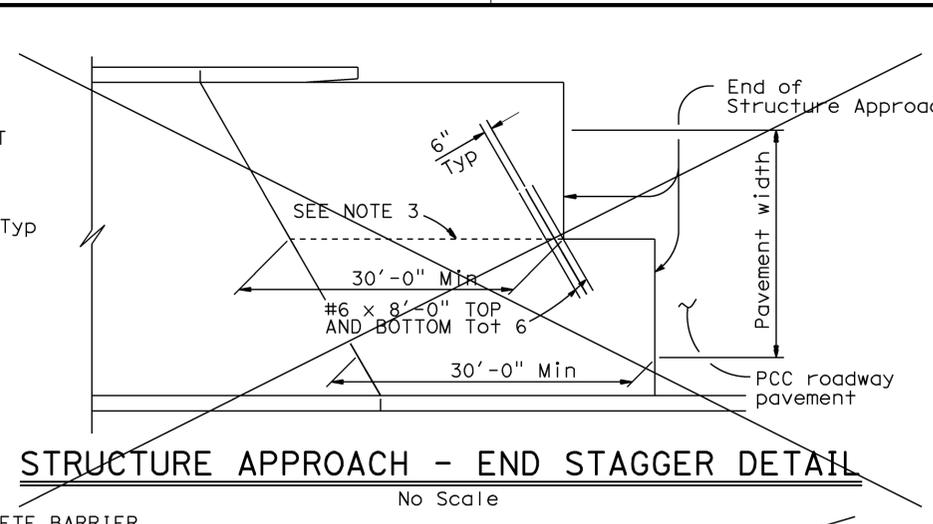
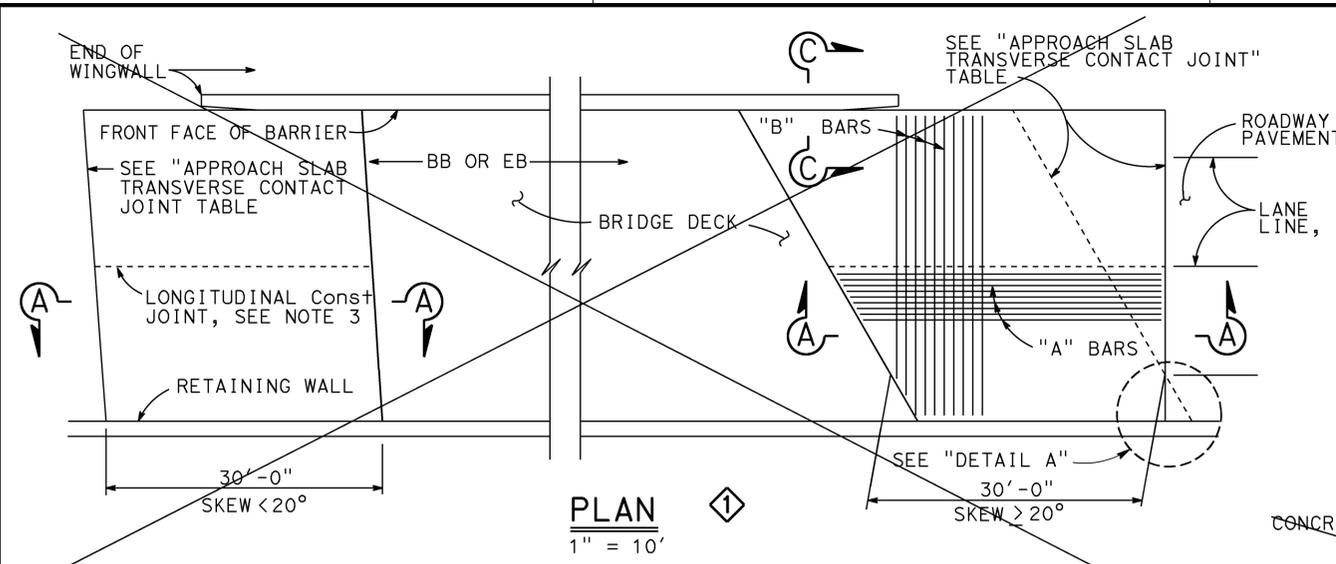
USERNAME => s1157655 DATE PLOTTED => 04-DEC-2015 TIME PLOTTED => 08:50

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	562	786

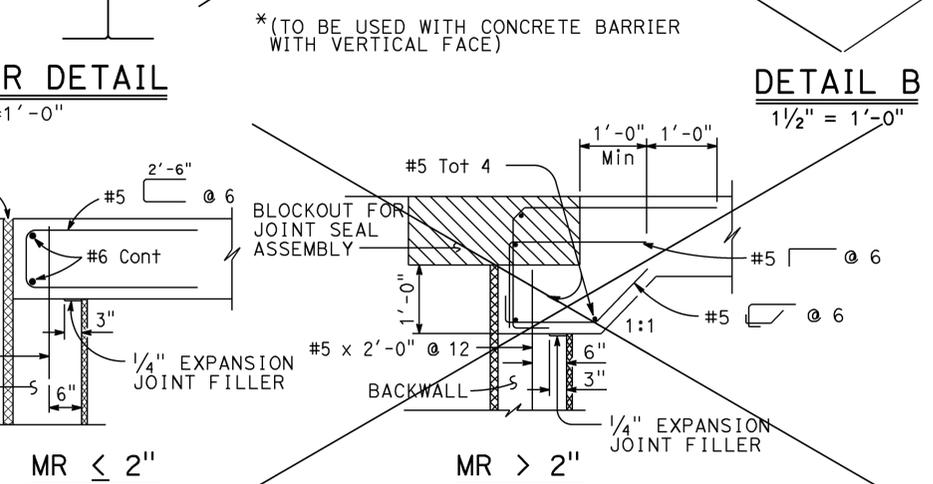
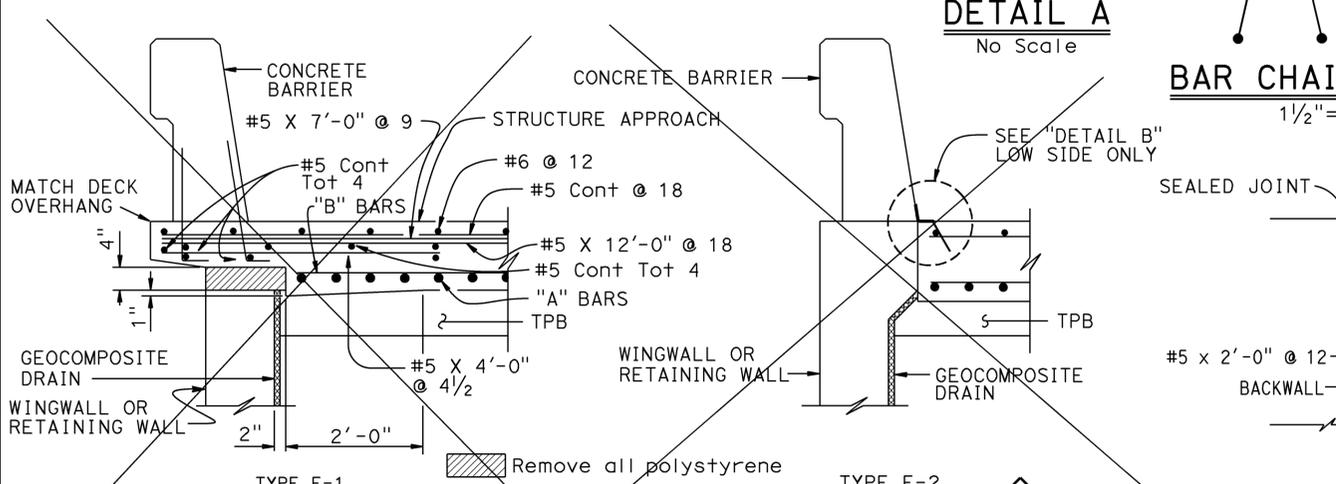
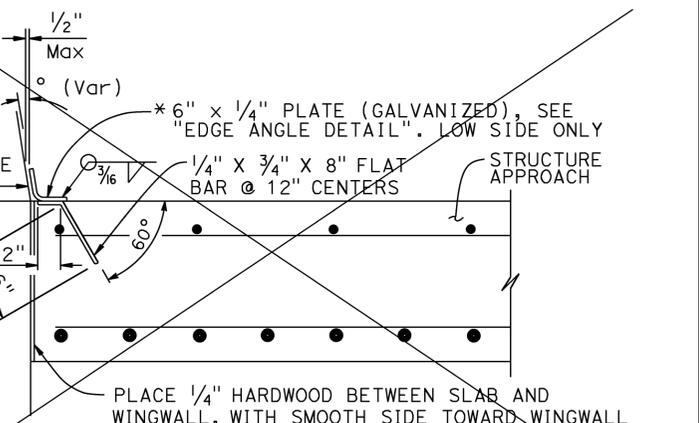
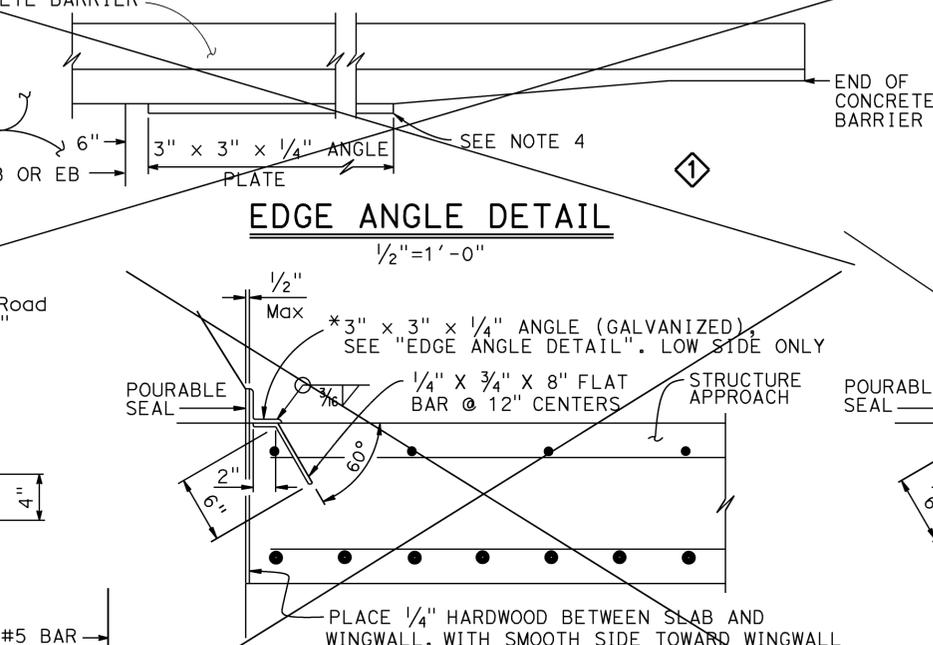
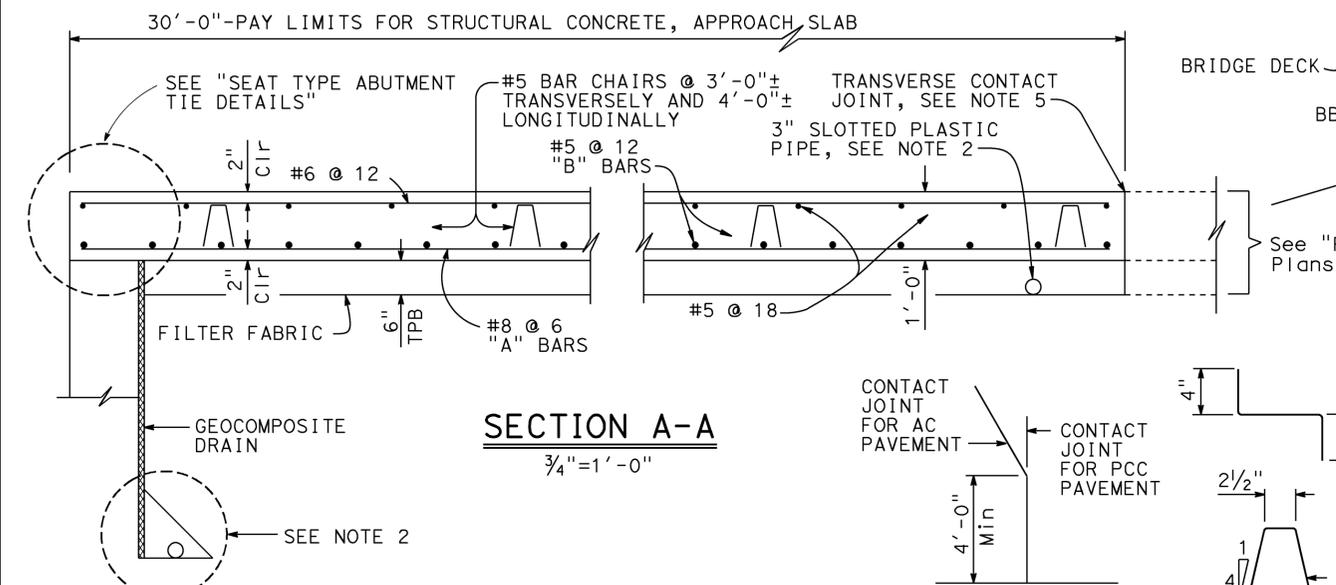
Rakesh Deo
 REGISTERED CIVIL ENGINEER
 DATE 5-23-14
 PLANS APPROVAL DATE 12-7-15

Rakesh Deo
 No. C73814
 Exp. 6/30/17
 CIVIL
 STATE OF CALIFORNIA

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APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
<math>< 20^\circ</math>	PARALLEL TO FACE OF PN	PARALLEL TO FACE OF PN
$20^\circ - 45^\circ$	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER LINES 24' TO 36' APART
> 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER AT EACH LANE LINE



- NOTES:**
- For details not shown, see Structure Plans. For MR ≤ 2, adjust bar reinforcement to clear a sawcut for sealed joint, when required.
 - For drainage details, see "STRUCTURE APPROACH DRAINAGE DETAILS" sheet.
 - For longitudinal construction joints in approach slab, see "ABUTMENT DETAILS NO.4" sheet.
 - End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable.
 - For transverse contact joint with new PCC paving, refer to Standard Plan P10.
 - Approach slab transverse reinforcement may be placed parallel to paving notch. Spacing of transverse reinforcement is measured along roadway.

REMOVED STANDARD DRAWING

Does Not Apply

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH 7

BRIDGE NO. 51-0342
 POST MILE 2.44

CARPINTERIA CREEK BRIDGE (REPLACE)
STRUCTURE APPROACH TYPE N(30S)

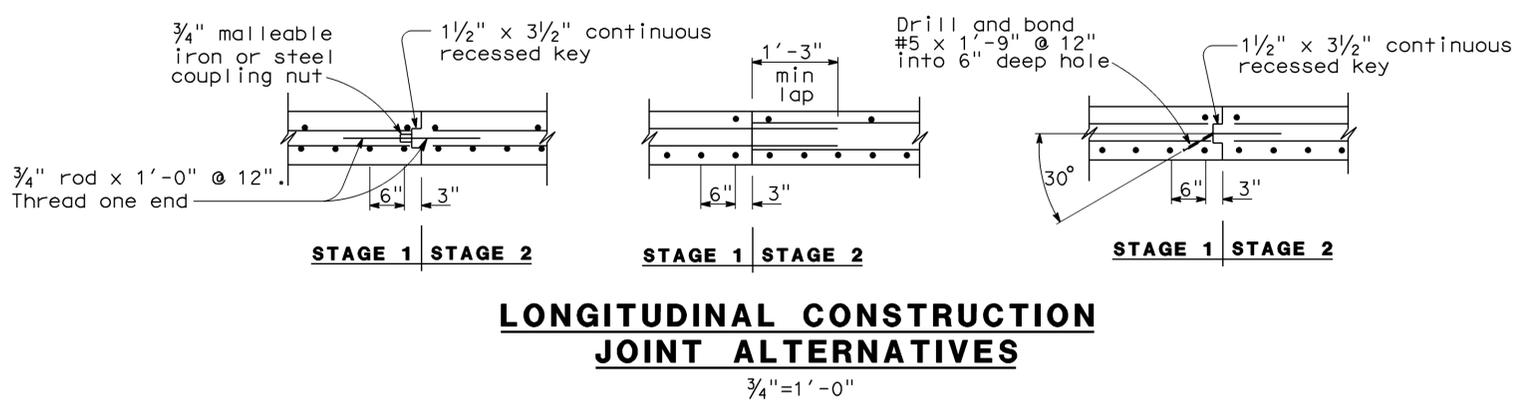
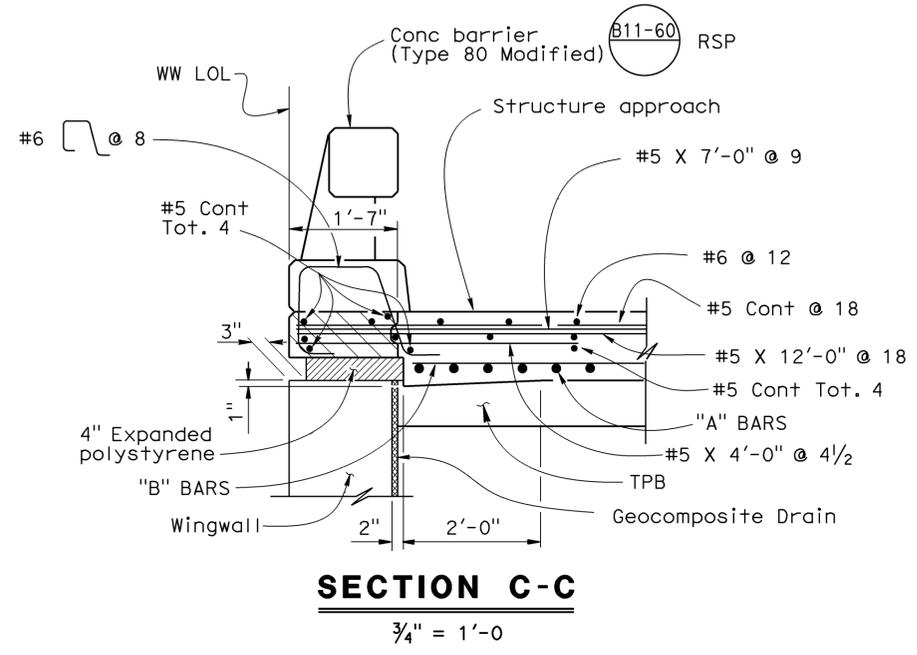
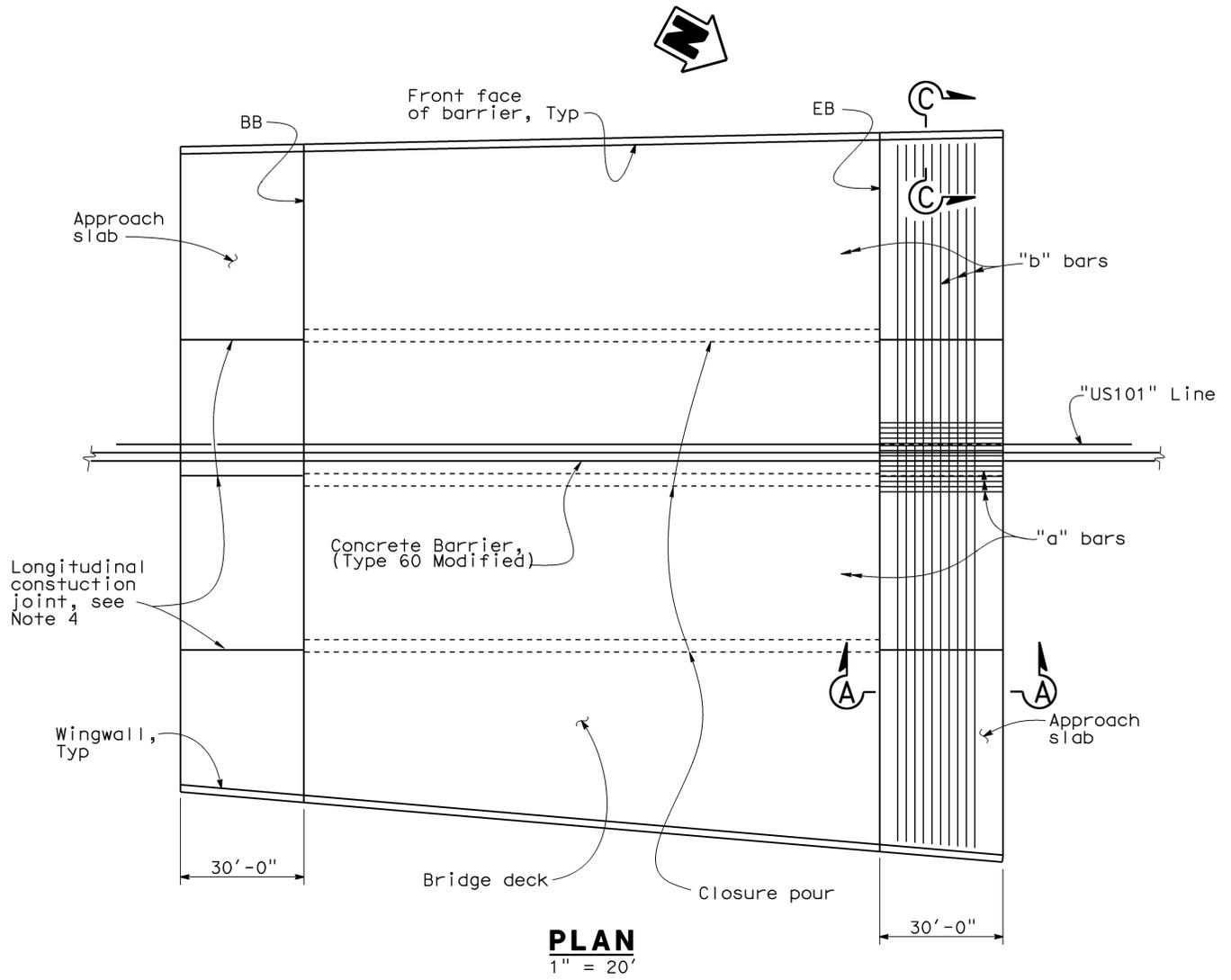
UNIT: 3592
 PROJECT NUMBER & PHASE: 05000005431
 CONTRACT NO.: 05-4482U4

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES: 10-9-12

SHEET 21 OF 30

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	563	786
			Rakesh Deo 5-23-14 REGISTERED CIVIL ENGINEER DATE		
			12-7-15 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.					



- NOTES:
- For Concrete Barrier (Type 60 Modified), see "CONCRETE BARRIER DETAILS NO. 1" sheet.
 - For drainage details, see "STRUCTURE APPROACH DRAINAGE DETAILS" sheet.
 - For "SECTION A-A" and approach slab details not shown, see "STRUCTURE APPROACH TYPE N(30S)" sheet.
 - Longitudinal construction joint in approach slab, see "ABUTMENT DETAILS NO. 4" sheet.

LEGEND:

	Indicates integrally colored concrete
	Indicates expanded polystyrene

DESIGN	BY Sujan Talukder	CHECKED Minh Vo
DETAILS	BY B. Jenko / G. Dickerson	CHECKED Minh Vo
QUANTITIES	BY Tracy Sanderson	CHECKED Renee Anderson

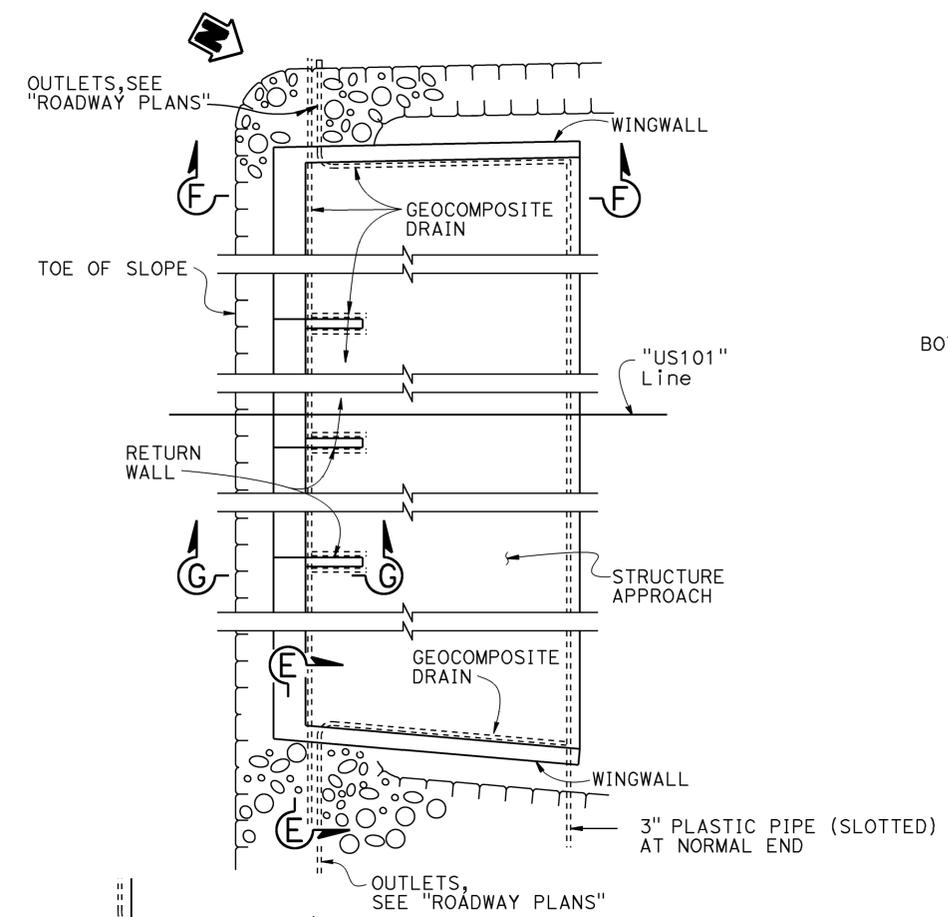
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 7

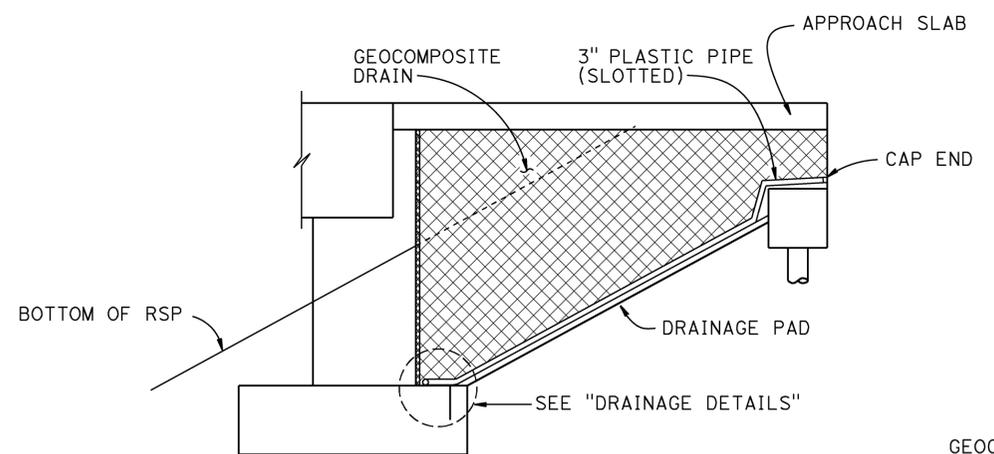
BRIDGE NO.	51-0342
POST MILE	2.44

CARPINTERIA CREEK BRIDGE (REPLACE)
STRUCTURE APPROACH DETAILS

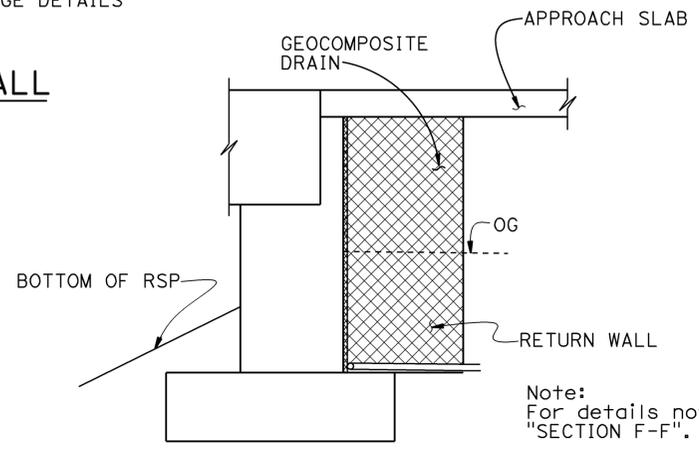
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	564	786
			5-23-14		
			REGISTERED CIVIL ENGINEER		
			12-7-15		
			PLANS APPROVAL DATE		
<p><i>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</i></p>					



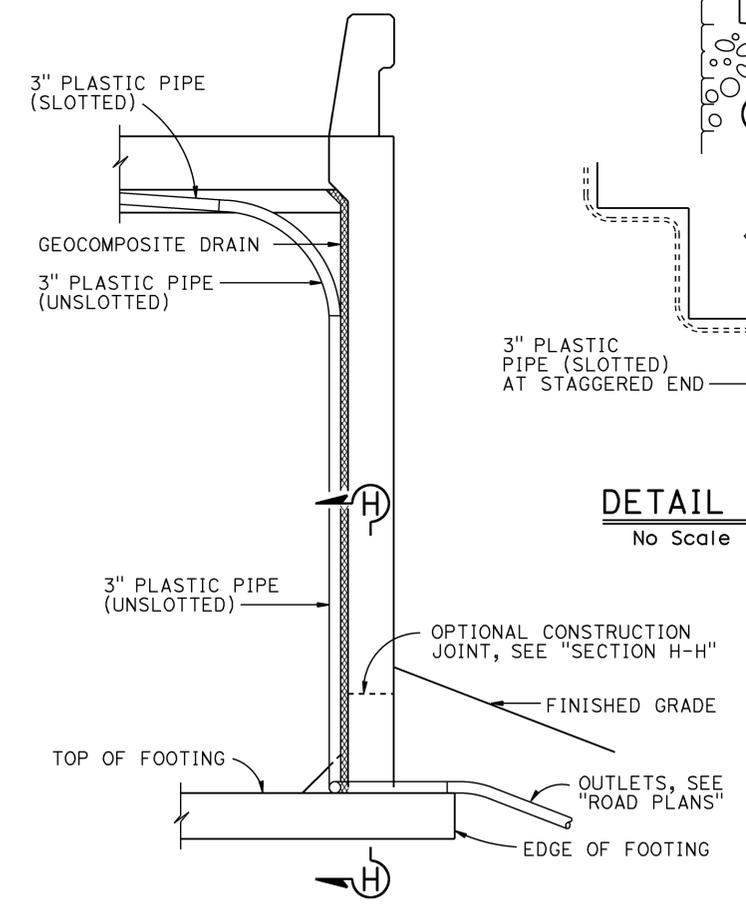
TYPICAL PLAN
No scale



CANTILEVER WINGWALL SECTION F-F
No scale

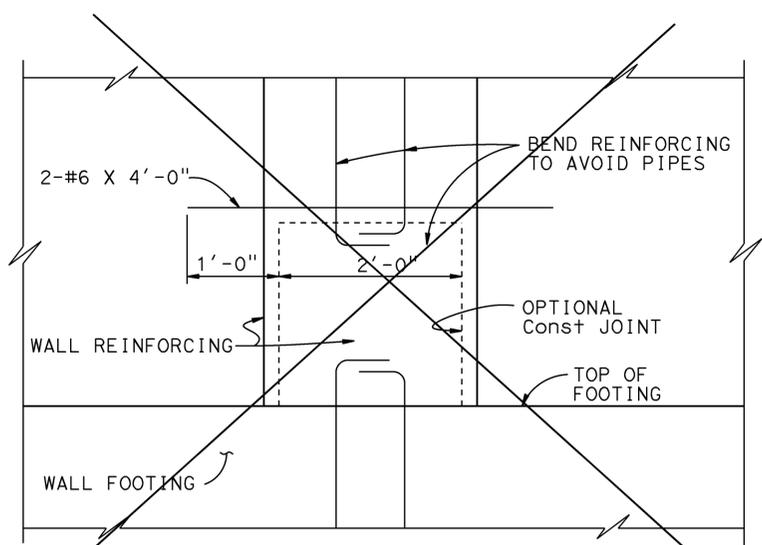
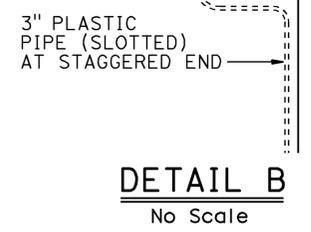


RETURN WALL SECTION G-G
No scale

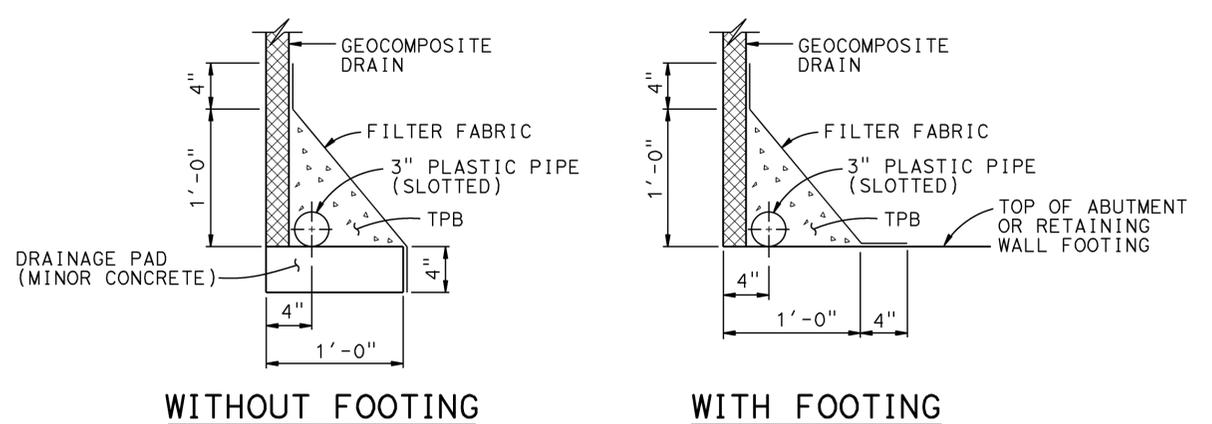


SECTION E-E
1/2" = 1'-0"

NOTE: Bends and junctions in 3" plastic pipe are 30" radius Min



SECTION H-H
1" = 1'-0"
Does not apply



WITHOUT FOOTING

WITH FOOTING

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

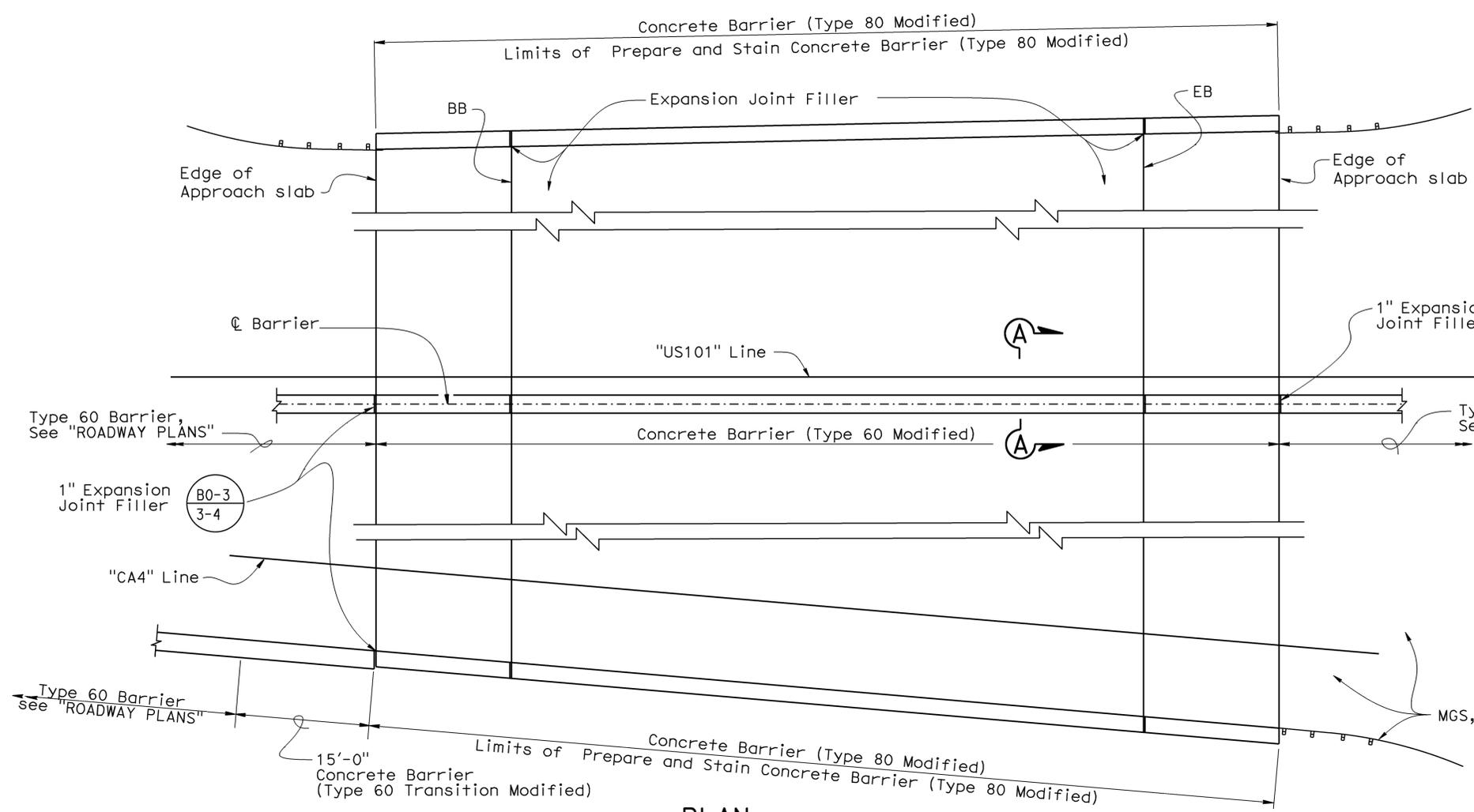
REVISED STANDARD DRAWING	1 Revised "TYPICAL PLAN" view
FILE NO. xs3-110	APPROVAL DATE July 2011

STATE OF CALIFORNIA	
DEPARTMENT OF TRANSPORTATION	

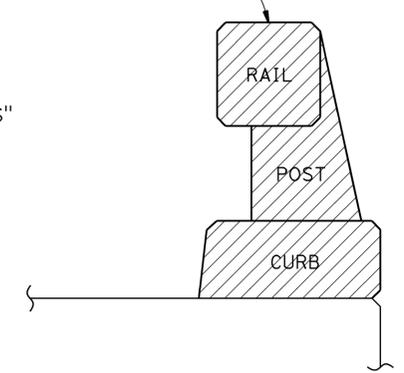
DIVISION OF ENGINEERING SERVICES	
BRIDGE NO.	51-0342
POST MILE	2.44

CARPINTERIA CREEK BRIDGE (REPLACE)	
STRUCTURE APPROACH DRAINAGE DETAILS	

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	565	786
			5-23-14		
Rakesh Deo			DATE		
REGISTERED CIVIL ENGINEER			12-7-15		
			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.					



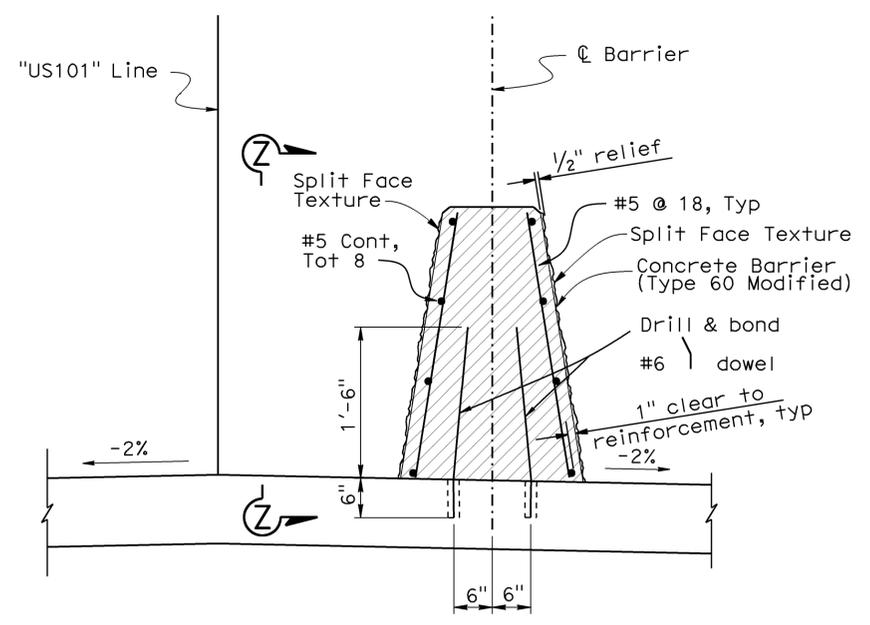
Wood beam texture on all four sides of the rail. Prepare and stain wood beam texture



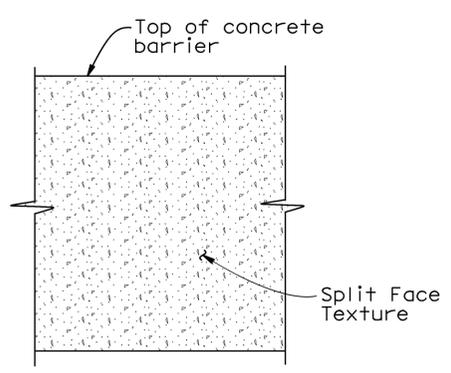
CONCRETE BARRIER (TYPE 80 MODIFIED)
NO SCALE

LEGEND: Indicates integrally colored concrete

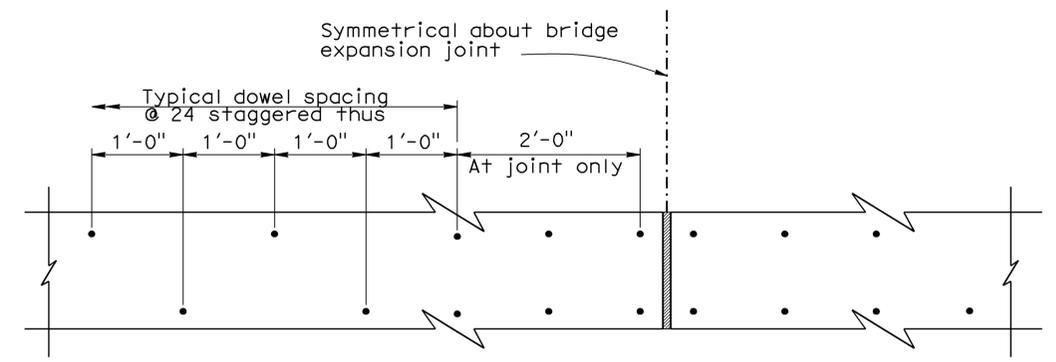
NOTE:
For barrier transition details not shown, see "CONCRETE BARRIER DETAILS NO. 2" sheet.



