

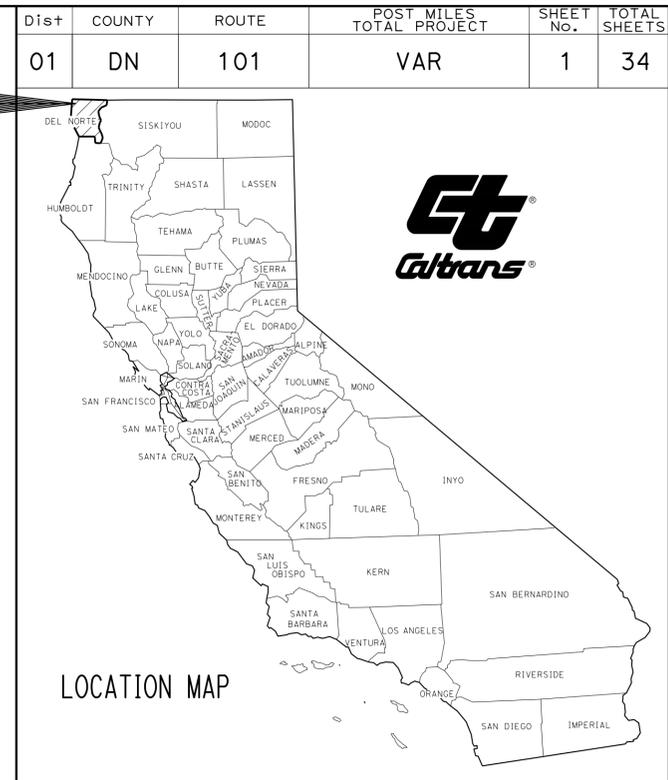
INDEX OF PLANS	
SHEET No	DESCRIPTION
1	TITLE AND LOCATION MAP
2-3	TYPICAL CROSS SECTIONS
4-7	LAYOUTS
8-10	CONSTRUCTION AREA SIGNS
11	TRAFFIC HANDLING PLAN
12	SUMMARY OF QUANTITIES
13-17	EROSION CONTROL PLANS AND QUANTITIES
18-22	REVISED STANDARD PLANS

STRUCTURE PLANS	
23-25	RAILROAD AVENUE OVERCROSSING
26-28	101/199 CONNECTOR OVERCROSSING
29-31	SMITH RIVER OVERFLOW BRIDGE
32-34	ROWDY CREEK BRIDGE

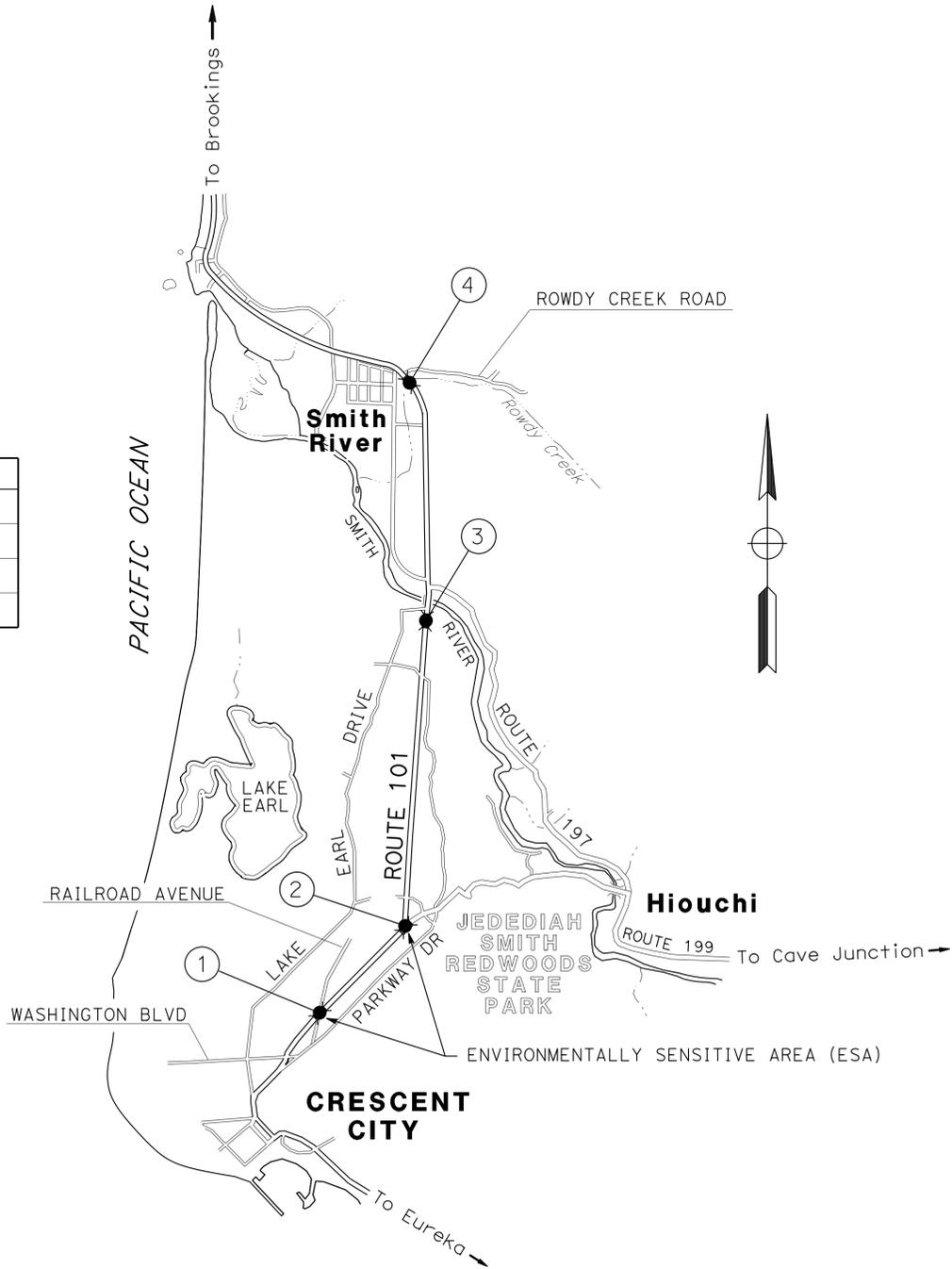
THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA ACNHP-Q101(288)E
DEPARTMENT OF TRANSPORTATION
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN DEL NORTE COUNTY
AT VARIOUS LOCATIONS

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



LOCATIONS OF CONSTRUCTION					
No.	COUNTY	ROUTE	POST MILE	BRIDGE #	BRIDGE NAME
①	DN	101	R28.32	01-0063	RAILROAD AVENUE OVERCROSSING
②	DN	101	R30.81	01-0058F	199/101 CONNECTOR OVERCROSSING
③	DN	101	35.77	01-0046	SMITH RIVER OVERFLOW BRIDGE
④	DN	101	39.63	01-0023	ROWDY CREEK BRIDGE



P:\PROJ\01\04100\dr\aff\ing\01_041004_01120000231ab001.dgn
 PROJECT MANAGER: KEVIN CHURCH
 DESIGN MANAGER: L. R. ASHLEY

PROJECT ENGINEER
 REGISTERED CIVIL ENGINEER
 DATE: 11/05/15
 November 09, 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.



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

NO SCALE

CONTRACT No.	01-0A1004
PROJECT ID	0112000023

LAST REVISION: 11-05-15
 DATE PLOTTED => 30-DEC-2015
 TIME PLOTTED => 12:57

NOTES:

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

DESIGN DESIGNATION
 ROUTE 101 (PM: R28.32/39.63)

2015 ADT = 11,100 D = 60
 2037 ADT = 12,300 T = 5%
 DHV (2015) = 1,270 V = 65
 ESAL (2037) = N/A TI₂₀ = 10.0

PAVEMENT CLIMATE REGION
 NORTH COAST

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	2	34

11/05/15
 REGISTERED CIVIL ENGINEER DATE

November 09, 2015
 PLANS APPROVAL DATE

T. LARK
 No. 52481
 Exp. 2/31/16
 CIVIL

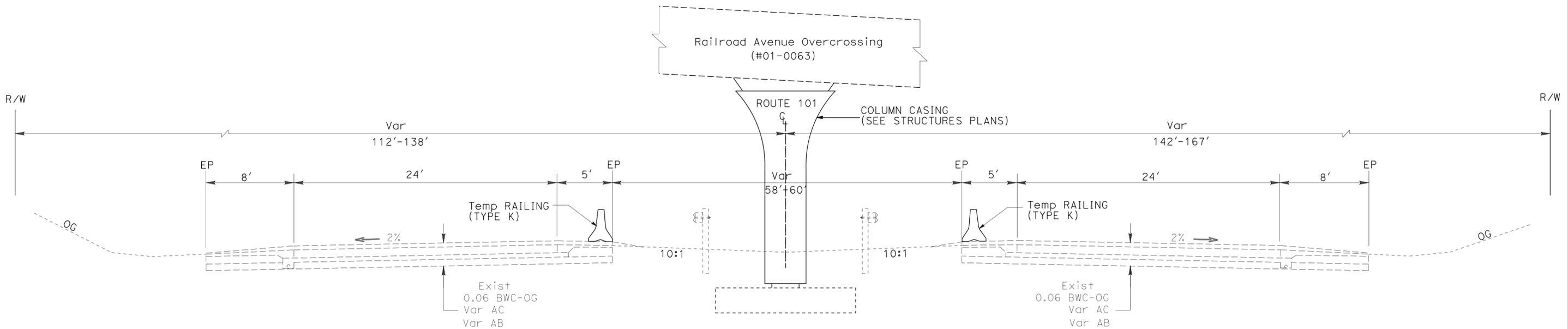
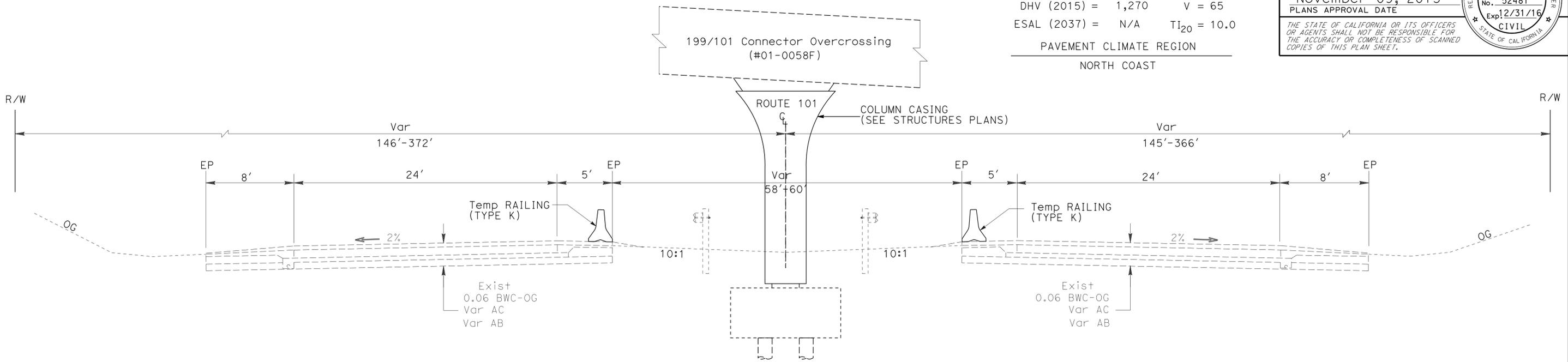
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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DESIGN