SECTION A-A
1" = 1'-0" (A76A)



VIEW Z-Z
1" = 1'-0"



PLAN DOWEL SPACING AT EXPANSION JOINT
1" = 1'-0"

NOTE:
Minor adjustment may be made in dowel spacing to clear main reinforcement.

DESIGN	Sujan Talukder	M. Guadamuz
BY	B. Jenko / Y. Feng	CHECKED M. Guadamuz
QUANTITIES	Tracy Sanderson	CHECKED Renee Anderson

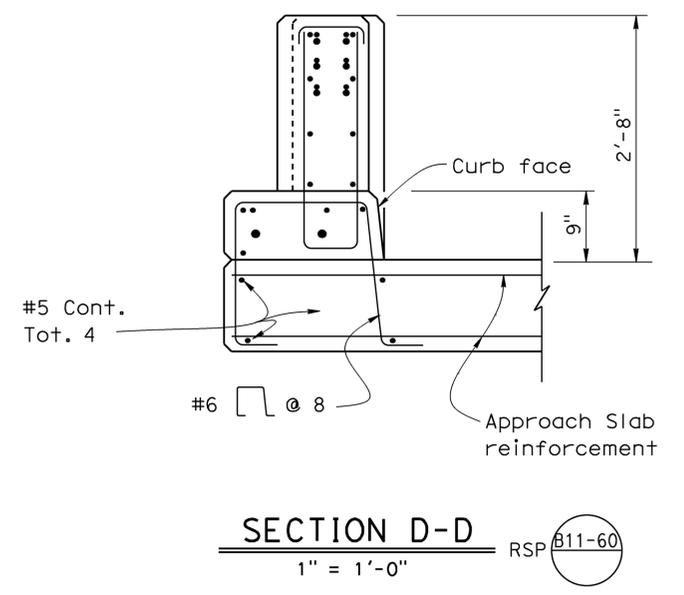
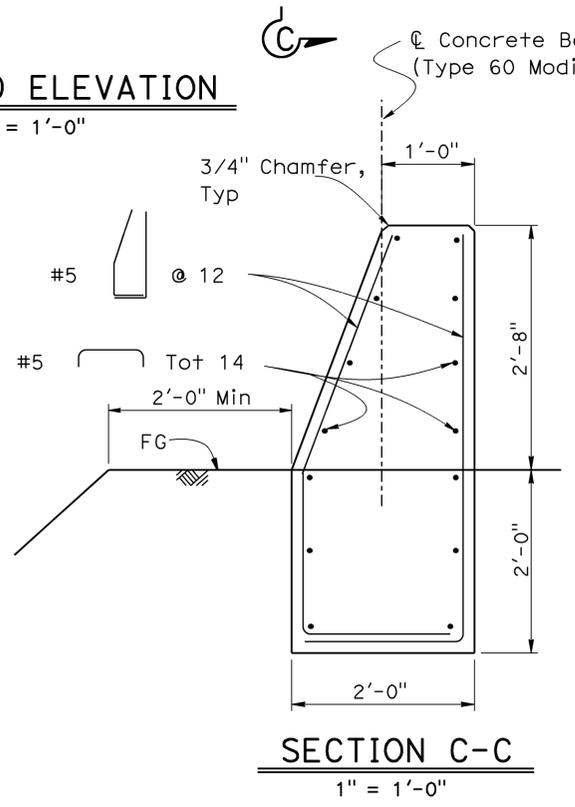
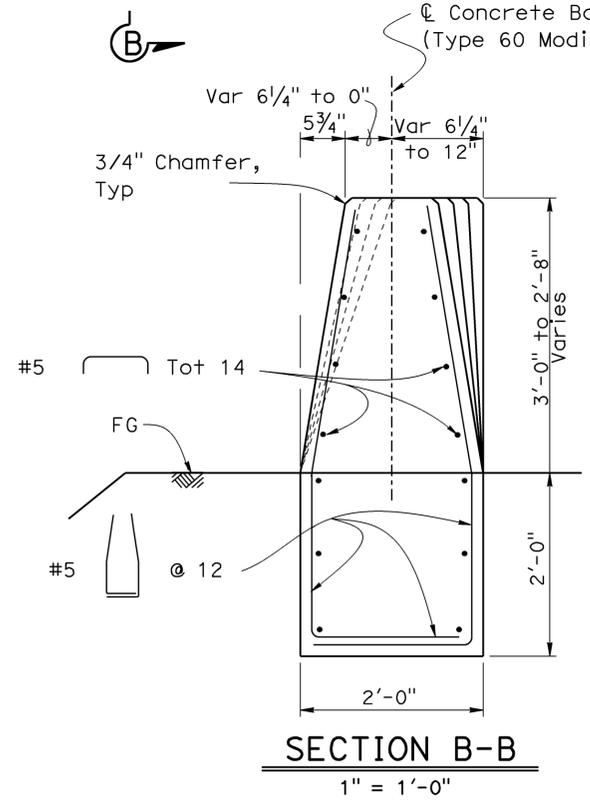
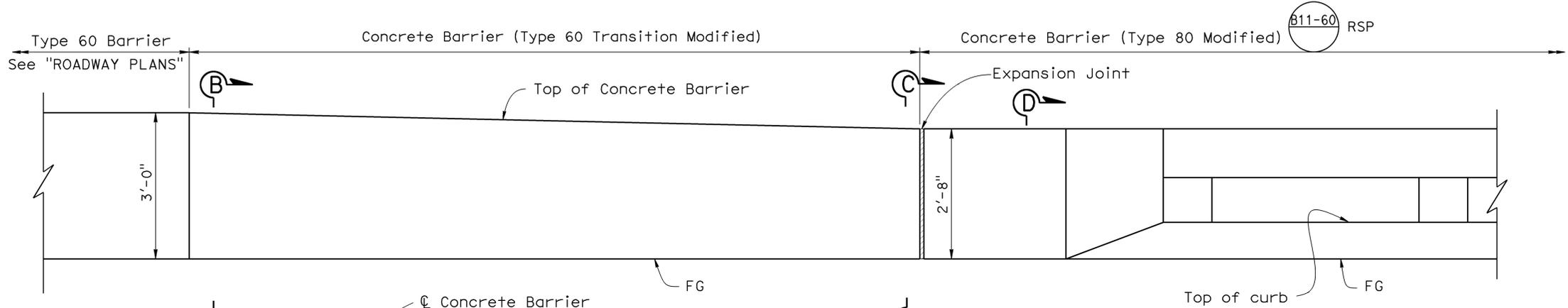
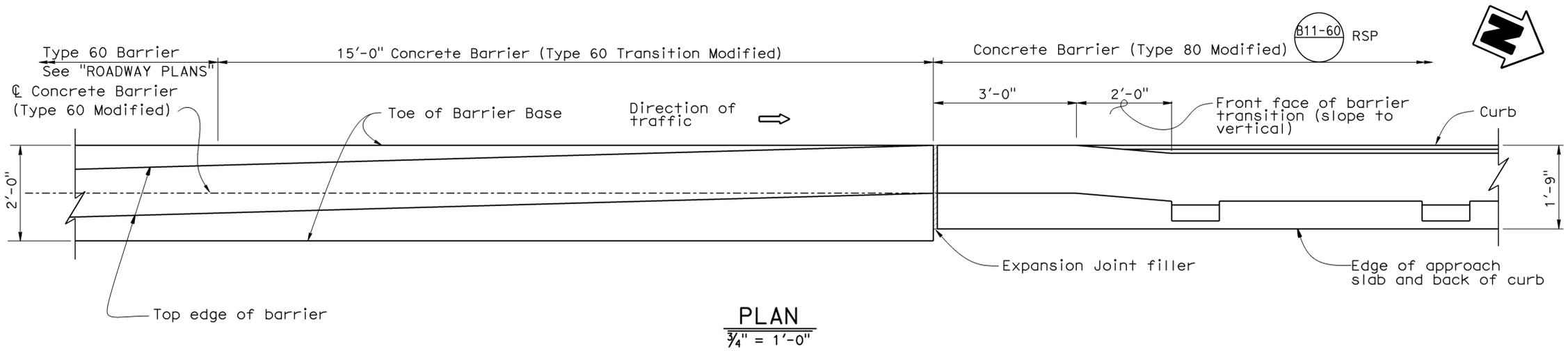
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO.	51-0342
POST MILE	2.44

CARPINTERIA CREEK BRIDGE (REPLACE)
CONCRETE BARRIER DETAILS NO. 1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	566	786
Rakesh Deo REGISTERED CIVIL ENGINEER			5-23-14 DATE		
12-7-15 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.					



DESIGN	BY Sujan Talukder	CHECKED M. Guadamuz
DETAILS	BY Yingjue Feng	CHECKED M. Guadamuz
QUANTITIES	BY Tracy Sanderson	CHECKED Renee Anderson

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO.	51-0342
POST MILE	2.44

CARPINTERIA CREEK BRIDGE (REPLACE)
CONCRETE BARRIER DETAILS NO. 2

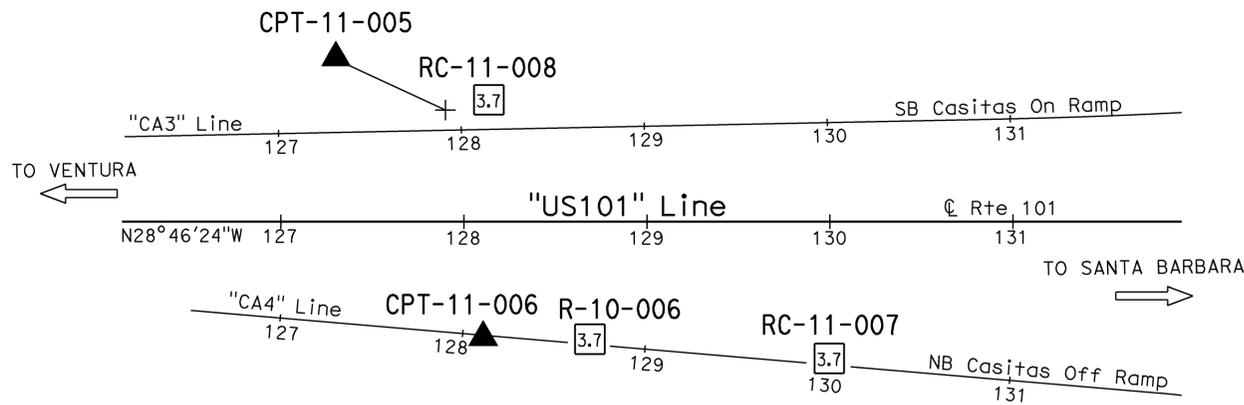
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	567	786

REGISTERED CIVIL ENGINEER *Ryan Turner* DATE 3-5-14
 PLANS APPROVAL DATE 12-7-15
 No. C73956 Exp. 6-30-17
 CIVIL STATE OF CALIFORNIA

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BENCH MARK

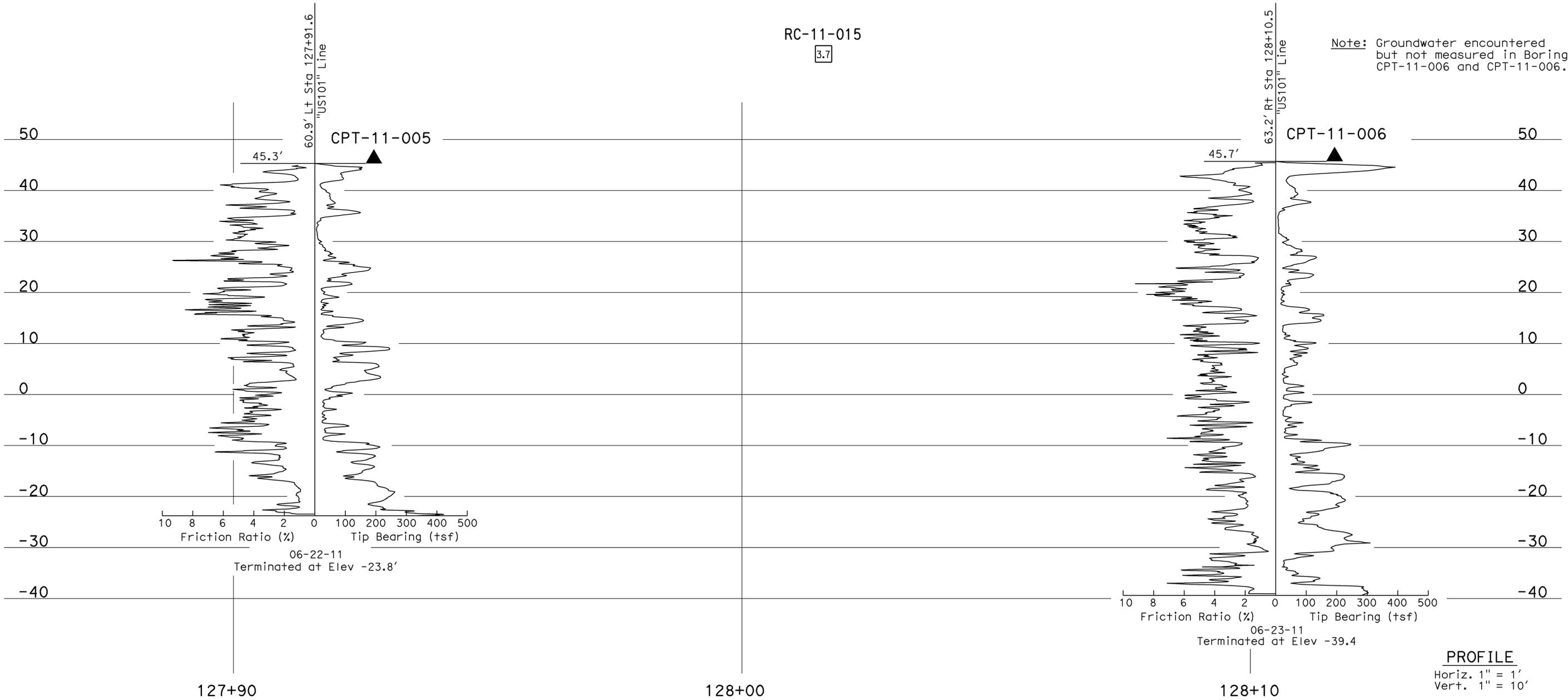
SB101 PM2.43 Elev 40.09
 Fnd 1" IP w/Caltrans Control PP w/Nail
 300.37 Rt "US101" Line, C Rte 101
 Sta 127+82.01
 N 1,969,332.70
 E 6,106,522.27
 SB101 PM2.47 Elev 41.63
 Fnd 1" IP w/Caltrans Control PP w/Nail
 2.53 Rt "US101" Line, C Rte 101
 Sta 130+88.10
 N 1,969,457.63
 E 6,106,113.87
 Vert Datum NAVD88



PLAN

1" = 50'

Note: Groundwater encountered but not measured in Borings CPT-11-006 and CPT-11-006.



PROFILE

Horiz. 1" = 1'
 Vert. 1" = 10'

ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		CARPINTERIA CREEK BRIDGE (REPLACE)	
FUNCTIONAL SUPERVISOR		DRAWN BY: F. Nguyen, IG-Remmen		DEPARTMENT OF TRANSPORTATION		STRUCTURE DESIGN		51-0342		LOG OF TEST BORINGS 1 OF 5	
NAME: M. Finegan		CHECKED BY: M. Jurasius		FIELD INVESTIGATION BY: R. Turner		DESIGN BRANCH 7		POST MILE			
05 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3643		PROJECT NUMBER & PHASE: 05000005431		CONTRACT NO.: 05-4482U4		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
				0 1 2 3		2.44		REVISION DATES		SHEET OF	
								01-22-13 06-06-13 02-06-14 02-20-14		26 30	

USERNAME => S115755 DATE PLOTTED => 04-DEC-2015 TIME PLOTTED => 08:50

FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS 1 OF 5"

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	568	786

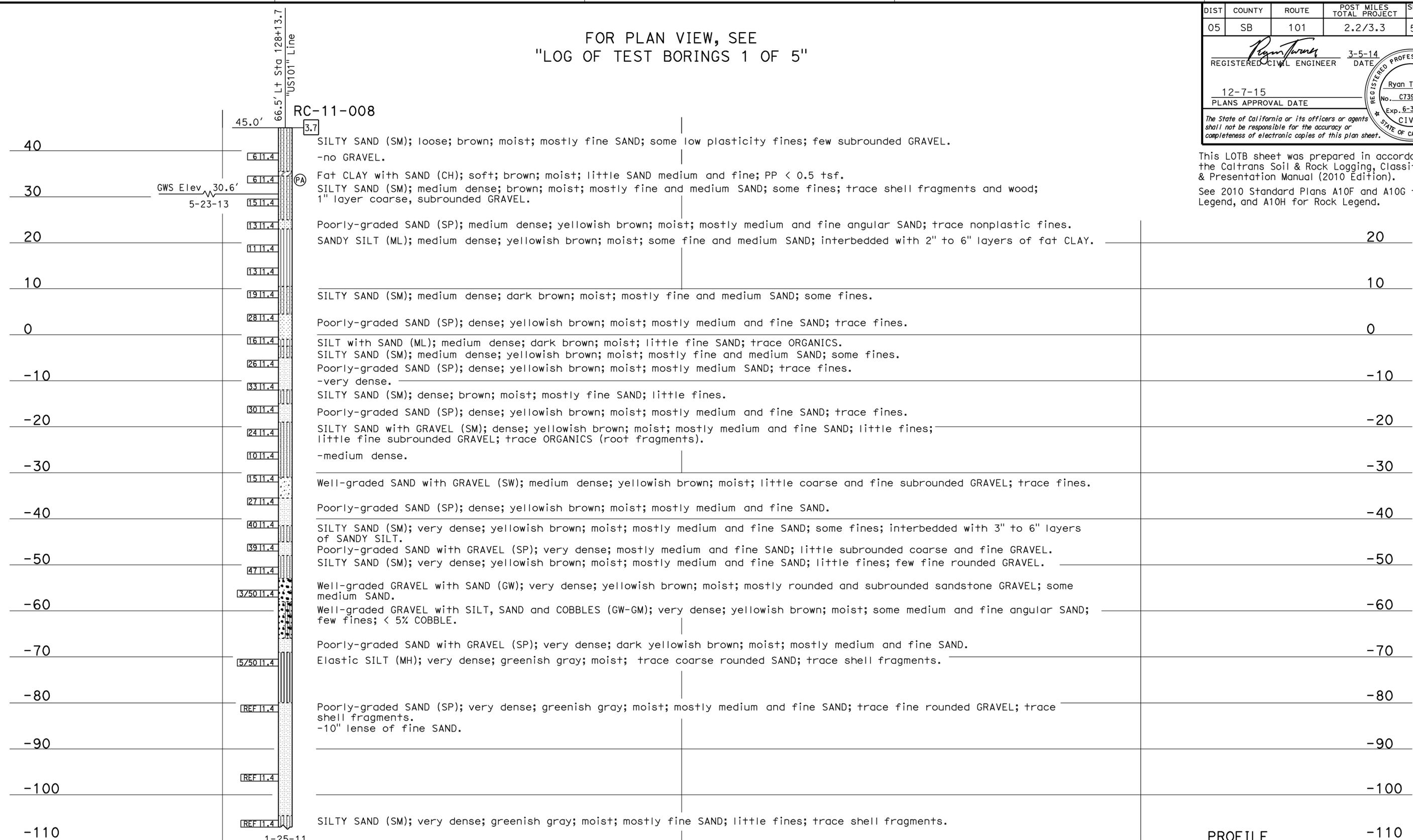
REGISTERED CIVIL ENGINEER *Ryan Turner* DATE 3-5-14

12-7-15 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Ryan Turner
No. C73956
Exp. 6-30-17
CIVIL
STATE OF CALIFORNIA

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This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).
See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.



PROFILE
Horiz: 1" = 10'
Vert: 1" = 10'

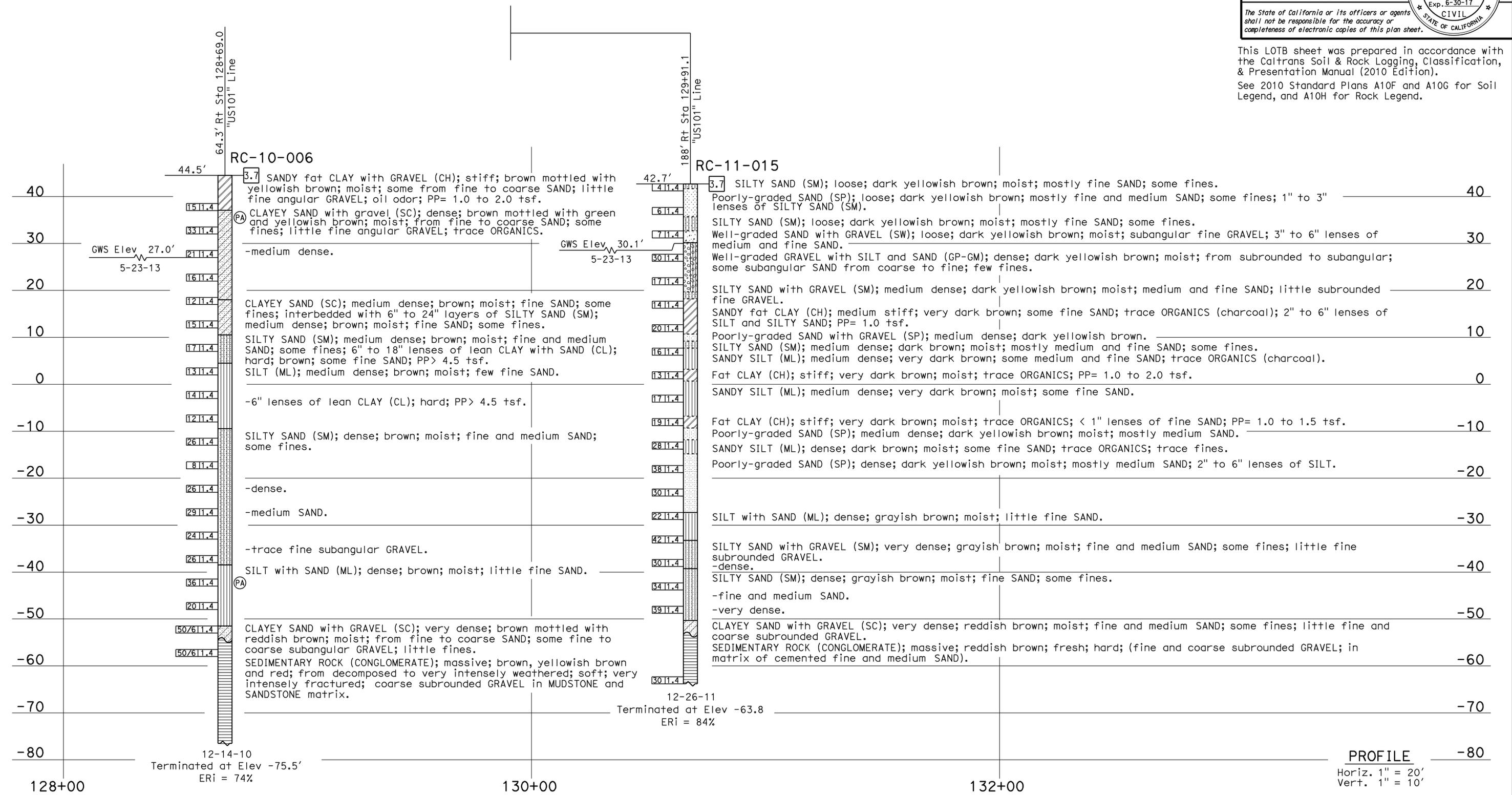
ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION		DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7		BRIDGE NO. 51-0342 POST MILE 2.44		CARPINTERIA CREEK BRIDGE (REPLACE)	
FUNCTIONAL SUPERVISOR NAME: M. Finegan		DRAWN BY: F. Nguyen, IG-Remmen CHECKED BY: D. Appelbaum		FIELD INVESTIGATION BY: M. Jurasius		UNIT: 3643 PROJECT NUMBER & PHASE: 05000005431		CONTRACT NO.: 05-4482U4		LOG OF TEST BORINGS 2 OF 5	
06S CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES 01-22-13 06-06-13 02-06-14 03-05-14		SHEET OF 27 30	

FILE => 51-0342-z-1tb02.dgn

USERNAME => s115755 DATE PLOTTED => 04-DEC-2015 TIME PLOTTED => 08:50

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	569	786
			3-5-14	DATE	
REGISTERED CIVIL ENGINEER Ryan Turner No. C73956 Exp. 6-30-17 CIVIL STATE OF CALIFORNIA			12-7-15	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>					

FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS 1 OF 5"



This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition). See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.

ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		CARPINTERIA CREEK BRIDGE (REPLACE)	
FUNCTIONAL SUPERVISOR		DRAWN BY: F. Nguyen, IG-Remmen		DEPARTMENT OF TRANSPORTATION		STRUCTURE DESIGN		51-0342		LOG OF TEST BORINGS 3 OF 5	
NAME: M. Finegan		CHECKED BY: D. Appelbaum		FIELD INVESTIGATION BY:		DESIGN BRANCH 7		POST MILE			
				R. Turner, M. Jurasius				2.44			
06S CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3643		PROJECT NUMBER & PHASE: 05000005431		CONTRACT NO.: 05-4482U4		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
				0 1 2 3				REVISION DATES		SHEET OF	
								01-22-13 06-06-13 02-06-14 03-04-14		28 30	

USERNAME => S115755 DATE PLOTTED => 04-DEC-2015 TIME PLOTTED => 08:50

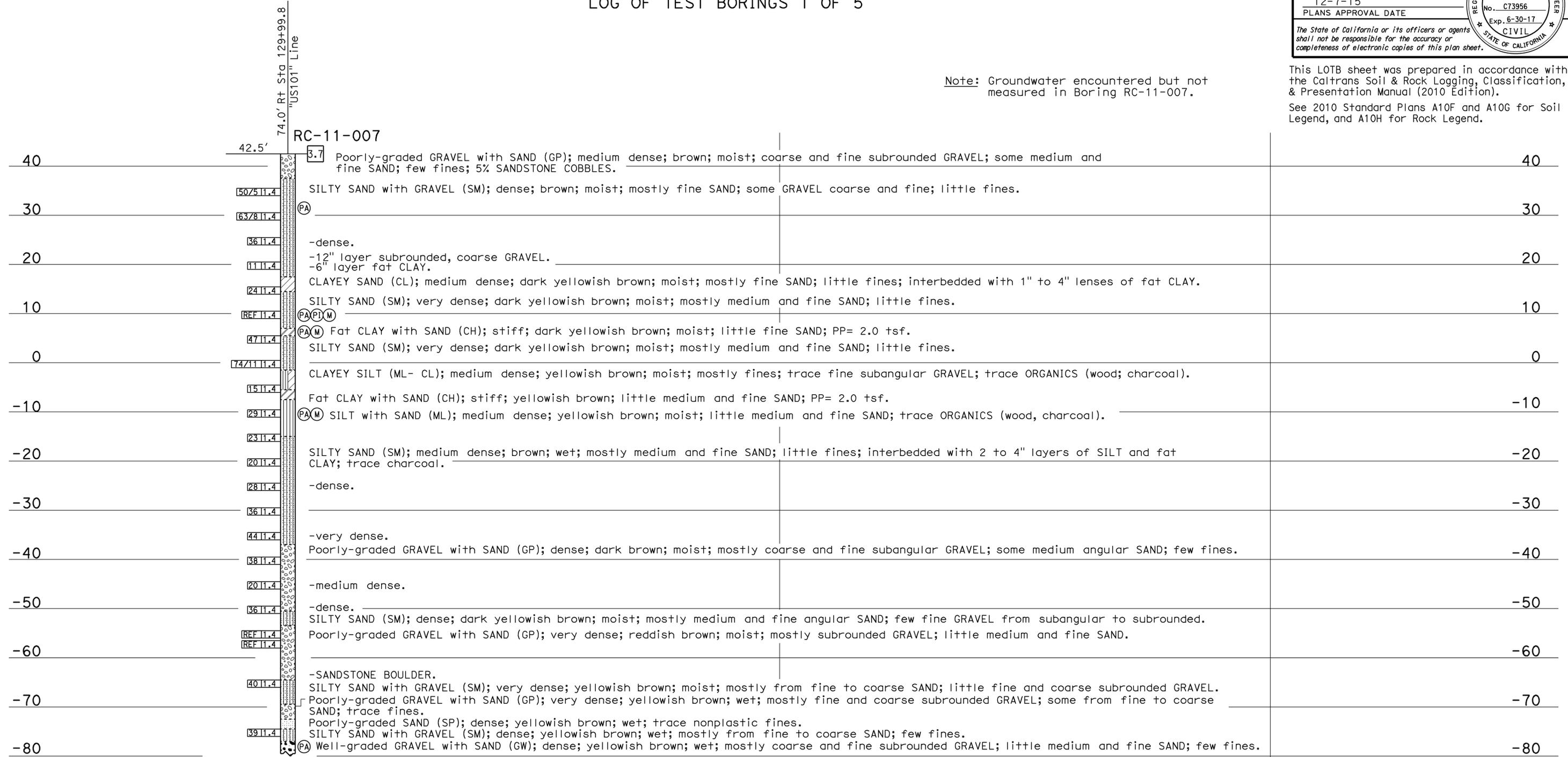
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	570	786

REGISTERED CIVIL ENGINEER *Ryan Turner* DATE 3-5-14
 PLANS APPROVAL DATE 12-7-15
 No. C73956 Exp. 6-30-17
 CIVIL
 STATE OF CALIFORNIA
 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.

FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS 1 OF 5"

Note: Groundwater encountered but not measured in Boring RC-11-007.

This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).
See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.



PROFILE
Horiz: 1" = 10'
Vert: 1" = 10'

ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		CARPINTERIA CREEK BRIDGE (REPLACE)	
FUNCTIONAL SUPERVISOR		DRAWN BY: F. Nguyen, IG-Remmen		FIELD INVESTIGATION BY:		STRUCTURE DESIGN		51-0342		LOG OF TEST BORINGS 4 OF 5	
NAME: M. Finegan		CHECKED BY: D. Appelbaum		M. Jurasius		DESIGN BRANCH 7		POST MILE			
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		UNIT: 3643		2.44		CONTRACT NO.: 05-4482U4	
						PROJECT NUMBER & PHASE: 05000005431		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES	
						FILE => 51-0342-z-1+04.dgn				SHEET 29 OF 30	

USERNAME => s115755 DATE PLOTTED => 04-DEC-2015 TIME PLOTTED => 08:30

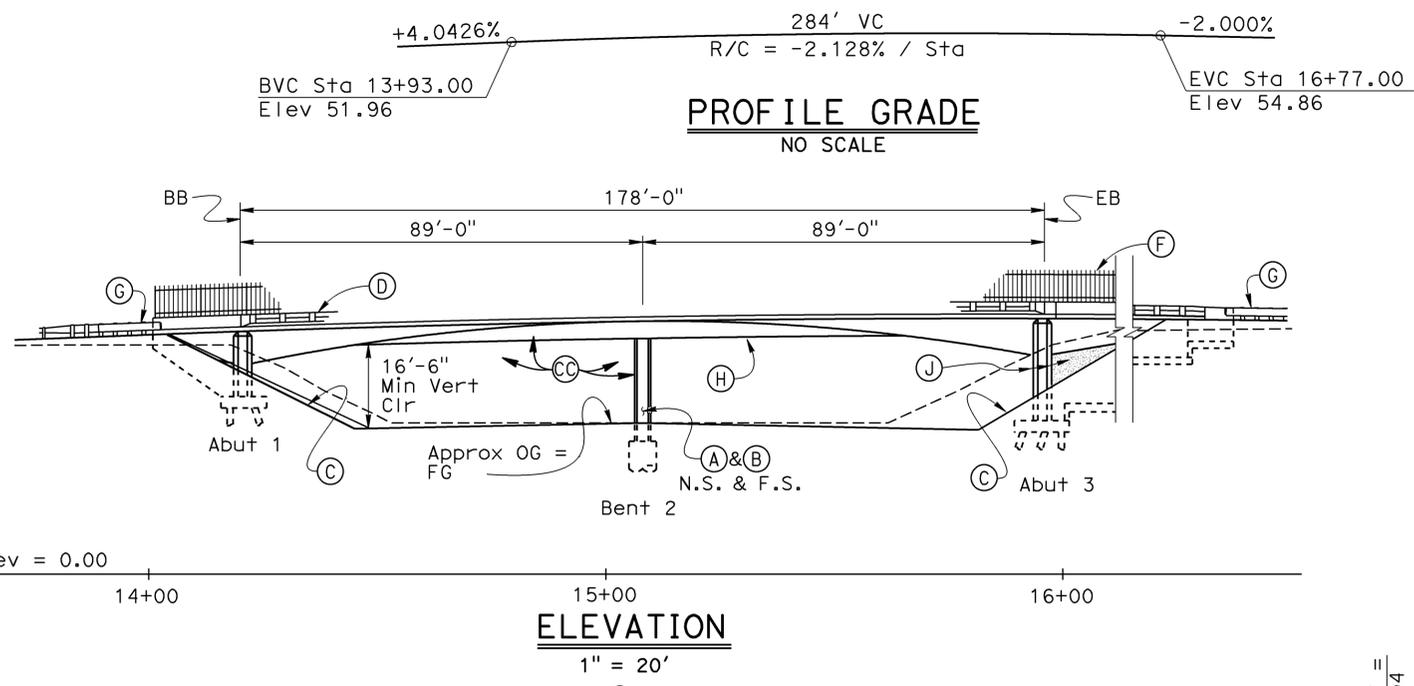
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	572	786

Rakesh Deo		5-23-14
REGISTERED CIVIL ENGINEER		DATE
12-7-15		PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER

Rakesh Deo
No. C73814
Exp. 6/30/17
CIVIL
STATE OF CALIFORNIA

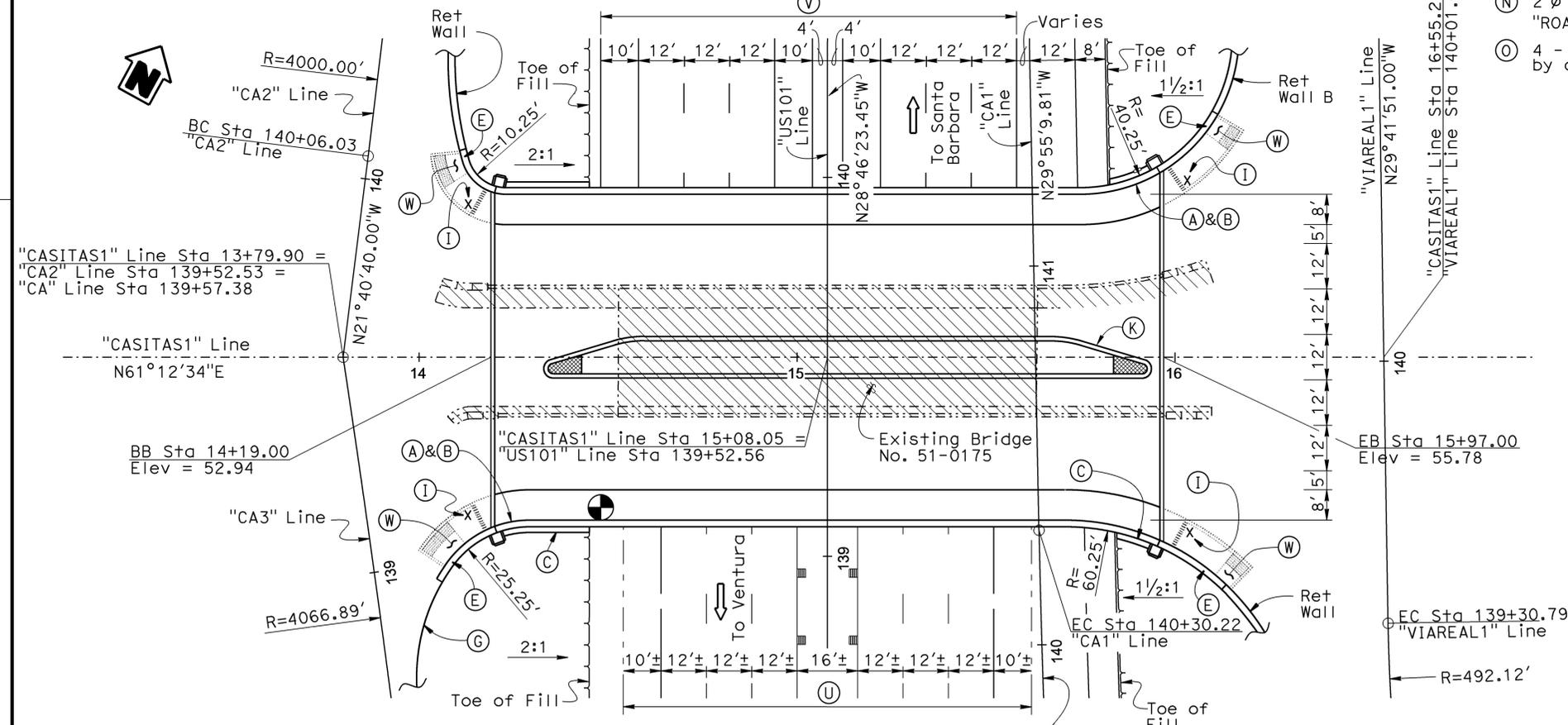
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- NOTES:
- (A) Paint "Casitas Pass Road Overcrossing"
 - (B) Paint "Br. No. 51-0343"
 - (C) Slope Paving (Split Faced Block Texture)
 - (D) Concrete Barrier (Type 80SW Modified)
 - (E) Concrete Barrier (Type 80A Modified)
 - (F) Picket Fence Railing
 - (G) MGS, see "ROADWAY PLANS"
 - (H) For architectural details on exterior girder, see "BRIDGE GEOMETRICS NO. 1" sheet
 - (I) Traffic signals, see "ROADWAY PLANS"
 - (J) In-and-out block texture and limits of prepare and stain concrete on abutment face, wingwalls and retaining walls
 - (K) Bridge planter, see "BRIDGE PLANTER LAYOUT", "BRIDGE PLANTER DETAILS NO. 1, NO. 2, AND NO. 3", AND BRIDGE PLANTER DRAINAGE" sheets.
 - (L) 2"Ø Electric Conduit (decorative lights), see "ROADWAY PLANS"
 - (M) 2"Ø Future Electric Conduit (Caltrans), see "ROADWAY PLANS"
 - (N) 2"Ø Electric Conduit (irrigation), see "ROADWAY PLANS"
 - (O) 4 - 4" (Tot 8) Verizon Telephone Conduit, by others

- (P) 3"Ø water supply line
- (Q) City Of Carpinteria 8" water line and 12" casing, by others
- (R) 4 - 5" SCE power conduit, by others
- (S) 4" Cox Cable television conduit, by others
- (T) 2"Ø electrical conduit (traffic signal), see "ROADWAY PLANS"
- (U) Existing "US101" lane configuration
- (V) Future "US101" lane configuration
- (W) Sidewalk and ADA ramp, see "ROADWAY PLANS"
- (X) Deck drainage
- (Y) Bridge planter drainage
- (AA) 10"Ø water line (12"Ø casing), Carpinteria Valley Water District
- (CC) Integrally colored concrete at abutments, bent and superstructure soffit slab and girders

NOTE: For Quantities, see "DECK CONTOURS" sheet.



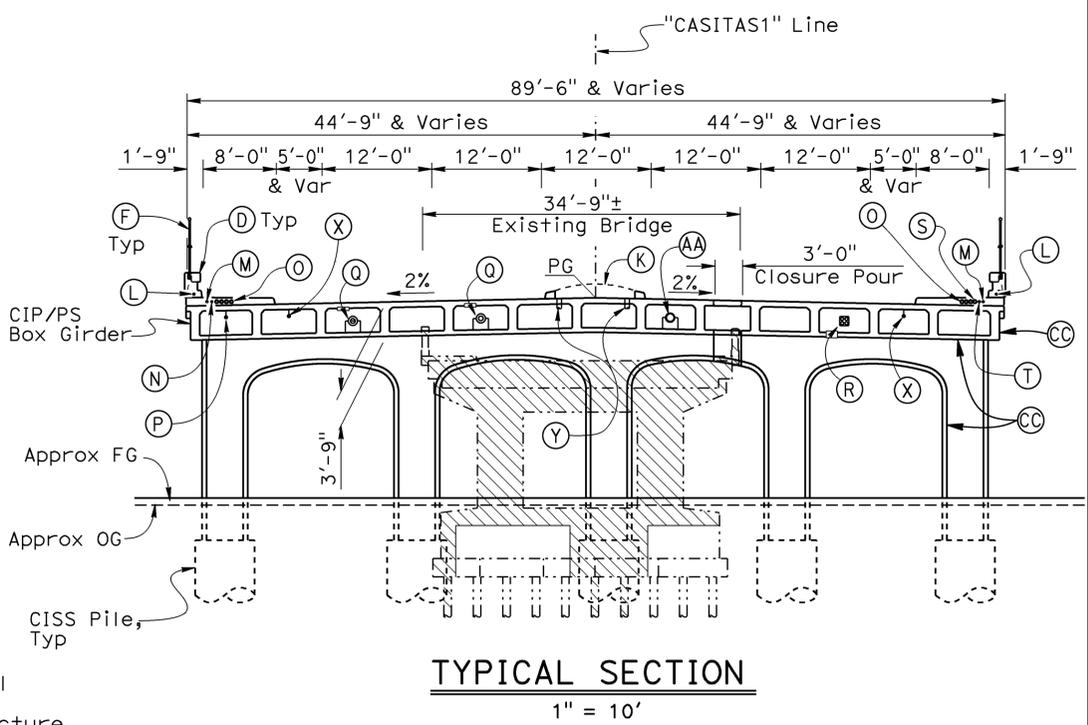
CURVE DATA

Line	R	Δ	T	L
"VIAREAL1" Line	492.12'	31°22'56"	138.25'	269.55'
"CA1" Line	3000.00'	3°11'29"	83.57'	167.10'
"CA2" Line	4000.00'	5°00'42"	175.06'	349.89'
"CA3" Line	4066.89'	4°20'39"	154.25'	308.35'
"CNOSE4" Line	100.01'	38°01'06"	34.45'	66.36'

PLAN
1" = 20'

LEGEND:

- Indicates bridge removal
- Indicates existing structure
- Indicates location of Min Vert Clr



Michael Downs DESIGN ENGINEER	DESIGN	BY Rakesh Deo	CHECKED Ubong Inyang	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO.	51-0343	CASITAS PASS ROAD OVERCROSSING (REPLACE) GENERAL PLAN NO. 1
	DETAILS	BY G. Dickerson	CHECKED Ubong Inyang	LAYOUT	BY Rakesh Deo			CHECKED Ubong Inyang	POST MILE	
QUANTITIES	BY H. Vu / J. Szaba	CHECKED Mario Guadamuz	SPECIFICATIONS	BY Dave Klein	CHECKED Dave Klein	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3592 PROJECT NUMBER & PHASE: 05000005431 CONTRACT NO.: 05-4482U4		DISREGARD PRINTS BEARING EARLIER REVISION DATES

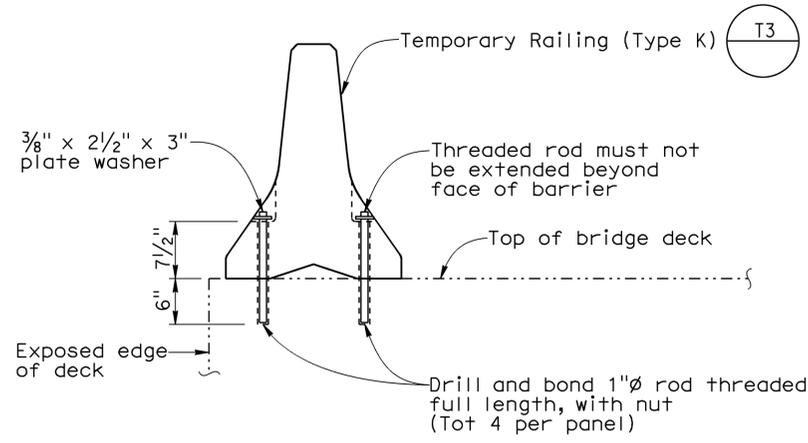
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	573	786

Rakesh Deo 5-23-14
 REGISTERED CIVIL ENGINEER DATE

12-7-15
 PLANS APPROVAL DATE

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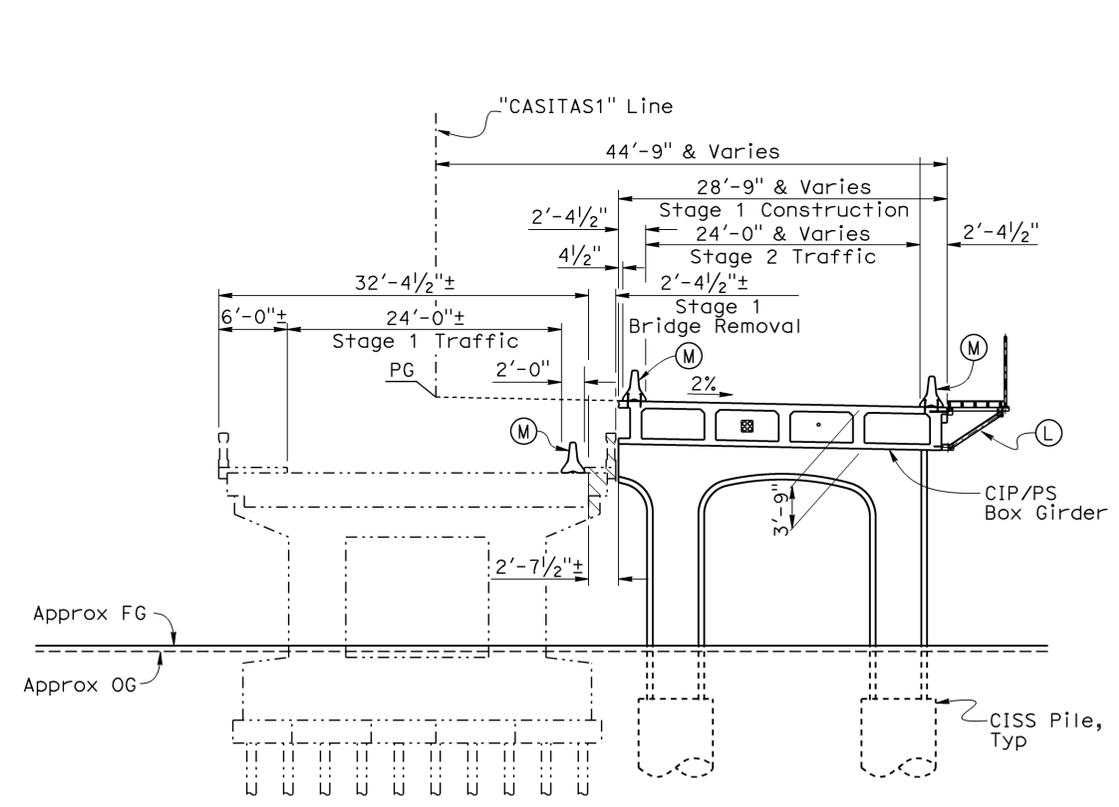
REGISTERED PROFESSIONAL ENGINEER
 Rakesh Deo
 No. C73814
 Exp. 6/30/17
 CIVIL
 STATE OF CALIFORNIA



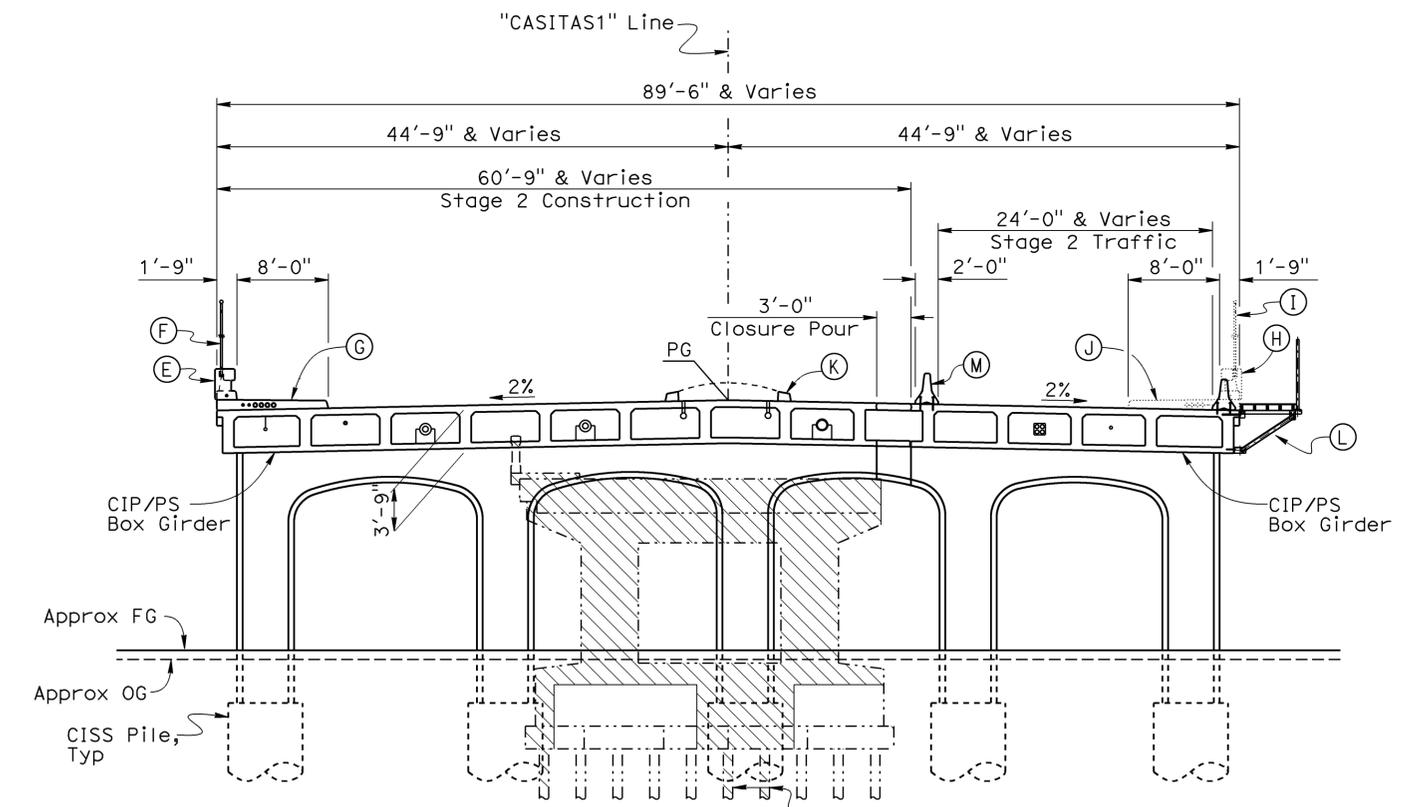
- NOTES:
1. Existing bridge elements within the limits of CISS piles shall be removed fully.
 - (E) Concrete Barrier (Type 80SW Modified)
 - (F) Picket Fence Railing
 - (G) Integral colored concrete sidewalk
 - (H) Concrete barrier (Type 80SW Modified). To be constructed at end of stage 2 construction
 - (I) Picket fence railing. To be constructed at end of stage 2 construction
 - (J) Integral colored concrete sidewalk. To be constructed at end of stage 2 construction
 - (K) Integral colored concrete curb at bridge planter to be constructed during stage 2 construction.
 - (L) Temporary pedestrian walkway. To be removed when sidewalk at left edge of deck is open for pedestrians at end of Stage 2 construction
 - (M) Temporary railing, Type K, see "ROADWAY PLANS"

LEGEND:
 - - - - - Indicates existing structure
 [Hatched Box] Indicates bridge removal

TEMPORARY RAILING (TYPE K) ATTACHMENT DETAIL
 No Scale



STAGE 1
 1/8" = 1'-0"



STAGE 2
 1/8" = 1'-0"

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

DESIGN	BY Rakesh Deo	CHECKED Ubong Inyang
DETAILS	BY G. Dickerson/C. Cancino	CHECKED Ubong Inyang
QUANTITIES	BY H. Vu / J. Szabo	CHECKED Mario Guadamuz

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO.	51-0343
POST MILE	2.64

CASITAS PASS ROAD OVERCROSSING (REPLACE)
CONSTRUCTION STAGING PLAN

USERNAME => s1115755 DATE PLOTTED => 04-DEC-2015 TIME PLOTTED => 08:51

INDEX TO PLANS

SHEET NO.	TITLE	SHEET NO.	TITLE
1	GENERAL PLAN	28	DECK DRAINAGE DETAILS
2	CONSTRUCTION STAGING PLAN	29	SLOPE PAVING - FULL SLOPE
3	INDEX TO PLANS	30	SLOPE PAVING DETAILS
4	DECK CONTOURS	31	IN-AND-OUT BLOCK TEXTURE
5	FOUNDATION PLAN	32	SIDEWALK EXPANSION JOINT ARMOR
6	ABUTMENT 1 LAYOUT	33	BARRIER MOUNTED PICKET FENCE RAILING LAYOUT NO. 1
7	ABUTMENT 3 LAYOUT	34	BARRIER MOUNTED PICKET FENCE RAILING LAYOUT NO. 2
8	ABUTMENT DETAILS NO. 1	35	BARRIER MOUNTED PICKET FENCE RAILING DETAILS NO. 1
9	ABUTMENT DETAILS NO. 2	36	BARRIER MOUNTED PICKET FENCE RAILING DETAILS NO. 2
10	ABUTMENT DETAILS NO. 3	37	BARRIER MOUNTED PICKET FENCE RAILING DETAILS NO. 3
11	ABUTMENT DETAILS NO. 4	38	BRIDGE PLANTER LAYOUT
12	ABUTMENT DETAILS NO. 5	39	BRIDGE PLANTER DETAILS NO. 1
13	ABUTMENT DETAILS NO. 6	40	BRIDGE PLANTER DETAILS NO. 2
14	RETAINING WALL LAYOUT	41	BRIDGE PLANTER DETAILS NO. 3
15	RETAINING WALL DETAILS	42	BRIDGE PLANTER DRAINAGE
16	BENT LAYOUT	43	TEMPORARY PEDESTRIAN WALKWAY LAYOUT
17	BENT DETAILS NO. 1	44	TEMPORARY PEDESTRIAN WALKWAY TYPICAL SECTION
18	BENT DETAILS NO. 2	45	TEMPORARY PEDESTRIAN WALKWAY DETAILS NO. 1
19	BENT DETAILS NO. 3	46	TEMPORARY PEDESTRIAN WALKWAY DETAILS NO. 2
20	BRIDGE GEOMETRICS	47	TEMPORARY PEDESTRIAN WALKWAY DETAILS NO. 3
21	TYPICAL SECTION	48	LOG OF TEST BORINGS NO. 1 OF 6
22	GIRDER LAYOUT	49	LOG OF TEST BORINGS NO. 2 OF 6
23	GIRDER DETAILS NO. 1	50	LOG OF TEST BORINGS NO. 3 OF 6
24	GIRDER DETAILS NO. 2	51	LOG OF TEST BORINGS NO. 4 OF 6
25	GIRDER DETAILS NO. 3	52	LOG OF TEST BORINGS NO. 5 OF 6
26	GIRDER REINFORCEMENT NO. 1	53	LOG OF TEST BORINGS NO. 6 OF 6
27	GIRDER REINFORCEMENT NO. 2		

GENERAL NOTES LOAD AND RESISTANCE FACTOR DESIGN

DESIGN: AASHTO LRFD Bridge Design Specifications, 4th edition and the Caltrans Amendments, preface dated December 2011.

SEISMIC DESIGN: Caltrans Seismic Design Criteria, Version 1.6, dated November, 2010

SEISMIC LOAD: Acceleration Response Spectrum for Soil Profile D (M = 7.4)
Peak Bedrock Acceleration = 0.57g
V_{S100} = 679 ft/s

DEAD LOAD: Includes 35 psf for future wearing surface.

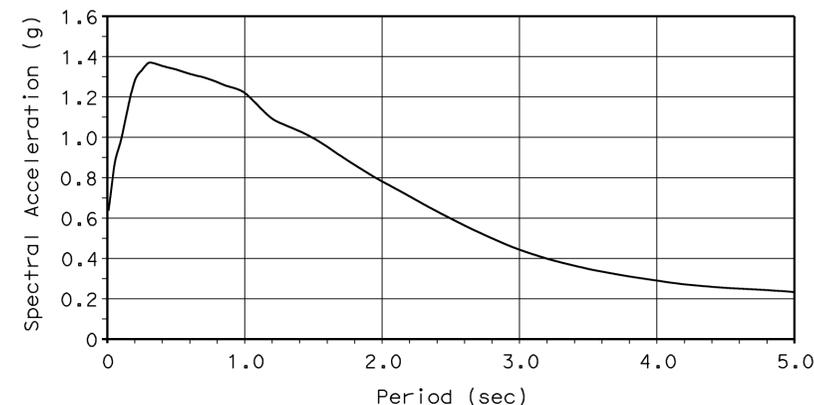
LIVE LOADING: HL93 and P-15 permit design load.

REINFORCED CONCRETE: f_y = 60 ksi
f'_c = 3.6 ksi
n = 8

PRESTRESSED CONCRETE: See "Prestressing Notes" on "GIRDER LAYOUT" sheet.

STEEL PIPE PILE: f_y = 45 ksi

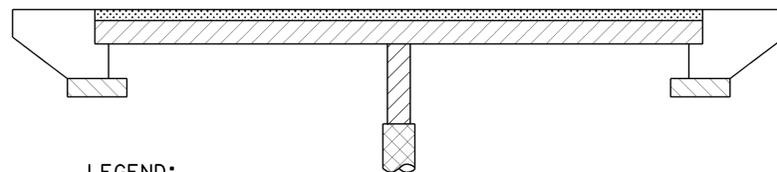
NOTE: Structural concrete bridge must be integrally colored concrete except where shown. For details, see "TYPICAL SECTION" sheet.



ACCELERATION RESPONSE SPECTRUM

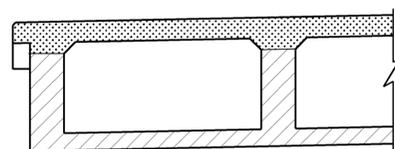
STANDARD PLANS DATED 2010

A10A	ABBREVIATIONS (SHEET 1 OF 2)
RSP A10B	ABBREVIATIONS (SHEET 2 OF 2)
A10C	LINES AND SYMBOLS (SHEET 1 OF 3)
A10D	LINES AND SYMBOLS (SHEET 2 OF 3)
A10E	LINES AND SYMBOLS (SHEET 3 OF 3)
A10F	LEGEND - SOIL (SHEET 1 OF 2)
A10G	LEGEND - SOIL (SHEET 2 OF 2)
A10H	LEGEND - ROCK
RSP A76C	CONCRETE BARRIER TYPE 60F
RSP A87A	CURB AND DRIVEWAYS
B0-1	BRIDGE DETAILS
B0-3	BRIDGE DETAILS
B0-5	BRIDGE DETAILS
B0-13	BRIDGE DETAILS
B2-5	PILE DETAILS CLASS 90 AND CLASS 140
B2-8	PILE DETAILS CLASS 200
RSP B3-4A	RETAINING WALL TYPE 5 (CASE 1)
RSP B3-5	RETAINING WALL DETAILS NO.1
B6-21	JOINT SEAL (MAXIMUM MOVEMENT RATING = 2")
B7-1	BOX GIRDER DETAILS
B7-6	DECK DRAIN TYPE D-1
B7-8	DECK DRAINAGE DETAILS
B7-10	UTILITY OPENING BOX GIRDER
RSP B8-5	CAST-IN-PLACE PRESTRESSED GIRDER DETAILS
B11-7	CHAIN LINK RAILING
RSP B11-60	CONCRETE BARRIER TYPE 80 (SHEET 1 OF 2)
B11-61	CONCRETE BARRIER TYPE 80 (SHEET 2 OF 2)
RSP B11-62	CONCRETE BARRIER TYPE 80SW (SHEET 1 OF 3)
B11-63	CONCRETE BARRIER TYPE 80SW (SHEET 2 OF 3)
B11-64	CONCRETE BARRIER TYPE 80SW (SHEET 3 OF 3)
B14-3	COMMUNICATION AND SPRINKLER CONTROL CONDUITS (CONDUIT LESS THAN 4")
B14-4	WATER SUPPLY LINE (BRIDGE)(PIPE SIZES LESS THAN 4")
B14-5	WATER SUPPLY LINE (DETAILS)(PIPE SIZES LESS THAN 4")
T3A	TEMPORARY RAILING (TYPE K)
T3B	TEMPORARY RAILING (TYPE K)



LEGEND:

[Solid Grey]	Structural concrete, Bridge
[Diagonal Hatching]	Structural concrete, Bridge (4.0 ksi at 28 days)
[Cross-hatching]	Structural concrete, Bridge Footing
[Dotted]	CISS Pile
[Stippled]	Structural Concrete, Bridge (Polymer Fiber) (4.0 Ksi at 28 days)



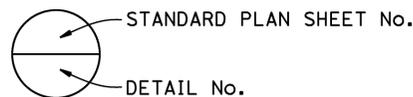
PART TYPICAL SECTION

CONCRETE STRENGTH AND TYPE LIMITS

No Scale

Location	Pile Type	Pile Cut-off Elevation (ft)	Nominal Resistance (kips)		Design Tip Elevation (ft)	Specified Driven Steel Shell Tip Elev (ft)	Specified Reinforcing and Concrete Tip Elev (ft)	Required Driving Resistance (kips)
			Compression	Tension				
Abut 1	Class 200 Alt "W"	36.67	400	N/A	-26.33 (a), -8 (c)	-26.33	N/A	400
Bent 2	78" CISS	29.00	4610	N/A	-47.0 (a), -46.0 (d)	-47.0	-37.0	3270
Abut 3	Class 200 Alt "W"	31.42	400	N/A	-21.58 (a), -10 (c)	-21.58	N/A	400
Abut 3 Wingwalls	Class 140 Alt "W"	35.42	160	N/A	10.42 (a)	10.42	N/A	160

- NOTES:
- Design tip elevations for Abutments are controlled by: (a) Compression, (c) Settlement.
 - Design tip elevations for Bents are controlled by: (a) Compression and (d) Lateral.
 - Required driving resistance at Abutments 1 and 3 exceed the required nominal resistance to provide sufficient penetration into a bearing layer.
 - The Specified tip elevations must not be raised above the design tip elevations for tension load, lateral load and tolerable settlement.



DESIGN	BY Rakesh Deo	CHECKED Ubong Inyang
DETAILS	BY G. Dickerson/C. Cancino	CHECKED Ubong Inyang
QUANTITIES	BY H. Vu / J. Szabo	CHECKED Mario Guadamuz

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

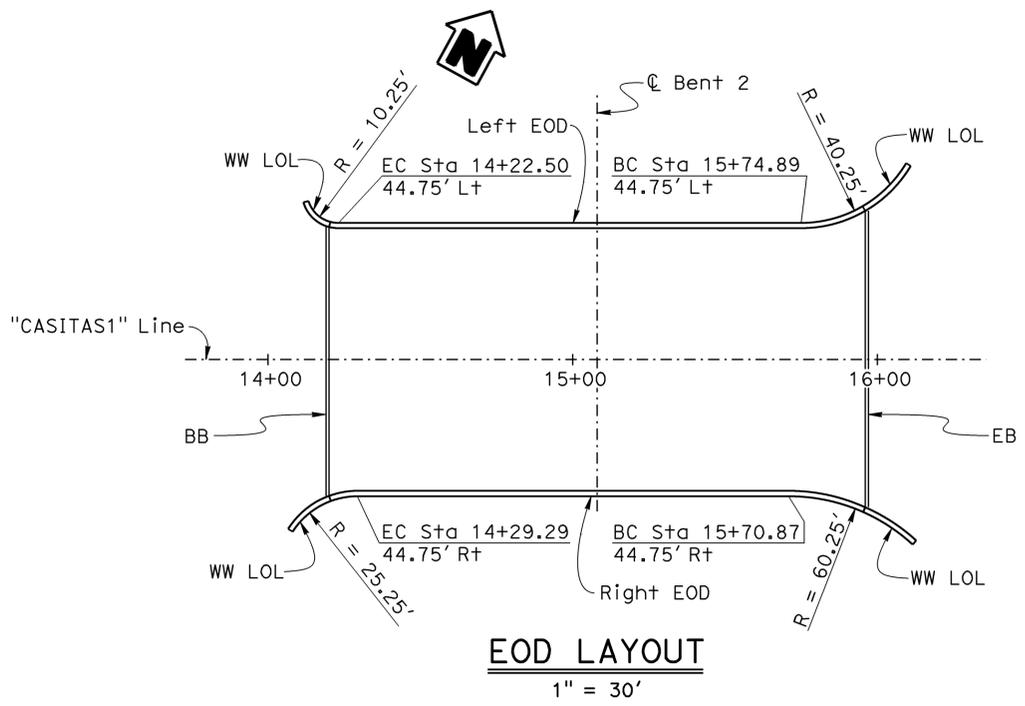
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO.	51-0343
POST MILE	2.64

CASITAS PASS ROAD OVERCROSSING (REPLACE)

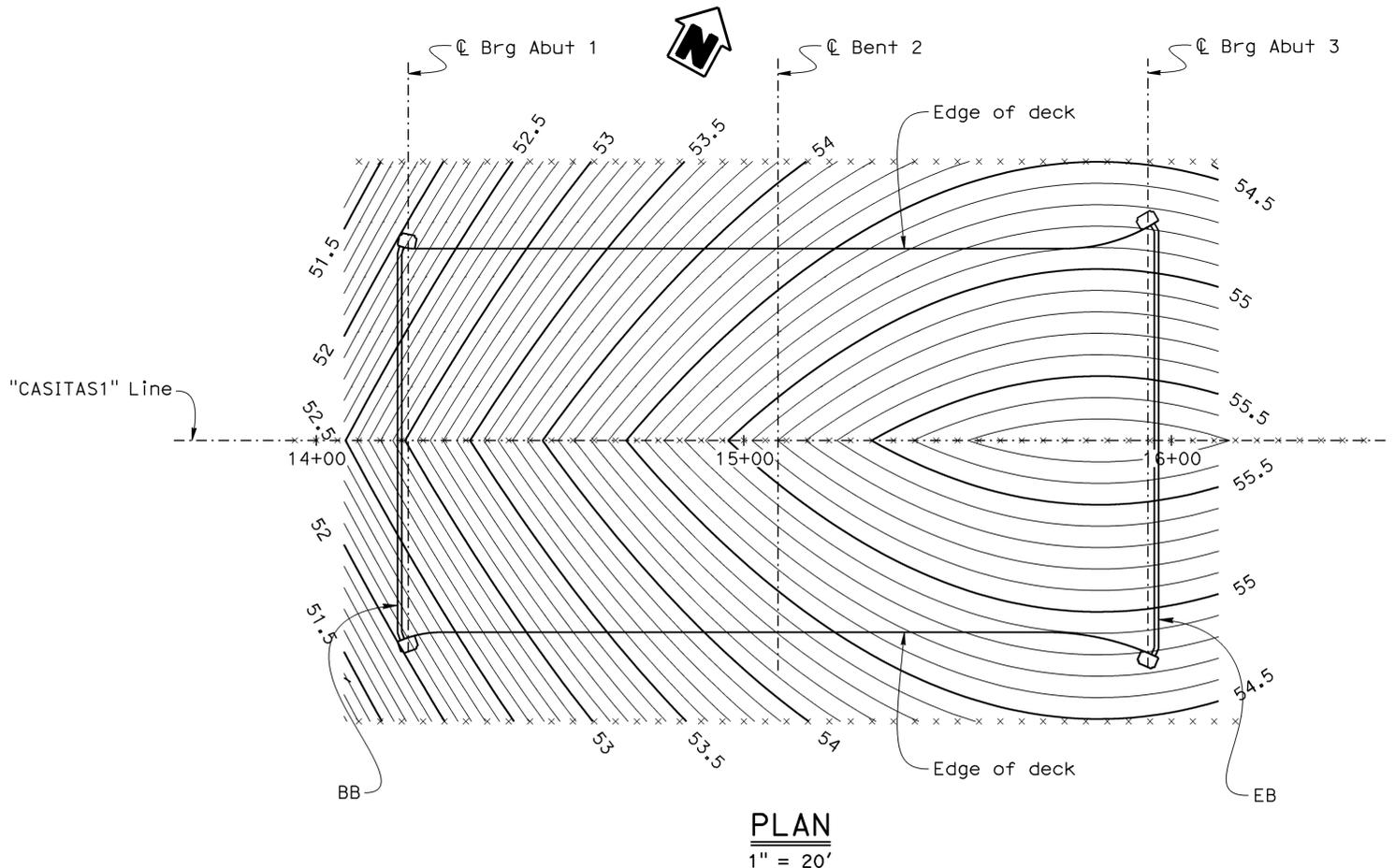
INDEX TO PLANS

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	575	786
			Rakesh Deo	5-23-14	
			REGISTERED CIVIL ENGINEER	DATE	
			12-7-15		
			PLANS APPROVAL DATE		
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QUANTITIES

BRIDGE REMOVAL, LOCATION B	LUMP	SUM
STRUCTURE EXCAVATION (BRIDGE)	1,828	CY
STRUCTURE BACKFILL (BRIDGE)	1,000	CY
3" SUPPLY LINE (BRIDGE)	218	LF
TEMPORARY PEDESTRIAN WALKWAY	LUMP	SUM
FURNISH PILING (CLASS 140) (ALTERNATIVE W)	258	LF
DRIVE PILE (CLASS 140) (ALTERNATIVE W)	10	EA
FURNISH PILING (CLASS 200) (ALTERNATIVE W)	2,957	LF
DRIVE PILE (CLASS 200) (ALTERNATIVE W)	50	EA
FURNISH 78" CAST-IN-STEEL-SHELL CONCRETE PILING	380	LF
DRIVE 78" CAST-IN-STEEL-SHELL CONCRETE PILING	5	EA
PRESTRESSING CAST-IN-PLACE CONCRETE	LUMP	SUM
STRUCTURAL CONCRETE, BRIDGE FOOTING	210	CY
STRUCTURAL CONCRETE, BRIDGE	1,340	CY
STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER)	353	CY
MINOR CONCRETE (BRIDGE PLANTER)	14	CY
IN-AND-OUT BLOCK TEXTURE	3,080	SQFT
JOINT SEAL (MR 1 1/2")	189	LF
BAR REINFORCING STEEL (BRIDGE)	497,400	LB
PREPARE AND STAIN CONCRETE	6,902	SQFT
SLOPE PAVING (IN-AND-OUT BLOCK TEXTURE CONCRETE)	36	CY
MINOR CONCRETE (CURB) (LF)	333	LF
MISCELLANEOUS METAL (BRIDGE)	475	LB
BRIDGE PLANTER DRAINAGE SYSTEM	6,050	LB
BRIDGE DECK DRAINAGE SYSTEM	7,802	LB
PICKET FENCE RAILING	430	LF
CONCRETE BARRIER (TYPE 80A MODIFIED)	104	LF
CONCRETE BARRIER (TYPE 80SW MODIFIED)	353	LF



NOTES:
 × - Indicates 5'-0" intervals along station line
 Contours do not include camber
 Contour interval = 0.10'

DESIGN	BY Rakesh Deo	CHECKED Ubong Inyang
DETAILS	BY Gerald Dickerson	CHECKED Ubong Inyang
QUANTITIES	BY H. Vu / J. Szabo	CHECKED Mario Guadamuz

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH 7

BRIDGE NO.	51-0343	CASITAS PASS ROAD OVERCROSSING (REPLACE)
POST MILE	2.6	
		DECK CONTOURS

CURVE DATA

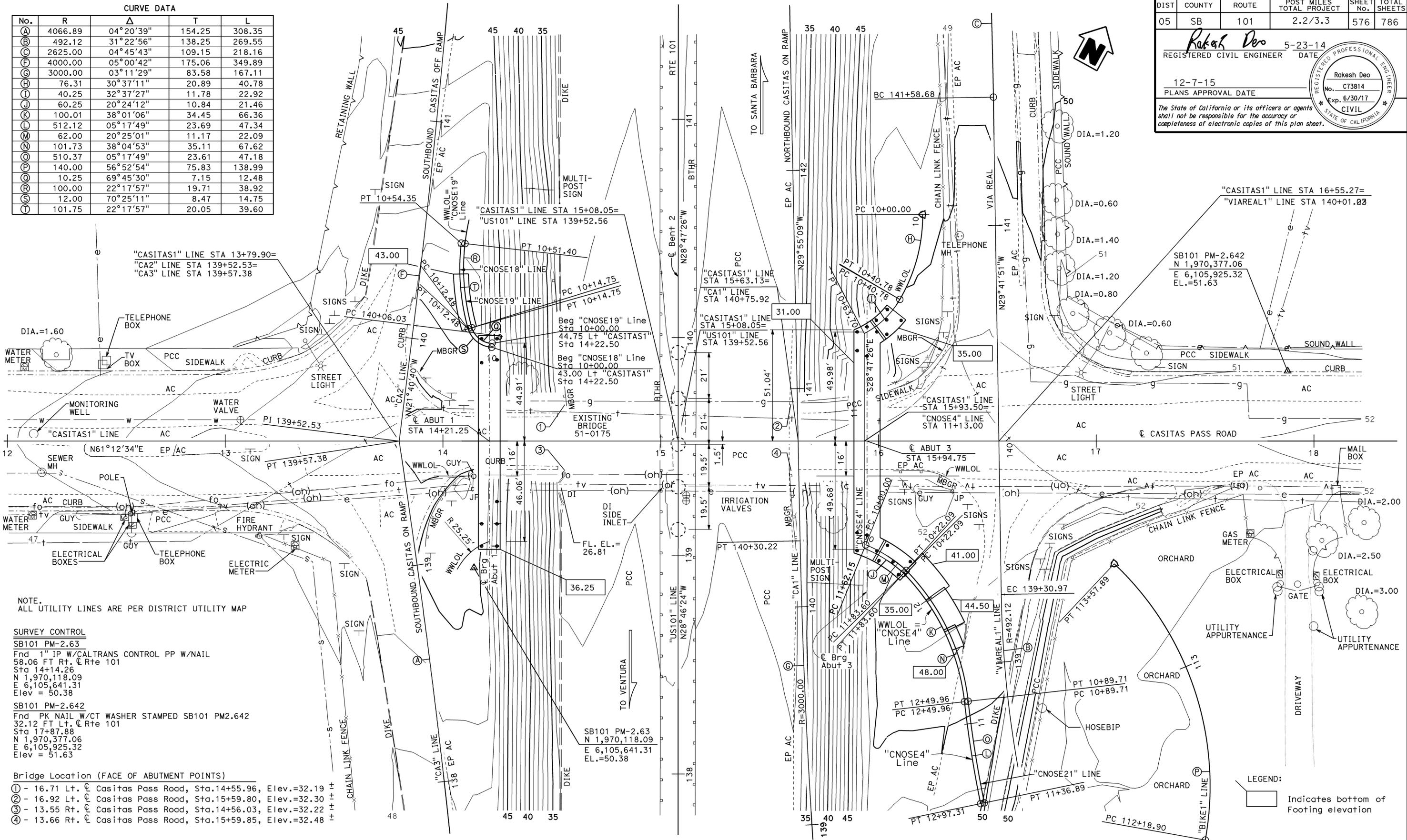
No.	R	Δ	T	L
A	4066.89	04°20'39"	154.25	308.35
B	492.12	31°22'56"	138.25	269.55
C	2625.00	04°45'43"	109.15	218.16
F	4000.00	05°00'42"	175.06	349.89
G	3000.00	03°11'29"	83.58	167.11
H	76.31	30°37'11"	20.89	40.78
I	40.25	32°37'27"	11.78	22.92
J	60.25	20°24'12"	10.84	21.46
K	100.01	38°01'06"	34.45	66.36
L	512.12	05°17'49"	23.69	47.34
M	62.00	20°25'01"	11.17	22.09
N	101.73	38°04'53"	35.11	67.62
O	510.37	05°17'49"	23.61	47.18
P	140.00	56°52'54"	75.83	138.99
Q	10.25	69°45'30"	7.15	12.48
R	100.00	22°17'57"	19.71	38.92
S	12.00	70°25'11"	8.47	14.75
T	101.75	22°17'57"	20.05	39.60

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	576	786

Rakesh Deo
 REGISTERED CIVIL ENGINEER
 No. C73814
 Exp. 6/30/17
 CIVIL
 STATE OF CALIFORNIA

5-23-14
 DATE
 12-7-15
 PLANS APPROVAL DATE

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NOTE:
ALL UTILITY LINES ARE PER DISTRICT UTILITY MAP

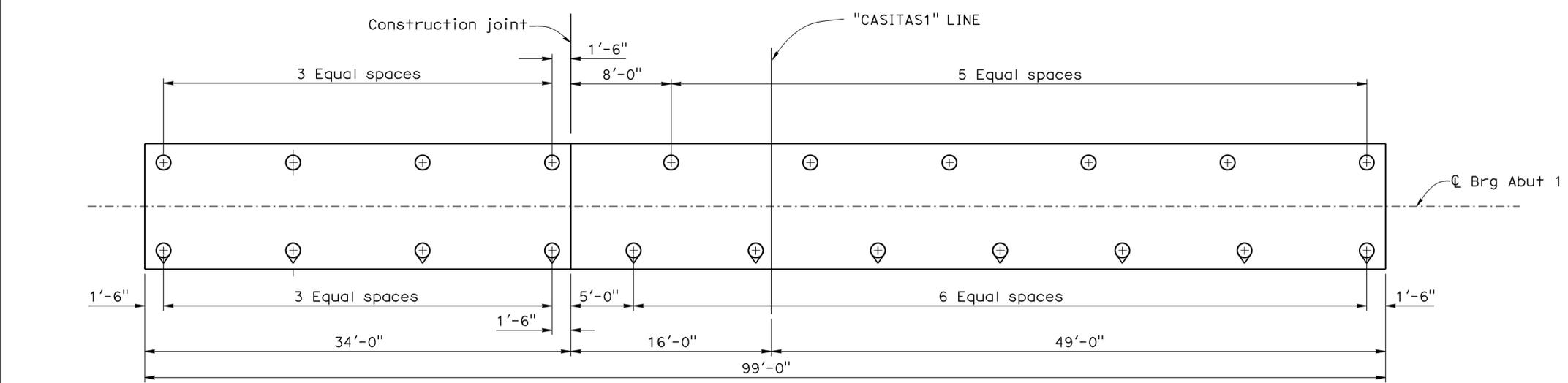
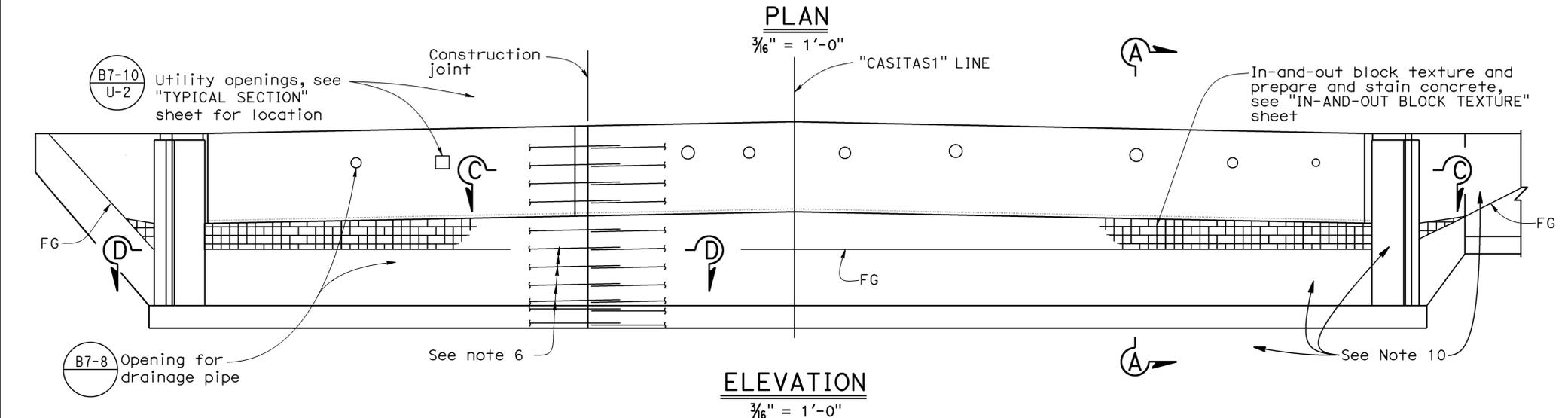
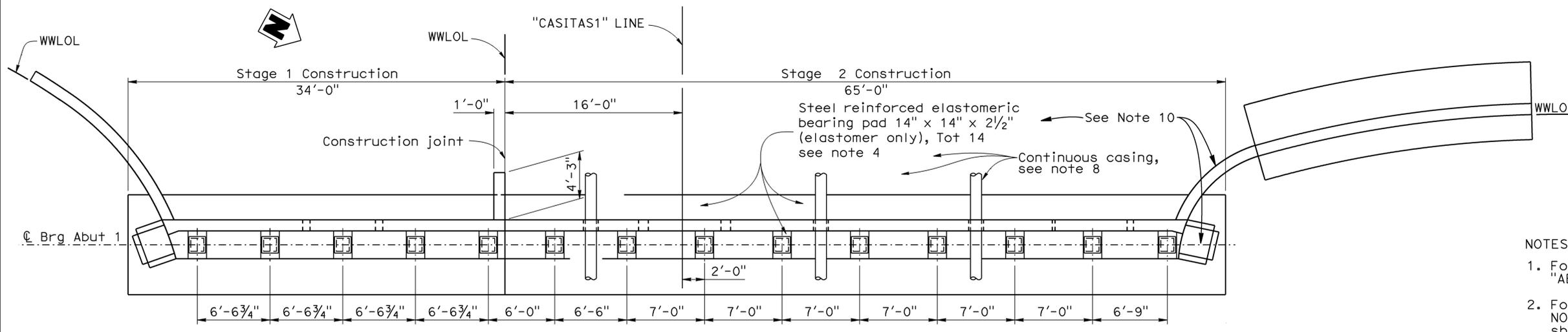
SURVEY CONTROL
 SB101 PM-2.63
 Fnd 1" IP W/CALTRANS CONTROL PP W/NAIL
 58.06 FT Rt. @ Rte 101
 Sta 14+14.26
 N 1,970,118.09
 E 6,105,641.31
 Elev = 50.38
 SB101 PM-2.642
 Fnd PK NAIL W/CT WASHER STAMPED SB101 PM2.642
 32.12 FT Lt. @ Rte 101
 Sta 17+87.88
 N 1,970,377.06
 E 6,105,925.32
 Elev = 51.63

- Bridge Location (FACE OF ABUTMENT POINTS)
- ① - 16.71 Lt. @ Casitas Pass Road, Sta.14+55.96, Elev.=32.19
 - ② - 16.92 Lt. @ Casitas Pass Road, Sta.15+59.80, Elev.=32.30
 - ③ - 13.55 Rt. @ Casitas Pass Road, Sta.14+56.03, Elev.=32.22
 - ④ - 13.66 Rt. @ Casitas Pass Road, Sta.15+59.85, Elev.=32.48

PRELIMINARY INVESTIGATION SECTION		DESIGN BY: Huan Wu / Rakesh Deo CHECKED: U. Inyang / S. Talukder	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO. 51-0343 POST MILE 2.64	CASITAS PASS ROAD OC (REPLACE) FOUNDATION PLAN	
SCALE: VERT. DATUM NAVD88 1"=20' HORZ. DATUM NAD83(92)(1991.35)	PHOTOGRAMMETRY AS OF: X SURVEYED BY: District CHECKED BY: D.Ivy 09/10	DETAILS BY: Yingjue Feng CHECKED: U. Inyang / S. Talukder	PROJECT NUMBER & PHASE: 05000005431		CONTRACT NO.: 05-4482U4	REVISION DATES: 09/30/10, 5/19/14, 5/24/14	SHEET 5 OF 53

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 UNIT: 3646
 FILE => 51-0343-e-fpl.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	577	786
Rakesh Deo REGISTERED CIVIL ENGINEER			5-23-14 DATE		
12-7-15 PLANS APPROVAL DATE					
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- NOTES:
- For "SECTION A-A", see "ABUTMENT DETAILS NO. 1" sheet.
 - For wingwall, see "ABUTMENT DETAILS NO. 3" and "ABUTMENT DETAILS NO. 4" sheets.
 - For shear key details, see "ABUTMENT DETAILS NO. 2" sheet.
 - For elastomeric bearing pad details, see "ABUTMENT DETAILS NO. 1" sheet.
 - For "SECTION C-C" and "SECTION D-D", see "ABUTMENT DETAILS NO. 2" sheet.
 - Extend stage 1 Abut Reinf 2'-0" into stage 2 construction.
 - Backwall to be placed after stressing.
 - Continuous casing for water line to be extended 20'-0" beyond the back of the abutment, City of Carpinteria.
 - Prepare and stain in-and-out block texture. Limits of stained concrete shall extend to 1'-0" below FG.
 - Use integrally colored concrete on all abutment elements above the top of footing, excluding the back wall.