FUNCTIONAL SUPERVISOR: L.R. ASHLEY

REVISOR: BIJAN SAMRAD, TODD LARK

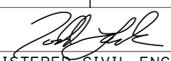
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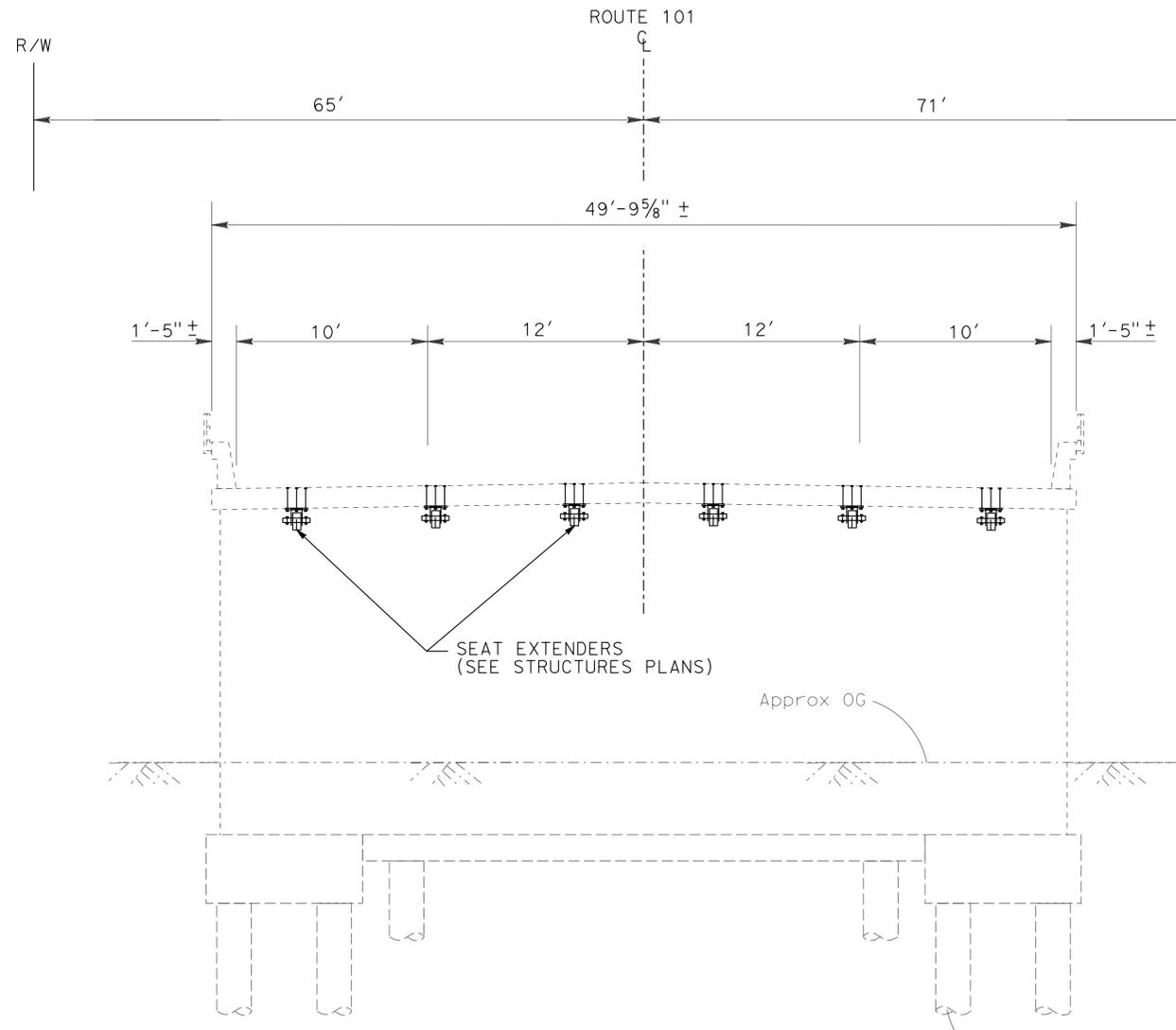
TYPICAL CROSS SECTIONS X-1

NO SCALE

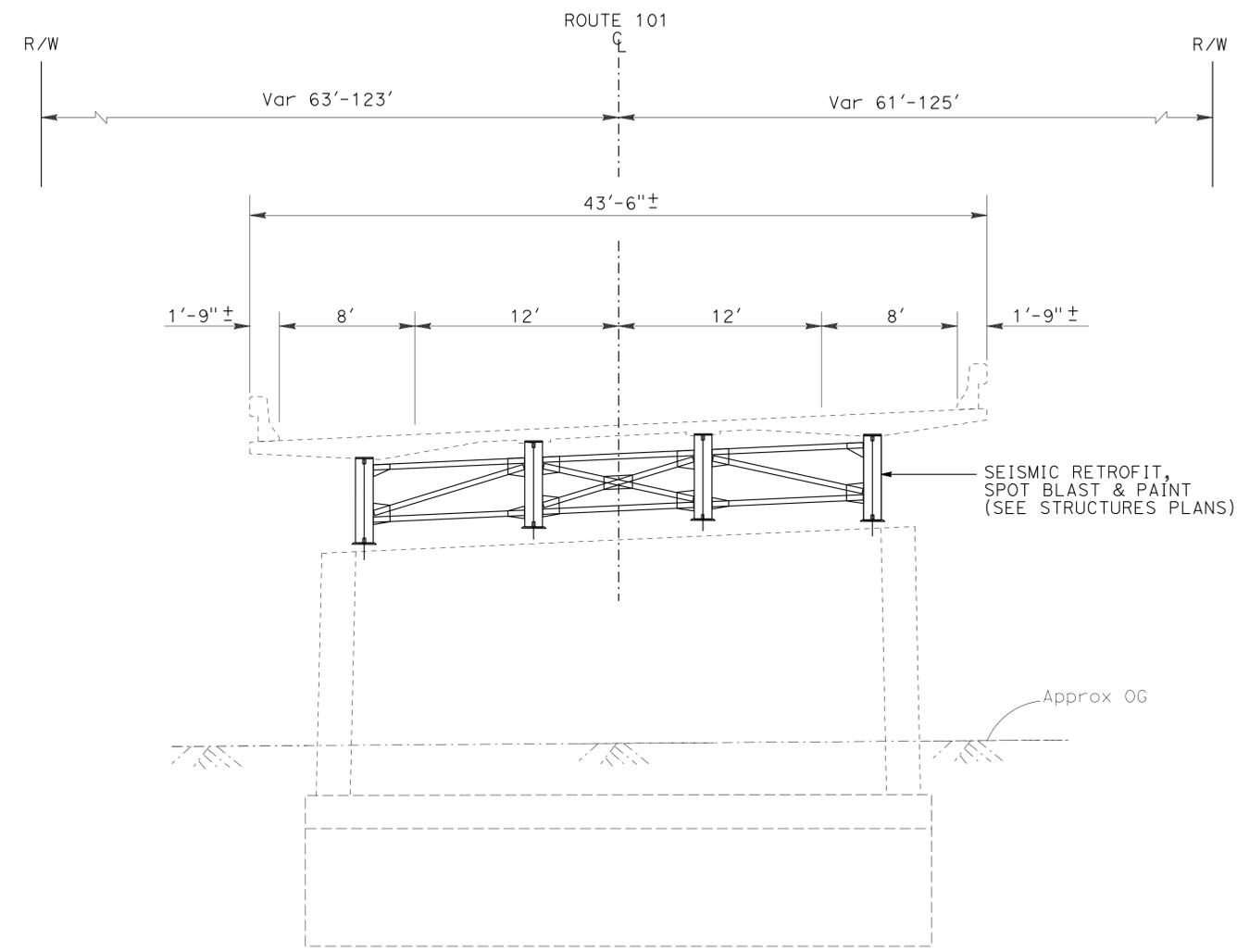
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	3	34


 REGISTERED CIVIL ENGINEER DATE 11/05/15
 November 09, 2015
 PLANS APPROVAL DATE
 No. 52481
 Exp. 2/31/16
 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.