LEGEND:
 ⊕ Indicates vertical pile
 ⊖ Indicates 1:3 battered pile

DESIGN BY Huan Vu CHECKED Sujun Talukder		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7		BRIDGE NO. 51-0343	CASITAS PASS ROAD OVERCROSSING (REPLACE)	
DETAILS BY Doug Wooten CHECKED Sujun Talukder			POST MILE 2.64	ABUTMENT 1 LAYOUT			
QUANTITIES BY H. Vu / J. Szabo CHECKED Mario Guadamuz			UNIT: 3592 PROJECT NUMBER & PHASE: 05000005431		CONTRACT NO.: 05-4482U4	DISREGARD PRINTS BEARING EARLIER REVISION DATES	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)			ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		REVISION DATES: 1-18-13, 05-21-14, 8-21-15		SHEET 6 OF 53

USERNAME => s115755 DATE PLOTTED => 04-DEC-2015 TIME PLOTTED => 08:51

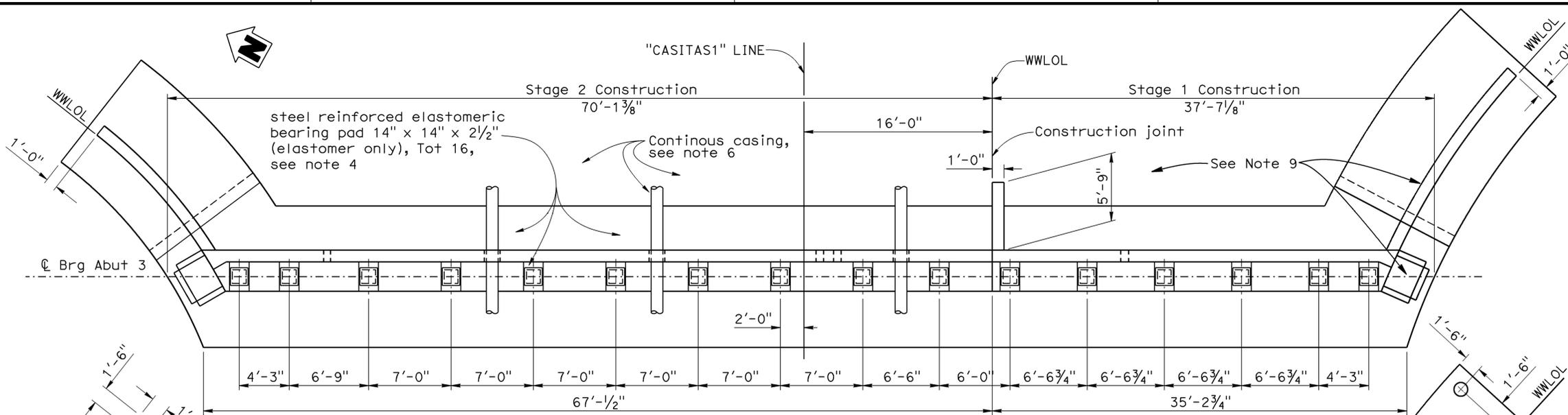
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	578	786

Rakesh Deo 5-23-14
 REGISTERED CIVIL ENGINEER DATE

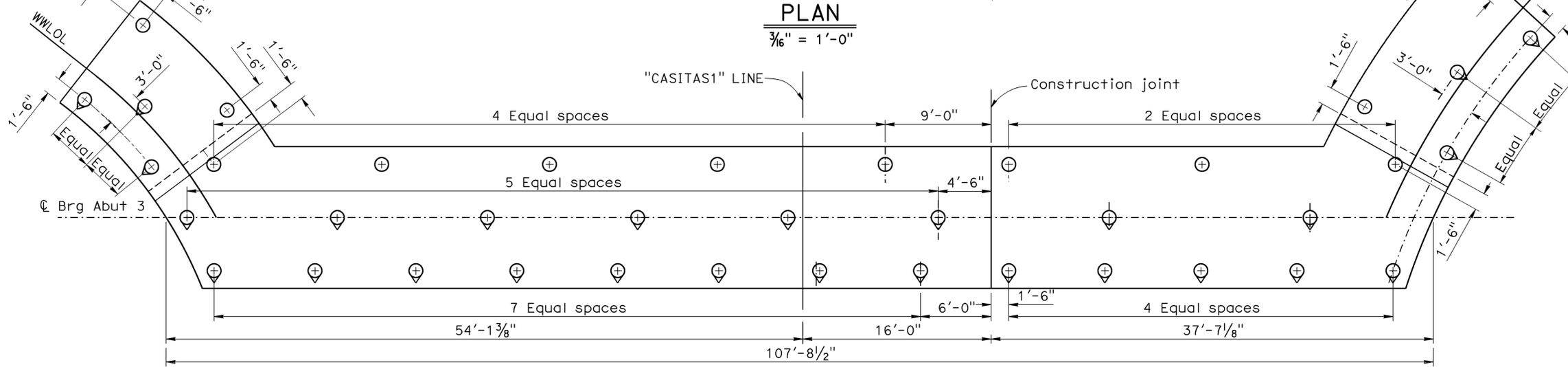
12-7-15
 PLANS APPROVAL DATE

Rakesh Deo
 No. C73814
 Exp. 6/30/17
 CIVIL
 STATE OF CALIFORNIA

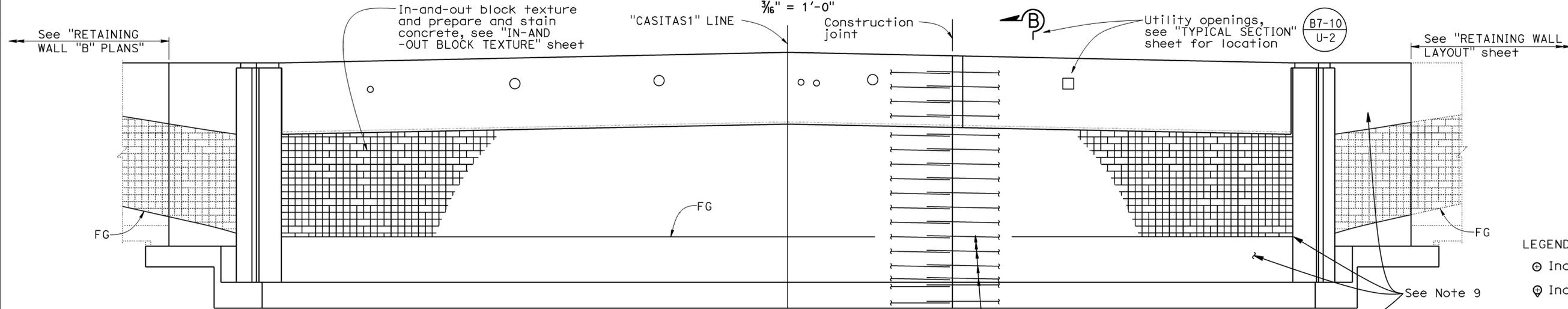
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PLAN
 $\frac{3}{16}'' = 1'-0''$



FOOTING PLAN
 $\frac{3}{16}'' = 1'-0''$



ELEVATION
 $\frac{3}{16}'' = 1'-0''$

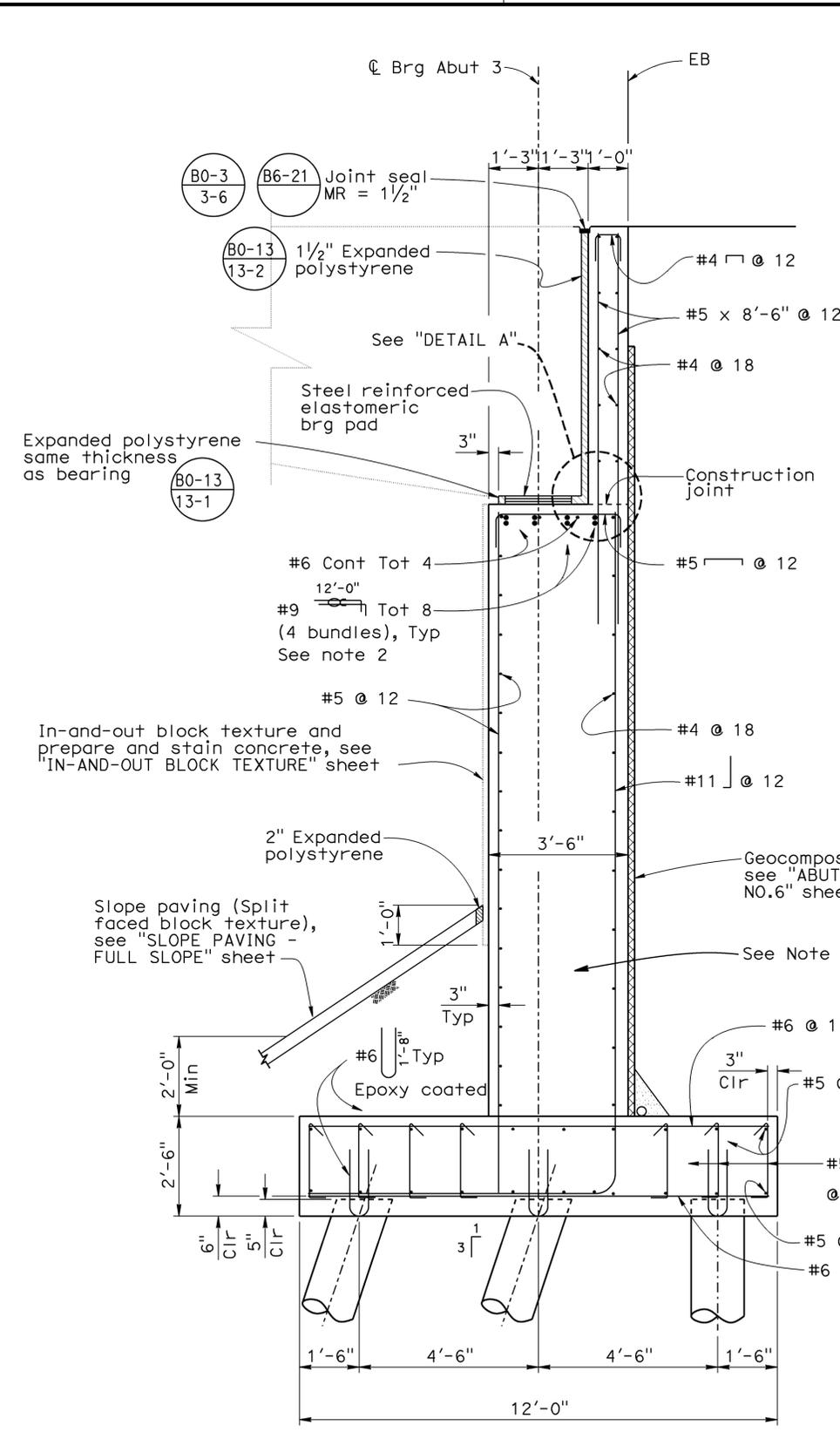
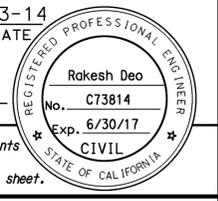
- NOTES:
- For "SECTION B-B", see "ABUTMENT DETAILS NO. 1" sheet.
 - For wingwalls, see "ABUTMENT DETAILS NO. 3" sheet.
 - For shear key details, see "ABUTMENT DETAILS NO. 2" sheets.
 - For elastomeric bearing pad details, see "ABUTMENT DETAILS NO. 1" sheet.
 - Extend stage 1 reinforcement 2'-0" into stage 2 construction.
 - Continuous casing for water line to be extended 20'-0" beyond the back of the abutment, City of Carpinteria.
 - Prepare and stain in-and-out block texture. Limits of stained concrete shall extend to 1'-0" below FG.
 - Use integrally colored concrete on all abutment elements above the top of footing, excluding the back wall

- LEGEND:
- ⊕ Indicates vertical pile
 - ⊙ Indicates 1:3 battered pile

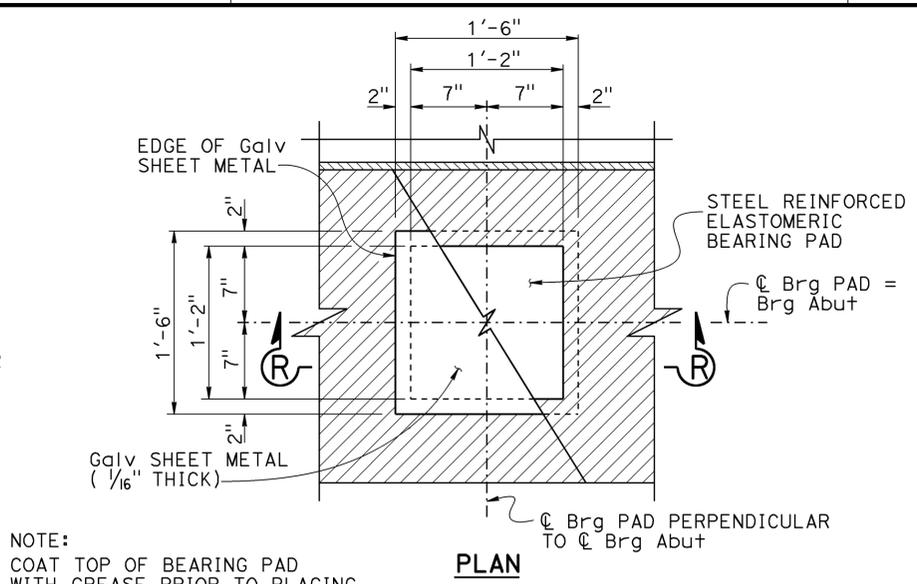
DESIGN BY Huan Vu	CHECKED Sujan Talukder	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DESIGN BRANCH 7	BRIDGE NO. 51-0343	CASITAS PASS ROAD OVERCROSSING (REPLACE) ABUTMENT 3 LAYOUT
DETAILS BY Doug Wooten	CHECKED Sujan Talukder		POST MILE 2.64	
QUANTITIES BY H. Vu / J. Szabo	CHECKED Mario Guadamuz			
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3592 PROJECT NUMBER & PHASE: 05000005431	CONTRACT NO.: 05-4482U4
			DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES: 12-28-12, 05-21-14, 8-21-15 SHEET 7 OF 53

USERNAME => s115755 DATE PLOTTED => 04-DEC-2015 TIME PLOTTED => 08:51

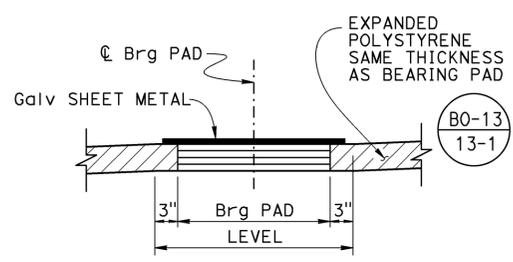
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	579	786
			5-23-14		
			REGISTERED CIVIL ENGINEER		
			12-7-15		
			PLANS APPROVAL DATE		
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SECTION B-B
ABUTMENT 3
1/2" = 1'-0"

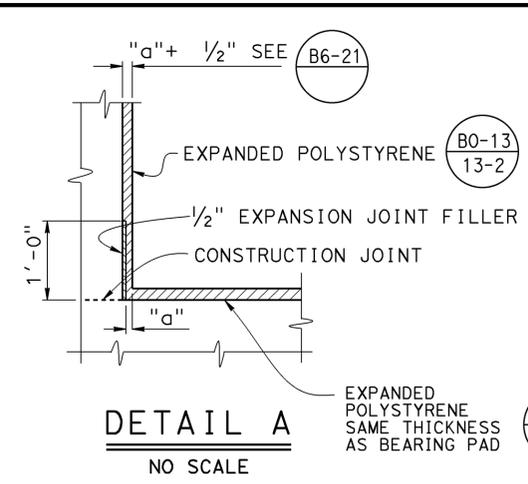


PLAN

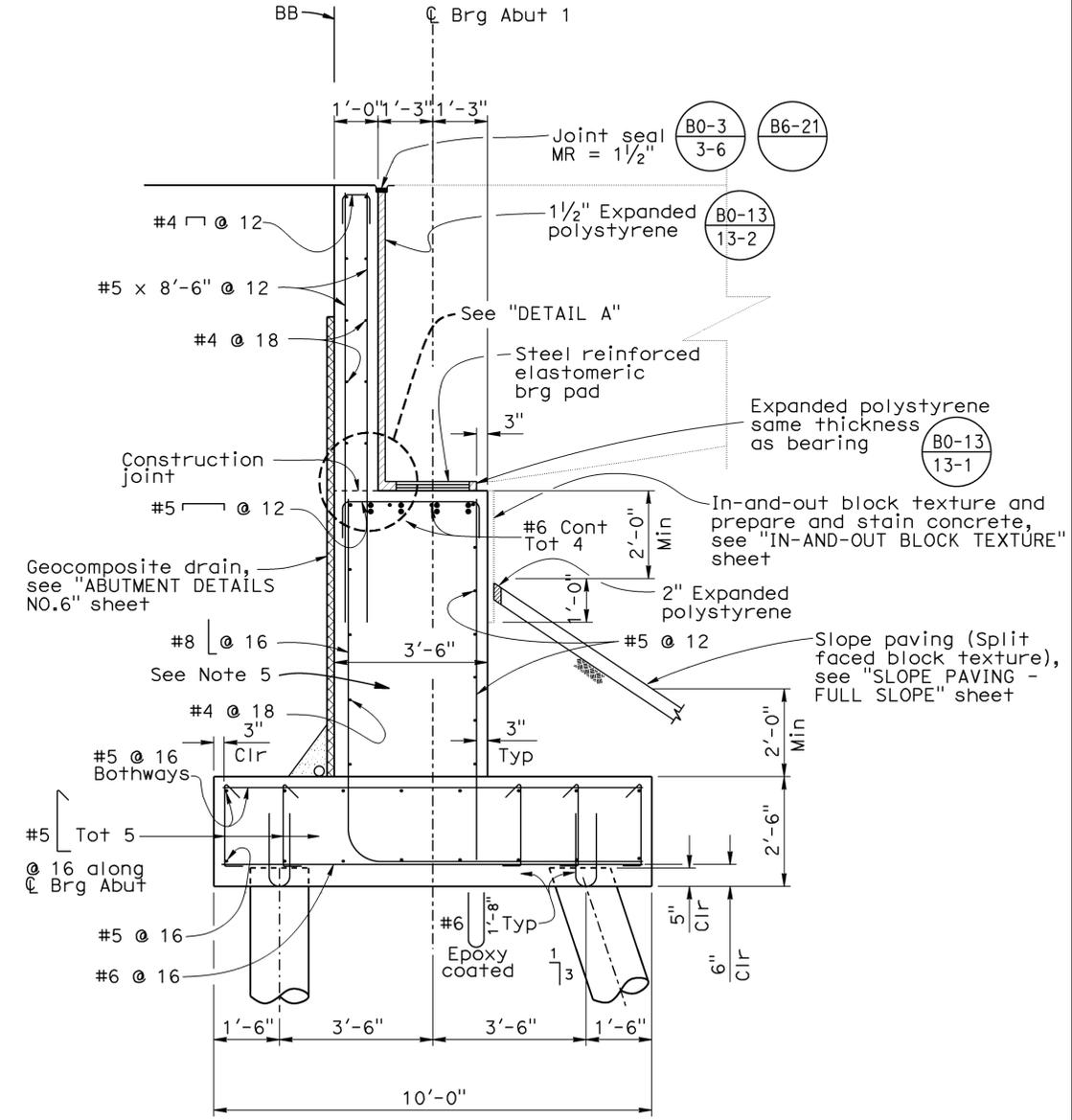


SECTION R-R
BEARING PAD DETAIL
NO SCALE

- NOTES:
- Backwall to be placed after stressing.
 - For location of reinforcement, see "ABUTMENT DETAILS NO. 2" sheet.
 - For location of "SECTION A-A", see "ABUTMENT 1 LAYOUT" sheet.
 - For location of "SECTION B-B", see "ABUTMENT 3 LAYOUT" sheet.
 - Use integrally colored concrete, see "ABUTMENT 1 LAYOUT" and "ABUTMENT 3 LAYOUT" sheets



DETAIL A
NO SCALE



SECTION A-A
ABUTMENT 1
1/2" = 1'-0"

DESIGN	BY Huan Vu	CHECKED Sujan Talukder
DETAILS	BY Doug Wooten	CHECKED Sujan Talukder
QUANTITIES	BY H. Vu / J. Szabo	CHECKED Mario Guadamuz

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 7

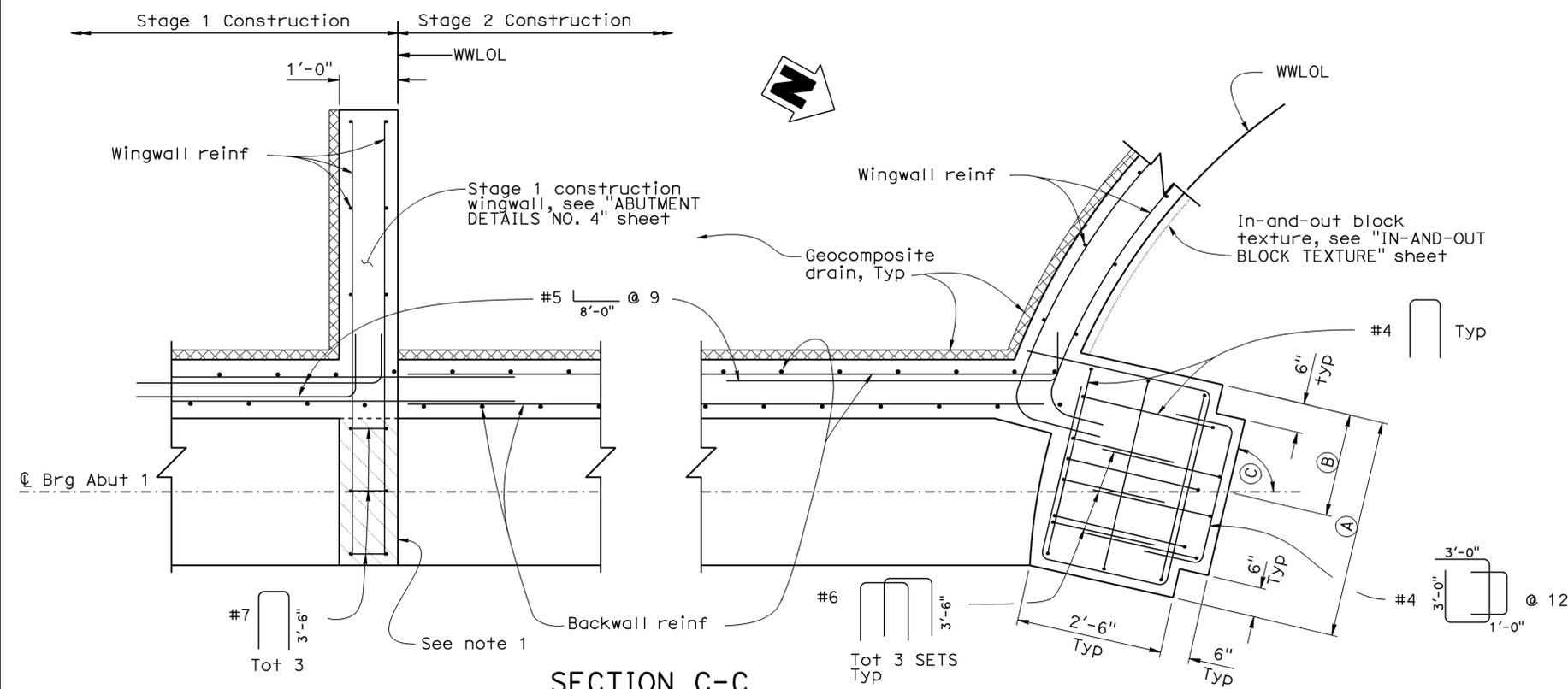
BRIDGE NO.	51-0343
POST MILE	2.64

CASITAS PASS ROAD OVERCROSSING (REPLACE)
ABUTMENT DETAILS NO. 1

SHEAR KEY DIMENSIONS		
LOCATION	Left Side of Bridge	Right Side of Bridge
(A)	Abut 1	3'-7"
	Abut 3	3'-8 1/2"
(B)	Abut 1	1'-4"
	Abut 3	1'-9"
(C)	Abut 1	10 1/2"
	Abut 3	1'-2"
(C)	Abut 1	77°
	Abut 3	70°

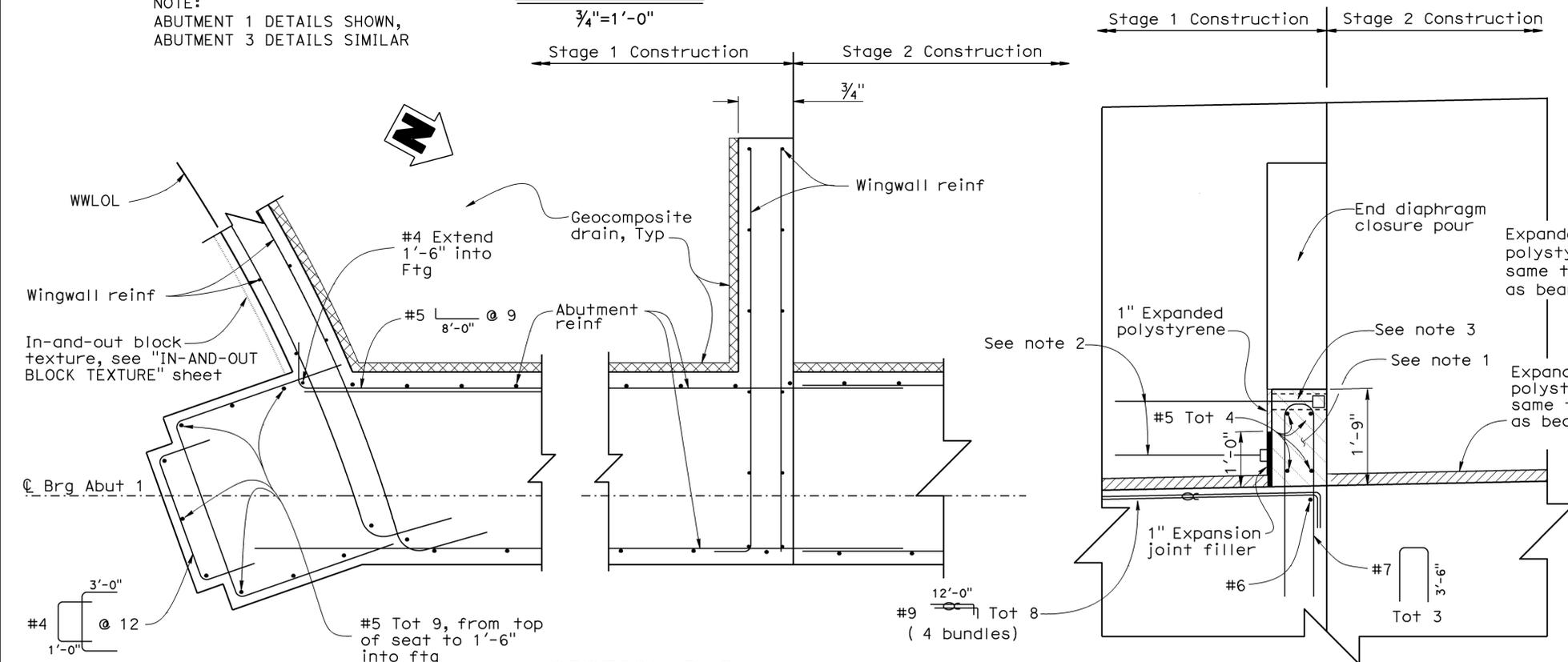
LEGEND:
 □ Indicates service splices to be staggered 1'-0"
 ⊕ Indicates bundled bars

- NOTES:
1. Temporary shear key and reinf to be removed at Stage 2 Construction.
 2. End diaphragm longitudinal reinf to be service spliced.
 3. Stage 1 end diaphragm reinf must be wrapped with 2 layers of 15 lbs building paper and remain undamaged during temporary shear key removal.
 4. For location of "SECTION C-C" and "SECTION D-D", see "ABUTMENT 1 LAYOUT" sheet.
 5. For limits of integrally colored concrete, see "ELEVATION" on "ABUTMENT 1 LAYOUT" sheet.



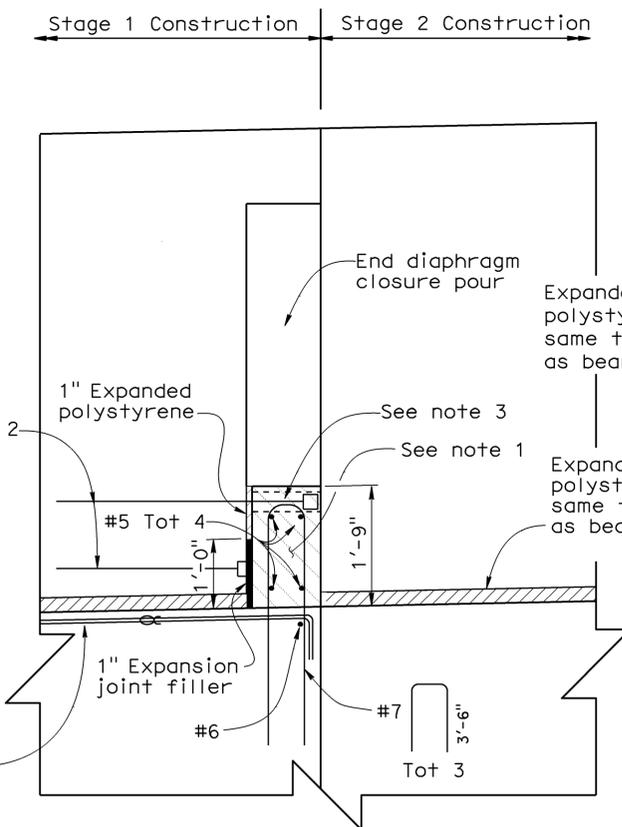
SECTION C-C
3/4"=1'-0"

NOTE:
ABUTMENT 1 DETAILS SHOWN,
ABUTMENT 3 DETAILS SIMILAR

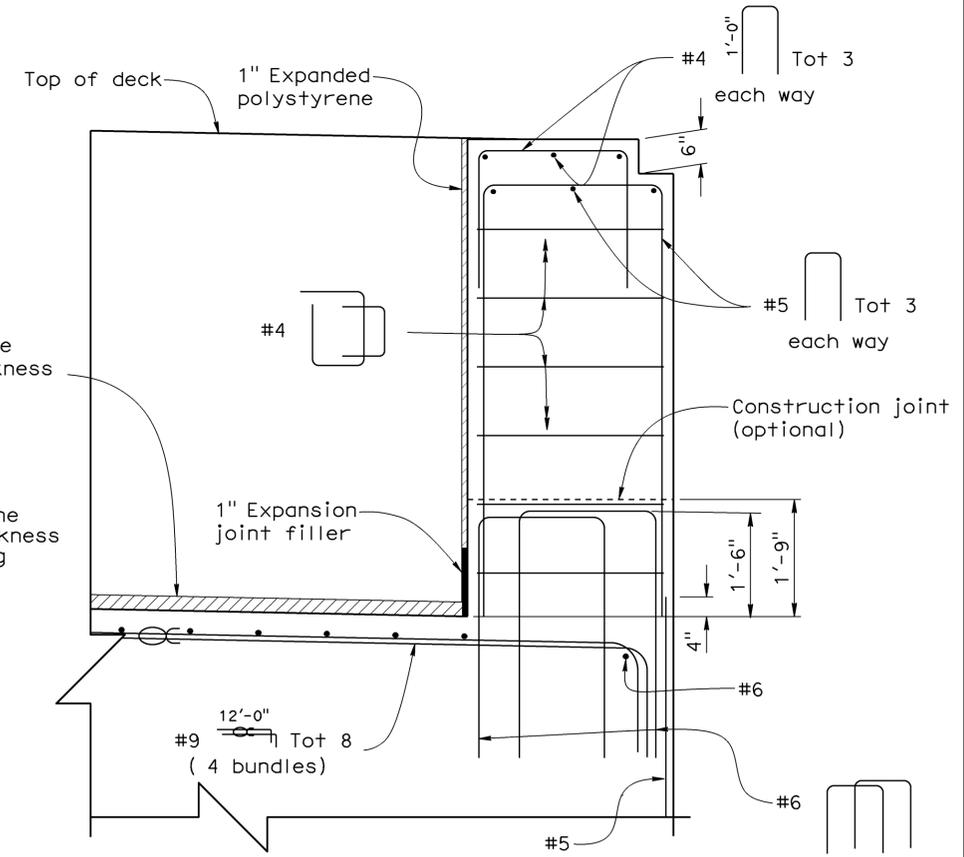


SECTION D-D
3/4"=1'-0"

NOTE:
ABUTMENT 1 DETAILS SHOWN,
ABUTMENT 3 DETAILS SIMILAR

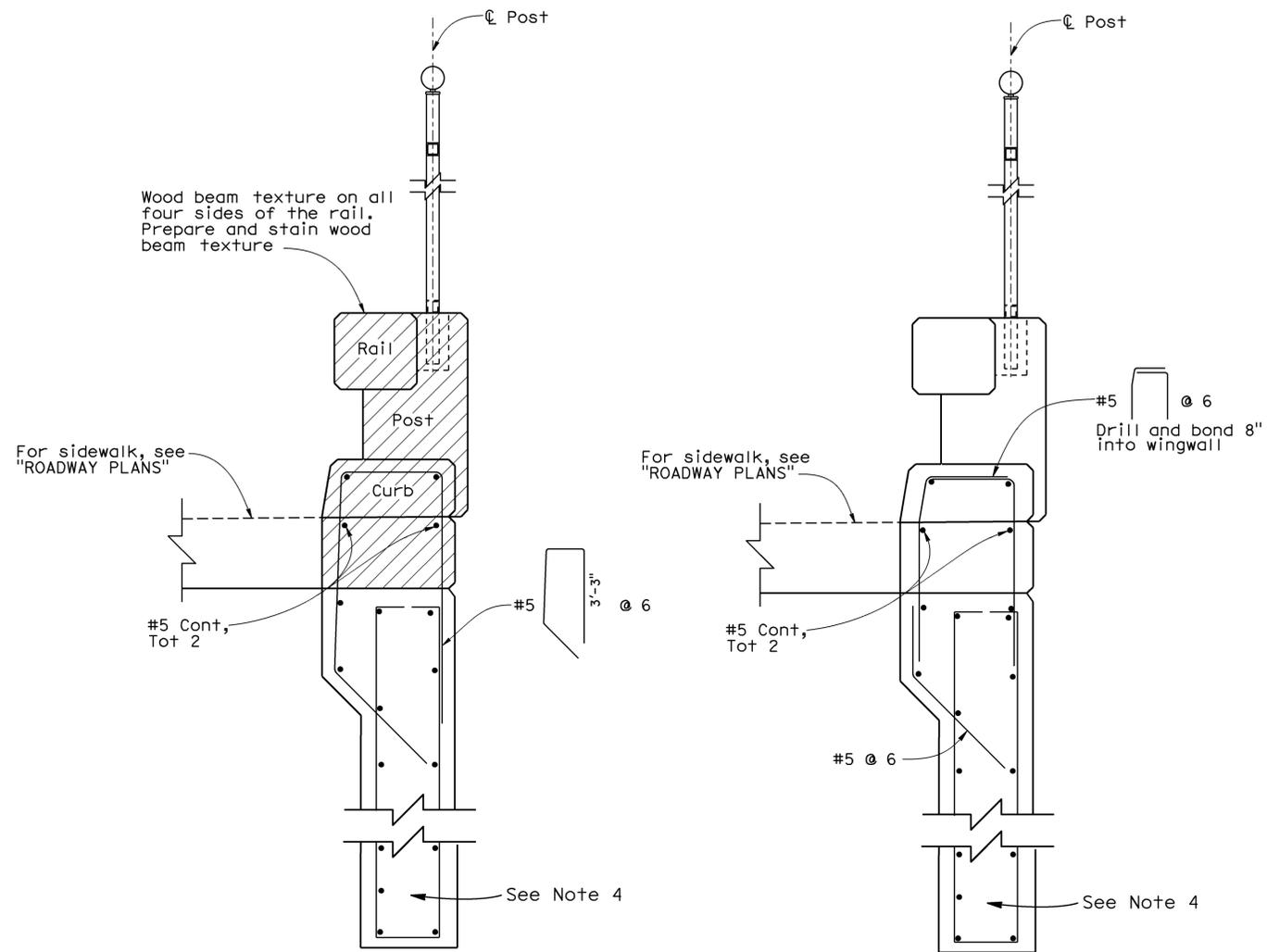


TEMPORARY SHEAR KEY
3/4"=1'-0"



EXTERNAL SHEAR KEY
3/4"=1'-0"

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	581	786
			<i>Rakesh Deo</i> 5-23-14		
			REGISTERED CIVIL ENGINEER DATE		
			12-7-15		
			PLANS APPROVAL DATE		
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SECTION F-F (B0-1)
1" = 1'-0"

RSP (B11-60) (Type 80A Modified)

SECTION G-G (B0-1)
1" = 1'-0"
DRILL AND BOND DETAIL

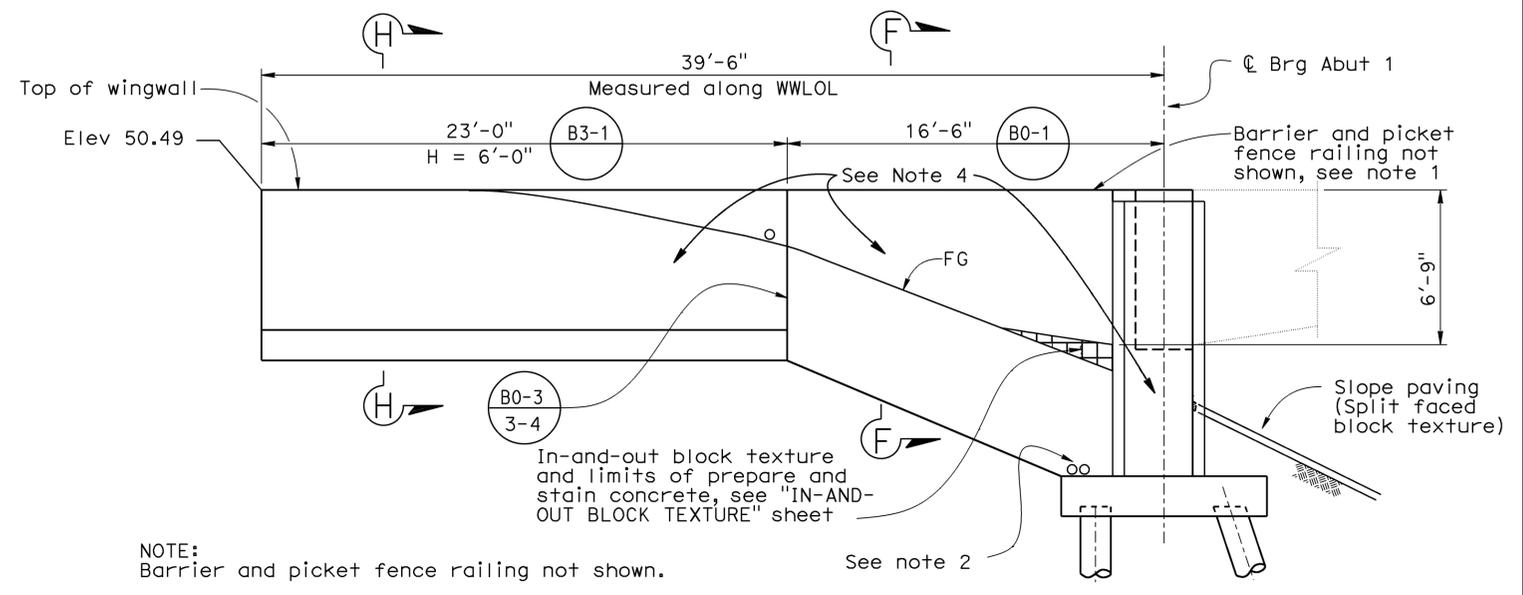
RSP (B11-60) (Type 80A Modified)

NOTES:

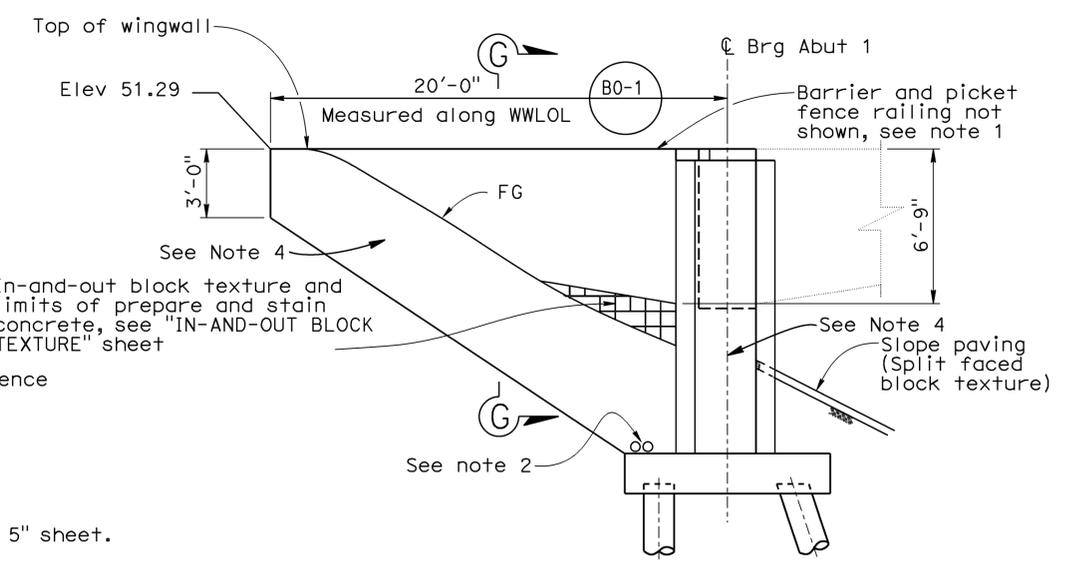
- For limits of concrete barrier and picket fence railing, see "BARRIER MOUNTED PICKET FENCE RAILING LAYOUT NO. 1" and "BARRIER MOUNTED PICKET FENCE RAILING LAYOUT NO. 2" sheets.
- Outlets to geocomposite drainage, see "ABUTMENT DETAILS NO. 6" sheet.
- For "SECTION H-H", see "ABUTMENT DETAILS NO. 5" sheet.
- Use integrally colored concrete, see "ELEVATION" on "ABUTMENT 1 LAYOUT" sheet

LEGEND:

Indicates integrally colored concrete.