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x
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DESIGN
 L.R. ASHLEY
 FUNCTIONAL SUPERVISOR
 CHECKED BY
 BIJAN SAMRAD
 TODD LARK
 REVISOR BY
 DATE REVISOR
 P:\PROJ\01\04100_vgraf\ing\01_041004\01120000231cc002.dgn



LOCATION 3
SMITH RIVER OVERFLOW BRIDGE (#01-0046)
 STA "101" 231+38.75 TO STA "101" 284+21.75

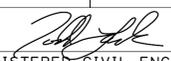


LOCATION 4
ROWDY CREEK BRIDGE (#01-0023)
 STA "101" 486+51.22 TO STA "101" 488+58.78

TYPICAL CROSS SECTIONS
X-2
 NO SCALE

LAST REVISION DATE PLOTTED => 30-DEC-2015
 11-05-15 TIME PLOTTED => 12:58

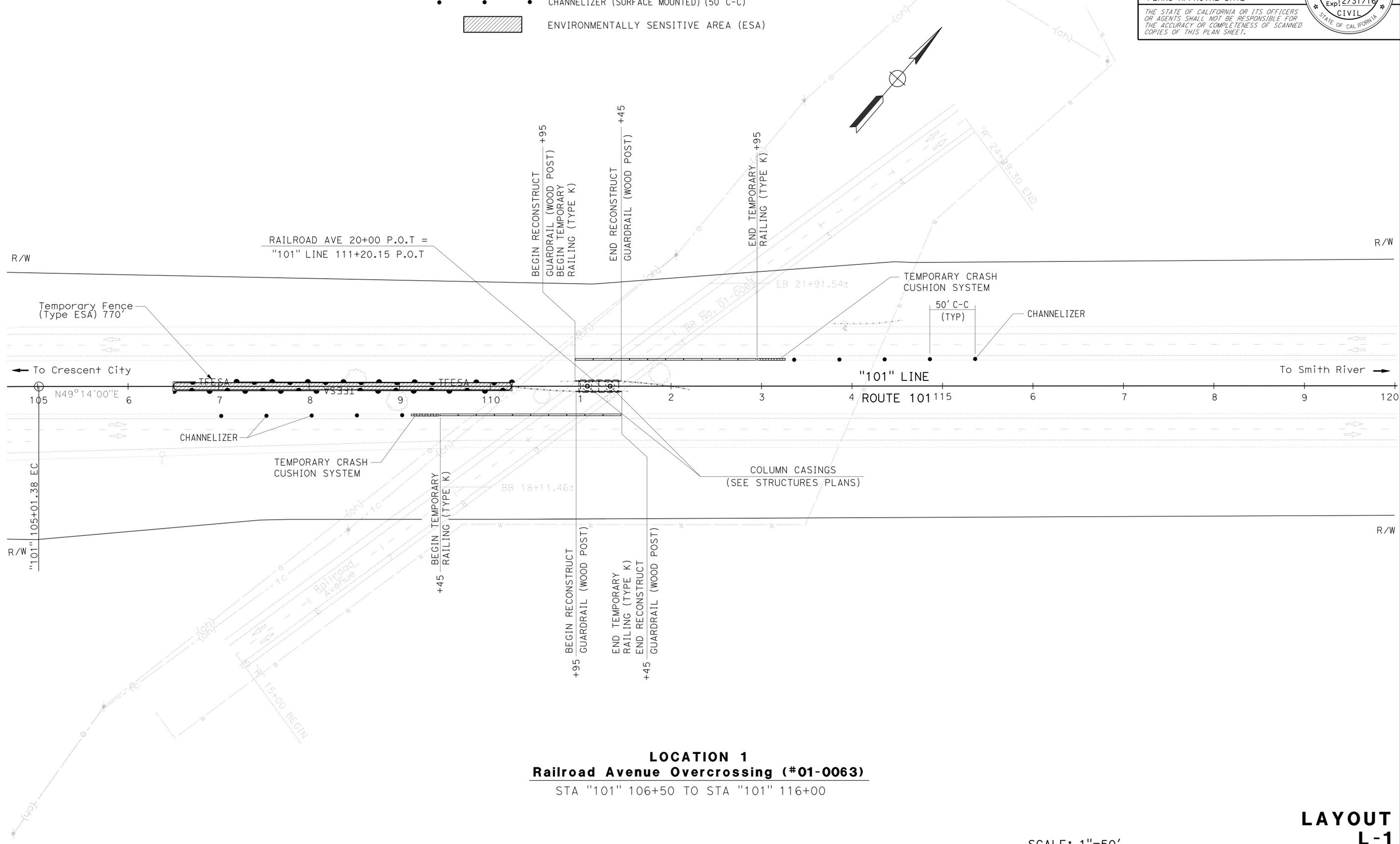
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	4	34

 REGISTERED CIVIL ENGINEER DATE 11/05/15	
November 09, 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
 T. LARK
 No. 52481
 Exp. 2/31/16
 CIVIL
 STATE OF CALIFORNIA

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

- LEGEND:**
-  TEMPORARY RAILING (TYPE K)
 -  TEMPORARY CRASH CUSHION SYSTEM
 -  CHANNELIZER (SURFACE MOUNTED) (50' C-C)
 -  ENVIRONMENTALLY SENSITIVE AREA (ESA)



SCALE: 1"=50'

LAYOUT
L-1

FUNCTIONAL SUPERVISOR	L.R. ASHLEY
CALCULATED/DESIGNED BY	CHECKED BY
BIJAN SAMRAD	TODD LARK
REVISED BY	DATE REVISED

LAST REVISION DATE PLOTTED => 30-DEC-2015
 11-05-15 TIME PLOTTED => 12:58

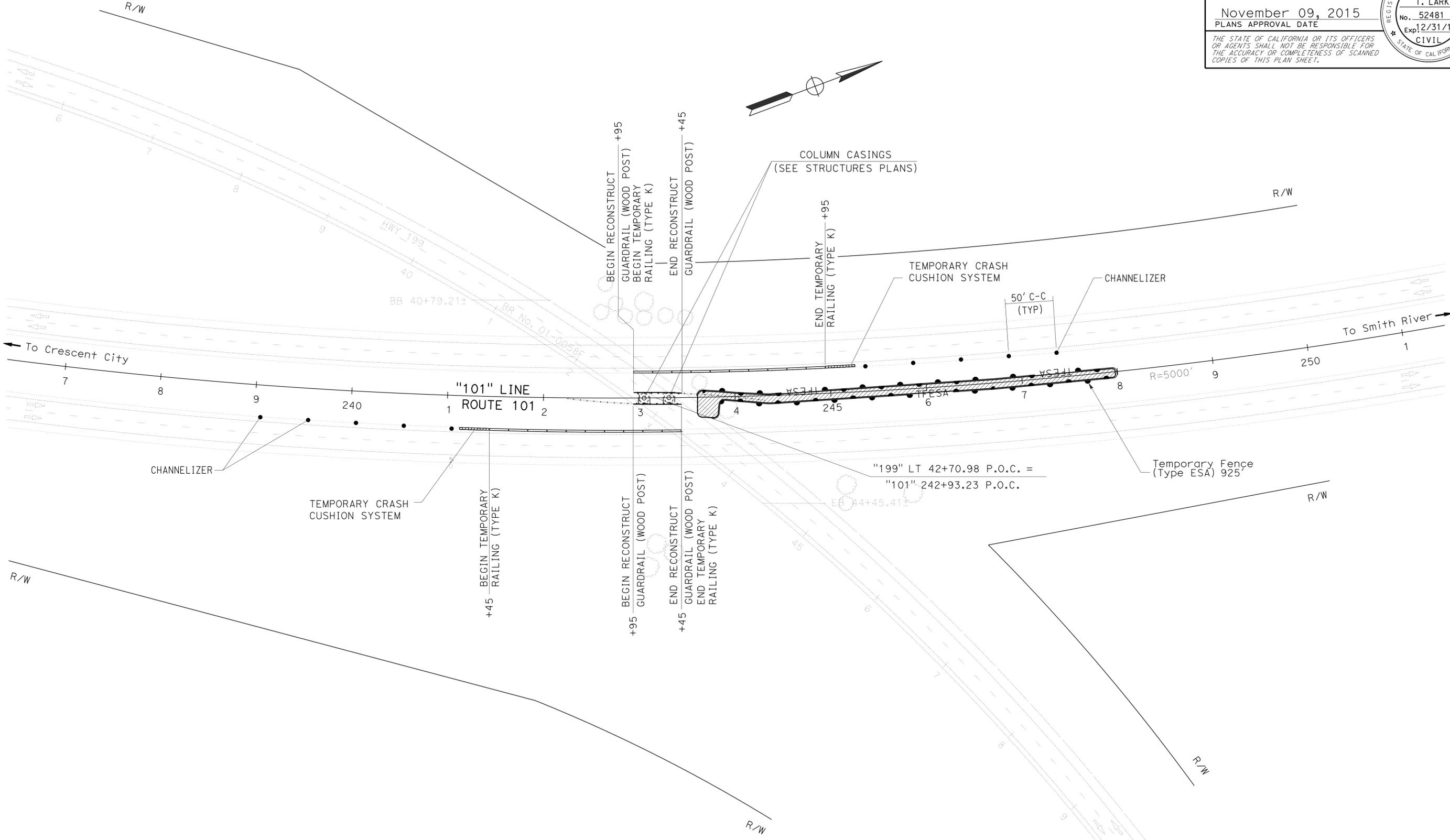
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	5	34

<i>T. Lark</i>	11/05/15
REGISTERED CIVIL ENGINEER	DATE
November 09, 2015	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
T. LARK
No. 52481
Exp. 2/31/16
CIVIL
STATE OF CALIFORNIA

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



LOCATION 2
199/101 CONNECTOR OVERCROSSING (01-0058F)
STA "101" 238+50 TO STA "101" 248+00

SCALE: 1"=50'

LAYOUT L-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	FUNCTIONAL SUPERVISOR	CHECKED BY	DESIGNED BY	REVISOR	DATE
	Caltrans	L.R. ASHLEY		BIJAN SAMRAD	TODD LARK	
BORDER LAST REVISED 7/2/2010		USERNAME => s132662	DGN FILE => 01120000231ea002.dgn		RELATIVE BORDER SCALE 15 IN INCHES	

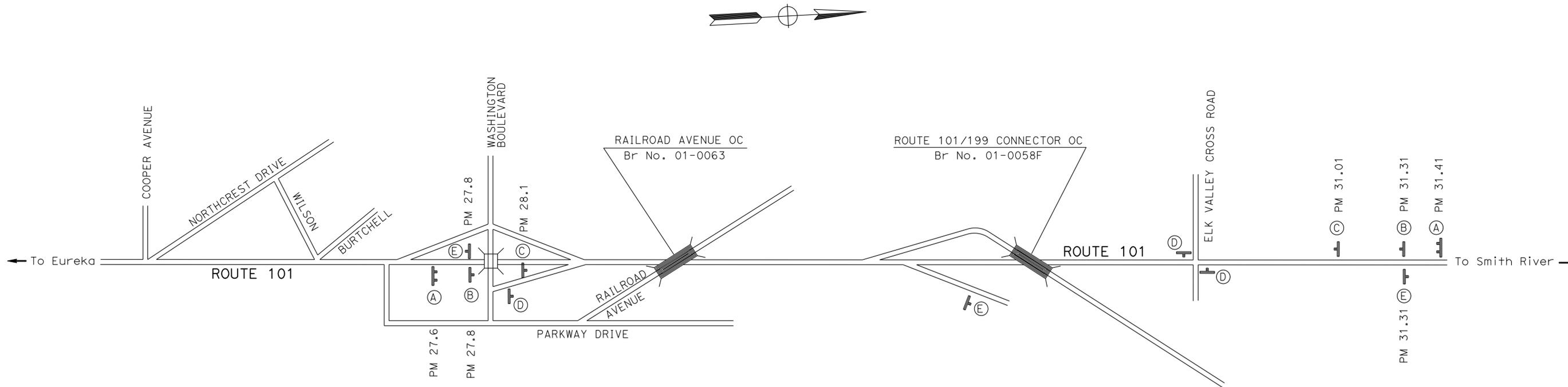
NOTES:

- EXACT SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No. (X)	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	(N) NUMBER OF SIGNS
	FEDERAL	CALIFORNIA				
A		C40 (CA)	144" x 60"	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONE	2 - 6" x 8"	6
B	W20-1		48" x 48"	ROAD WORK AHEAD	1 - 6" x 6"	6
		C23B (CA)	36" x 24"	BRIDGE REPAIR		
C	W11-1		36" x 36"	BICYCLE SYMBOL	1 - 4" x 6"	6
	W16-1		24" x 30"	SHARE THE ROAD		
D	W20-1		36" x 36"	ROAD WORK AHEAD	1 - 4" x 6"	10
E	G20-2		48" x 24"	END ROAD WORK	1 - 4" x 6"	7

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



LOCATION 1
Railroad Avenue
Overcrossing (#01-0063)

LOCATION 2
US 101/US 199 Connector
Overcrossing (#01-0058F)

CONSTRUCTION AREA SIGNS
CS-1

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

NO SCALE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	9	34

<i>T. Lark</i>	11/05/15
REGISTERED CIVIL ENGINEER	DATE
November 09, 2015	
PLANS APPROVAL DATE	

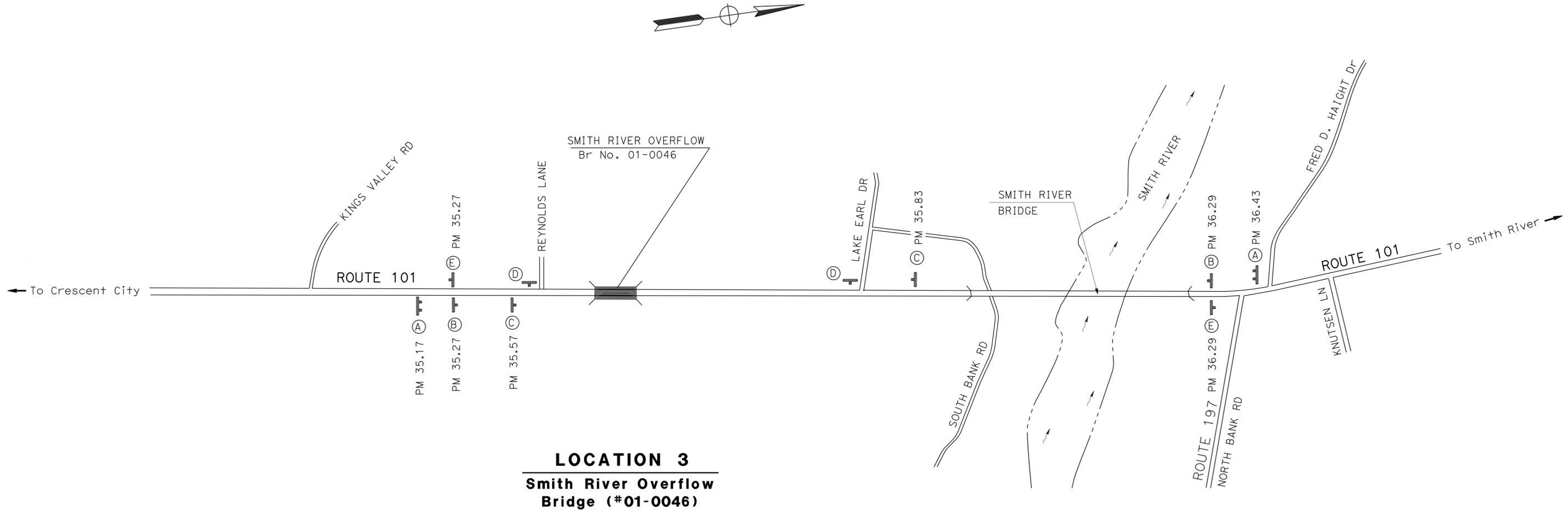
REGISTERED PROFESSIONAL ENGINEER	T. LARK
No. 52481	
Exp. 12/31/16	
CIVIL	

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NOTES:

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- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DESIGN
 FUNCTIONAL SUPERVISOR: L.R. ASHLEY
 CALCULATED/DESIGNED BY: BIJAN SAMRAD
 CHECKED BY: TODD LARK
 REVISOR: BIJAN SAMRAD
 DATE REVISOR: TODD LARK
 PROJECT NUMBER & PHASE: 011200002311a002.dgn



APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

CONSTRUCTION AREA SIGNS
CS-2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	10	34

<i>T. Lark</i>		11/05/15
REGISTERED CIVIL ENGINEER	DATE	
November 09, 2015		
PLANS APPROVAL DATE		

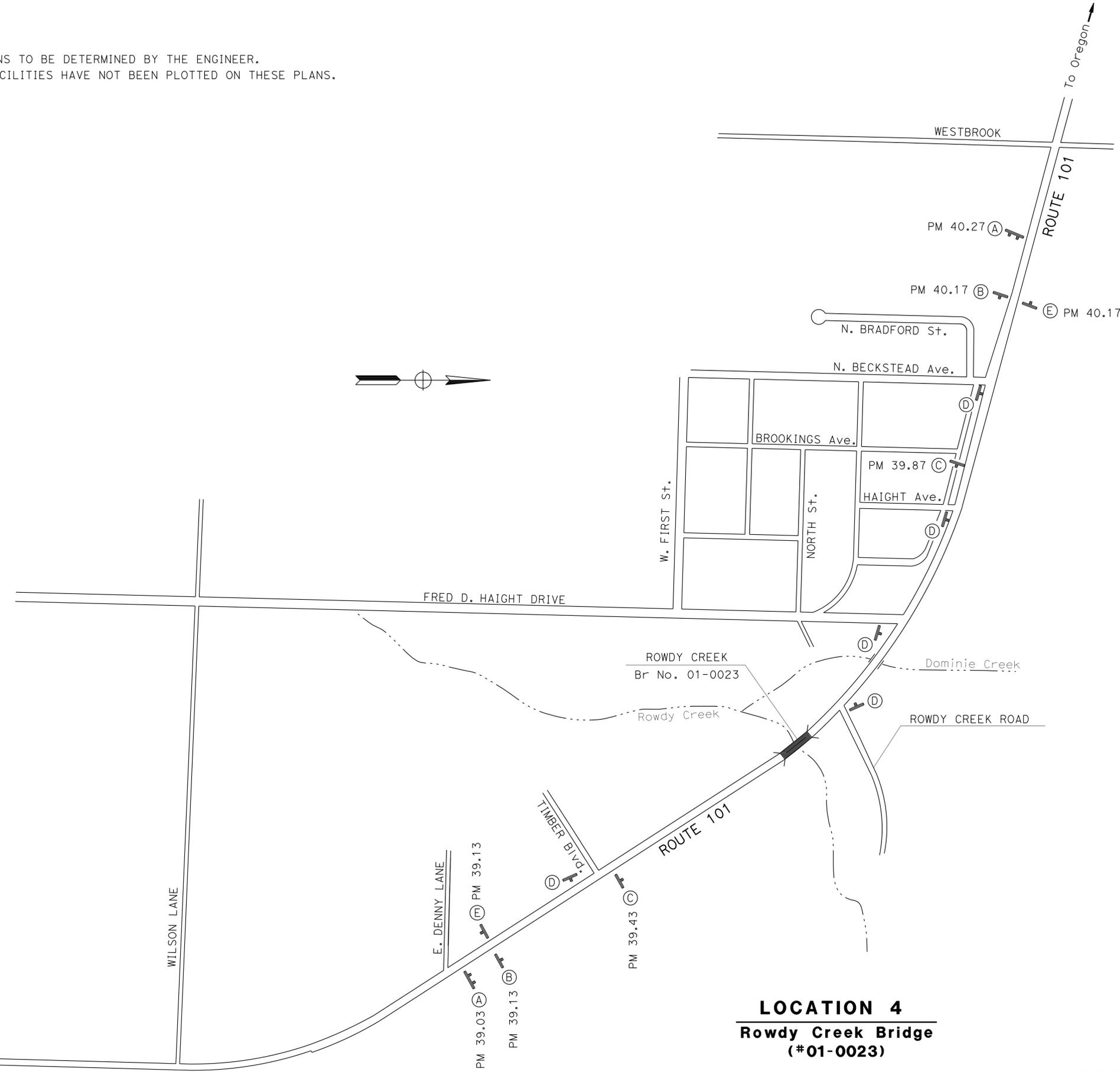
REGISTERED PROFESSIONAL ENGINEER	
T. LARK	
No.	52481
Exp.	2/31/16
CIVIL	
STATE OF CALIFORNIA	

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.