DEVELOPED MIRRORED ABUTMENT 1 LEFT WINGWALL ELEVATION
1/4" = 1'-0"



DEVELOPED ABUTMENT 1 RIGHT WINGWALL ELEVATION
1/4" = 1'-0"

DESIGN BY Huan Vu / Rakesh Deo		CHECKED Sujan Talukder	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO. 51-0343	CASITAS PASS ROAD OVERCROSSING (REPLACE) ABUTMENT DETAILS NO. 3
DETAILS BY Doug Wooten		CHECKED Sujan Talukder			POST MILE 2.64	
QUANTITIES BY H. Vu / J. Szabo		CHECKED Mario Guadamuz				
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)			ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3592	PROJECT NUMBER & PHASE: 05000005431	CONTRACT NO.: 05-4482U4
			0 1 2 3	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 10 OF 53

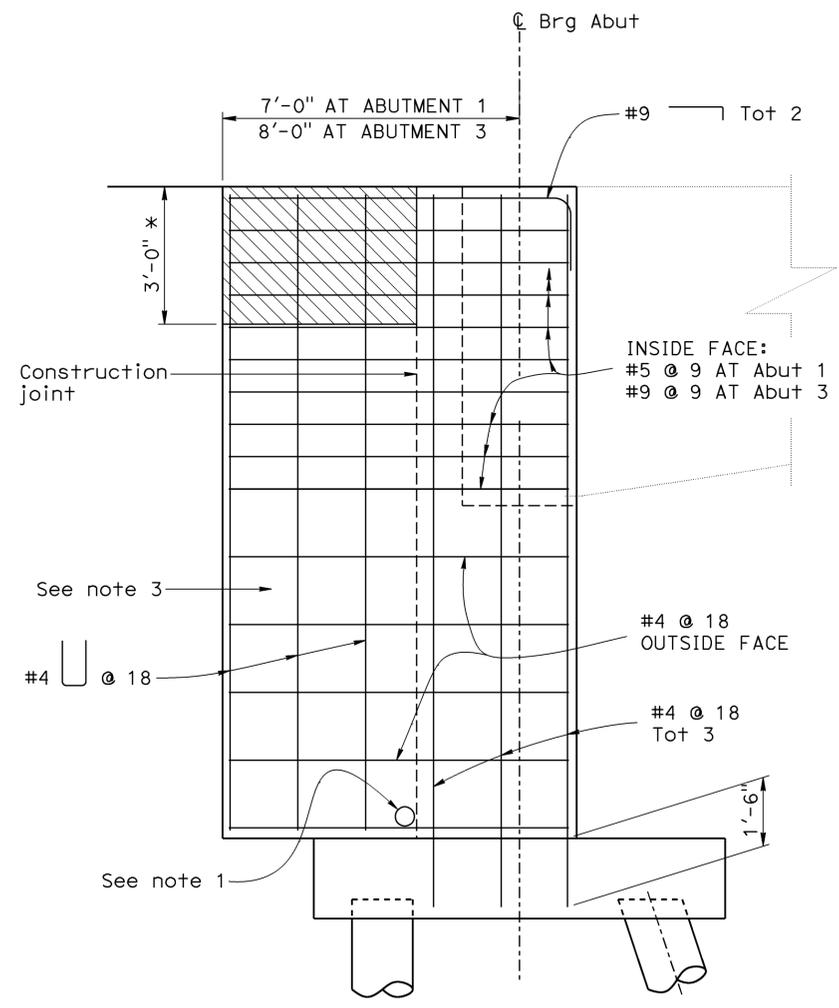
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	582	786

Rakesh Deo 5-23-14
 REGISTERED CIVIL ENGINEER DATE

12-7-15
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Rakesh Deo
 No. C73814
 Exp. 6/30/17
 CIVIL
 STATE OF CALIFORNIA

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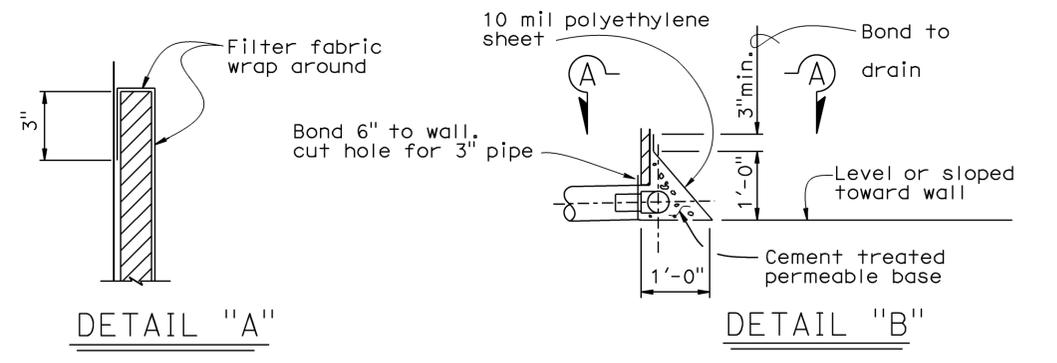
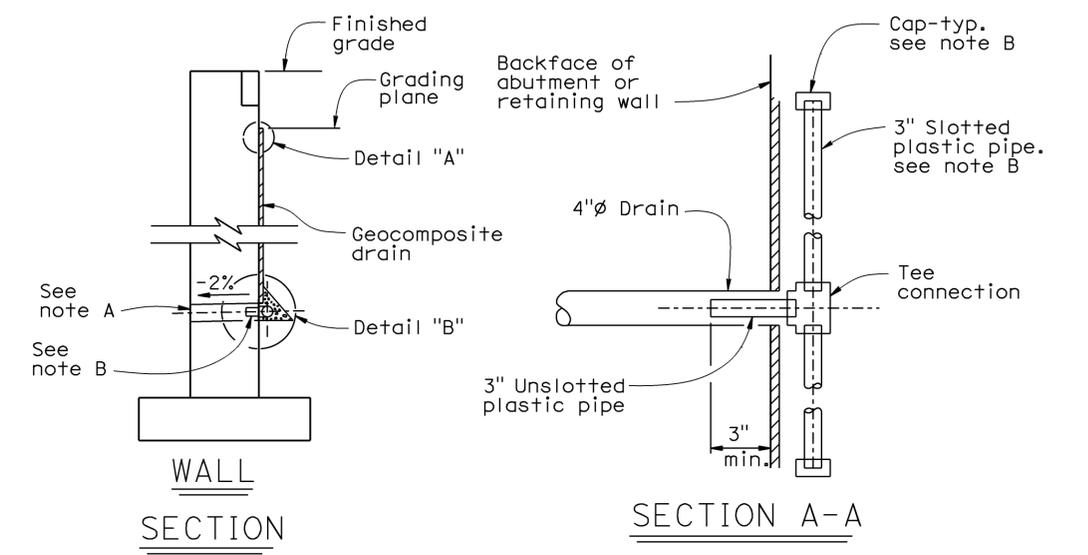


STAGE 1 CONSTRUCTION WINGWALL
 1/2"=1'-0"

LEGEND:

* Portion of wingwall to be removed during Stage 2 construction

- NOTES:**
1. Outlets to geocomposite drainage, see "ABUTMENT DETAILS NO. 6" sheet.
 2. For limits of concrete barrier and picket fence railing, see "BARRIER MOUNTED PICKET FENCE RAILING LAYOUT NO. 1" and "BARRIER MOUNTED PICKET FENCE RAILING LAYOUT NO. 2" sheets.
 3. Stage 1 construction wingwall must not have integral concrete color.



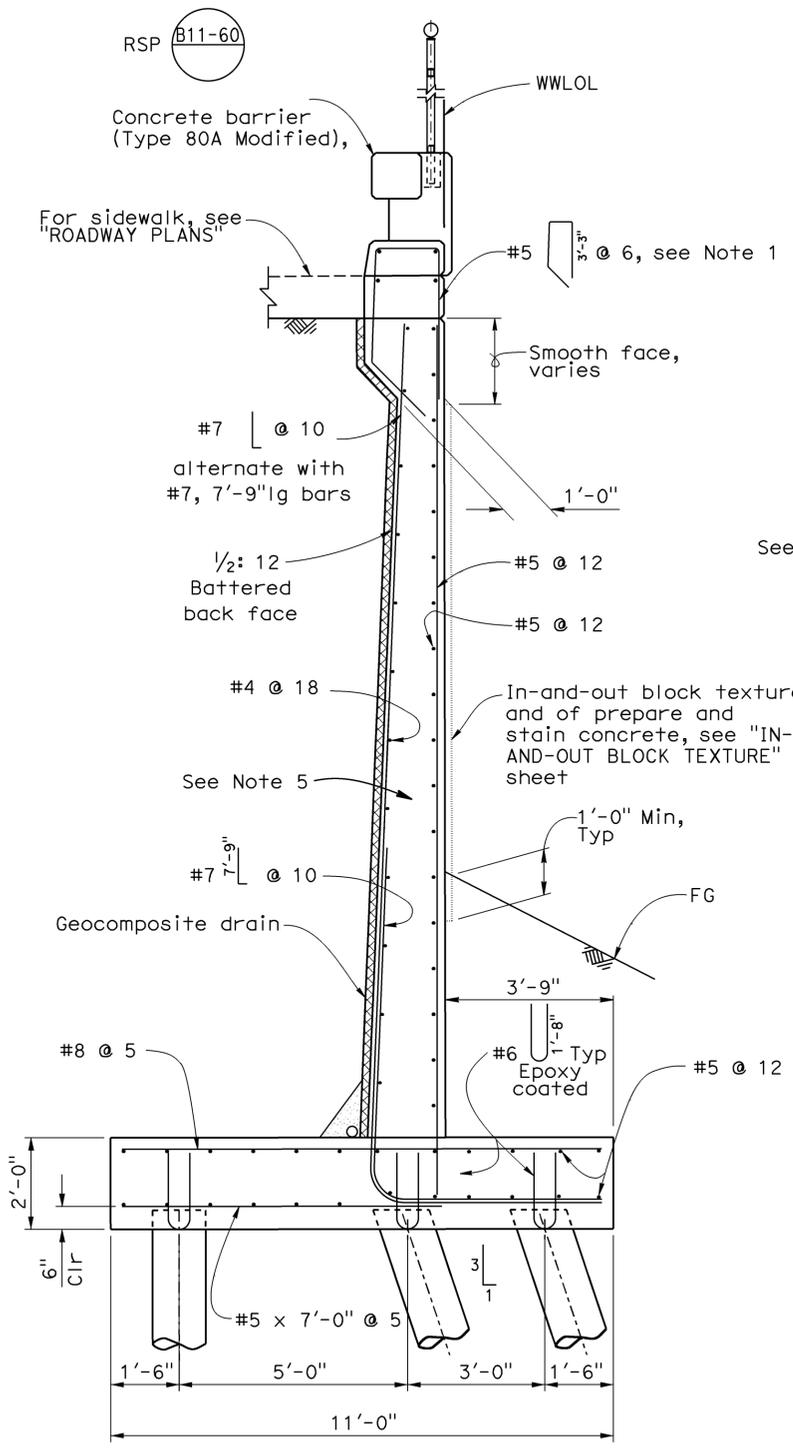
WEEP HOLE AND GEOCOMPOSITE DRAIN

- NOTES:**
- A. 4" Ø DRAINS AT INTERMEDIATE SAG POINTS AND AT 25' MAX CENTER TO CENTER. EXPOSED WALL DRAINS MUST BE LOCATED 3"± ABOVE FINISHED GRADE.
 - B. GEOCOMPOSITE DRAIN, CEMENT TREATED PERMEABLE BASE, AND 3" Ø SLOTTED PLASTIC PIPE CONTINUOUS BEHIND RETAINING WALL OR ABUTMENT. CAP ENDS OF PIPE. PROVIDE "TEE" CONNECTION AT EACH 4" Ø DRAIN.
 - C. CONNECT THE LOW END OF PLASTIC PIPE TO THE MAIN OUTLET PIPE AS APPLICABLE.

DESIGN BY Huan Vu / R. Deo CHECKED Sujan Talukder DETAILS BY Doug Wooten CHECKED Sujan Talukder QUANTITIES BY H. Vu / J. Szabo CHECKED Mario Guadamuz	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO. 51-0343 POST MILE 2.64 CASITAS PASS ROAD OVERCROSSING (REPLACE) ABUTMENT DETAILS NO. 4
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3592 PROJECT NUMBER & PHASE: 05000005431	CONTRACT NO.: 05-4482U4 DISREGARD PRINTS BEARING EARLIER REVISION DATES
		FILE => 51-0343-f-abdt04.dgn	REVISION DATES: 03-12-14, 04-14-14, 04-21-14
		0 1 2 3	SHEET 11 OF 53

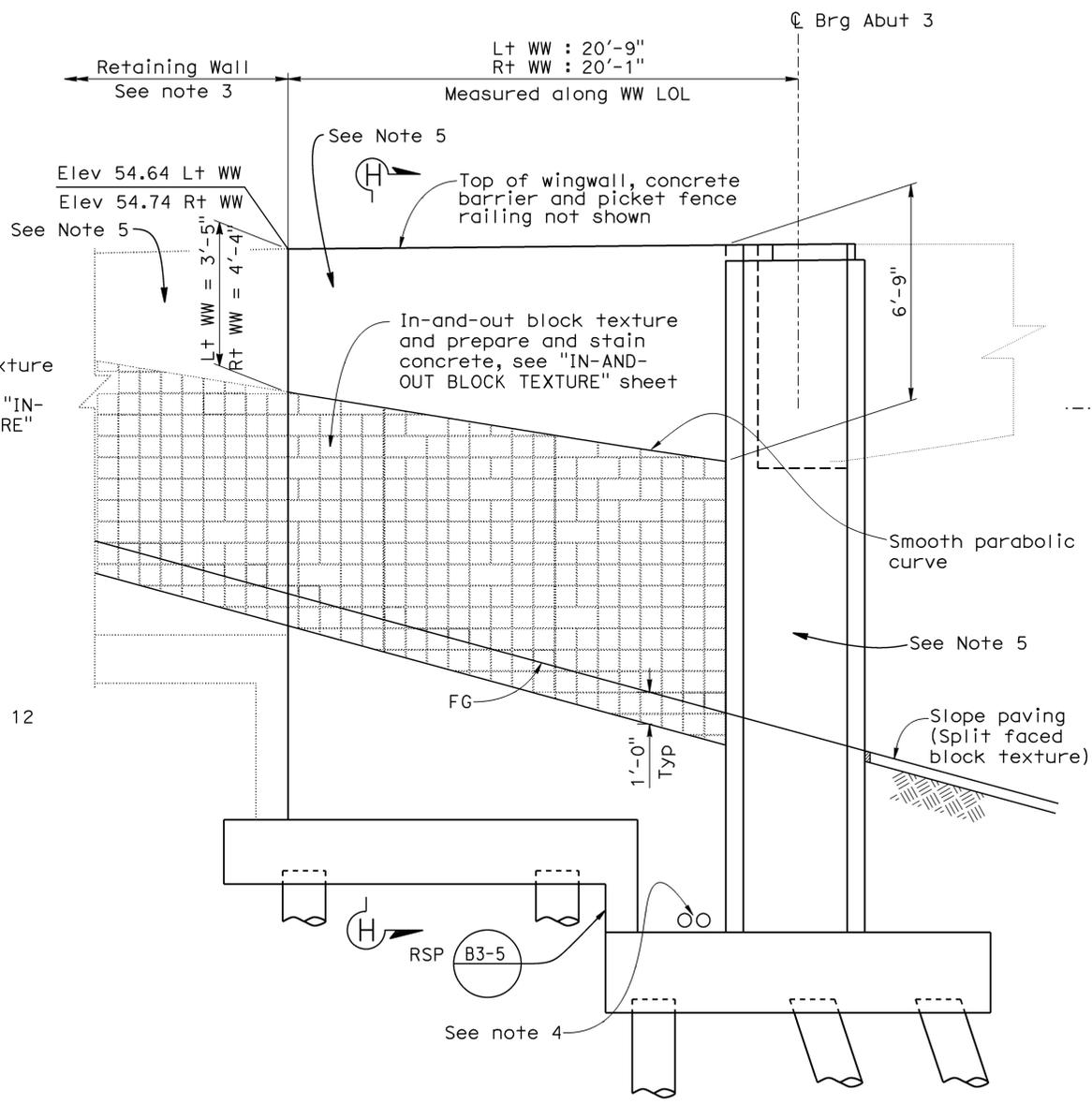
USERNAME => s115755 DATE PLOTTED => 04-DEC-2015 08:51

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	583	786
			Rakesh Deo 5-23-14 REGISTERED CIVIL ENGINEER DATE		
			12-7-15 PLANS APPROVAL DATE		
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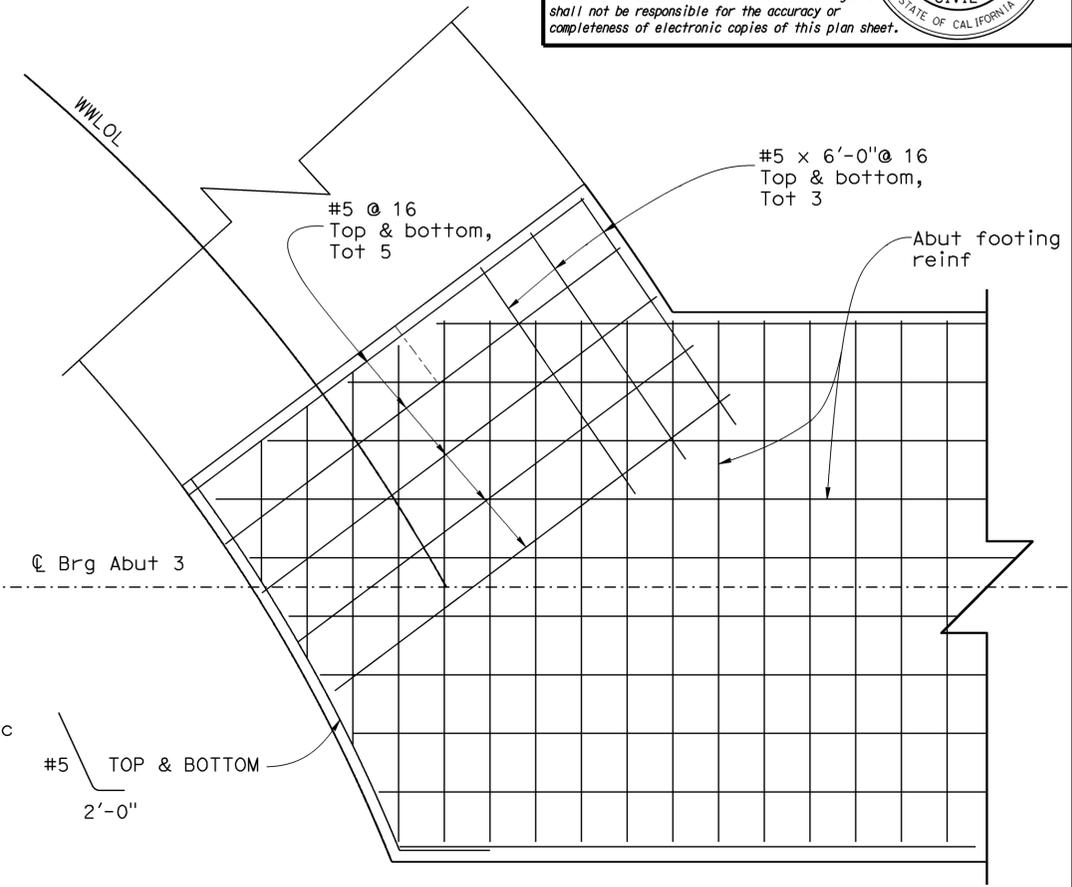
SECTION H-H
No Scale

- NOTES:
1. Drill and bond required on Rt WW.
 2. For drill and bond detail, see "ABUTMENT DETAILS NO. 3" sheet.



DEVELOPED ABUTMENT 3 WINGWALL

3/8" = 1'-0"



ABUTMENT 3 FOOTING CORNER REINFORCEMENT

LEFT SIDE SHOWN, RIGHT SIDE SIMILAR

1/2" = 1'-0"

- NOTES:
1. Abutment 3 left wingwall shown, Abutment 3 right wingwall similar.
 2. For limits of concrete barrier and picket fence railing, see "BARRIER MOUNTED PICKET FENCE RAILING LAYOUT NO. 1" and "BARRIER MOUNTED PICKET FENCE RAILING LAYOUT NO. 2" sheets.
 3. For retaining wall at Abut 3 Lt, see "RETAINING WALL "B" " plans. For retaining wall at Abut 3 Rt, see "RETAINING WALL LAYOUT" and "RETAINING WALL DETAILS" sheets.
 4. Outlets to geocomposite drainage, see "ABUTMENT DETAILS NO. 6" sheet.
 5. Use integrally colored concrete, see "ELEVATION" on "ABUTMENT 3 LAYOUT" sheet

DESIGN	BY Huan Vu	CHECKED Sujun Talukder
DETAILS	BY Doug Wooten	CHECKED Sujun Talukder
QUANTITIES	BY H. Vu / J. Szabo	CHECKED Mario Guadamuz

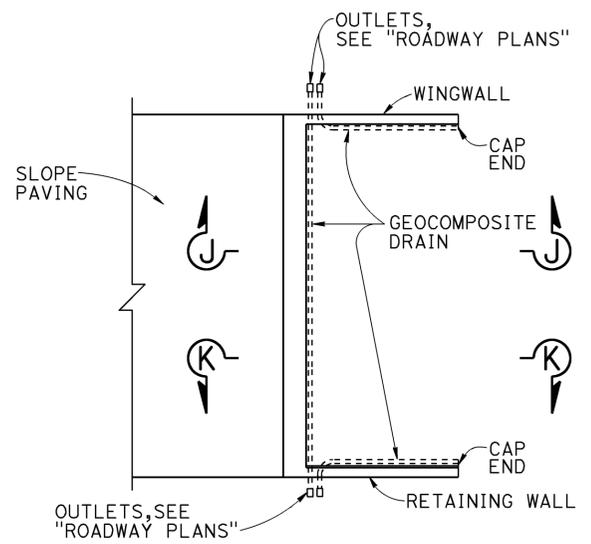
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO.	51-0343
POST MILE	2.64

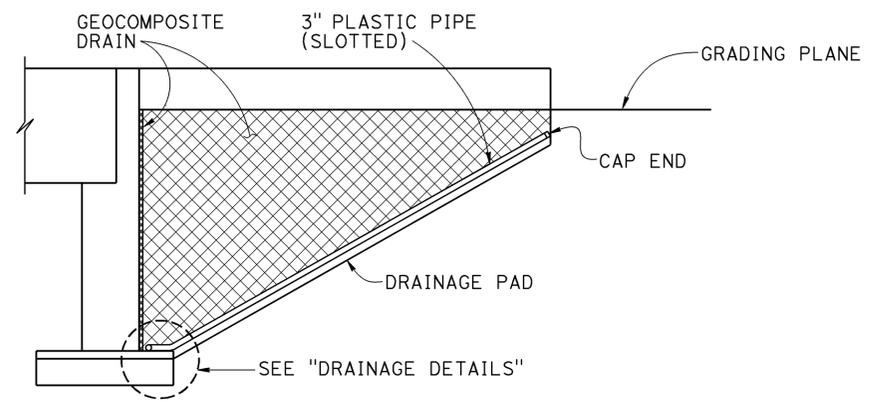
CASITAS PASS ROAD OVERCROSSING (REPLACE)
ABUTMENT DETAILS NO. 5

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	584	786
<i>Rakesh Deo</i> REGISTERED CIVIL ENGINEER			5-23-14 DATE		
12-7-15 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>					

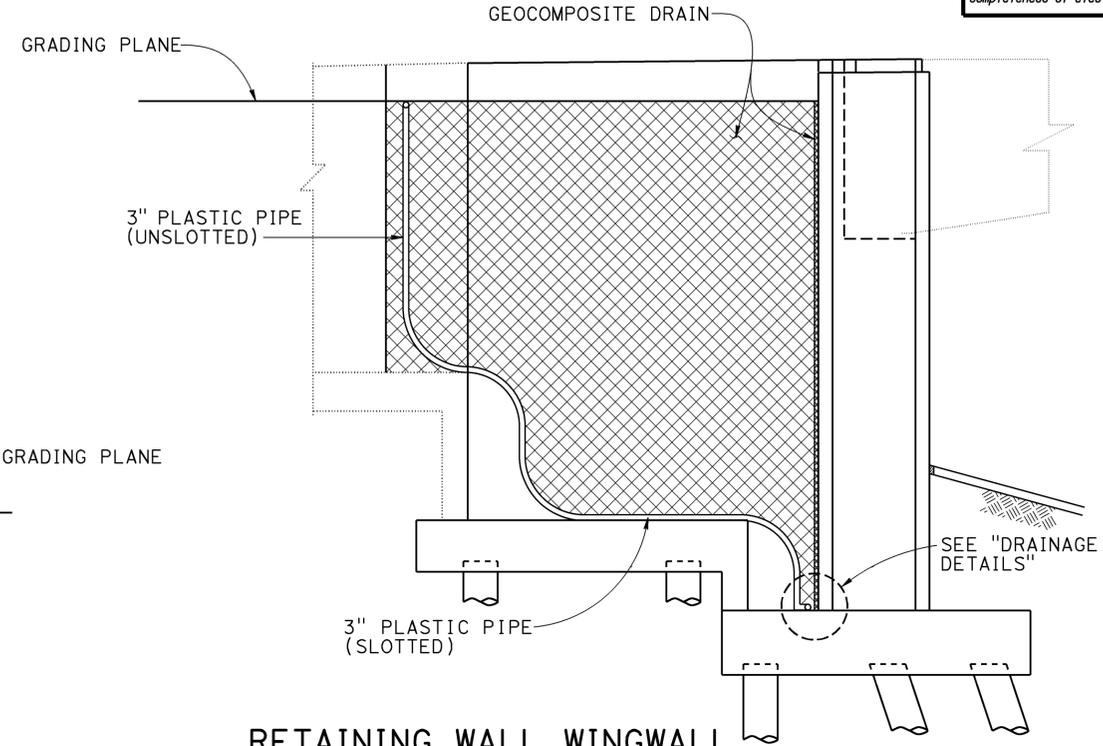


TYPICAL PLAN
No Scale

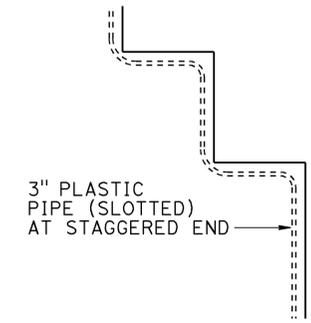
FOR PIPE LAYOUT AT STAGGERED END, SEE "DETAIL B"



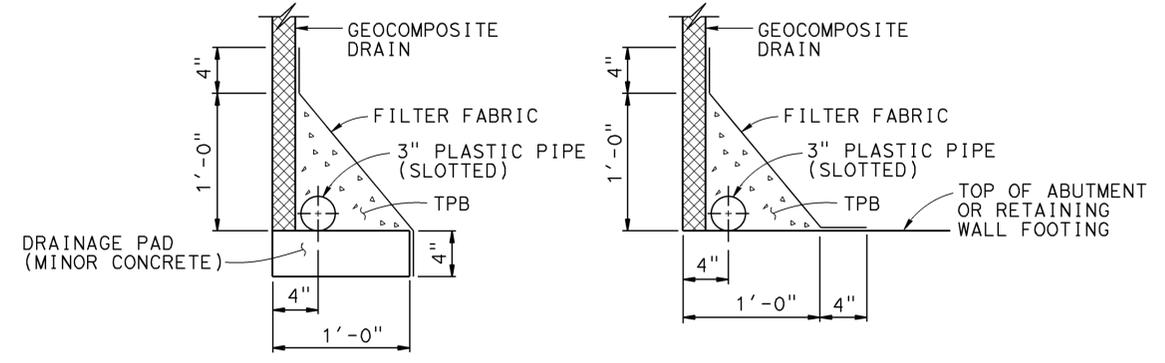
CANTILEVER WINGWALL
SECTION J-J
No Scale



RETAINING WALL WINGWALL DRAINAGE DETAILS
SECTION K-K
No Scale



DETAIL B
No Scale



WITHOUT FOOTING **WITH FOOTING**
DRAINAGE DETAILS
No Scale

DESIGN	BY Huan Vu / R. Deo	CHECKED Sujan Talukder
DETAILS	BY Doug Wooten	CHECKED Sujan Talukder
QUANTITIES	BY H. Vu / J. Szabo	CHECKED Mario Guadamuz

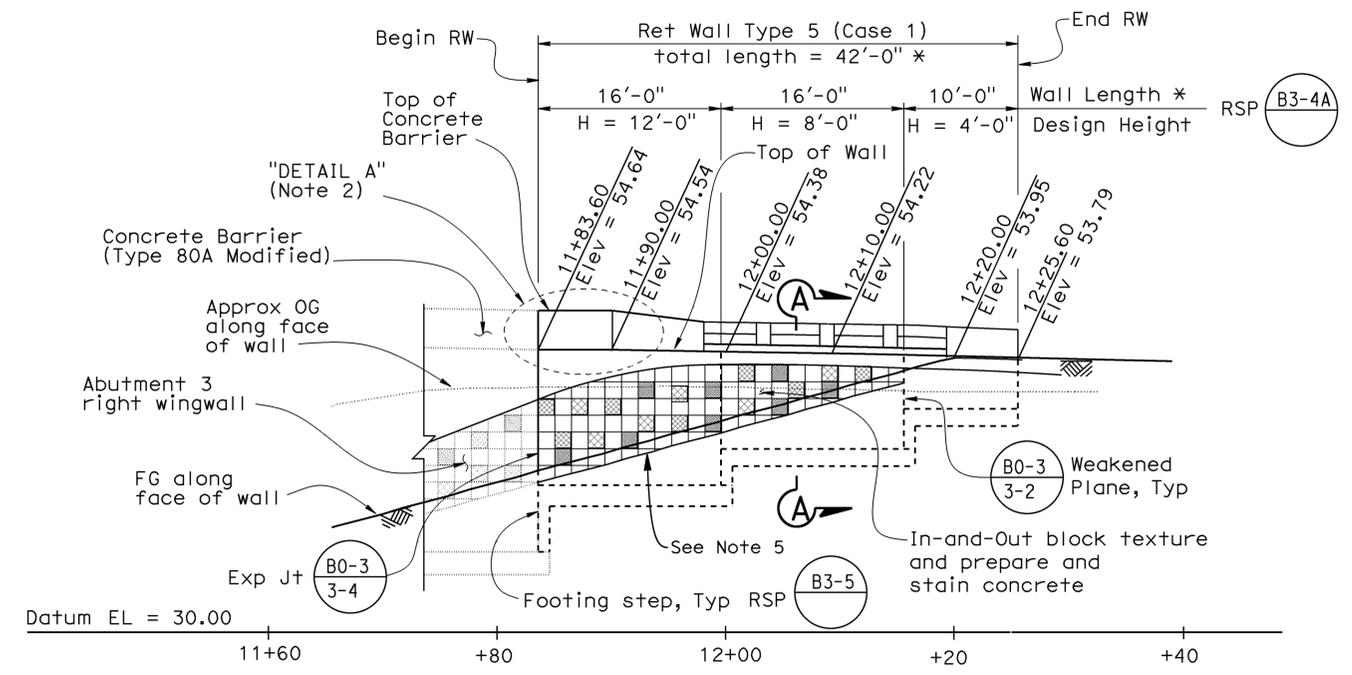
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO.	51-0343
POST MILE	2.64

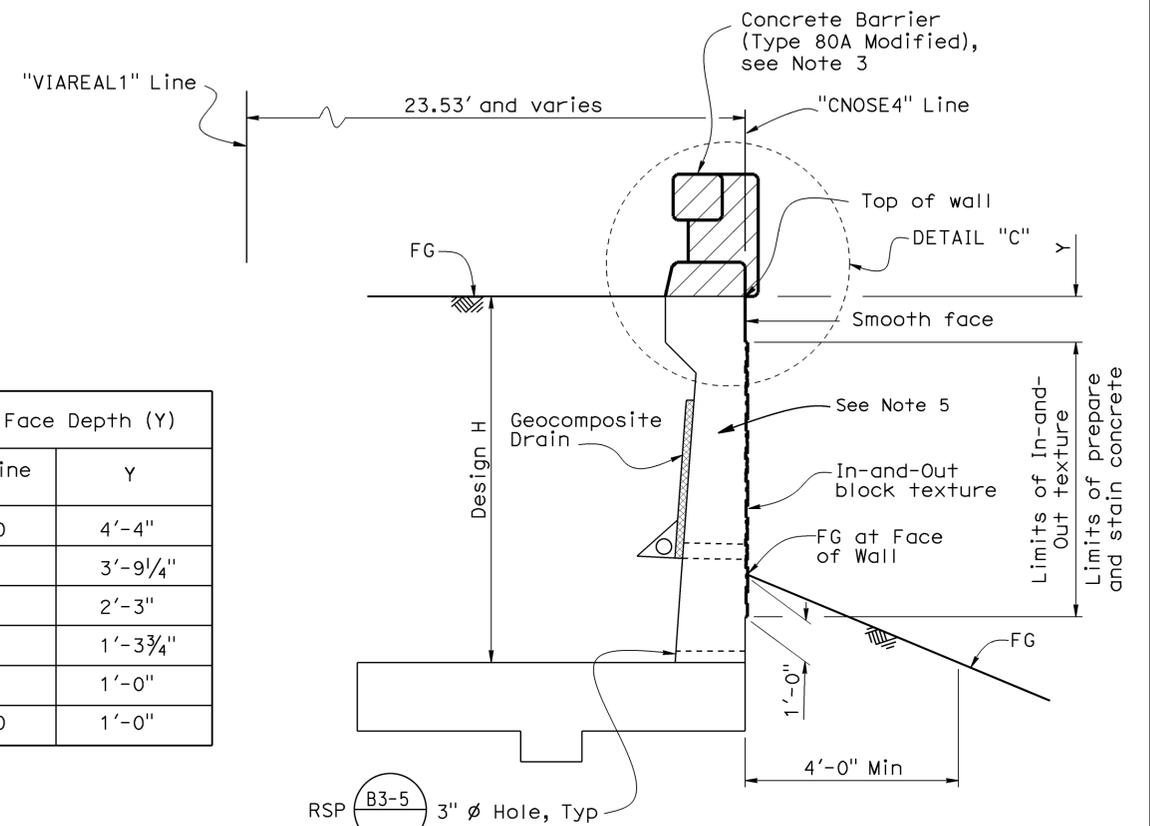
CASITAS PASS ROAD OVERCROSSING (REPLACE)
ABUTMENT DETAILS NO. 6

- NOTES:
- Barrier mounted picket fence railing on Abut 3 Rt wing wall not shown.
 - For "DETAIL A", see "RETAINING WALL DETAILS", sheet.
 - For modified barrier post details, see "BARRIER MOUNTED PICKET FENCE RAILING DETAILS NO. 1" sheet.
 - Limits of prepare and stain concrete on barrier must be exposed surfaces of rail from Begin RW to End RW.
 - Use integrally colored concrete, see "ELEVATION" on "ABUTMENT 3 LAYOUT" sheet

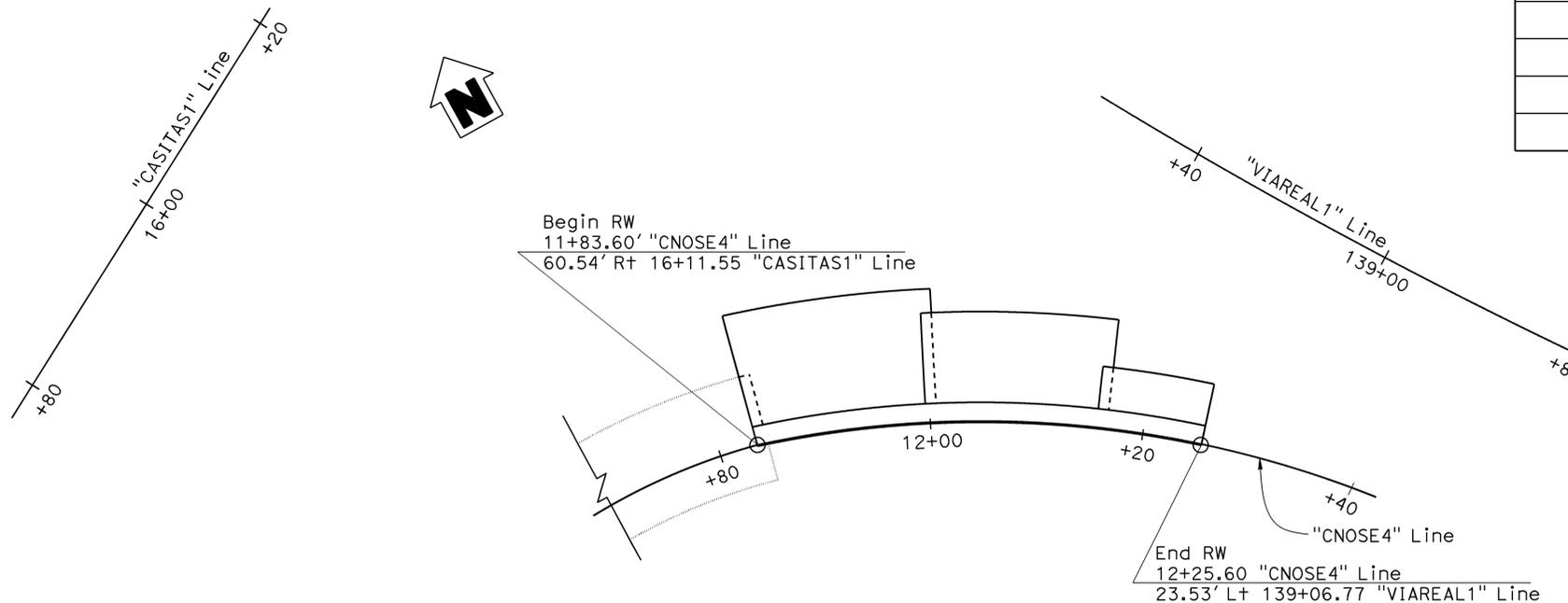


ELEVATION
1/8" = 1'-0"

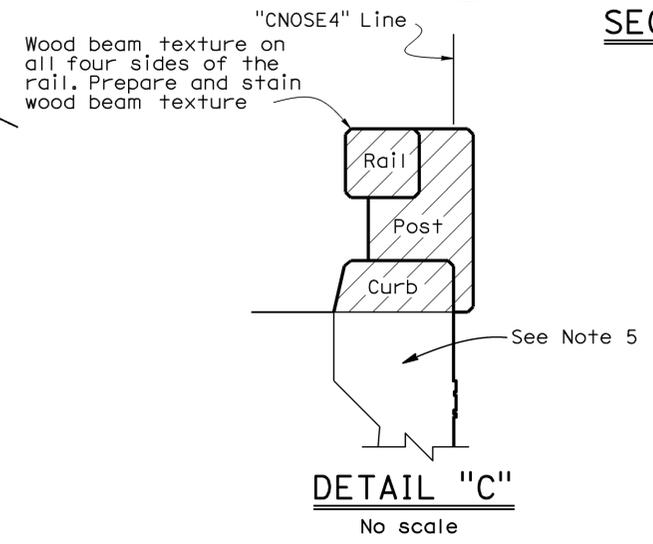
Smooth Face Depth (Y)	
"CNOSE4" Line Station	Y
11+83.60	4'-4"
11+85	3'-9 1/4"
11+90	2'-3"
11+95	1'-3 3/4"
12+00	1'-0"
12+25.60	1'-0"



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



PLAN
1/8" = 1'-0"



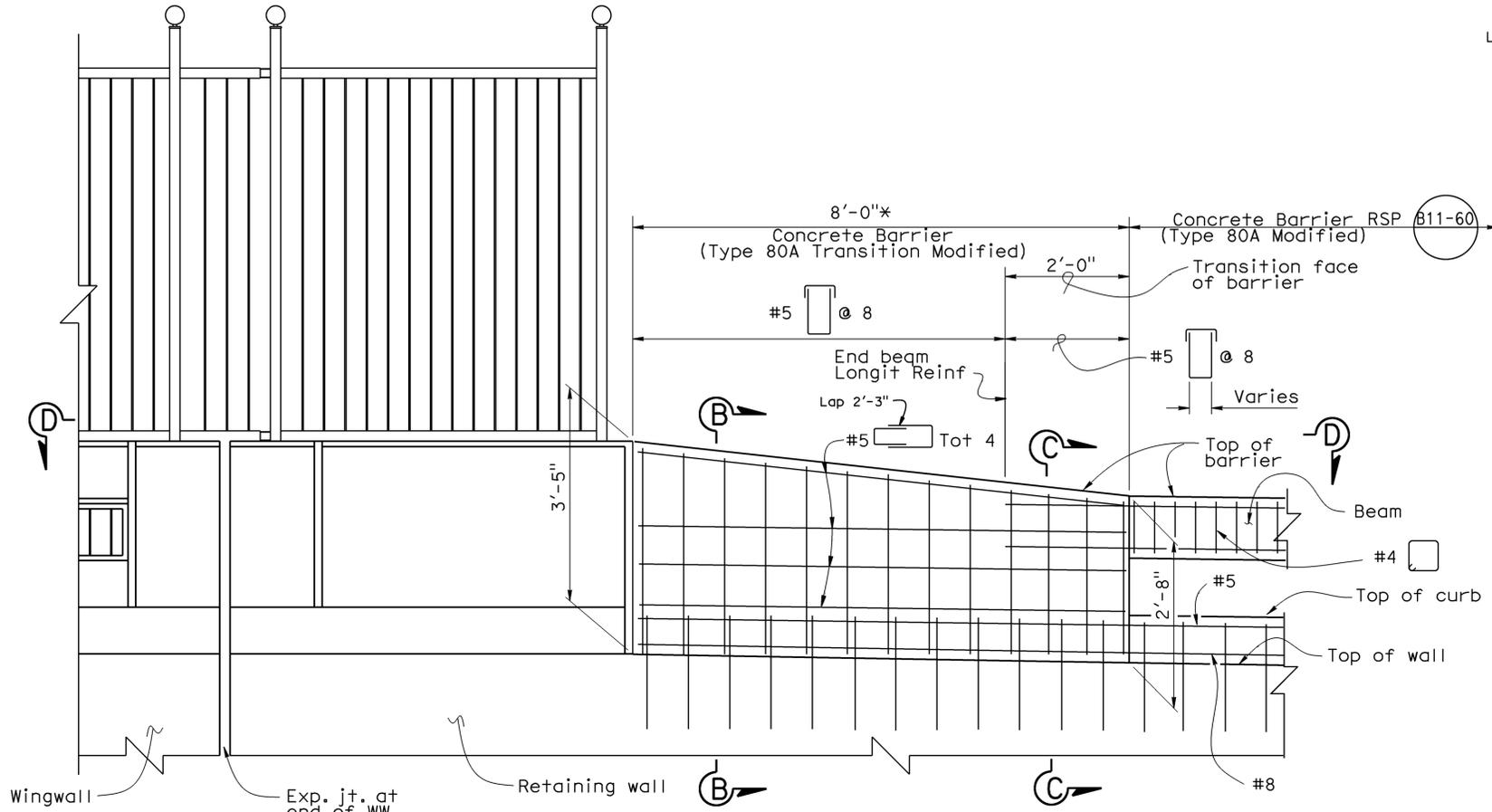
LEGEND:

Indicates integrally colored concrete

* Measured along "CNOSE4" Line

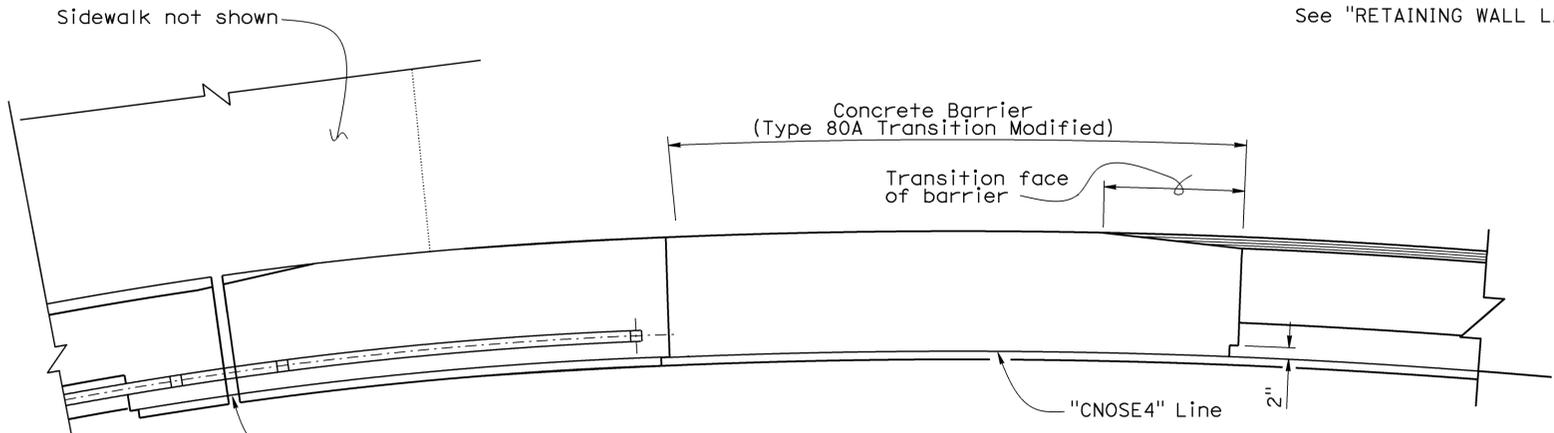
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	586	786
<i>Rakesh Deo</i> REGISTERED CIVIL ENGINEER			5-23-14 DATE		
12-7-15 PLANS APPROVAL DATE			The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.		