NOTES:

1. EXACT SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGN
Caltrans	L.R. ASHLEY	
CALCULATED/DESIGNED BY	CHECKED BY	
BIJAN SAMRAD	TODD LARK	
REVISOR	DATE	



LOCATION 4
Rowdy Creek Bridge
(#01-0023)

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

CONSTRUCTION AREA SIGNS
CS-3

NO SCALE

NOTES:

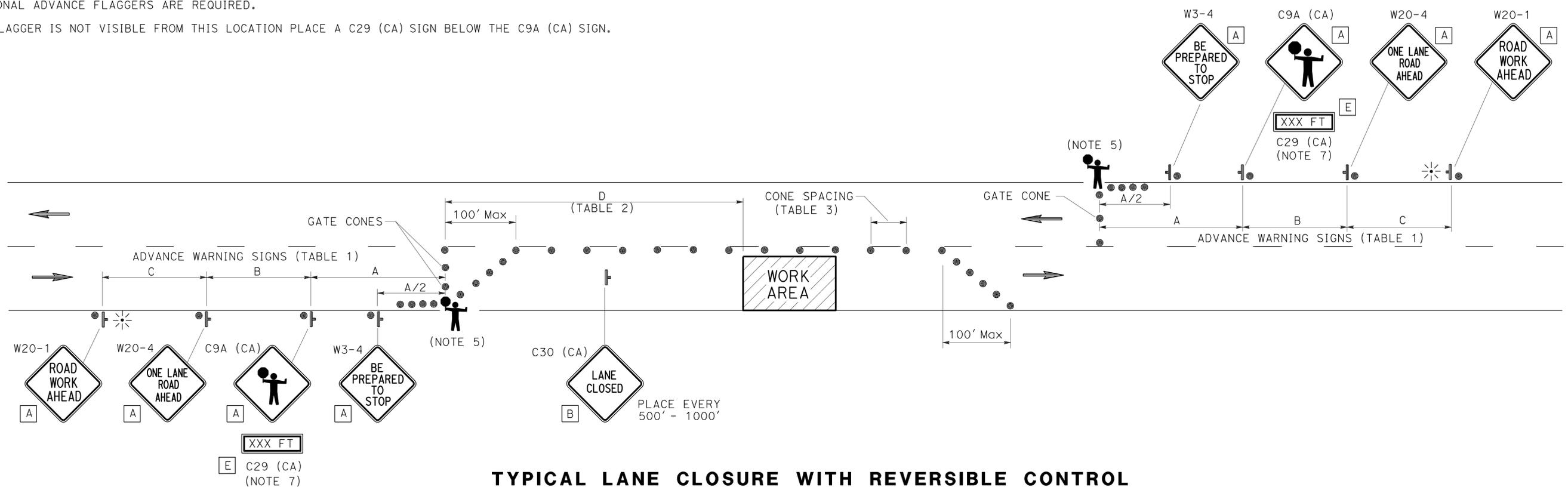
- CALIFORNIA CODES ARE DESIGNATED BY (CA). OTHERWISE, FEDERAL (MUTCD) CODES ARE SHOWN.
- ALL SIGNS SHALL HAVE A BLACK LEGEND ON FLUORESCENT ORANGE BACKGROUND AND SHALL BE EQUIPPED WITH AT LEAST TWO 16" x 16" ORANGE FLAGS FOR DAYTIME CLOSURE OR FLASHING BEACONS FOR LANE CLOSURE DURING HOURS OF DARKNESS.
- ALL CONES USED FOR LANE CLOSURES DURING THE HOURS OF DARKNESS SHALL BE FITTED WITH RETROREFLECTIVE BANDS OR SLEEVES.
- WHEN A PILOT CAR IS USED, PLACE A C37 (CA) SIGN AT ALL INTERSECTIONS WITHIN TRAFFIC CONTROL AREA. WHERE VEHICULAR TRAFFIC CAN NOT EFFECTIVELY SELF-REGULATE, AT LEAST ONE FLAGGER SHALL BE USED AT EACH INTERSECTION WITHIN THE TRAFFIC CONTROL AREA.
- FLAGGER SHOULD STAND IN A CONSPICUOUS PLACE, FACING TRAFFIC AT ALL TIMES, BE VISIBLE TO APPROACHING TRAFFIC AS WELL AS APPROACHING VEHICLES AFTER THE FIRST VEHICLE HAS STOPPED.
- ADDITIONAL ADVANCE FLAGGERS ARE REQUIRED.
- WHEN FLAGGER IS NOT VISIBLE FROM THIS LOCATION PLACE A C29 (CA) SIGN BELOW THE C9A (CA) SIGN.

LEGEND

- TRAFFIC CONE
- ⊥ TEMPORARY SIGN
- ← DIRECTION OF TRAVEL
- ☼ PORTABLE FLASHING BEACON
- 🚧 FLAGGER

SIGN PANEL SIZE (MINIMUM)

- A 48" x 48" - SPEED OF 45 mph OR MORE
36" x 36" - SPEED LESS THAN 45 mph
- B 30" x 30"
- C UNUSED
- D UNUSED
- E 20" x 7"



TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL

TABLE 1

ADVANCE WARNING SIGN SPACING

ROAD TYPE	Min A	Min B	Min C
	ft		
URBAN (25 mph OR LESS)	100	100	100
URBAN (30 mph TO 40 mph)	250	250	250
URBAN (MORE THAN 40 mph)	350	350	350
RURAL	500	500	500
EXPRESSWAY / FREEWAY	1000	1500	2640

TABLE 2

BUFFER SPACE

APPROACH SPEED	Min D	DOWNGRADE		
		Min D		
		-3%*	-6%*	-9%*
mph	ft			
25 & BELOW	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785

* USE ON SUSTAINED DOWNGRADE STEEPER THAN -3 PERCENT AND LONGER THAN 1 MILE.

TABLE 3

Max CONE SPACING

POSTED SPEED	TAPER	TANGENT	CONFLICT*
	ft		
mph			
20	20	40	10
25	25	50	12
30	30	60	15
35	35	70	17
40	40	80	20
45	45	90	22
50	50	100	25
55	55	110	27
60	60	120	30
65	65	130	32

* USE WHERE THERE IS A CONFLICT BETWEEN EXISTING PAVEMENT MARKINGS AND CHANNELIZERS.

P:\PROJ\01\001\00\graff\ing\01_001\004\01120000231.mcd001.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Caltrans® TRAFFIC OPERATIONS
 FUNCTIONAL SUPERVISOR: RICHARD MULLEN
 CALCULATED/DESIGNED BY: SHERI M. RODRIGUEZ
 CHECKED BY: TROY A. ARSENEAU
 REVISED BY: SHERI M. RODRIGUEZ
 DATE REVISED:

APPROVED FOR TRAFFIC HANDLING WORK ONLY

NO SCALE

TRAFFIC HANDLING PLAN TH-1

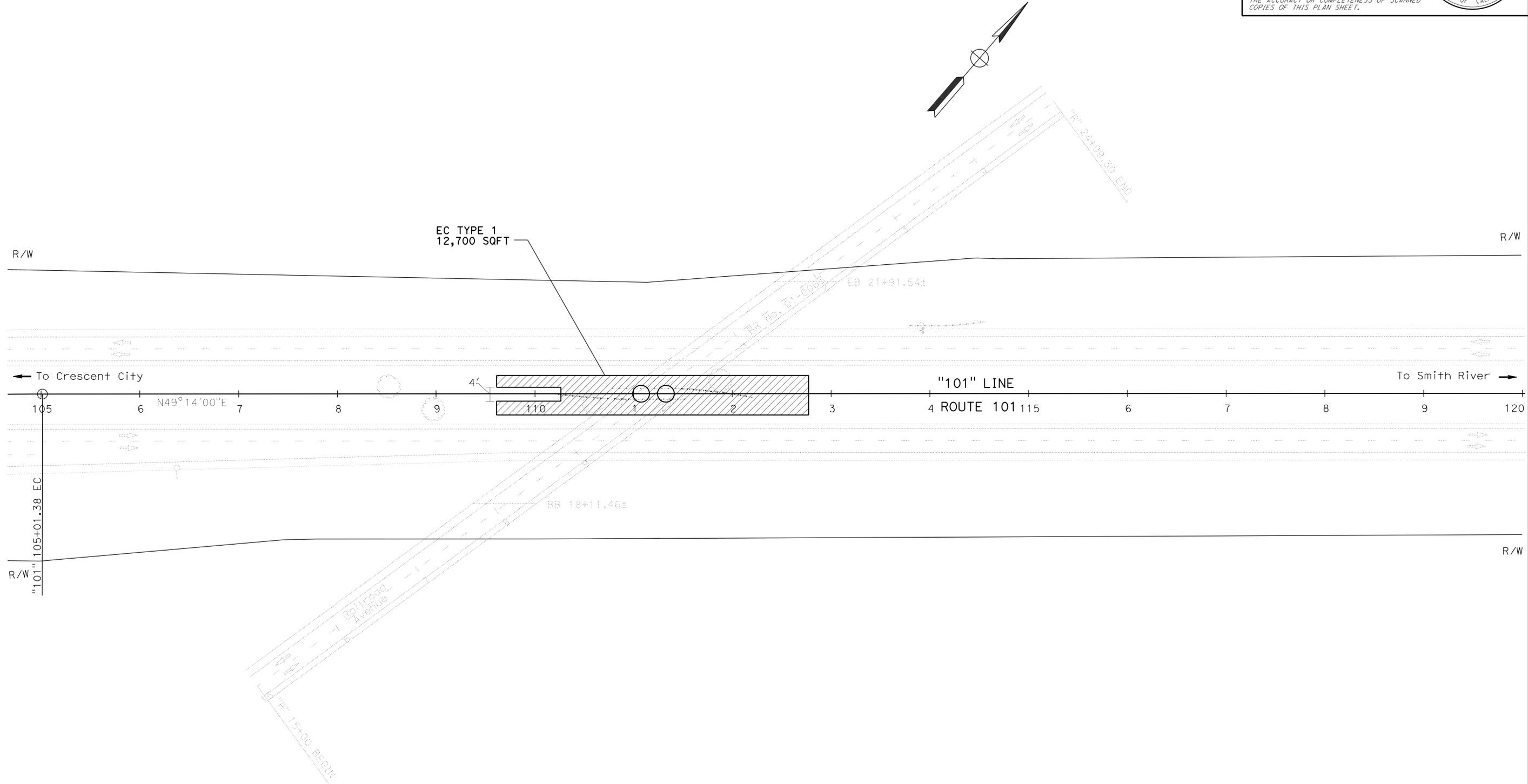
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	13	34

Laura Lazzarotto
 LICENSED LANDSCAPE ARCHITECT
 November 09, 2015
 PLANS APPROVAL DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans LANDSCAPE	TIM BOESE	CHECKED BY	DATE
		LAURA LAZZAROTTO	REVISOR
		PATRICK SULLIVAN	DATE



LOCATION 1
Railroad Avenue Overcrossing (#01-0063)
 STA "101" 109+61 TO STA "101" 112+77

APPROVED FOR EROSION CONTROL WORK ONLY

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

LAST REVISION DATE PLOTTED => 30-DEC-2015 TIME PLOTTED => 12:59

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	14	34

Laura Lazzarotto
 LICENSED LANDSCAPE ARCHITECT
 November 09, 2015
 PLANS APPROVAL DATE

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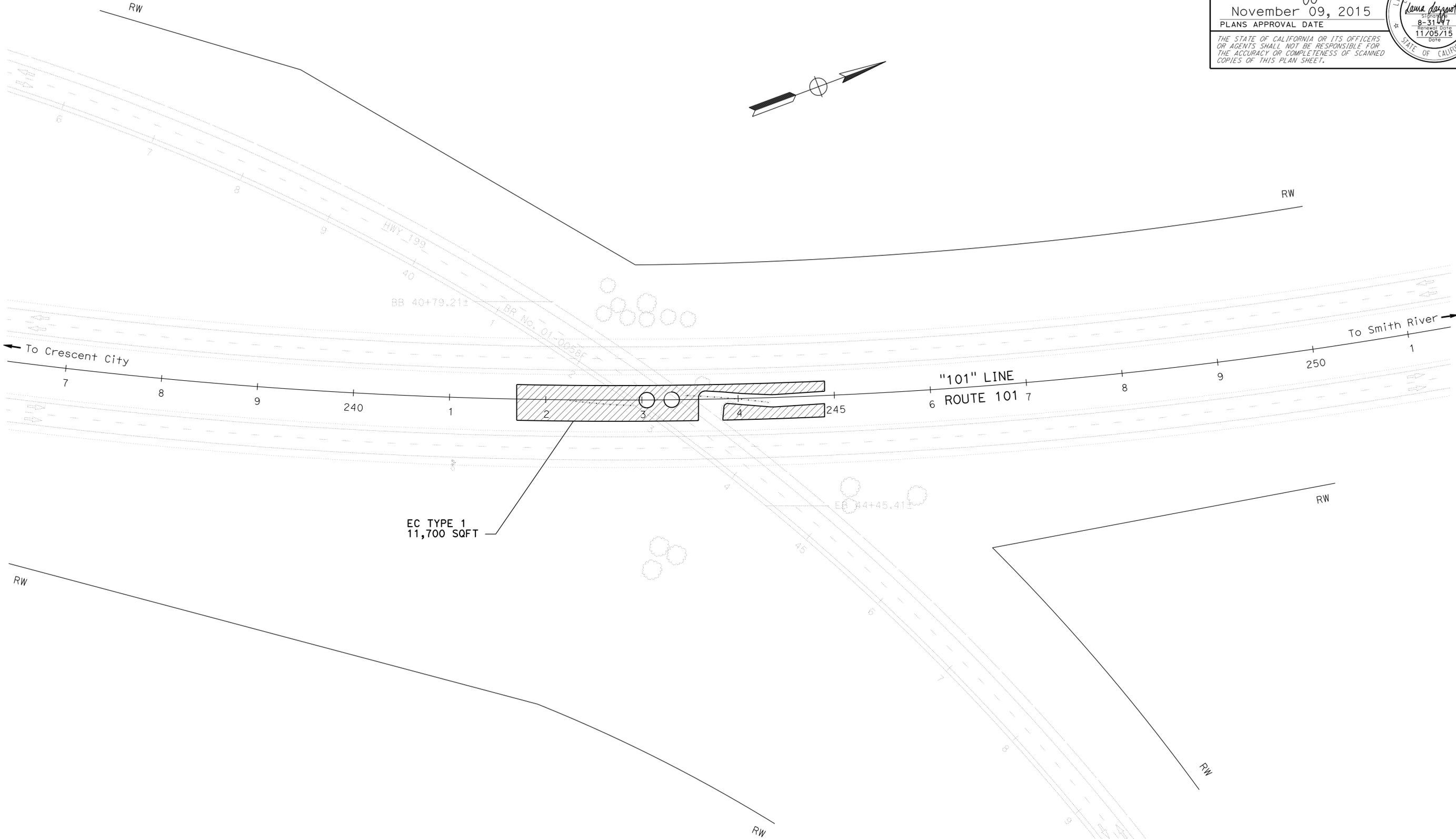
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE

FUNCTIONAL SUPERVISOR
 TIM BOESE

CALCULATED/DESIGNED BY
 LAURA LAZZAROTTO

CHECKED BY
 PATRICK SULLIVAN

REVISOR BY
 DATE



LOCATION 2
199/101 CONNECTOR OVERCROSSING (01-0058F)

STA "101" 241+70 TO STA "101" 244+90

APPROVED FOR EROSION CONTROL WORK ONLY

EROSION CONTROL PLAN
EC-2

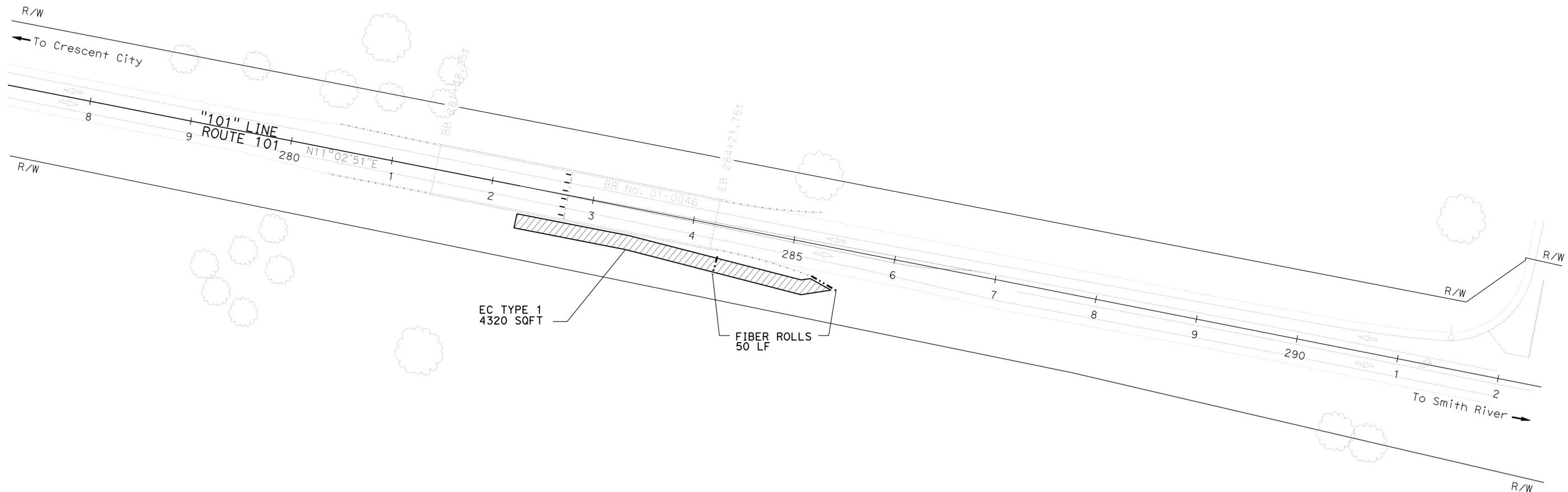
SCALE: 1"=50'

LAST REVISION DATE PLOTTED => 30-DEC-2015
 11-05-15 TIME PLOTTED => 12:59

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	15	34

Laura Lazzarotto
 LICENSED LANDSCAPE ARCHITECT
 November 09, 2015
 PLANS APPROVAL DATE