NOTE:
For details not shown, see "BARRIER MOUNTED PICKET FENCE RAILING LAYOUT NO. 1" sheet

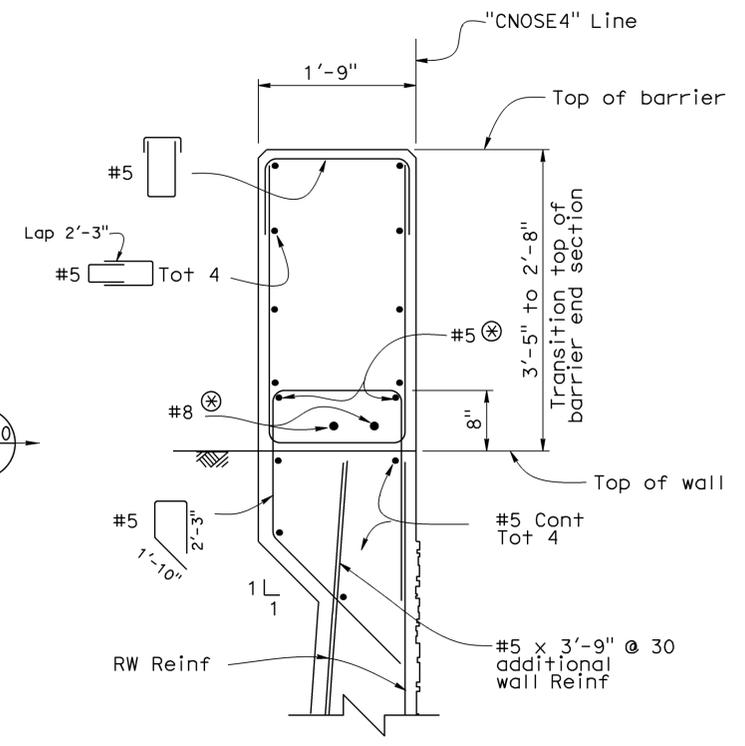


DETAIL A
3/4" = 1'-0"

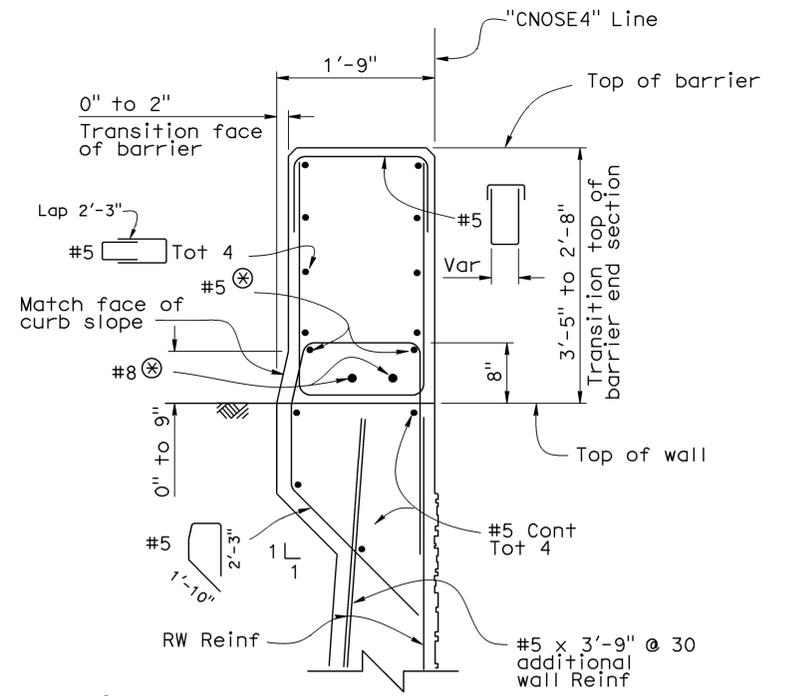
* Measure along "CNOSE4" Line
NOTE:
For location of Detail A,
See "RETAINING WALL LAYOUT" SHEET.



VIEW D-D
3/4" = 1'-0"



SECTION B-B
1" = 1'-0"



SECTION C-C
1" = 1'-0"

DESIGN	BY Manode Kodsuntie	CHECKED Jun Ki Jung
DETAILS	BY Bruno Jenko	CHECKED Jun Ki Jung
QUANTITIES	BY Jun Ki Jung	CHECKED Jun Ki Jung

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

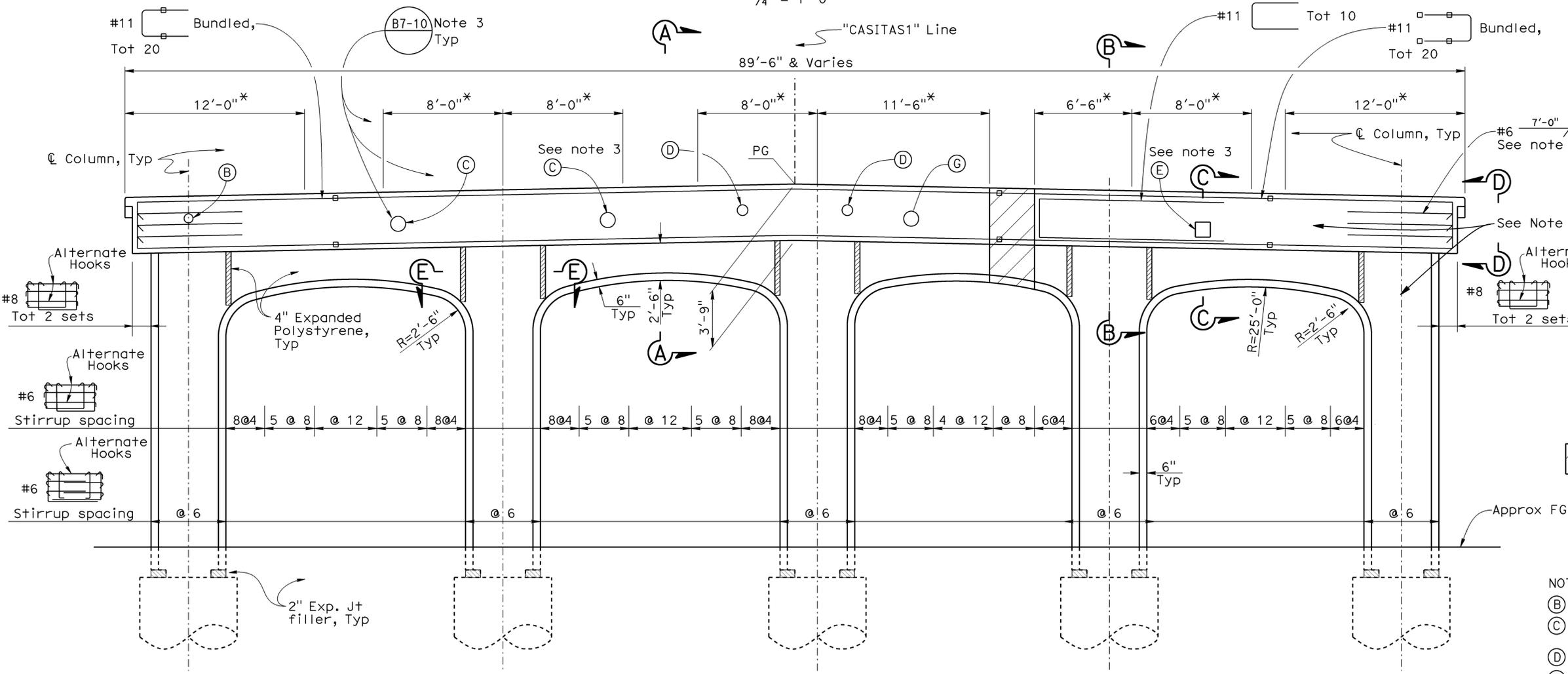
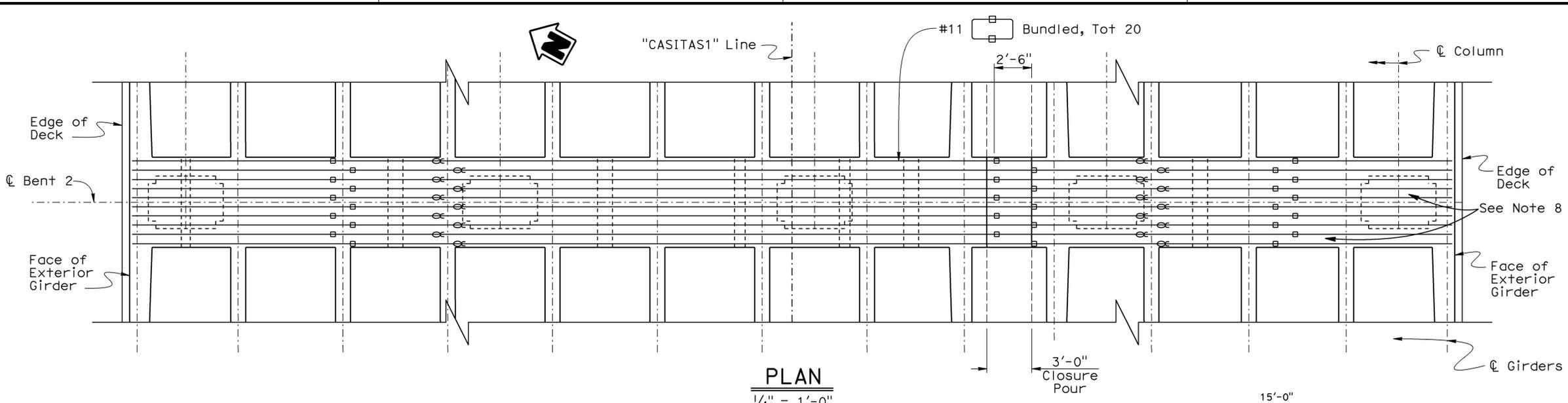
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO.	51-0343
POST MILE	2.64

CASITAS PASS ROAD OVERCROSSING (REPLACE)
RETAINING WALL DETAILS

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	587	786

Rakesh Deo 5-23-14
 REGISTERED CIVIL ENGINEER DATE
 12-7-15
 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.



- NOTES:**
- For "SECTION A-A", "SECTION B-B" and "SECTION C-C", see "BENT DETAILS NO. 1" sheet.
 - For reinforcement not shown, see "BENT DETAILS NO. 1", "BENT DETAILS NO. 2" and "BENT DETAILS NO. 3" sheets.
 - For details, see Section C-C on "BENT DETAILS NO. 1" sheet and Utility Opening in Bent Cap on "BENT DETAILS NO. 3" sheet.
 - Falsework at Bent 2 Stage 2 Construction to be removed after completion of Bent Cap closure pour.
 - For "SECTION E-E" see "BENT DETAILS NO. 3" sheet.
 - Adjust reinf to clear opening.
 - Lap splices prohibited in bent cap reinf.
 - Use integrally colored concrete in all bent elements above the top of CISS piles excluding the deck slab

- LEGEND:**
- * Indicates "NO SPLICE ZONE" for main bent cap reinforcement and service spliced side face reinforcement.
 - ∞ Indicates bundled bars
 - Indicates service splices to be staggered 2'-6"
 - ▨ Indicates limit of closure pour

- NOTES:**
- (B) 3" Water supply line (bridge)
 - (C) 8"∅ Water line (12"∅ casing), City of Carpinteria
 - (D) Bridge planter drainage pipe
 - (E) 1'-0" x 1'-0" Opening for power conduit, SCE
 - (G) 10"∅ water line (12"∅ casing) Carpinteria Valley Water District

DESIGN	BY Rakesh Deo	CHECKED Ubong Inyang
DETAILS	BY G. Dickerson/C. Cancino	CHECKED Ubong Inyang
QUANTITIES	BY H. Vu / J. Szabo	CHECKED Mario Guadamuz

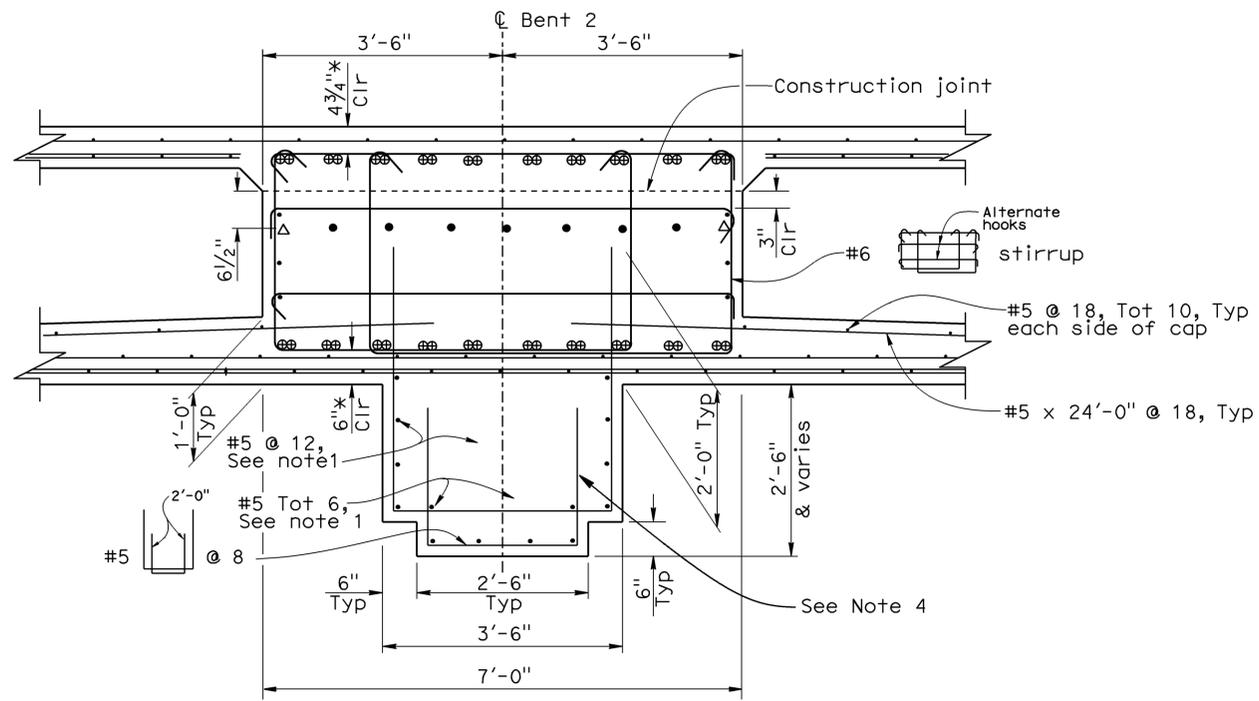
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO.	51-0343	CASITAS PASS ROAD OVERCROSSING (REPLACE)
POST MILE	2.64	
BENT LAYOUT		

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	588	786
			5-23-14 REGISTERED CIVIL ENGINEER DATE 12-7-15 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.		

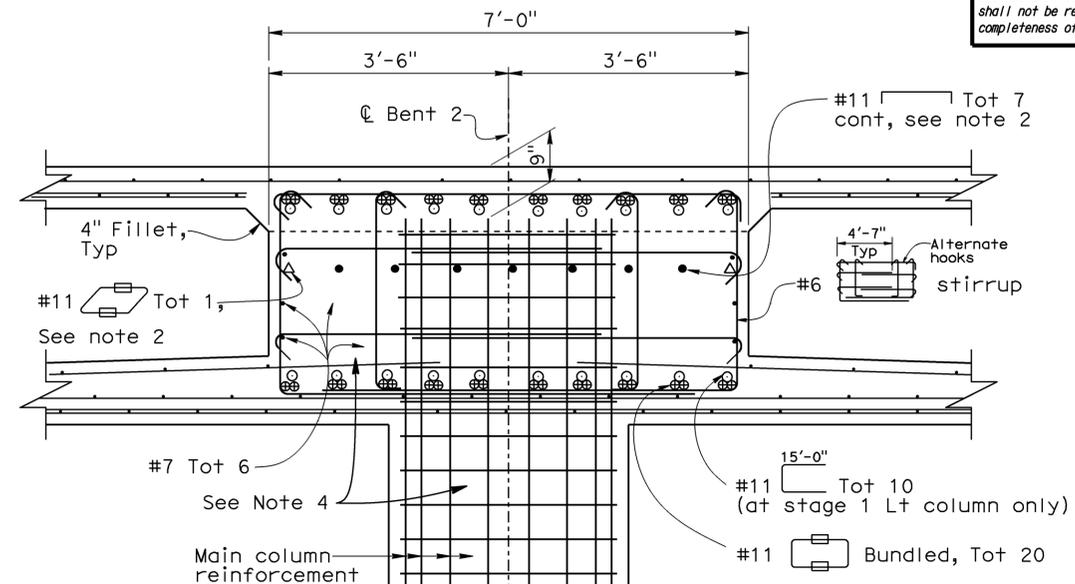
NOTES:

1. Extend reinf 1'-6" into column concrete.
2. Adjust reinf to clear prestressing duct.
3. Lap splices prohibited in bent cap reinf.
4. Use integrally colored concrete, see "ELEVATION" on "BENT LAYOUT" sheet



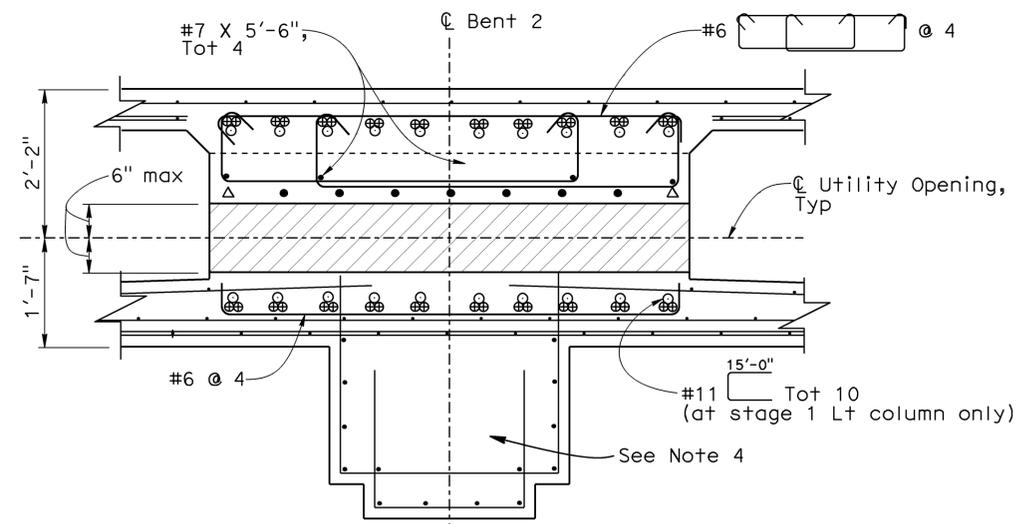
SECTION A-A

3/4" = 1'-0"



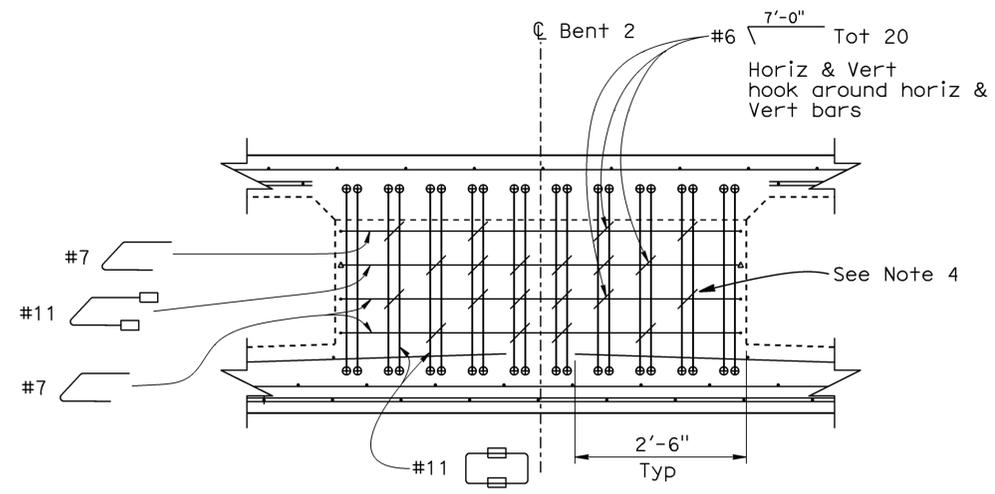
SECTION B-B

3/4" = 1'-0"



**SECTION C-C
AT UTILITY OPENING**

3/4" = 1'-0"



VIEW D-D

3/4" = 1'-0"

LEGEND:

- Indicates service plices to be staggered 2'-6"
- * Indicates clearance to main bent cap reinforcement
- ▨ Indicates utility opening in bent cap
- ⊕ Indicates # 11
- Indicates # 11
- △ Indicates # 11

DESIGN	BY Rakesh Deo	CHECKED Ubong Inyang
DETAILS	BY G. Dickerson/C. Cancino	CHECKED Ubong Inyang
QUANTITIES	BY H. Vu / J. Szabo	CHECKED Mario Guadamuz

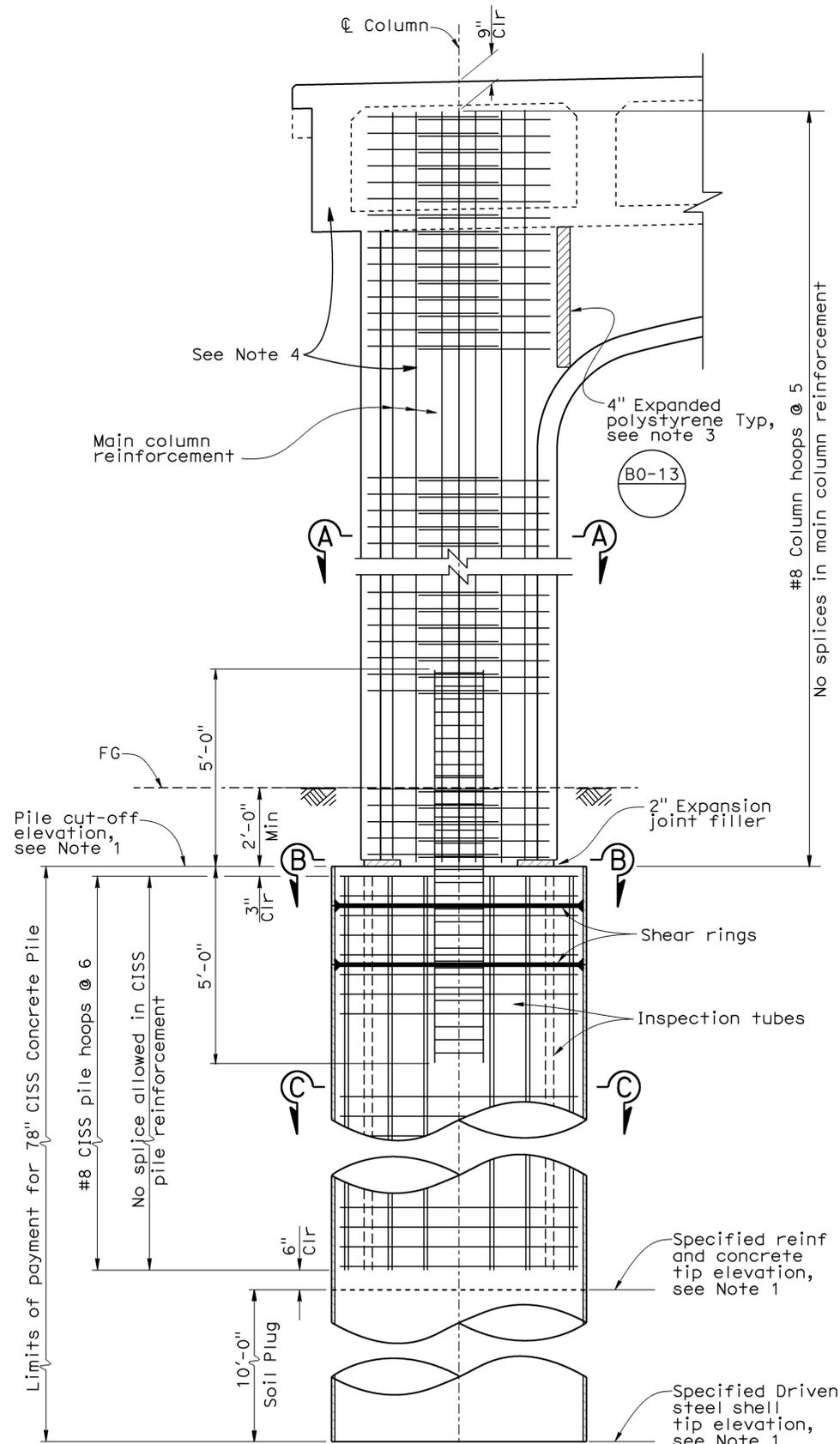
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 7

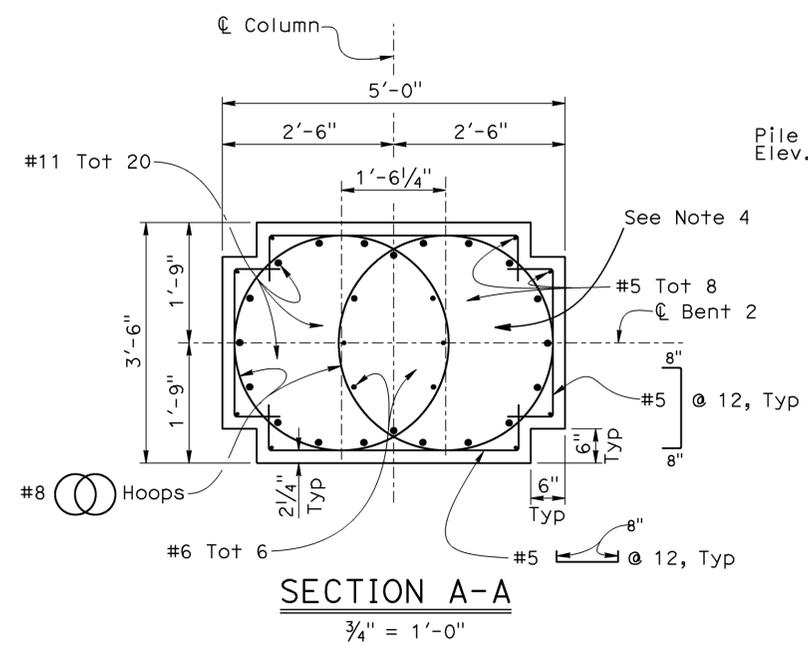
BRIDGE NO.	51-0343
POST MILE	2.64

CASITAS PASS ROAD OVERCROSSING (REPLACE)
BENT DETAILS NO. 1

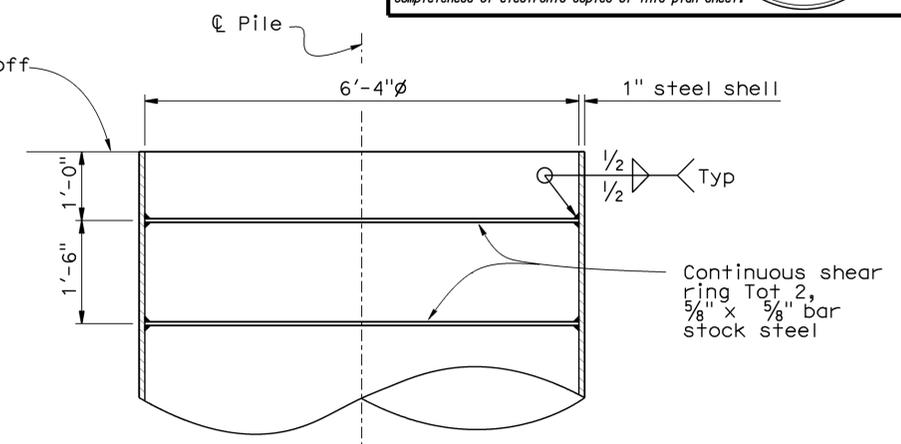
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	589	786
Rakesh Deo REGISTERED CIVIL ENGINEER DATE: 5-23-14			12-7-15 PLANS APPROVAL DATE		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



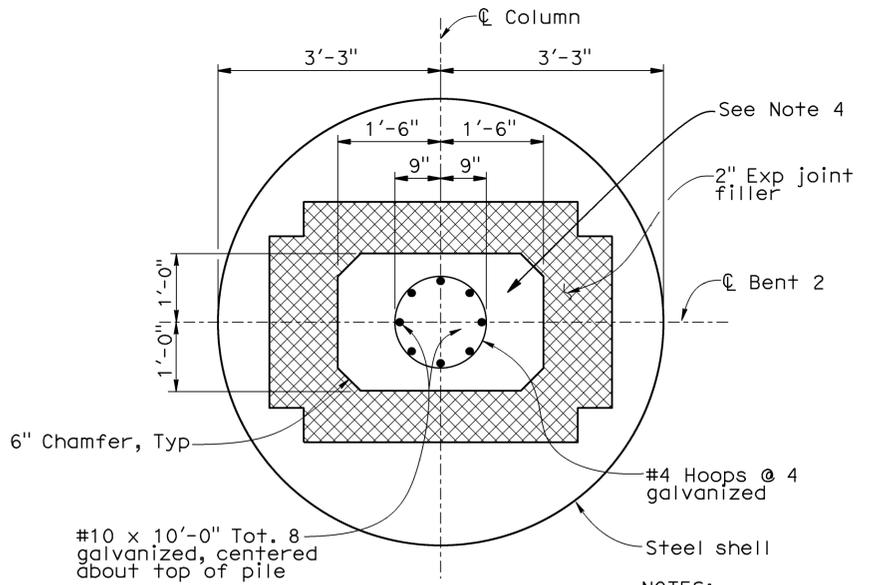
COLUMN ELEVATION
1/2" = 1'-0"



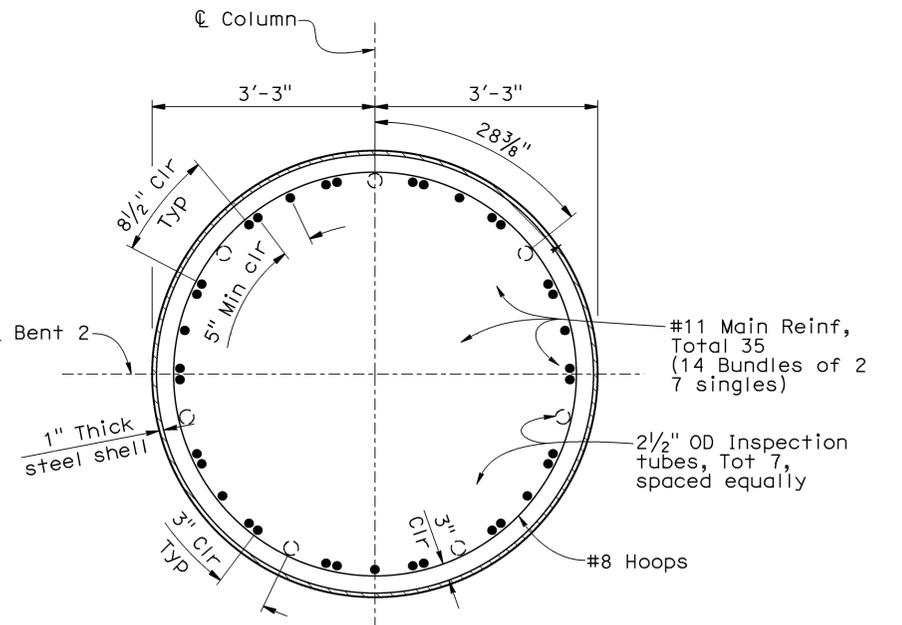
SECTION A-A
3/4" = 1'-0"



DOUBLE SHEAR RING DETAIL
3/4" = 1'-0"



SECTION B-B
3/4" = 1'-0"



SECTION C-C
3/4" = 1'-0"

- NOTES:
- See "Pile Data Table on \"INDEX TO PLANS\" sheet.
 - All hoops are ultimate butt spliced continuous. Only staggered ultimate butt splices are allowed.
 - Provide 6" concrete cover along perimeter on all sides.
 - Use integrally colored concrete, see "ELEVATION" on "BENT LAYOUT" sheet

LEGEND:
 Indicates inspection tubes

DESIGN	BY R. Deo / S. Talukder	CHECKED Ubong Inyang
DETAILS	BY Bruno Jenko	CHECKED Ubong Inyang
QUANTITIES	BY H. Vu / J. Szabo	CHECKED Mario Guadamuz

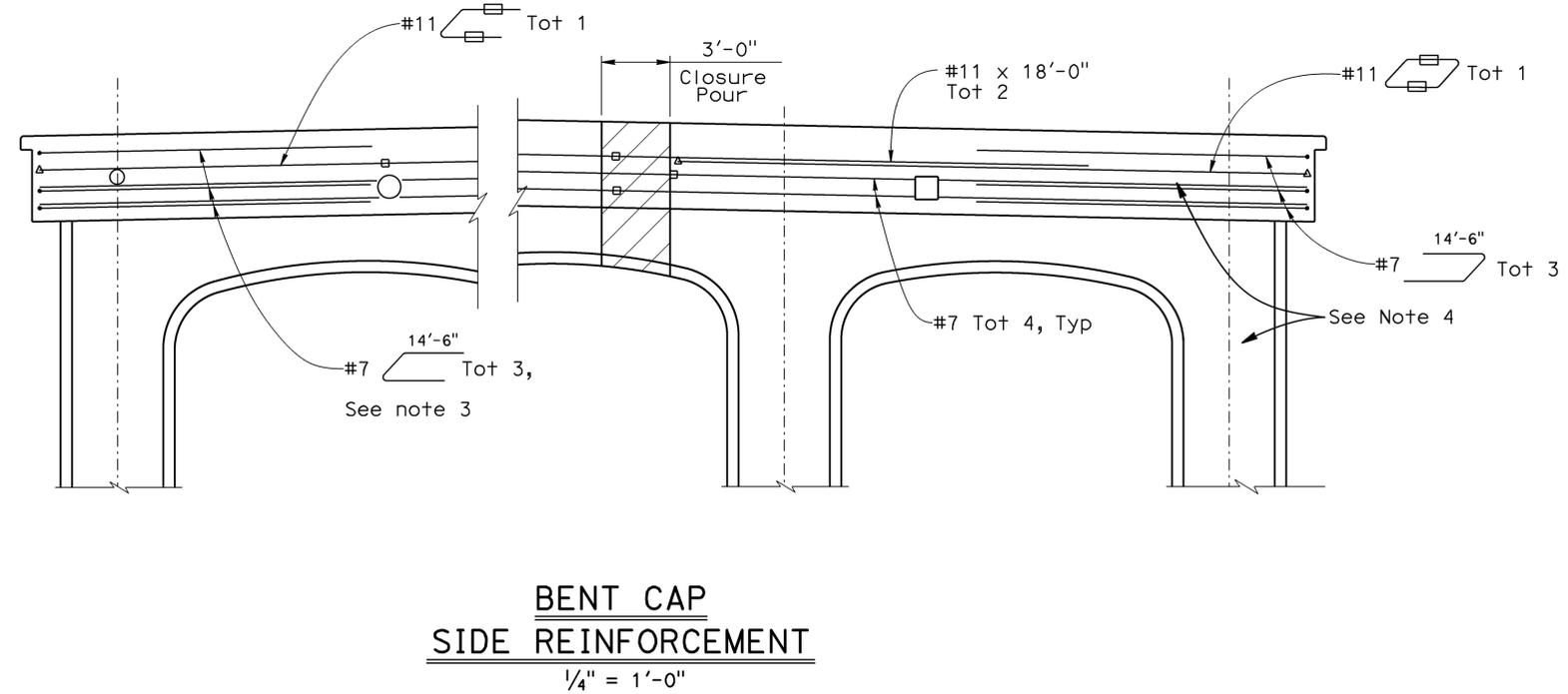
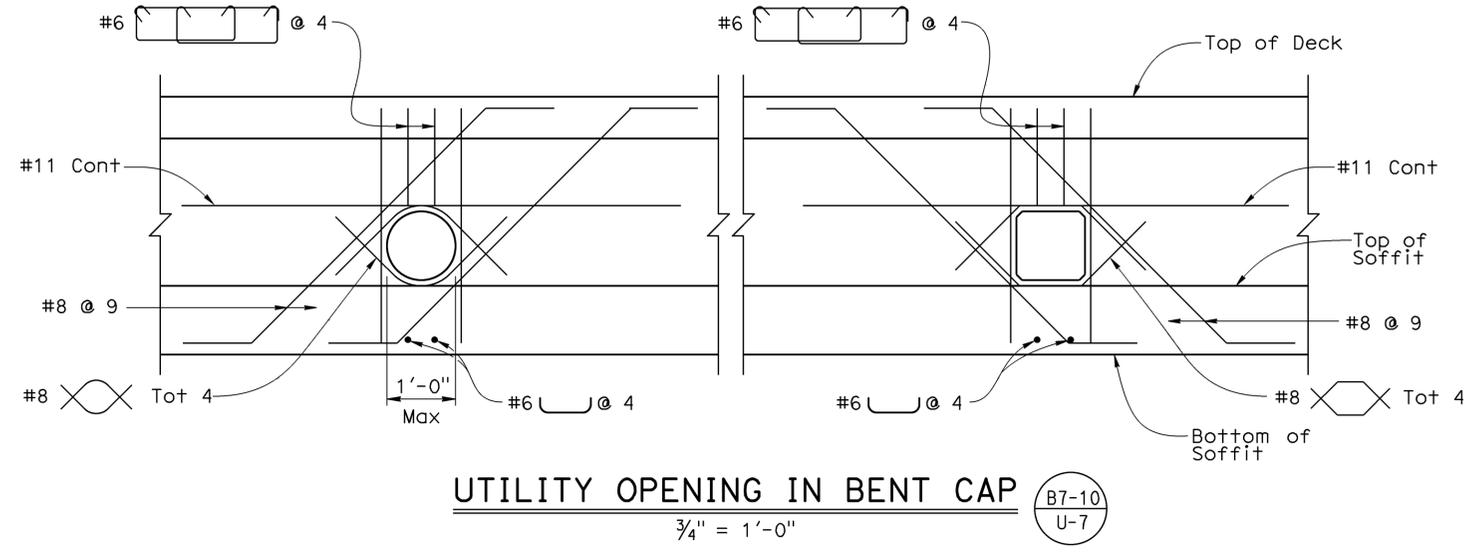
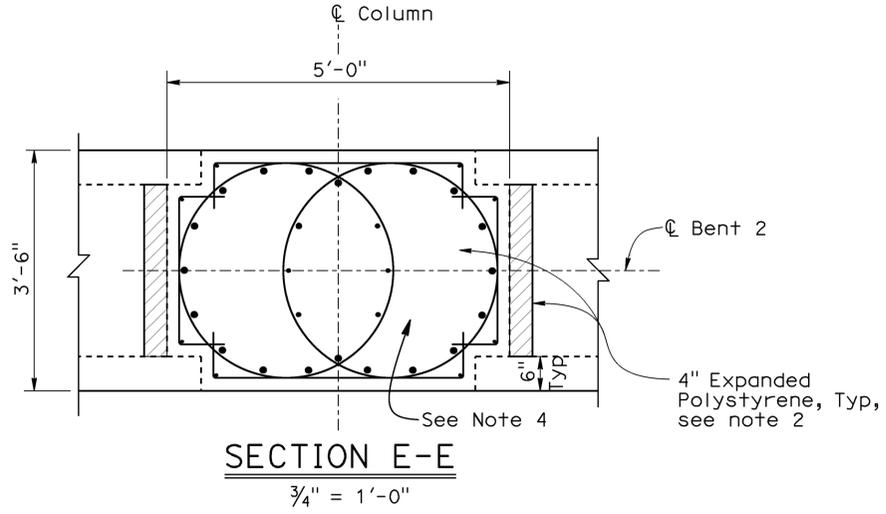
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO.	51-0343
POST MILE	2.64

CASITAS PASS ROAD OVERCROSSING (REPLACE)
BENT DETAILS NO. 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	590	786
			Rakesh Deo 5-23-14 REGISTERED CIVIL ENGINEER DATE		
			12-7-15 PLANS APPROVAL DATE		
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LEGEND:

□ - Indicates service splices to be staggered 2'-6"

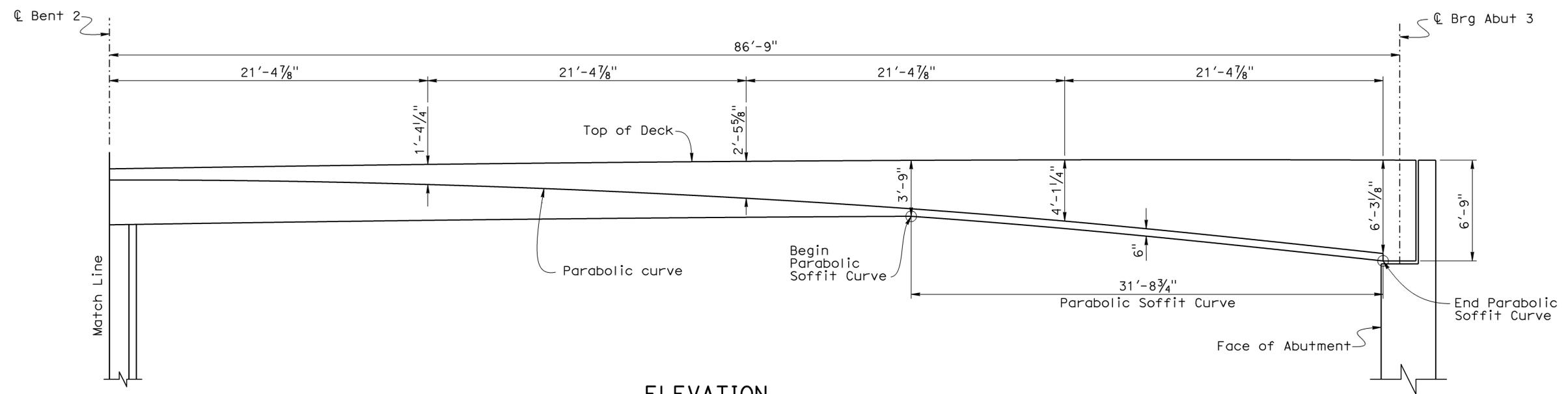
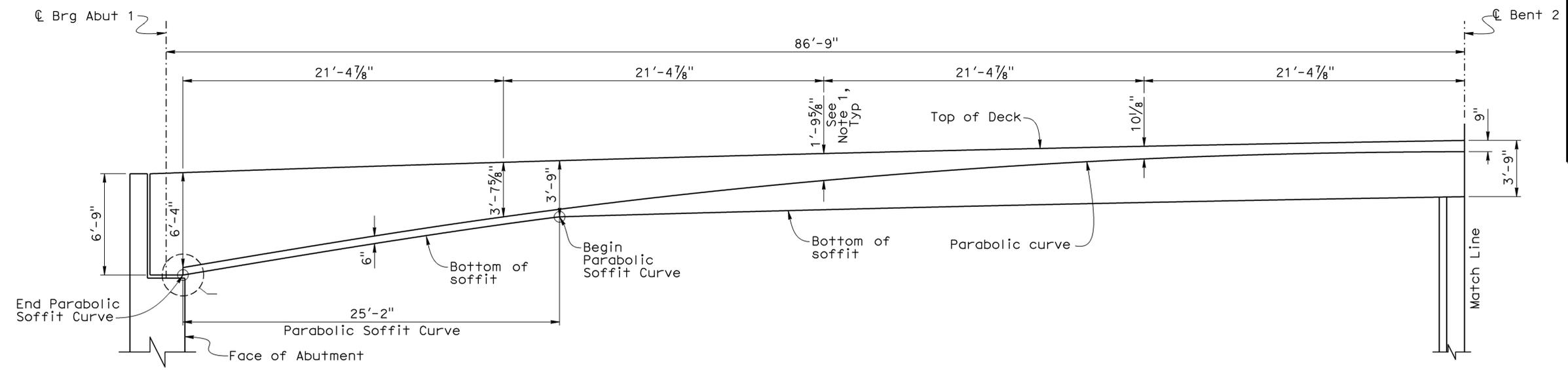
NOTES:

1. For reinforcement not shown, see "BENT LAYOUT" and "BENT DETAILS NO. 1" sheets.
2. Provide 6" concrete cover along perimeter on all sides.
3. Adjust reinf to clear opening.
4. Use integrally colored concrete, see "ELEVATION" on "BENT LAYOUT" sheet

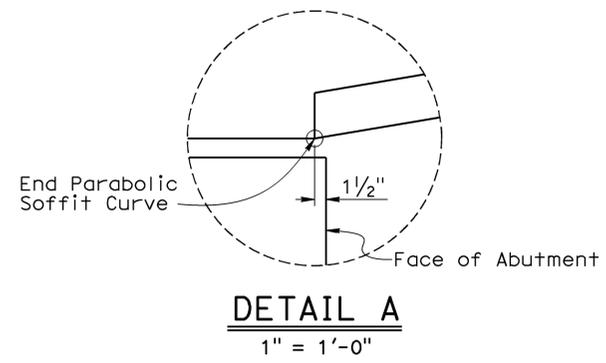
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	DESIGN BY Rakesh Deo CHECKED Ubong Inyang	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO. 51-0343	CASITAS PASS ROAD OVERCROSSING (REPLACE) BENT DETAILS NO. 3
	DETAILS BY Jaime Ramirez CHECKED Ubong Inyang		PROJECT NUMBER & PHASE: 05000005431	POST MILE 2.64	
	QUANTITIES BY H. Vu / J. Szabo CHECKED Mario Guadamuz		DESIGN BRANCH 7	CONTRACT NO.: 05-4482U4	REVISION DATES 11-13-13 05/19/14 04-21-14

USERNAME => s115755 DATE PLOTTED => 04-DEC-2015 TIME PLOTTED => 08:52

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	591	786
			5-23-14 REGISTERED CIVIL ENGINEER DATE 12-7-15 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.		