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LOCATION 3
SMITH RIVER OVERFLOW BRIDGE (#01-0046)
 STA "101" 282+31 TO STA "101" 285+46

APPROVED FOR EROSION CONTROL WORK ONLY

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	LANDSCAPE
FUNCTIONAL SUPERVISOR	TIM BOESE
CALCULATED/DESIGNED BY	CHECKED BY
LAURA LAZZAROTTO	PATRICK SULLIVAN
REVISER BY	DATE

LAST REVISION DATE PLOTTED => 30-DEC-2015 11-05-15 TIME PLOTTED => 12:59

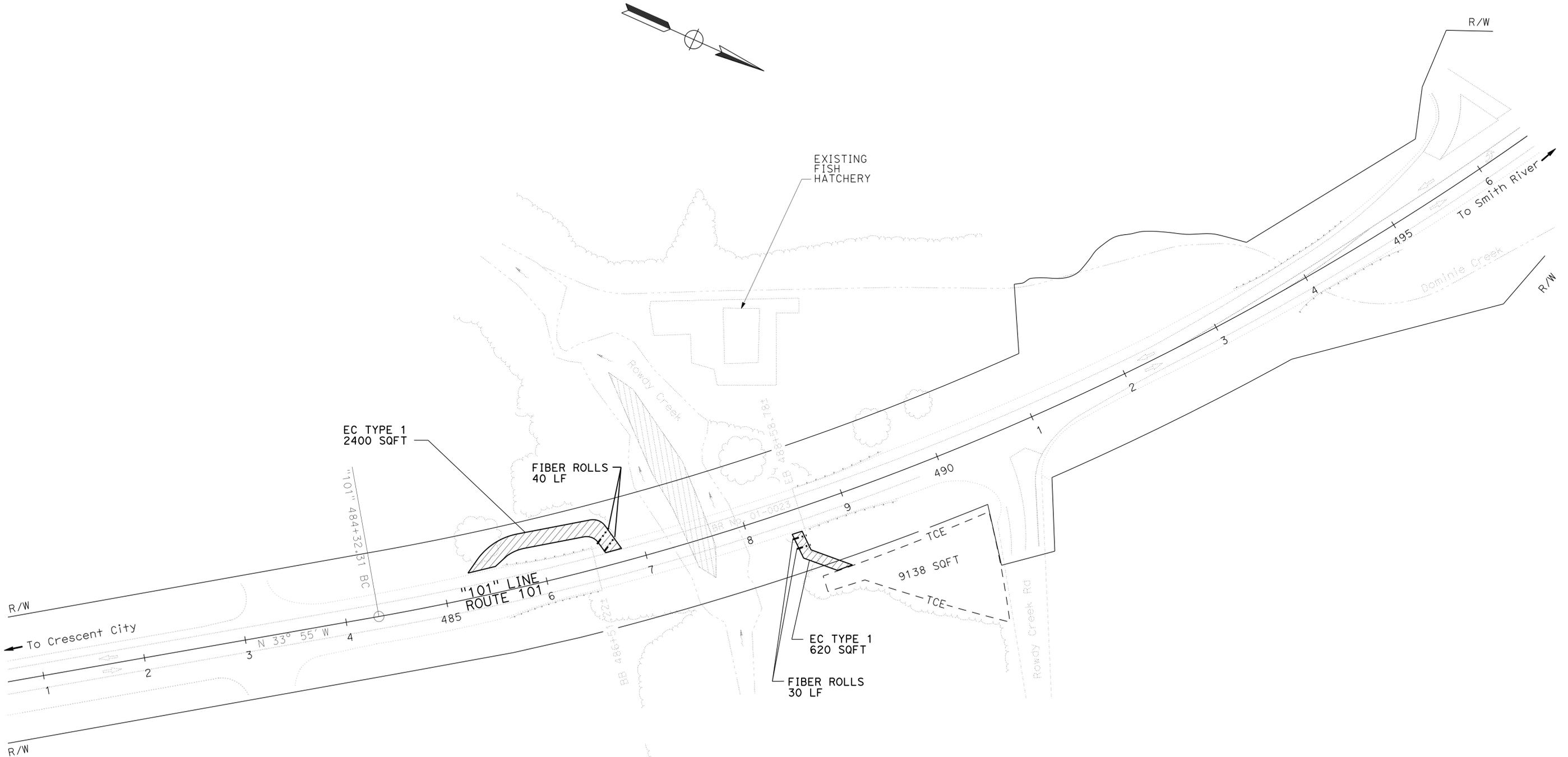
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	16	34

<i>Laura Lazzarotto</i> LICENSED LANDSCAPE ARCHITECT	
November 09, 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>	



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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans LANDSCAPE	TIM BOESE	Laura Lazzarotto	Laura Lazzarotto
		Checked by	Patrick Sullivan



LOCATION 4
ROWDY CREEK BRIDGE (#01-0023)

STA "101" 485+27 TO STA "101" 486+80
 STA "101" 488+41 TO STA "101" 488+85

APPROVED FOR EROSION CONTROL WORK ONLY

EROSION CONTROL PLAN
EC-4

SCALE: 1"=50'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	17	34

Laura Lazzarotto
 LICENSED LANDSCAPE ARCHITECT
 November 09, 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.

FIBER ROLLS

SEQUENCE	ITEM	MATERIAL		REMARKS
		DESCRIPTION	TYPE	
FIBER ROLLS MUST BE INSTALLED BEFORE EROSION CONTROL	FIBER ROLLS	FIBER ROLL	TYPE B 8" TO 10" Dia	TYPE 1 FIBER ROLL INSTALLATION

EROSION CONTROL TYPE 1

SEQUENCE	ITEM	MATERIAL		APPLICATION RATE
		DESCRIPTION	TYPE	
STEP 1	HYDROSEED	SEED	MIX 1	89 LB/ACRE
		FIBER	WOOD	1200 LB/ACRE
STEP 2	STRAW	STRAW	WHEAT AND/OR BARLEY	2 TON/ACRE
STEP 3	HYDROMULCH	FIBER	WOOD	1200 LB/ACRE
		TACKIFIER	PSYLLIUM	145 LB/ACRE

SEED MIX 1

SEED	BOTANICAL NAME (COMMON NAME)	PERCENT GERMINATION (MINIMUM)	POUNDS PURE LIVE SEED PER ACRE (SLOPE MEASUREMENT)
MIX 1	ESCHSCHOLZIA CALIFORNICA, MARITIMA ¹ (COASTAL CALIFORNIA POPPY)	35	6
	FESTUCA RUBRA ¹ (RED FESCUE)	50	12
	HORDEUM CALIFORNICUM 'PROSTRATE' ¹ (CALIFORNIA BARLEY, PROSTRATE)	50	50
	LAYIA PLATYGLOSSA ¹ (TIDY TIPS)	40	6
	VULPIA MICROSTACHYS ¹ (SMALL FESCUE)	50	15

¹ SEED PRODUCED IN CALIFORNIA ONLY.

EROSION CONTROL QUANTITIES

LOC	LOCATION (STATION)		DIRECTION	DESCRIPTION	HYDROSEED (SQFT)	STRAW (SQFT)	HYDROMULCH (SQFT)	FIBER ROLLS
	FROM	TO			SQFT	SQFT	SQFT	LF
1	109+61	112+77	MEDIAN	EC TYPE 1	12,700	12,700	12,700	-
2	241+70	244+90	MEDIAN	EC TYPE 1	11,700	11,700	11,700	-
3	282+31	285+46	NB, R+	EC TYPE 1	4,320	4,320	4,320	50
4	485+27	486+80	SB, L+	EC TYPE 1	2,400	2,400	2,400	40
	488+41	488+85	NB, R+	EC TYPE 1	620	620	620	30
TOTAL					31,740	31,740	31,740	120

EROSION CONTROL QUANTITIES ECQ-1

APPROVED FOR EROSION CONTROL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE
 FUNCTIONAL SUPERVISOR: TIM BOESE
 CALCULATED/DESIGNED BY: LAURA LAZZAROTTO
 CHECKED BY: PATRICK SULLIVAN
 REVISED BY: LAURA LAZZAROTTO
 DATE REVISED: PATRICK SULLIVAN

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	18	34

Grace M. Tsushima
REGISTERED CIVIL ENGINEER

July 19, 2013
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 11/09/15

UNIT OF MEASUREMENT SYMBOLS:

Some of the symbols used in the project plan quantity tables and in the Bid Item List are:

TABLE A

SYMBOL USED	DEFINITIONS
ACRE	ACRE
CF	CUBIC FOOT
CY	CUBIC YARD
EA	EACH
GAL	GALLON
LB	POUND
LF	LINEAR FOOT
SQFT	SQUARE FOOT
SQYD	SQUARE YARD
STA	100 FEET
TAB	TABLET
TON	2,000 POUNDS

Some of the symbols used in the plans other than in the project plan quantity tables are:

TABLE B

SYMBOL USED	DEFINITIONS
ksi	KIPS PER SQUARE INCH
ksf	KIPS PER SQUARE FOOT
psi	POUNDS PER SQUARE INCH
psf	POUNDS PER SQUARE FOOT
lb/ft ³ , pcf	POUNDS PER CUBIC FOOT
tsf	TONS PER SQUARE FOOT
mph, MPH *	MILES PER HOUR
ø	NOMINAL DIAMETER
oz	OUNCE
lb	POUND
kíp	1,000 POUNDS
cal	CALORIE
ft	FOOT OR FEET
gal	GALLON

* For use on a sign panel only

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ABBREVIATIONS
(SHEET 2 OF 2)**

NO SCALE

RSP A10B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A10B DATED MAY 20, 2011 - PAGE 2 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A10B