ELEVATION
 1/4" = 1'-0"



- NOTES:
- Dimensions are measured at EOD from top of deck. Top of deck elevation varies with profile grade and deck cross slope.
 - For details not shown, see "TYPICAL SECTION" sheet.

DESIGN BY Rakesh Deo CHECKED Ubong Inyang		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO. 51-0343	CASITAS PASS ROAD OVERCROSSING (REPLACE) BRIDGE GEOMETRICS		
DETAILS BY Gerald Dickerson CHECKED Ubong Inyang				POST MILE 2.64			
QUANTITIES BY H. Vu / J. Szabo CHECKED Mario Guadamuz							
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	UNIT: 3592 PROJECT NUMBER & PHASE: 05000005431	CONTRACT NO.: 05-4482U4	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 1-18-13 4-18-14 04-21-14	SHEET 20 OF 53

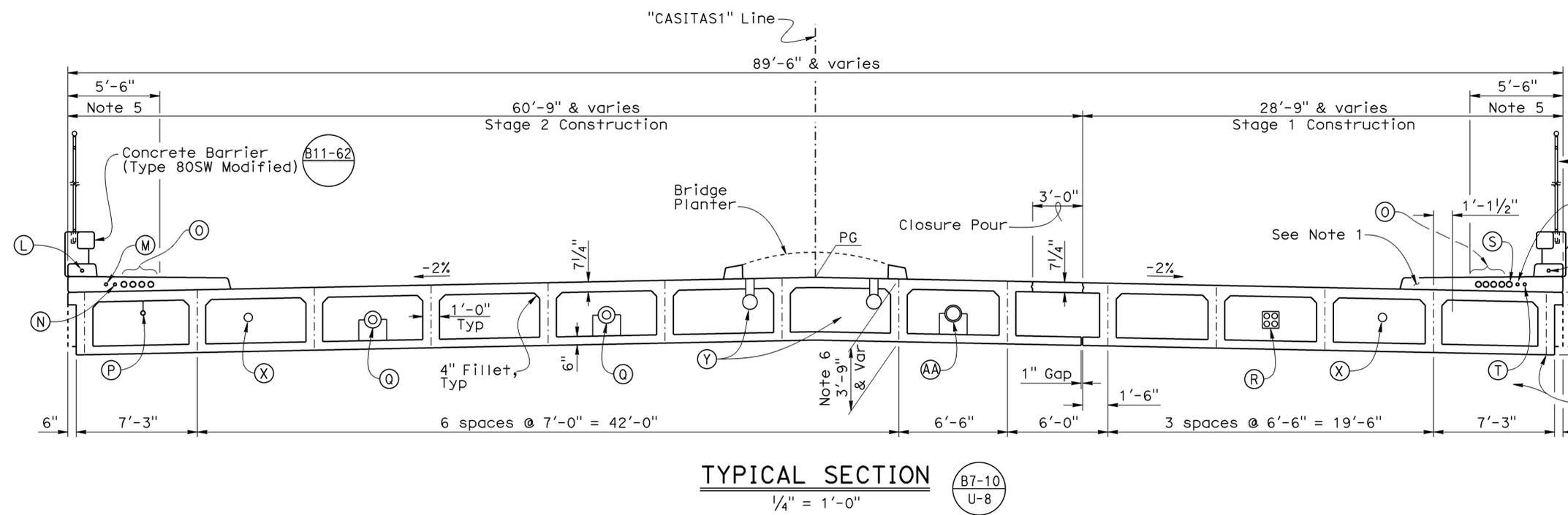
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	592	786

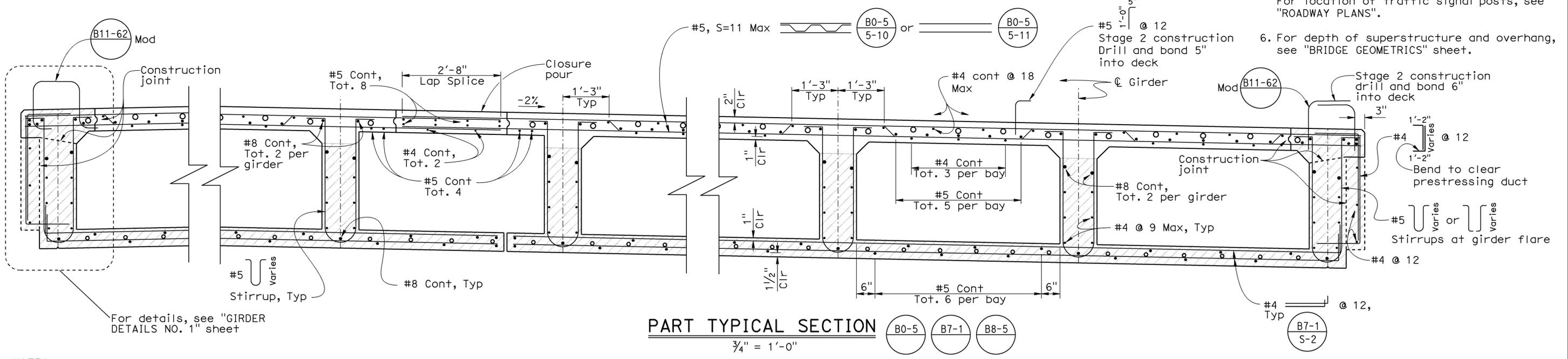
Rakesh Deo 5-23-14
 REGISTERED CIVIL ENGINEER DATE

12-7-15
 PLANS APPROVAL DATE

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- NOTES:
- Sidewalk, barrier and picket fence railing to be placed at end of Stage 2 construction.
 - All utilities must be centered in bay horizontally unless shown otherwise.
 - All utilities or casings, as applicable, in bay must be installed prior to placement of concrete for bridge deck.
 - Loop detectors to be placed in the deck prior to concrete pour, see "ROADWAY PLANS".
 - Locate utility conduits in sidewalk to clear traffic signal posts and foundations. For location of traffic signal posts, see "ROADWAY PLANS".
 - For depth of superstructure and overhang, see "BRIDGE GEOMETRICS" sheet.



- NOTES:
- (L) 2"Ø Electric Conduit (Decorative Lights), see "ROADWAY PLANS"
 - (M) 2"Ø Future Electric Conduit, see "ROADWAY PLANS"
 - (N) 2"Ø Electric Conduit (Irrigation), see "ROADWAY PLANS"
 - (O) 4 - 4"Ø (Tot 8) Telephone Conduit, Verizon
 - (P) 3" Water supply line (bridge)
 - (Q) 8"Ø Water line (12"Ø Casing), City of Carpinteria
 - (R) 4 - 5"Ø Power Conduit, SCE
 - (S) 4"Ø Television Conduit, COX Cable
 - (T) 2"Ø Electric Conduit (Traffic Signal), see "ROADWAY PLANS"
 - (X) Deck drainage
 - (Y) Bridge planter drainage
 - (AA) 10"Ø water line (12"Ø casing), Carpinteria Valley Water District

- LEGEND:
- o Indicates additional top slab and bottom slab reinforcement, see "GIRDER REINFORCEMENT NO. 1" and "GIRDER REINFORCEMENT NO. 2" sheets
 - ▨ Indicates integrally colored concrete

DESIGN	BY Rakesh Deo	CHECKED Ubong Inyang
DETAILS	BY G. Dickerson/C. Cancino	CHECKED Ubong Inyang
QUANTITIES	BY H. Vu / J. Szabo	CHECKED Mario Guadamuz

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO.	51-0343	CASITAS PASS ROAD OVERCROSSING (REPLACE)
POST MILE	2.64	
TYPICAL SECTION		

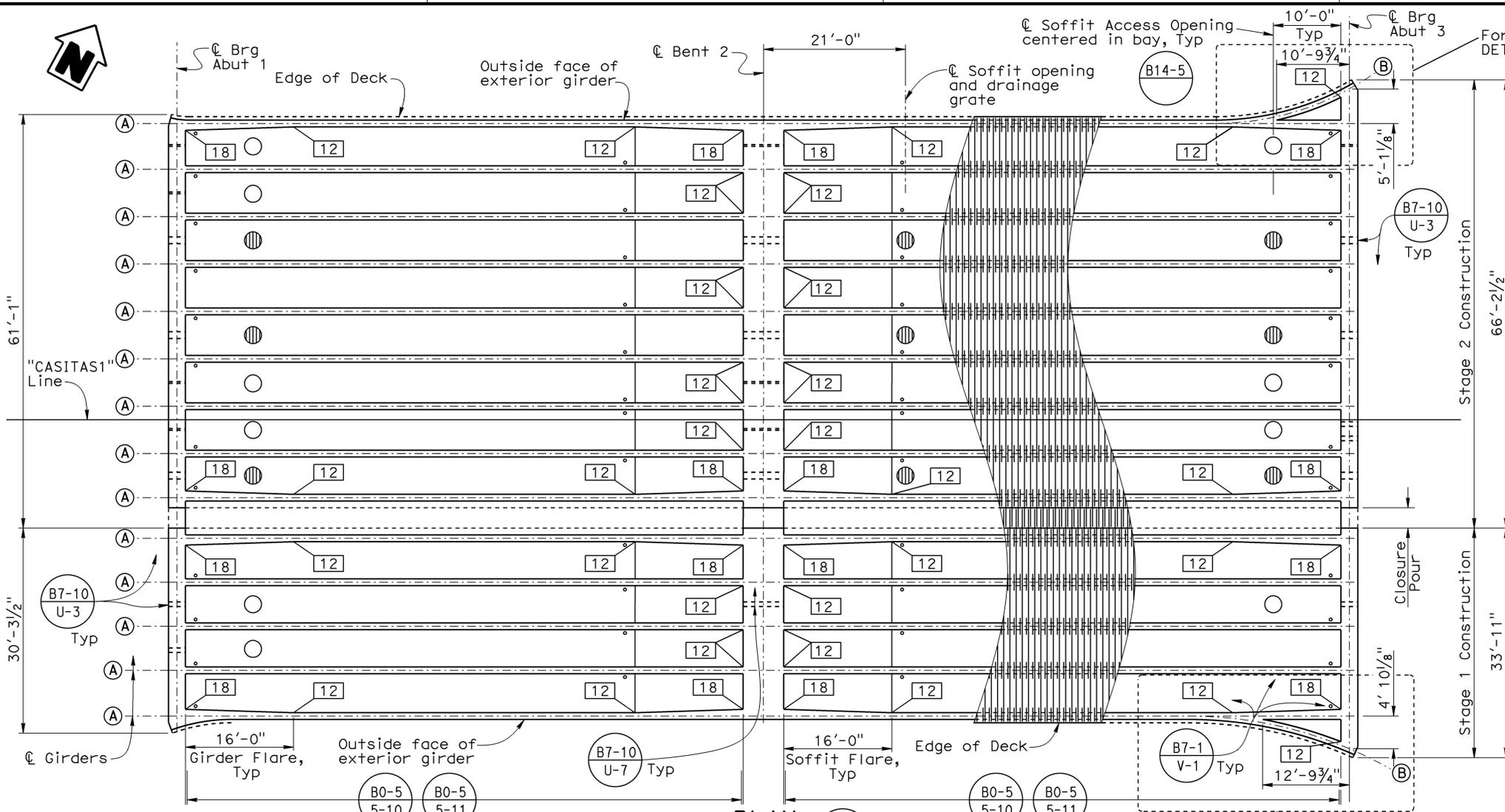
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	593	786

Rakesh Deo 5-23-14
 REGISTERED CIVIL ENGINEER DATE

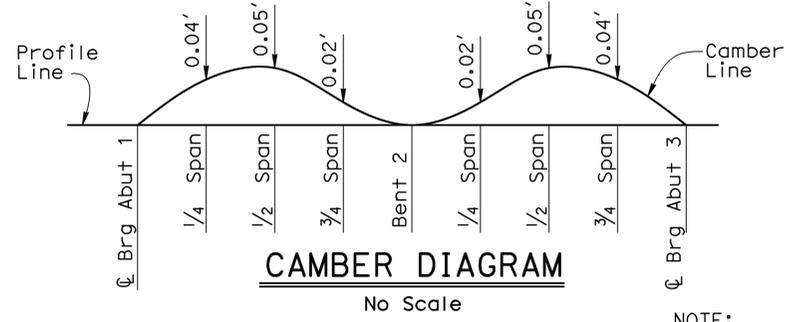
12-7-15
 PLANS APPROVAL DATE

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
 Rakesh Deo
 No. C73814
 Exp. 6/30/17
 CIVIL
 STATE OF CALIFORNIA



- LEGEND:
- ☒ Indicates point of no movement
 - Indicates girder stem width in inches
 - Indicates soffit access opening
 - ⊘ Indicates soffit opening and drainage grate, see "DECK DRAINAGE DETAILS" sheet



PRESTRESSING NOTES

270 KSI Low Relaxation Strands:

STAGE 1
 $P_{jack} = 5,000$ kips
 Total Number of Girders = 5

STAGE 2
 $P_{jack} = 9,000$ kips
 Total Number of Girders = 9

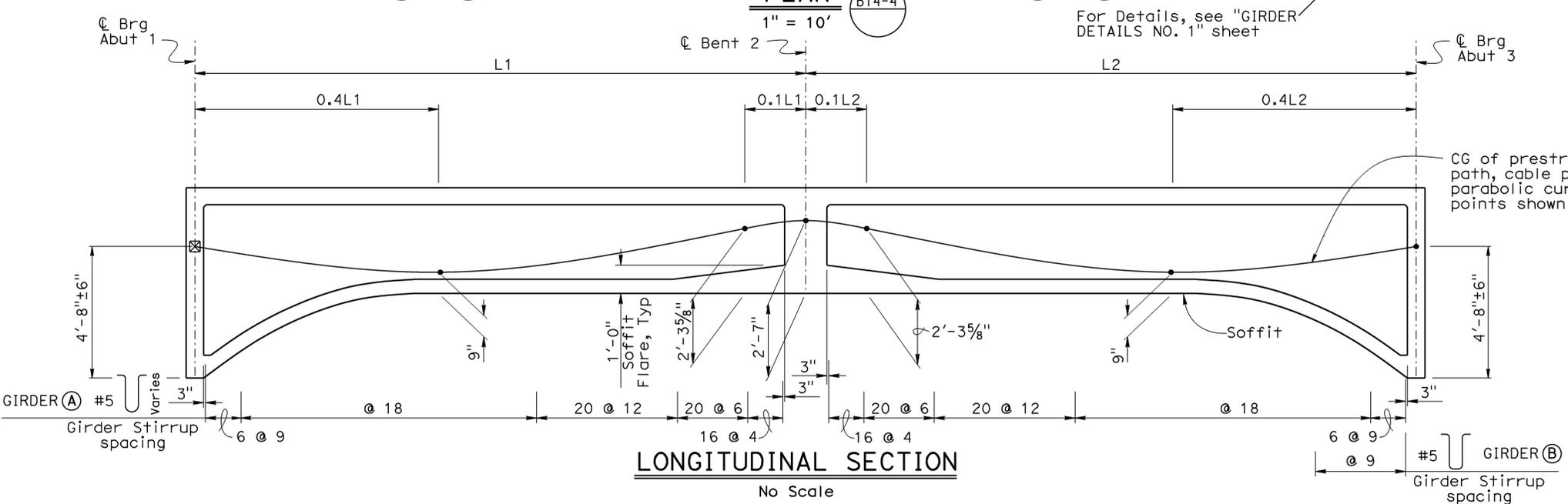
Anchor set = $\frac{3}{8}$ inch
 Friction Curvature Coefficient, $\mu = 15 \times 10^{-2}$ (1/rad)
 Friction Wobble Coefficient, $K = 0.0002/ft$

The final force ratio (larger divided by smaller) between any two girders must not exceed the ratio of 10 to 9

Concrete: $f'_c = 4.0$ ksi @ 28 days
 $f'_{ci} = 3.5$ ksi @ time of stressing

Contractor must submit elongation calculations based on initial stress at $\alpha = 0.9162$ times jacking stress.

One end stressing must be performed from Abutment 3 only



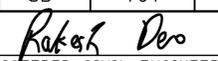
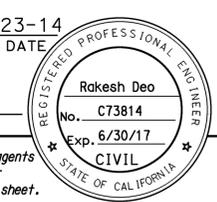
FALSEWORK RELEASE

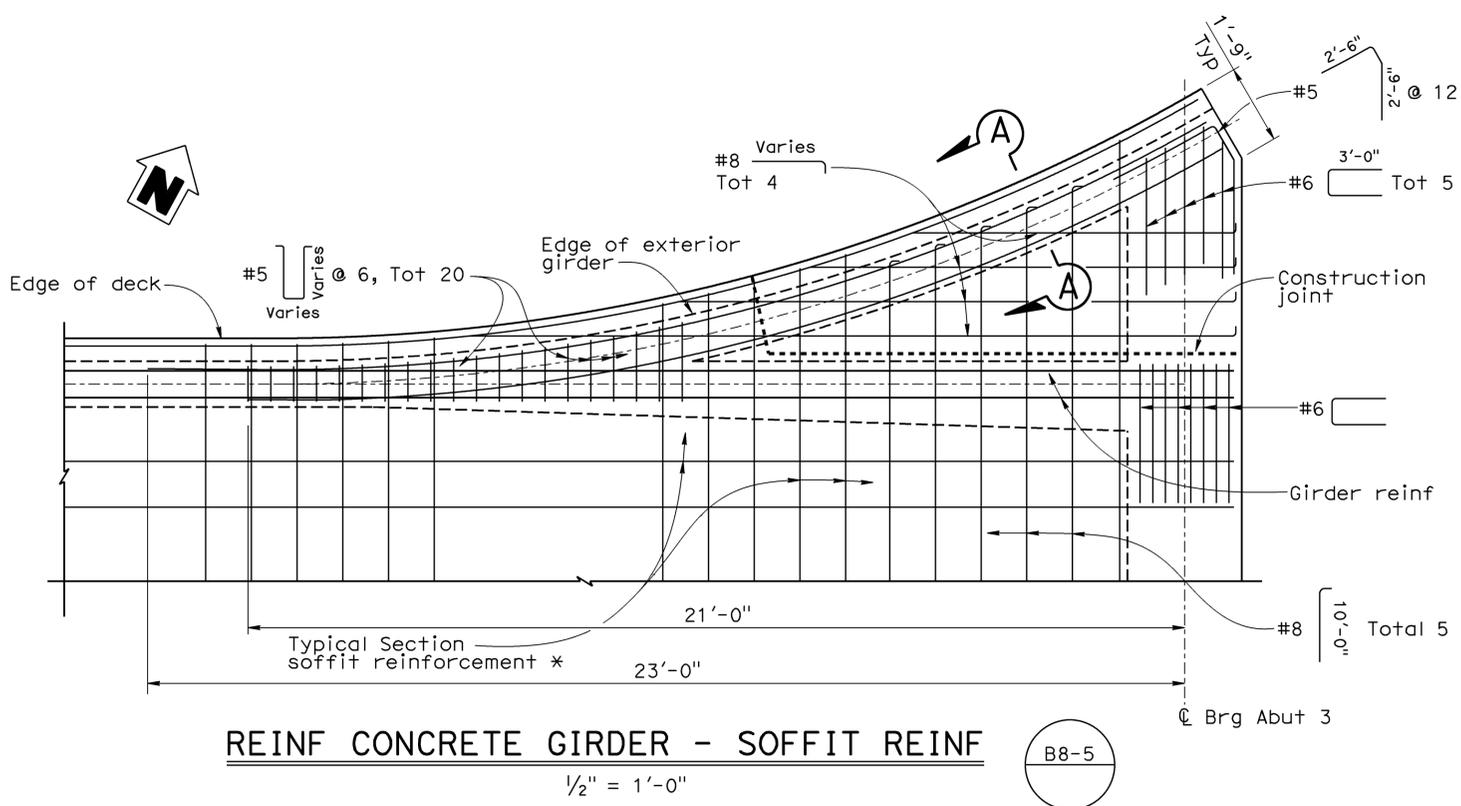
ALTERNATIVE 1:
 Falsework must be released as soon as permitted by the Specifications. Closure pour must not be placed sooner than 60 days after falsework has been released.

ALTERNATIVE 2:
 Falsework must be released less than 28 days after the last concrete has been placed. Closure pour must not be placed sooner than 14 days after the falsework has been released. When falsework release Alternative 2 is used, camber values are 0.75 times those shown.

NOTE:
 Falsework at Bent 2 stage 2 construction to be removed after completion of Bent Cap Closure Pour.

DESIGN BY R. Deo / S. Talukder	CHECKED Ubong Inyang	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO. 51-0343	CASITAS PASS ROAD OVERCROSSING (REPLACE) GIRDER LAYOUT
DETAILS BY G. Dickerson/C. Cancino	CHECKED Ubong Inyang		POST MILE 2.64	
QUANTITIES BY H. Vu / J. Szabo	CHECKED Mario Guadamuz			

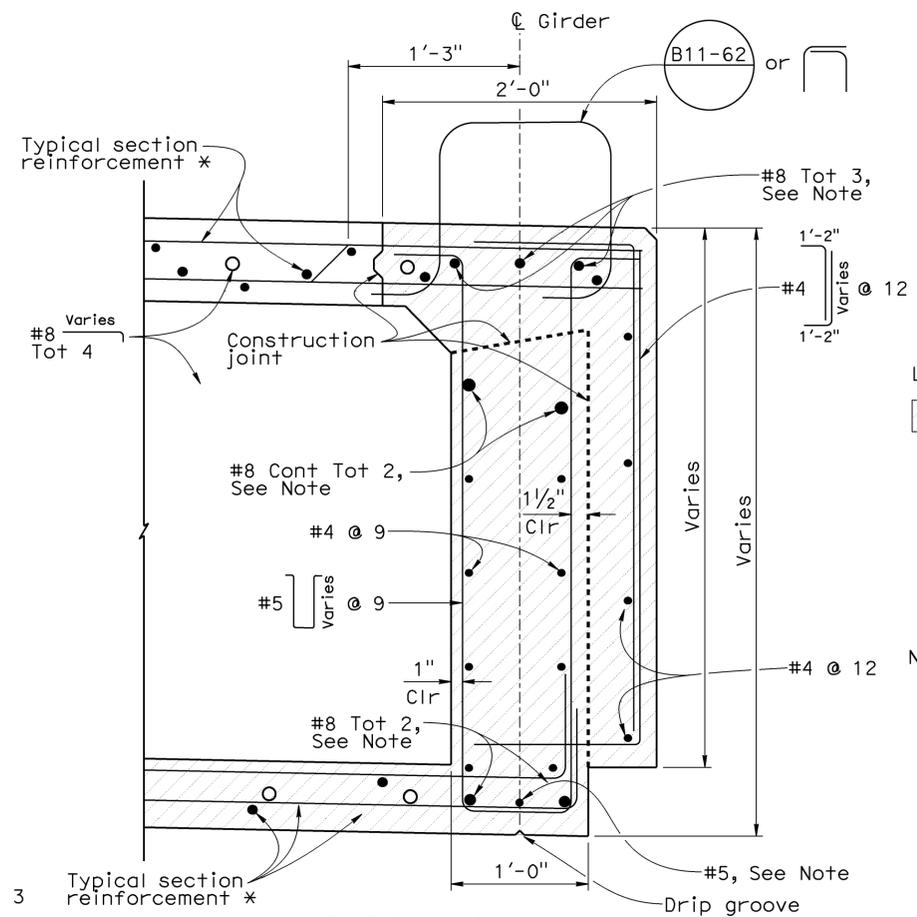
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	594	786
 REGISTERED CIVIL ENGINEER			5-23-14	DATE	
12-7-15 PLANS APPROVAL DATE					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.</small>					



REINFORCED CONCRETE GIRDER - SOFFIT REINFORCEMENT

1/2" = 1'-0"

B8-5



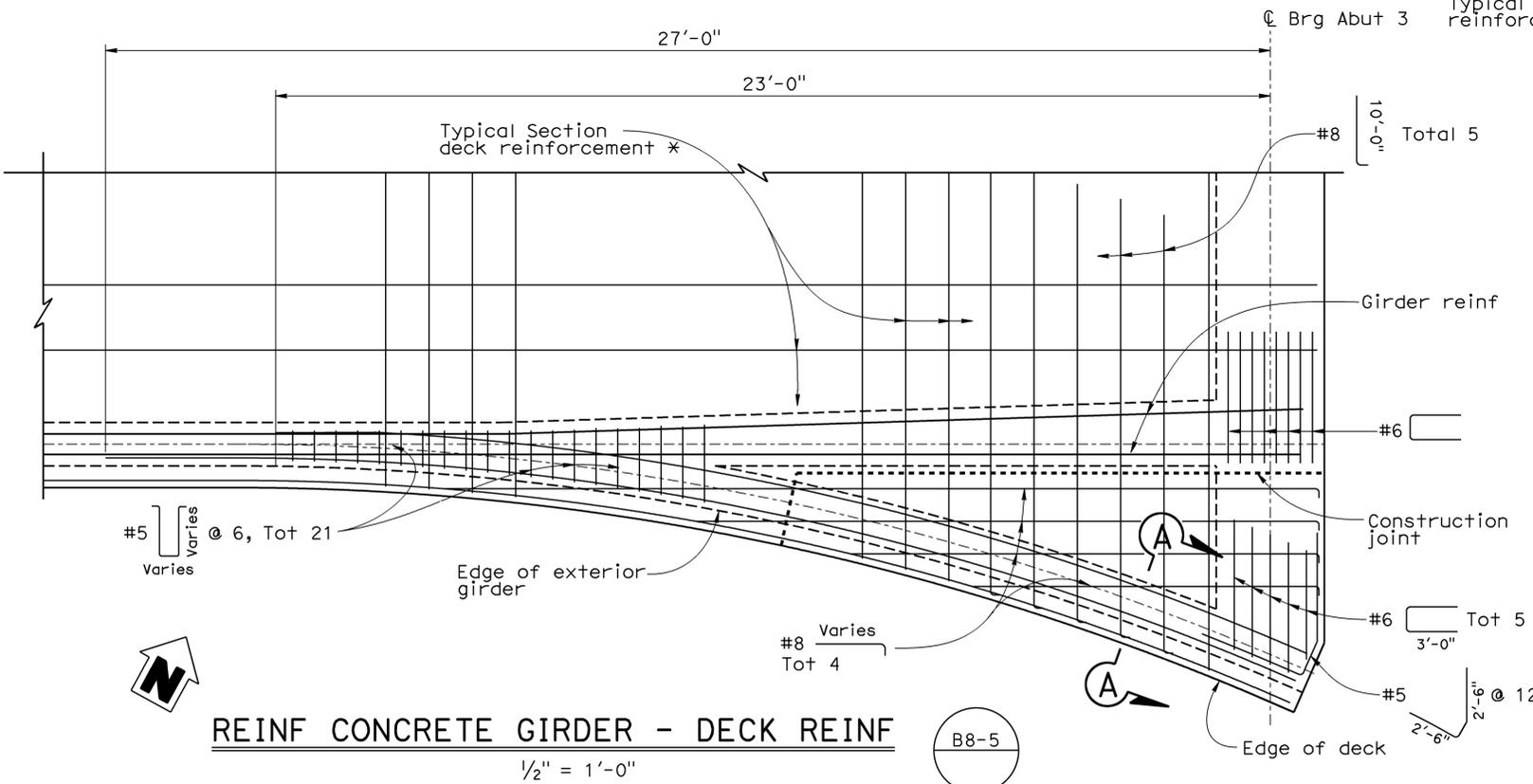
SECTION A-A

1/2" = 1'-0"

B7-1
B-1

LEGEND:
 Indicates integrally colored concrete
 * Extend Typical Section reinforcement to edge of deck or exterior girder, as applicable. For details, see "TYPICAL SECTION" sheet.

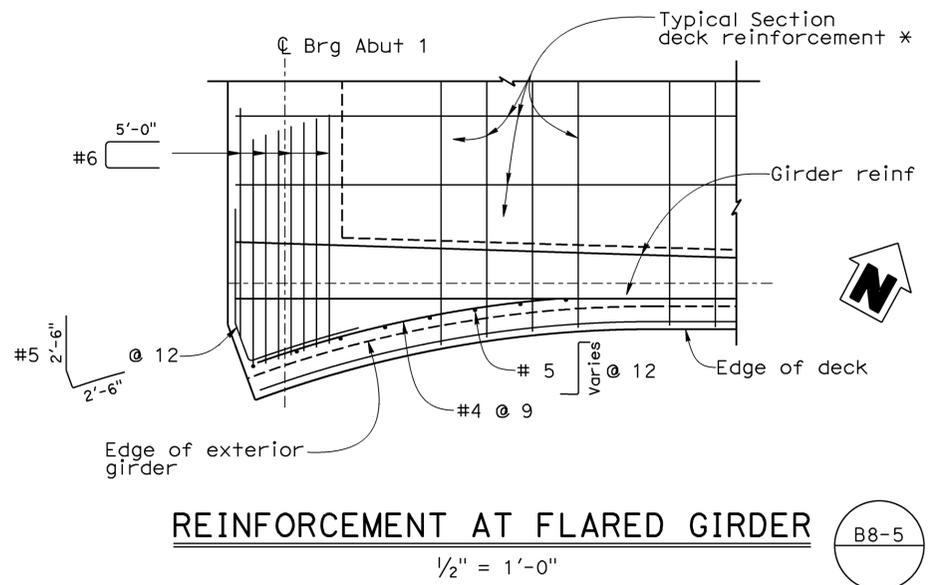
NOTE:
 Longitudinal reinforced concrete girder reinforcement to be extended to interior face of post tension exterior girder. Adjust reinforcement location to clear prestressing duct.



REINFORCED CONCRETE GIRDER - DECK REINFORCEMENT

1/2" = 1'-0"

B8-5



REINFORCEMENT AT FLARED GIRDER

1/2" = 1'-0"

B8-5

DESIGN	BY S. Talukder / R. Deo	CHECKED Ubong Inyang
DETAILS	BY G. Dickerson/C. Cancino	CHECKED Ubong Inyang
QUANTITIES	BY H. Vu / J. Szabo	CHECKED Mario Guadamuz

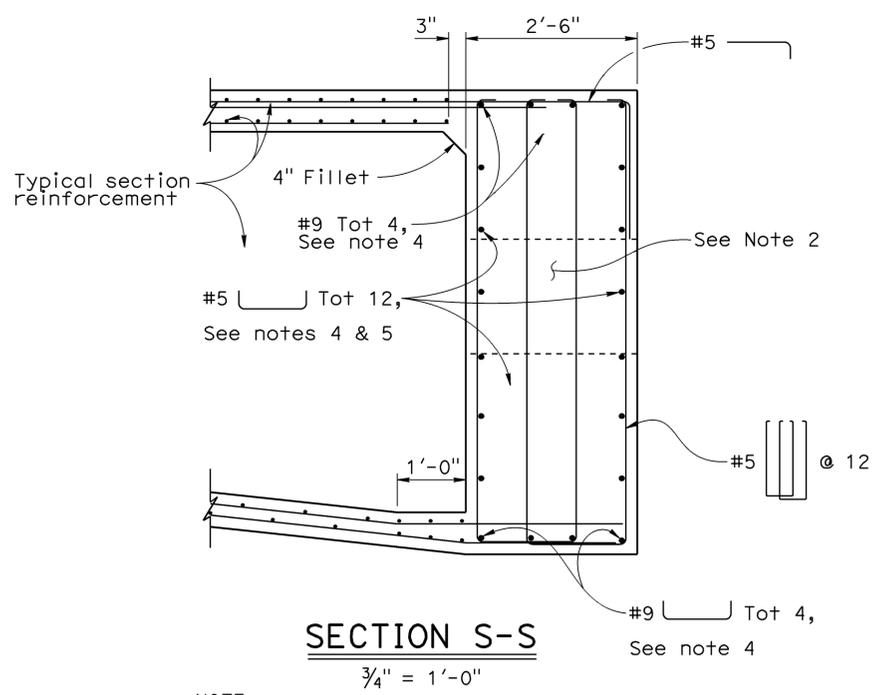
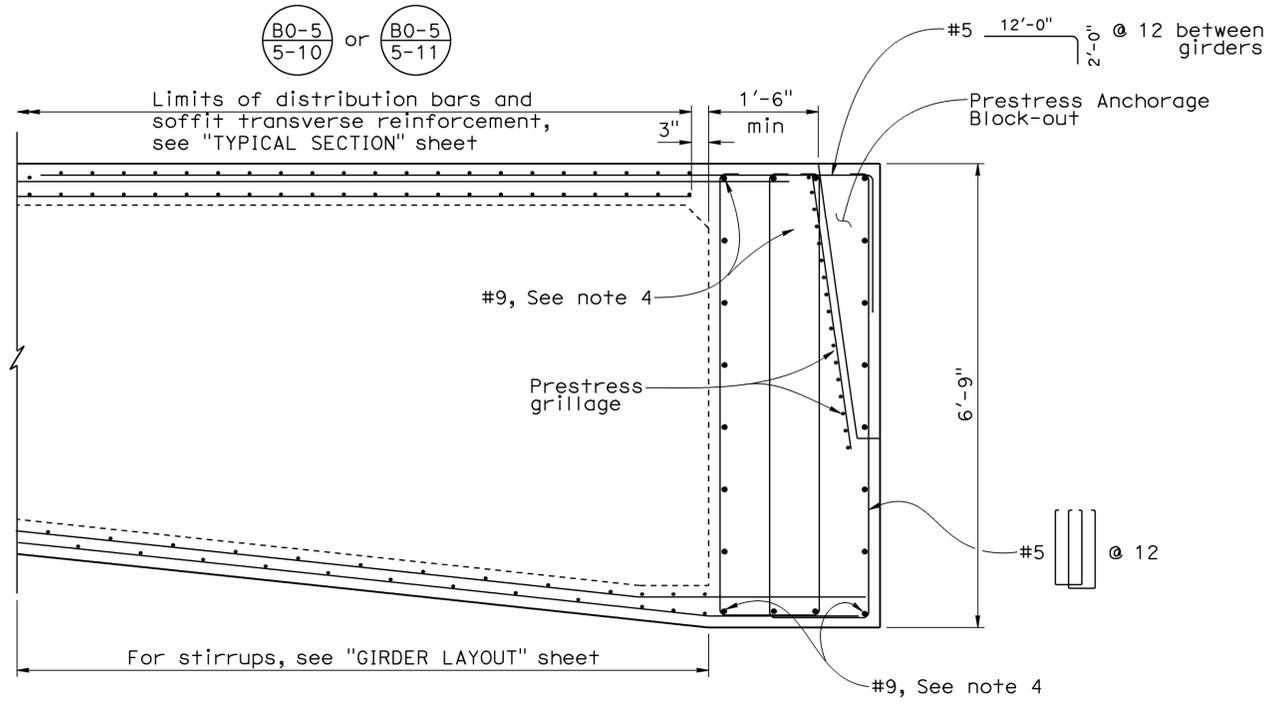
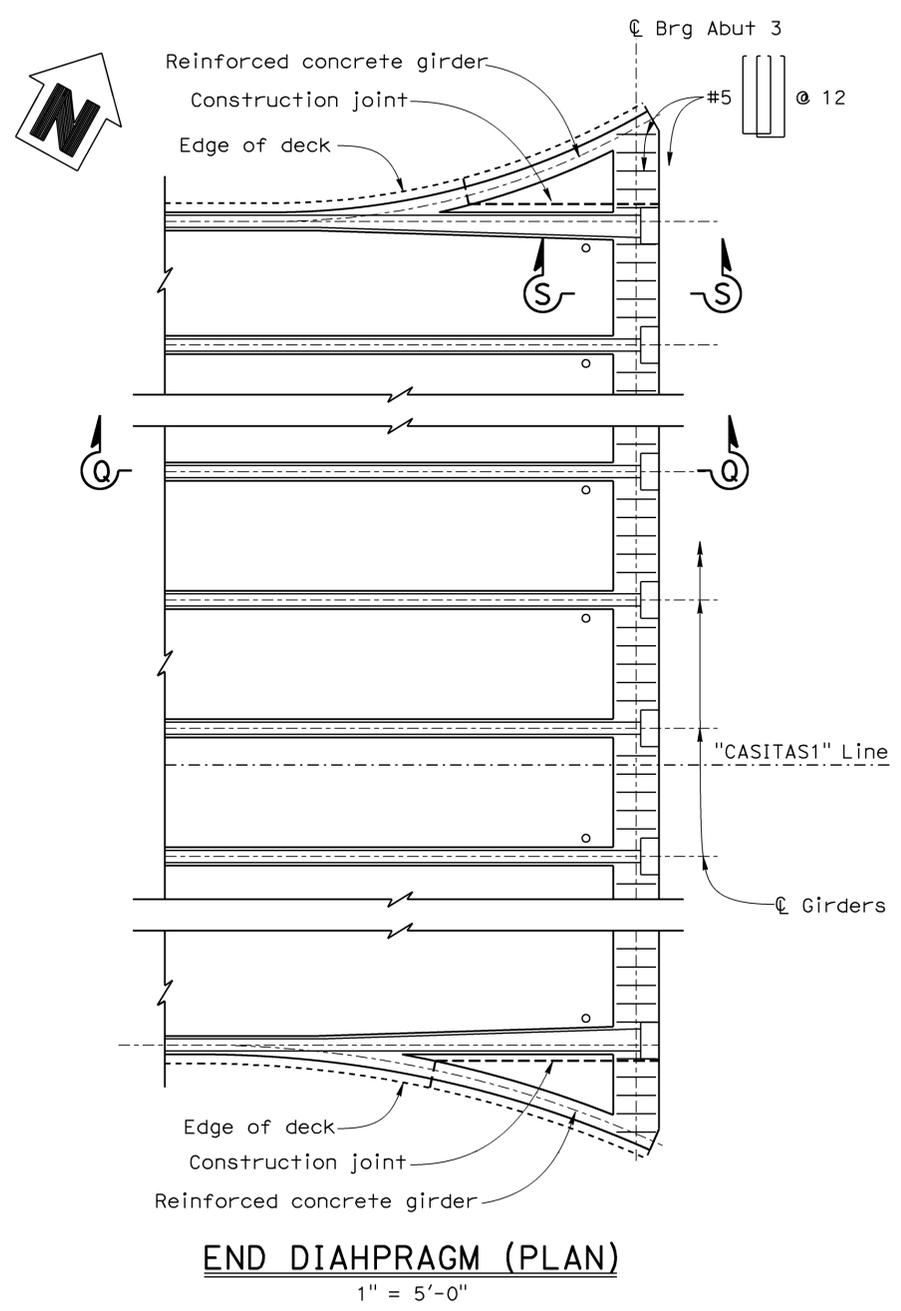
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO.
51-0343
POST MILE
2.64

CASITAS PASS ROAD OVERCROSSING (REPLACE)
GIRDER DETAILS NO. 1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	595	786
			5-23-14		
REGISTERED CIVIL ENGINEER			DATE		
12-7-15			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.					



NOTE:
For details not shown, see "SECTION Q-Q".

- NOTES:
- End diaphragm at Abut 3 shown, End Diaphragm at Abut 1 similar.
 - For utility openings, see "ABUTMENT 1 LAYOUT", "ABUTMENT 3 LAYOUT" and "GIRDER DETAILS NO. 3" sheets.
 - Remove temporary shear key and connect end diaphragm using closure pour. See "ABUTMENT DETAILS NO. 2" sheet.
 - Reinforcement may be service spliced at the closure pour, splices to be staggered @ 1'-0".
 - Reinforcement may be adjusted to clear prestressing anchorage if authorized.
 - Where reinforcement conflicts with utility opening, stop reinforcement 2" from sides of utility opening.

DESIGN	BY S. Talukder / R. Deo	CHECKED Ubong Inyang
DETAILS	BY Carlo Cancino	CHECKED Ubong Inyang
QUANTITIES	BY H. Vu / J. Szabo	CHECKED Mario Guadamuz

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 7

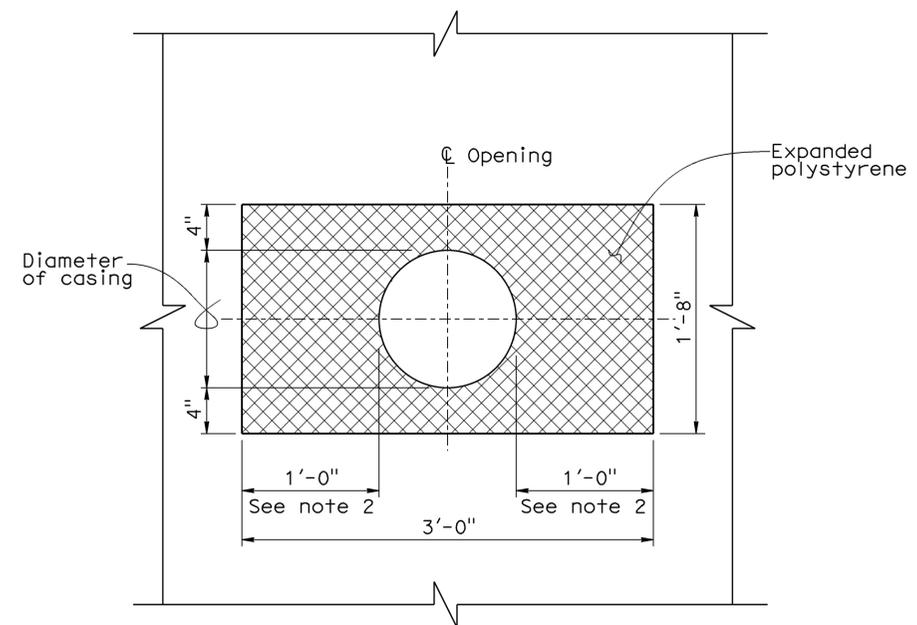
BRIDGE NO.	51-0343
POST MILE	2.64

CASITAS PASS ROAD OVERCROSSING (REPLACE)
GIRDER DETAILS NO. 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	596	786
			5-23-14		
REGISTERED CIVIL ENGINEER			DATE		
			12-7-15		
			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.					

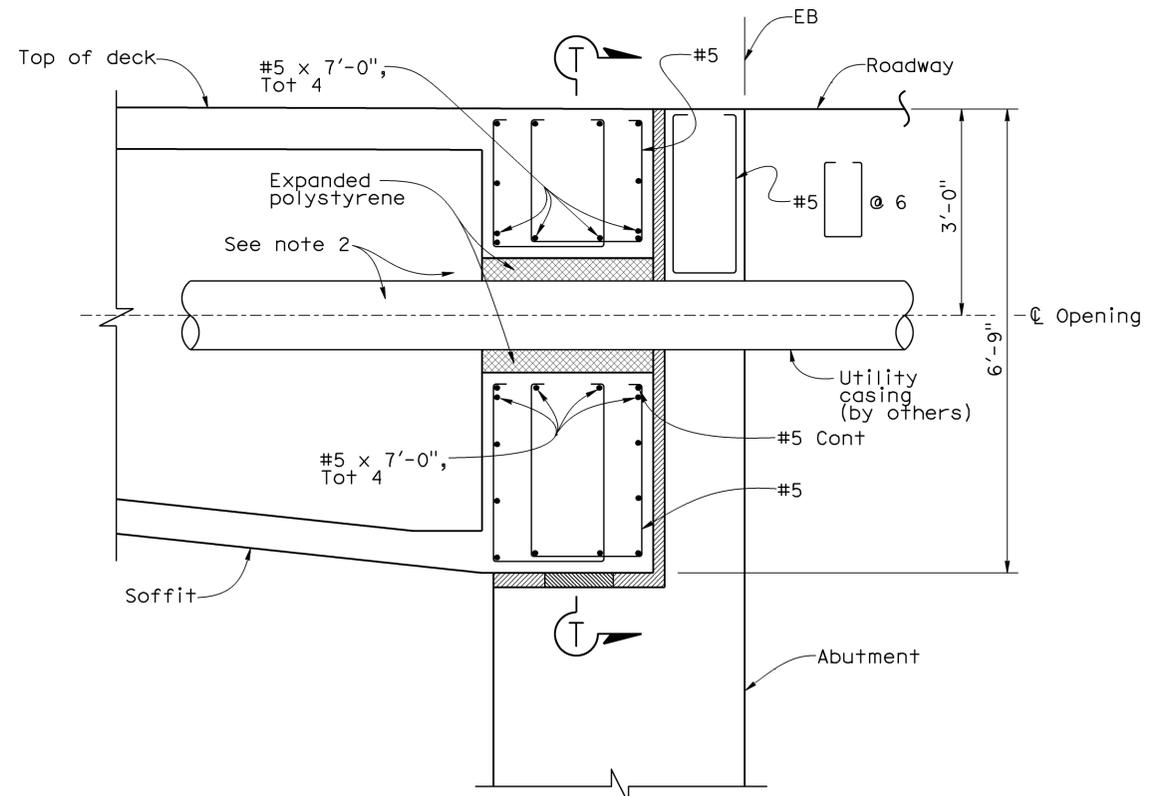


LEGEND:
 Indicates expanded polystyrene



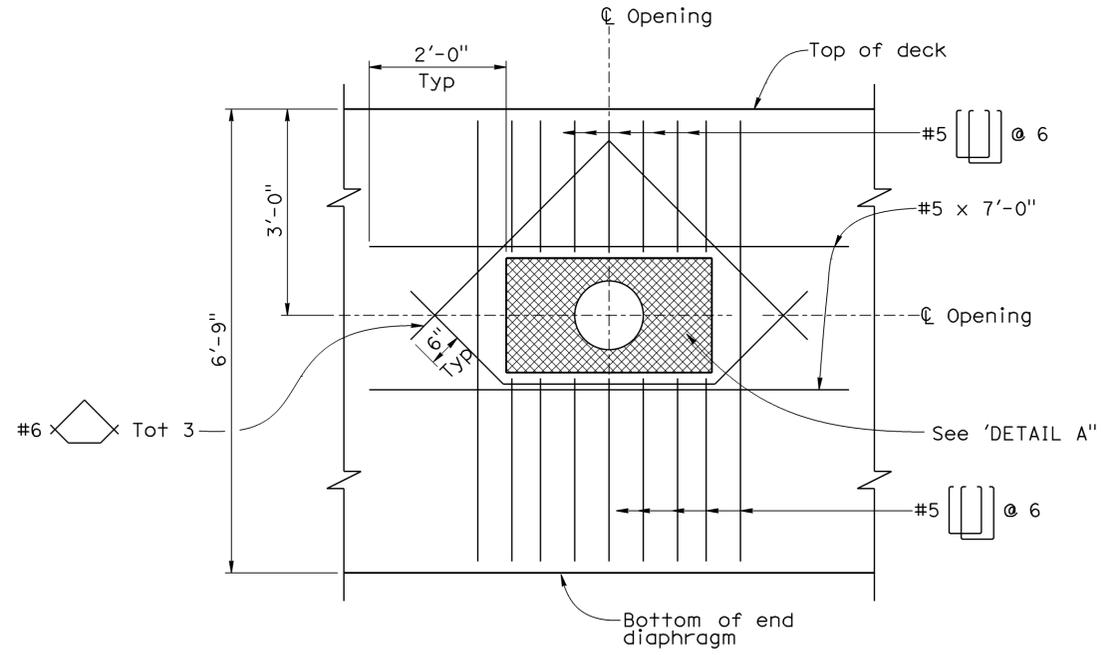
DETAIL A
 $1\frac{1}{2}'' = 1'-0''$

- NOTES:
- For reinforcement not shown, see **B7-10**
 - Provide 4" clr, Typ, for all other utilities.



UTILITY OPENING IN END DIAPHRAGM FOR WATER **B7-10**
 $\frac{3}{4}'' = 1'-0''$

NOTE:
 For details not shown, see "SECTION S-S" on "GIRDER DETAILS NO. 2" sheet.



SECTION T-T
 $\frac{3}{4}'' = 1'-0''$

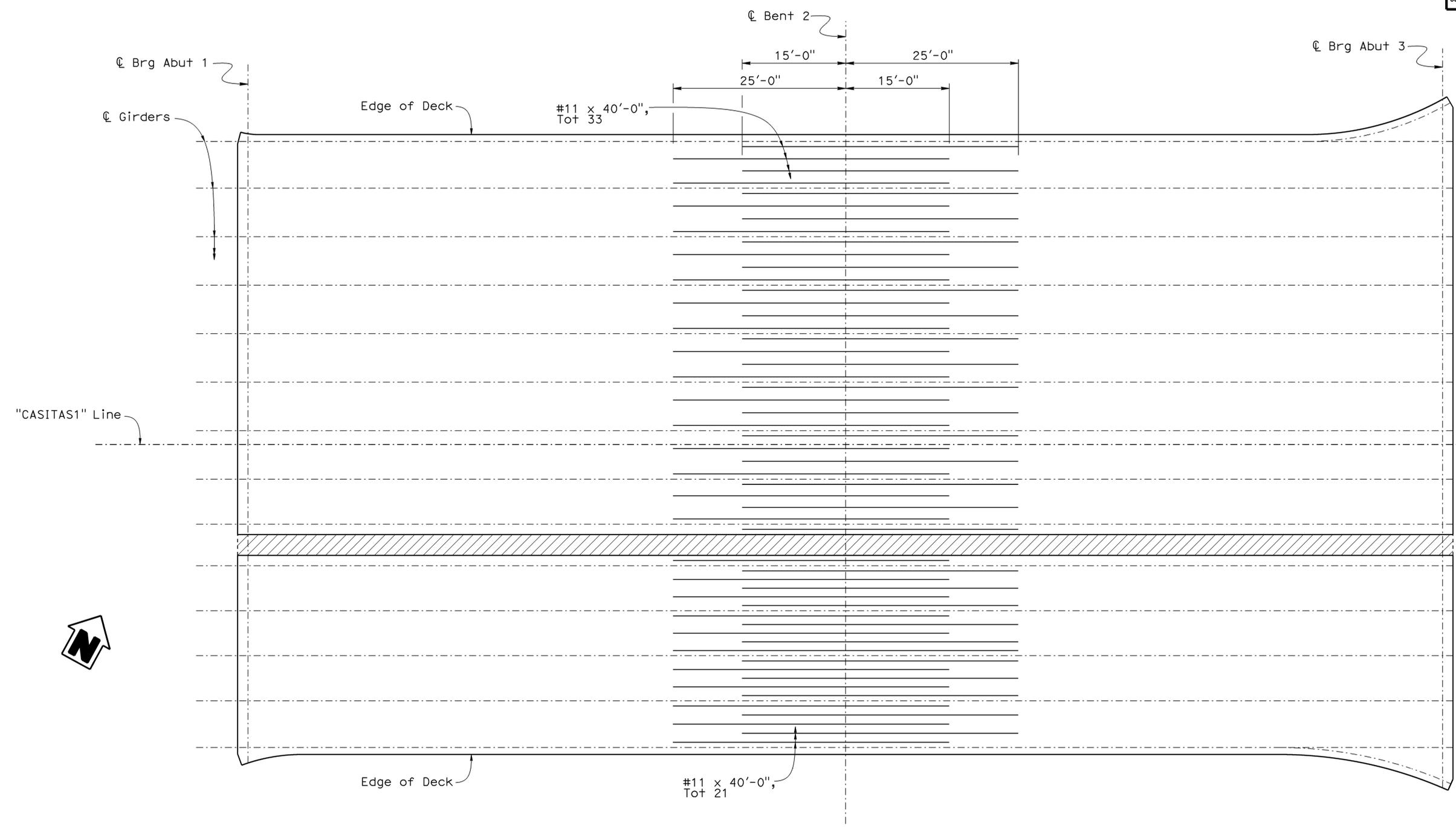
DESIGN	BY	R. Deo / S. Talukder	CHECKED	Ubong Inyang	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO.	51-0343	CASITAS PASS ROAD OVERCROSSING (REPLACE)		
	DETAILS	BY	Carlo Cancino	CHECKED			Ubong Inyang	POST MILE		2.64	GIRDER DETAILS NO. 3
QUANTITIES	BY	H. Vu / J. Szabo	CHECKED	Mario Guadamuz	UNIT: 3592	PROJECT NUMBER & PHASE: 05000005431	CONTRACT NO.: 05-4482U4	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)										25	53

USERNAME => s115755 DATE PLOTTED => 04-DEC-2015 08:52 TIME PLOTTED => 08:52

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	597	786
			5-23-14		
REGISTERED CIVIL ENGINEER			DATE		
12-7-15			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.					



- NOTES:
- Splices not allowed in additional reinforcement.
 - Reinforcement to be spaced equally within each bay.



LEGEND:
 Indicates closure pour

Stage 2 Construction
 Stage 1 Construction

ADDITIONAL TOP SLAB REINFORCEMENT
 $1/8" = 1'-0"$

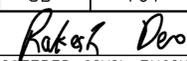
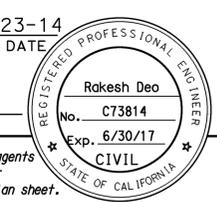
DESIGN	BY R. Deo / S. Talukder	CHECKED Ubong Inyang
DETAILS	BY G. Dickerson/C. Cancino	CHECKED Ubong Inyang
QUANTITIES	BY H. Vu / J. Szabo	CHECKED Mario Guadamuz

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

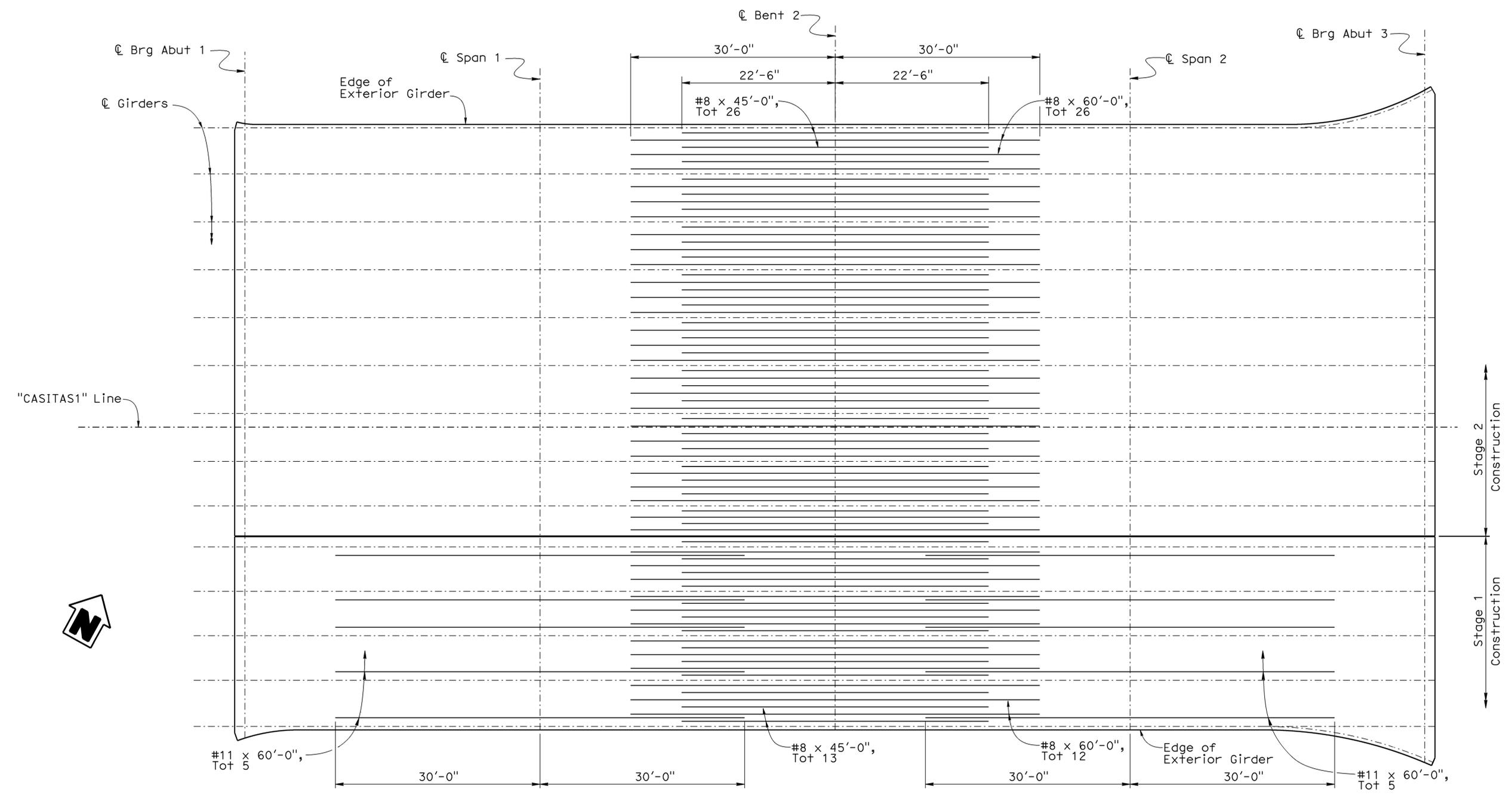
DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 7

BRIDGE NO.	51-0343
POST MILE	2.64

CASITAS PASS ROAD OVERCROSSING (REPLACE)
GIRDER REINFORCEMENT NO. 1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	598	786
 REGISTERED CIVIL ENGINEER			5-23-14 DATE		
12-7-15 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>					

- NOTES:
- Splices not allowed in additional reinforcement.
 - Reinforcement to be spaced equally within each bay.



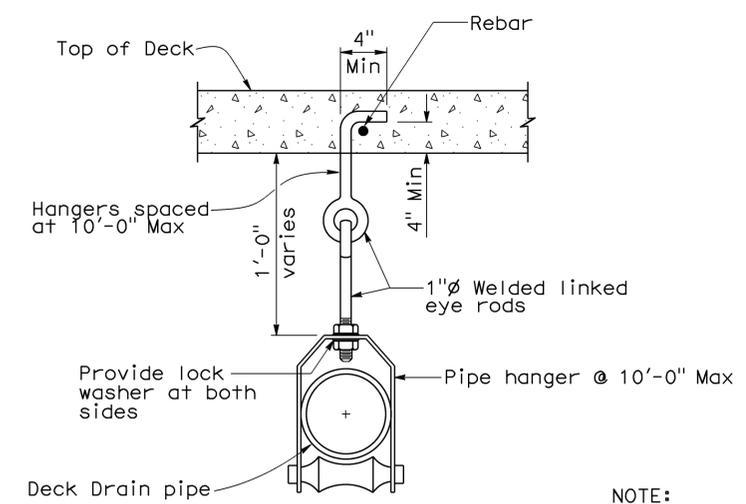
ADDITIONAL BOTTOM SLAB REINFORCEMENT
 $\frac{1}{8}'' = 1'-0''$

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN BY Rakesh Deo CHECKED Ubong Inyang	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO. 51-0343	CASITAS PASS ROAD OVERCROSSING (REPLACE) GIRDER REINFORCEMENT NO. 2
	DETAILS BY G. Dickerson/C. Cancino CHECKED Ubong Inyang			POST MILE 2.64	
	QUANTITIES BY H. Vu / J. Szabo CHECKED Mario Guadamuz			UNIT: 3592 PROJECT NUMBER & PHASE: 05000005431	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES: 11-13-12, 04-21-14, 04-16-14	SHEET 27 OF 53

FILE => 51-0343-o-gir_rf02.dgn

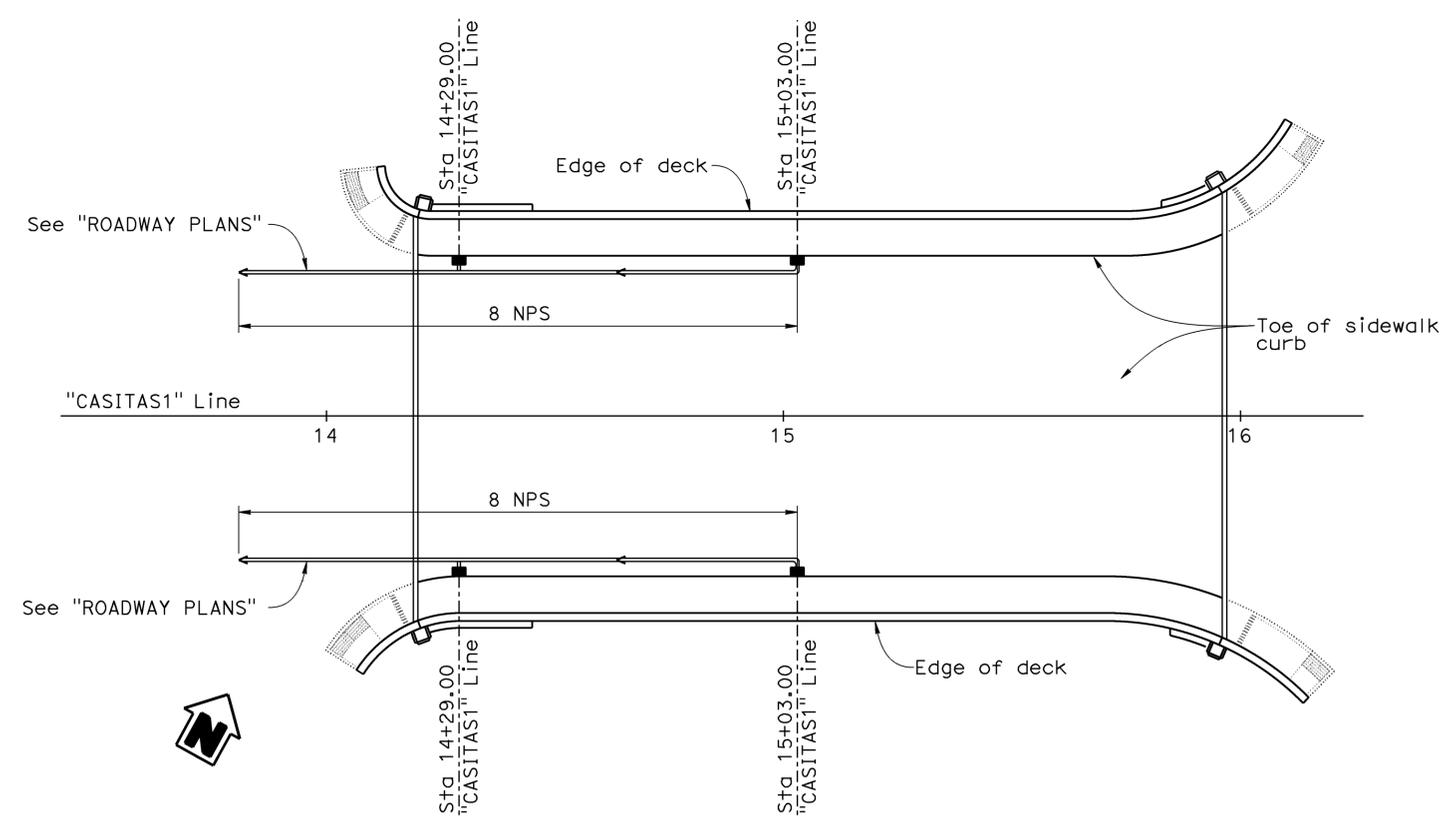
USERNAME => s115755 DATE PLOTTED => 04-DEC-2015 TIME PLOTTED => 08:52

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	599	786
			DATE		
			5-23-14		
			REGISTERED CIVIL ENGINEER		
			PLANS APPROVAL DATE		
			12-7-15		
			REGISTERED PROFESSIONAL ENGINEER		
			Rakesh Deo		
			No. C73814		
			Exp. 6/30/17		
			CIVIL		
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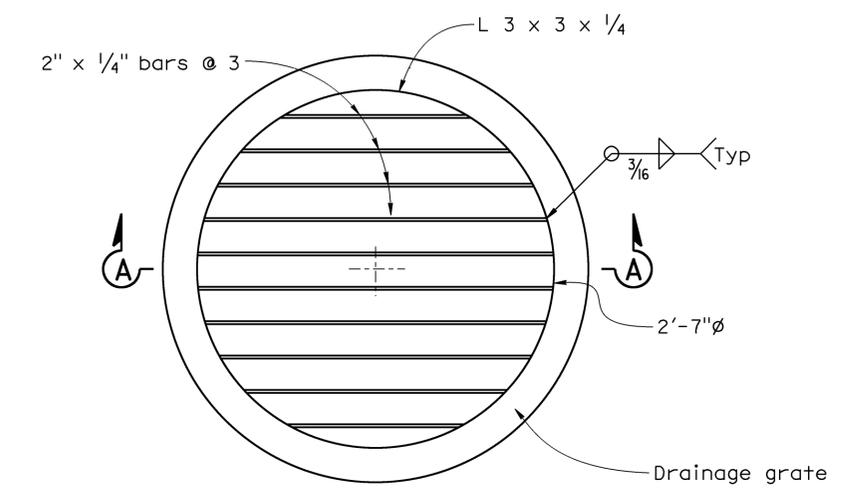
PIPE HANGER
No Scale

NOTE:
All hardware must be galvanized.

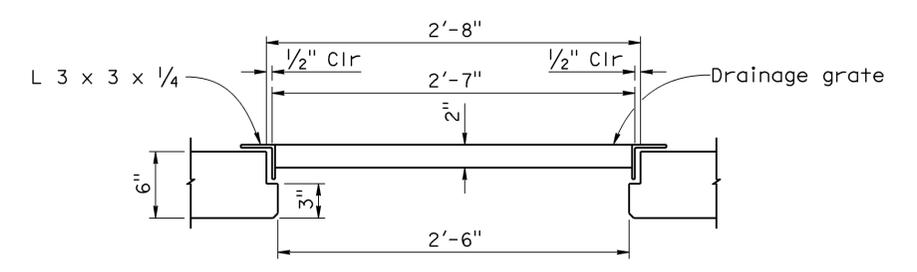


PLAN
1" = 20'

Legend:
 ■ - Indicates Deck drain Type D-1
 Drain pipe - 2% slope minimum



PLAN



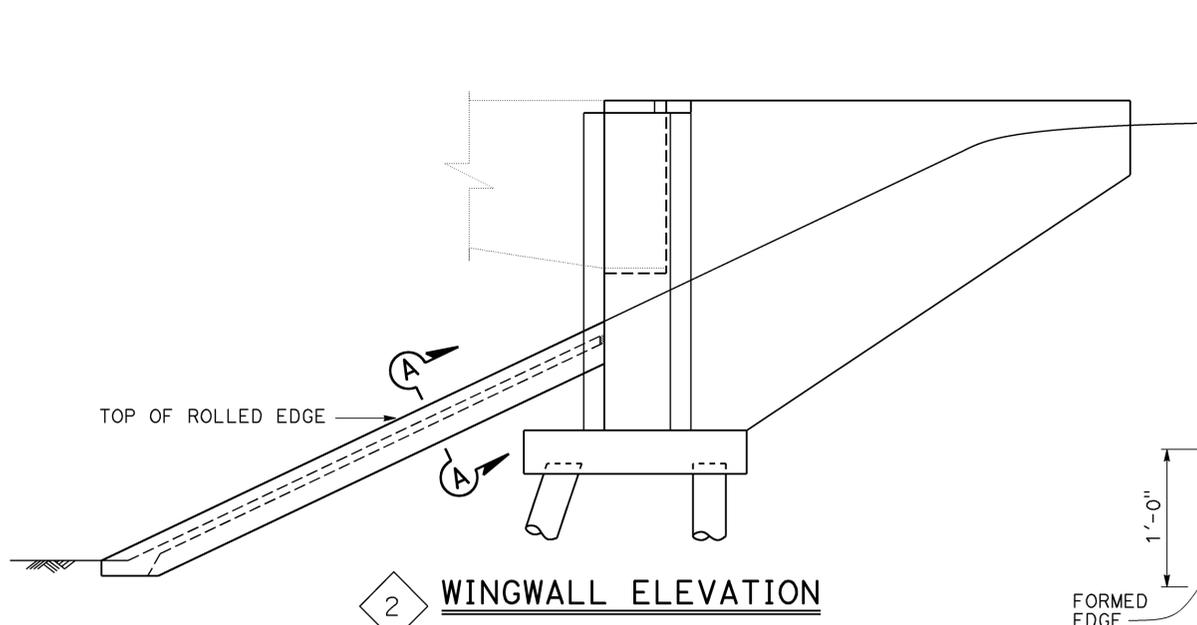
SECTION A-A

SOFFIT OPENING AND DRAINAGE GRATE DETAIL
No Scale

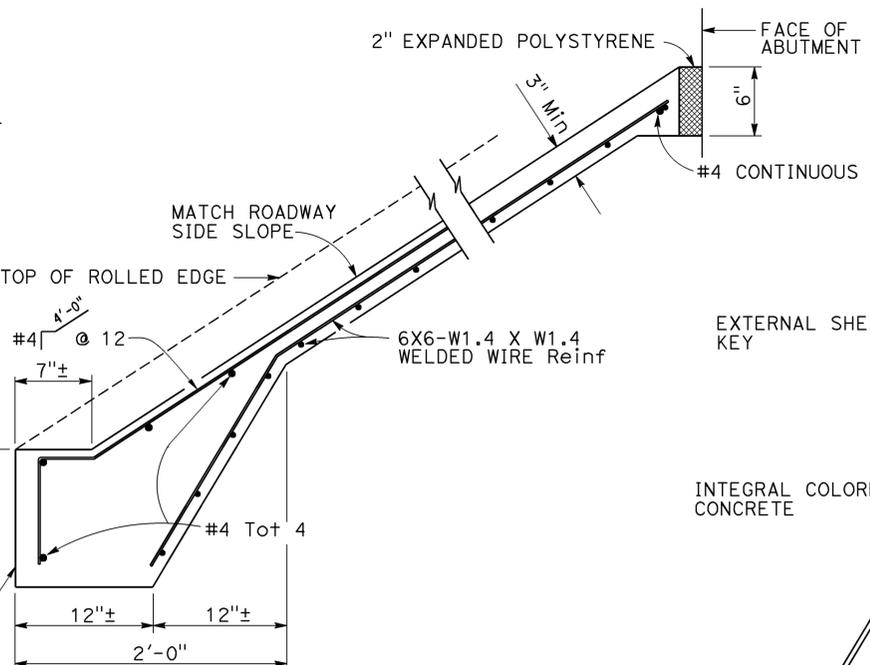
B14-5 Mod

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY S. Talukder / R. Deo	CHECKED U. Inyang / K. Stillmunkes	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO.	51-0343	CASITAS PASS ROAD OVERCROSSING (REPLACE) DECK DRAINAGE DETAILS
	DETAILS	BY Carlo Cancino	CHECKED U. Inyang / K. Stillmunkes			POST MILE	2.64	
	QUANTITIES	BY H. Vu / J. Szabo	CHECKED Mario Guadamuz					
				UNIT: 3592 PROJECT NUMBER & PHASE: 05000005431	CONTRACT NO.: 05-4482U4	DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES
				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	02-27-14	03-15-14	04-16-14
				FILE => 51-0343-p-dade+01.dgn				SHEET 28 OF 53

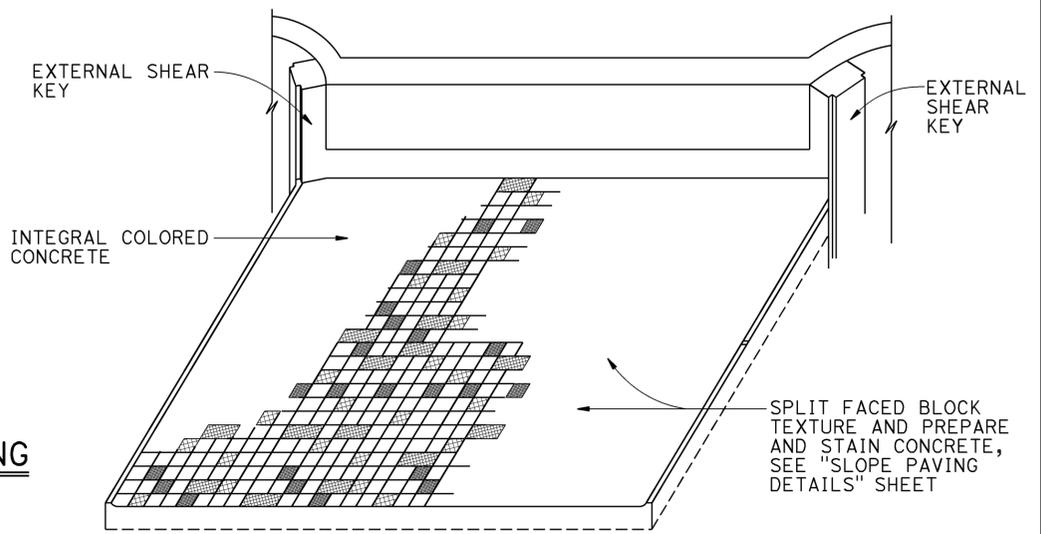
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	2.2/3.3	600	786
Rakesh Deo REGISTERED CIVIL ENGINEER			5-23-14 DATE		
12-7-15 PLANS APPROVAL DATE					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					



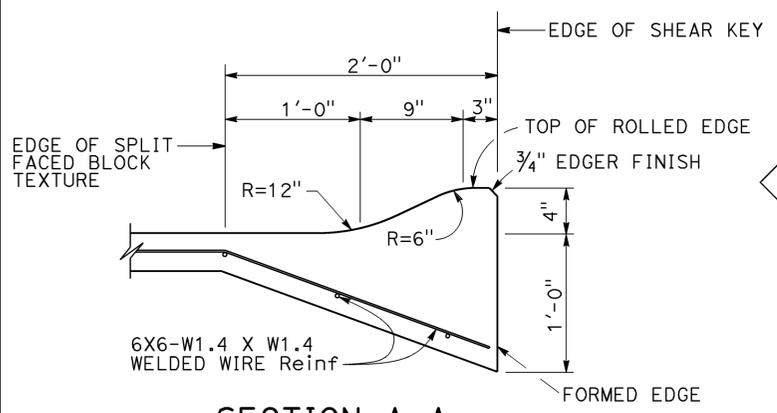
2 **WINGWALL ELEVATION**



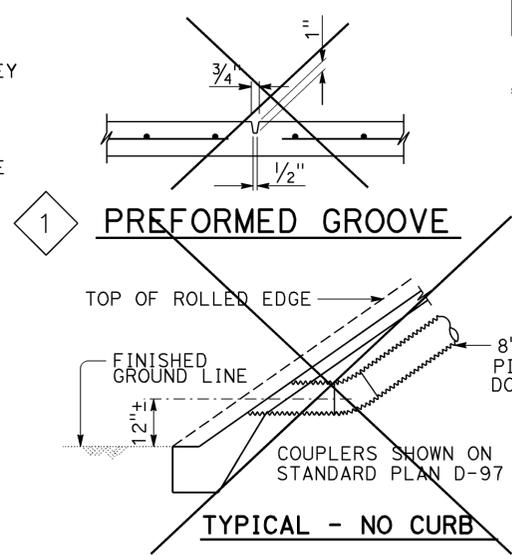
TYPICAL SECTION - CONCRETE PAVING



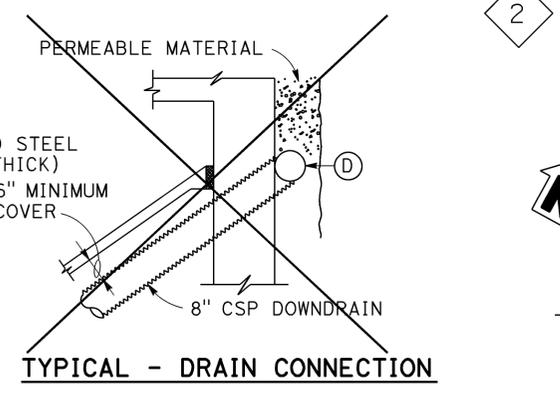
2 **PICTORIAL VIEW OF TYPICAL INSTALLATION**



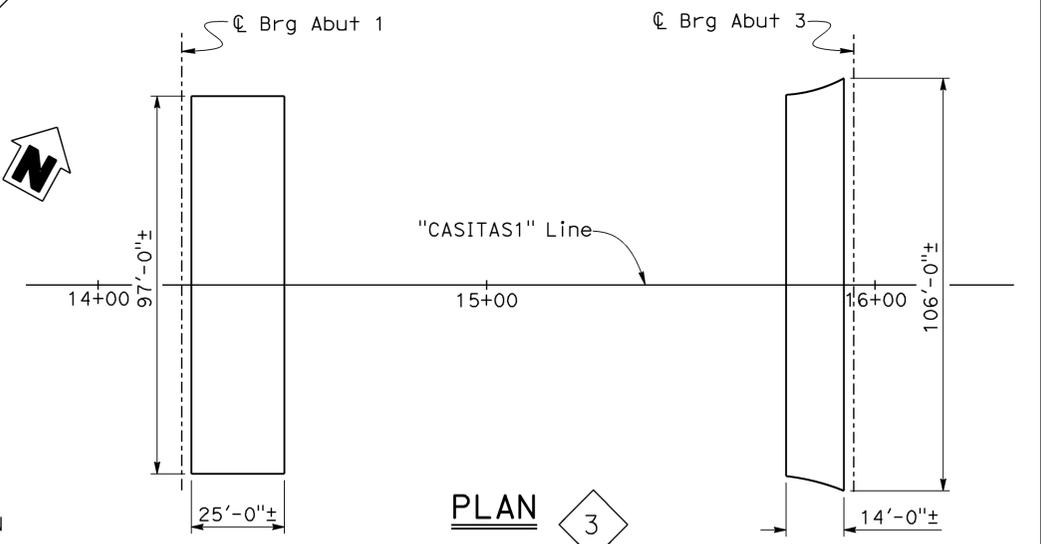
SECTION A-A



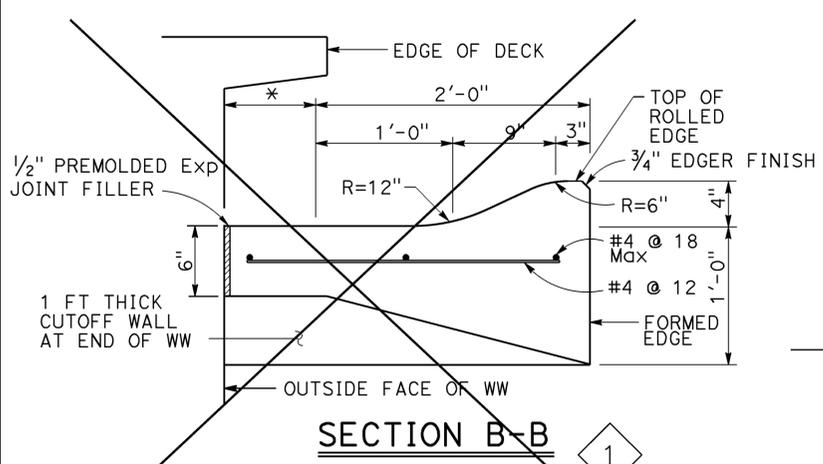
1 **PREFORMED GROOVE**



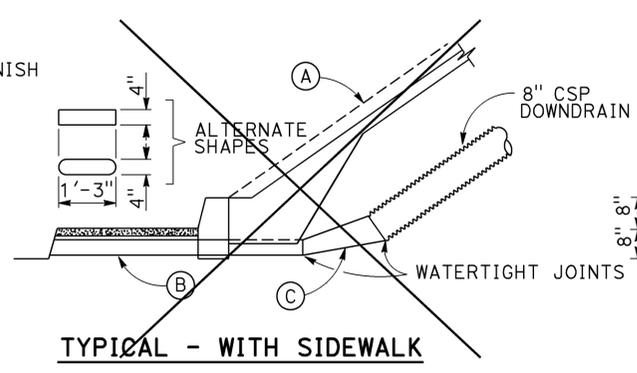
TYPICAL - DRAIN CONNECTION



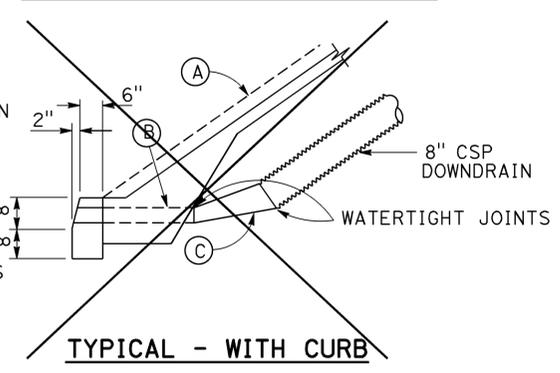
PLAN



SECTION B-B



TYPICAL - WITH SIDEWALK



TYPICAL - WITH CURB

DRAINAGE DETAILS

NOTE: Drainage details are only applicable when is indicated on detail sheets.

BO-3
3-5

LIMITS OF SLOPE PAVING & DRAINAGE LAYOUT

- (A) Top of rolled edge
- (B) Conduit:
0.064" galv corrugated steel or 0.109" smooth galv steel
- (C) Taper: { 0.064" galv corrugated steel or
0.109" smooth galv steel
- (D) 8" perforated steel pipe (0.064" thick) underdrain behind abutment. Connect to downdrain as shown on limits of Slope Paving & Drainage layout.

NO SCALE

REVISED STANDARD DRAWING	
FILE NO. xs4-210	APPROVAL DATE <u>July 2011</u>

1	Does not apply	3	Added new details
2	Revised details		

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO.	51-0343
POST MILE	2.64

CASITAS PASS ROAD OVERCROSSING (REPLACE)
SLOPE PAVING-FULL SLOPE

USERNAME => s115755 DATE PLOTTED => 04-DEC-2015 TIME PLOTTED => 08:53