	M
Maint	MAINTENANCE
Max	MAXIMUM
MB	METAL BEAM
MBB	METAL BEAM BARRIER
MBGR	METAL BEAM GUARD RAILING
Med	MEDIAN
MGS	MIDWEST GUARDRAIL SYSTEM
MH	MANHOLE
Min	MINIMUM
Misc	MISCELLANEOUS
Misc I & S	MISCELLANEOUS IRON AND STEEL
Mkr	MARKER
Mod	MODIFIED, MODIFY
Mon	MONUMENT
MP	METAL PLATE
MPGR	METAL PLATE GUARD RAILING
MR	MOVEMENT RATING
MSE	MECHANICALLY STABILIZED EMBANKMENT
Mt	MOUNTAIN, MOUNT
M+I	MATERIAL
MVP	MAINTENANCE VEHICLE PULLOUT
	N
N	NORTH
NB	NORTHBOUND
No.	NUMBER (MUST HAVE PERIOD)
Nos.	NUMBERS (MUST HAVE PERIOD)
NPS	NOMINAL PIPE SIZE
NS	NEAR SIDE
NSP	NEW STANDARD PLAN
NTS	NOT TO SCALE
	O
Obir	OBLITERATE
OC	OVERCROSSING
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OG	ORIGINAL GROUND
OGAC	OPEN GRADED ASPHALT CONCRETE
OGFC	OPEN GRADED FRICTION COURSE
OH	OVERHEAD
OHWM	ORDINARY HIGH WATER MARK
O-O	OUT TO OUT
Opp	OPPOSITE
OSD	OVERSIDE DRAIN
	P
p	PAGE
PAP	PERFORATED ALUMINUM PIPE
PB	PULL BOX
PC	POINT OF CURVATURE, PRECAST
PCC	POINT OF COMPOUND CURVE, PORTLAND CEMENT CONCRETE
PCMS	PORTABLE CHANGEABLE MESSAGE SIGN
PCP	PERFORATED CONCRETE PIPE, PRESTRESSED CONCRETE PIPE
PCVC	POINT OF COMPOUND VERTICAL CURVE
PEC	PERMIT TO ENTER AND CONSTRUCT
Ped	PEDESTRIAN
Ped OC	PEDESTRIAN OVERCROSSING
Ped UC	PEDESTRIAN UNDERCROSSING
Perm MtI	PERMEABLE MATERIAL

	P continued
PG	PROFILE GRADE
PI	POINT OF INTERSECTION
PJP	PARTIAL JOINT PENETRATION
Pkwy	PARKWAY
PL, PL	PLATE
P/L	PROPERTY LINE
PM	POST MILE, TIME FROM NOON TO MIDNIGHT
PN	PAVING NOTCH
POC	POINT OF HORIZONTAL CURVE
POT	POINT OF TANGENT
POVC	POINT OF VERTICAL CURVE
PP	PIPE PILE, PLASTIC PIPE, POWER POLE
PPL	PREFORMED PERMEABLE LINER
PPP	PERFORATED PLASTIC PIPE
PRC	POINT OF REVERSE CURVE
PRF	PAVEMENT REINFORCING FABRIC
PRVC	POINT OF REVERSE VERTICAL CURVE
PS&E	PLANS, SPECIFICATIONS AND ESTIMATES
PS, P/S	PRESTRESSED
PSP	PERFORATED STEEL PIPE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
Pvmt	PAVEMENT
	Q
	R
Qty	QUANTITY
	R
R	RADIUS
R & D	REMOVE AND DISPOSE
R & S	REMOVE AND SALVAGE
R/C	RATE OF CHANGE
RCA	REINFORCED CONCRETE ARCH
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RCPA	REINFORCED CONCRETE PIPE ARCH
Rd	ROAD
Reinf	REINFORCED, REINFORCEMENT, REINFORCING
Rel	RELOCATE
Repl	REPLACEMENT
Ret	RETAINING
Rev	REVISED, REVISION
Rdwy	ROADWAY
RHMA	RUBBERIZED HOT MIX ASPHALT
Riv	RIVER
RM	ROAD-MIXED
RP	RADIUS POINT, REFERENCE POINT
RR	RAILROAD
RSP	ROCK SLOPE PROTECTION, REVISED STANDARD PLAN
R+	RIGHT
Rte	ROUTE
RW	REDWOOD, RETAINING WALL
R/W	RIGHT OF WAY
Rwy	RAILWAY

	S
S	SOUTH, SUPPLEMENT
SAE	STRUCTURE APPROACH EMBANKMENT
Salv	SALVAGE
SAPP	STRUCTURAL ALUMINUM PLATE PIPE
SB	SOUTHBOUND
SC	SAND CUSHION
SCSP	SLOTTED CORRUGATED STEEL PIPE
SD	STORM DRAIN
Sec	SECOND, SECTION
Sep	SEPARATION
SG	SUBGRADE
Shld	SHOULDER
Sht	SHEET
Sim	SIMILAR
SL	STATION LINE
SM	SELECTED MATERIAL
Spec	SPECIAL, SPECIFICATIONS
SPP	SLOTTED PLASTIC PIPE
SS	SLOPE STAKE
SSBM	STRAP AND SADDLE BRACKET METHOD
SSD	STRUCTURAL SECTION DRAIN
SSPA	STRUCTURAL STEEL PLATE ARCH
SSPP	STRUCTURAL STEEL PLATE PIPE
SSPPA	STRUCTURAL STEEL PLATE PIPE ARCH
SSRP	STEEL SPIRAL RIB PIPE
St	STREET
Sta	STATION
STBB	SINGLE THRIE BEAM BARRIER
Std	STANDARD
Str	STRUCTURE
Surf	SURFACING
SW	SIDEWALK, SOUND WALL
Swr	SEWER
Sym	SYMMETRICAL
S4S	SURFACE 4 SIDES
	T
T	SEMI-TANGENT
Tan	TANGENT
TBB	THRIE BEAM BARRIER
Tbr	TIMBER
TC	TOP OF CURB
TCB	TRAFFIC CONTROL BOX
TCE	TEMPORARY CONSTRUCTION EASEMENT
TeI	TELEPHONE
Temp	TEMPORARY
TG	TOP OF GRADE
Tot	TOTAL
TP	TELEPHONE POLE
TPB	TREATED PERMEABLE BASE
TPM	TREATED PERMEABLE MATERIAL
Trans	TRANSITION

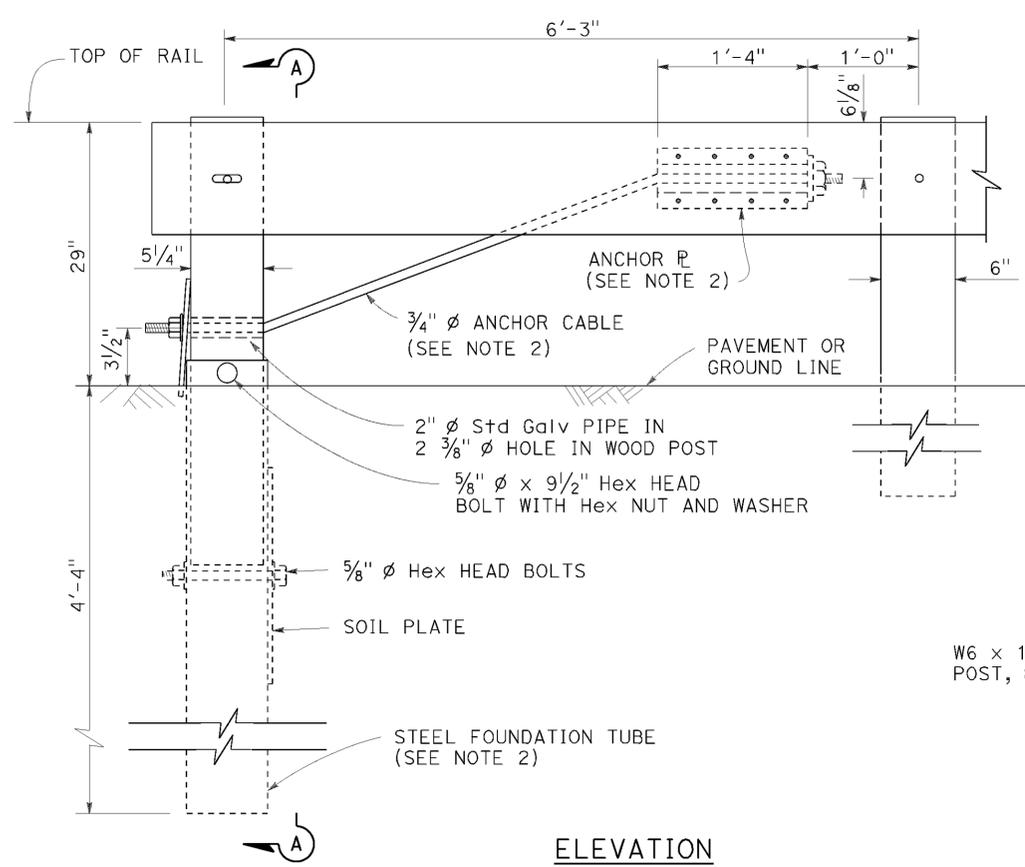
	T continued
TS	TRANSVERSE, TRAFFIC SIGNAL, TUBULAR STEEL
Typ	TYPICAL
	U
UC	UNDERCROSSING
UD	UNDERDRAIN
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UP	UNDERPASS
	V
V	VALVE, DESIGN SPEED
Var	VARIABLE, VARIES
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
Vert	VERTICAL
Via	VIADUCT
Vol	VOLUME
	W
W	WEST, WIDTH
WB	WESTBOUND
WH	WEEP HOLE
WM	WIRE MESH
WS	WATER SURFACE
WSP	WELDED STEEL PIPE
Wt	WEIGHT
WV	WATER VALVE
WW	WINGWALL
WWL	WINGWALL LAYOUT LINE
	X
X Sec	CROSS SECTION
Xing	CROSSING
	Y
Yr	YEAR
Yrs	YEARS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	19	34

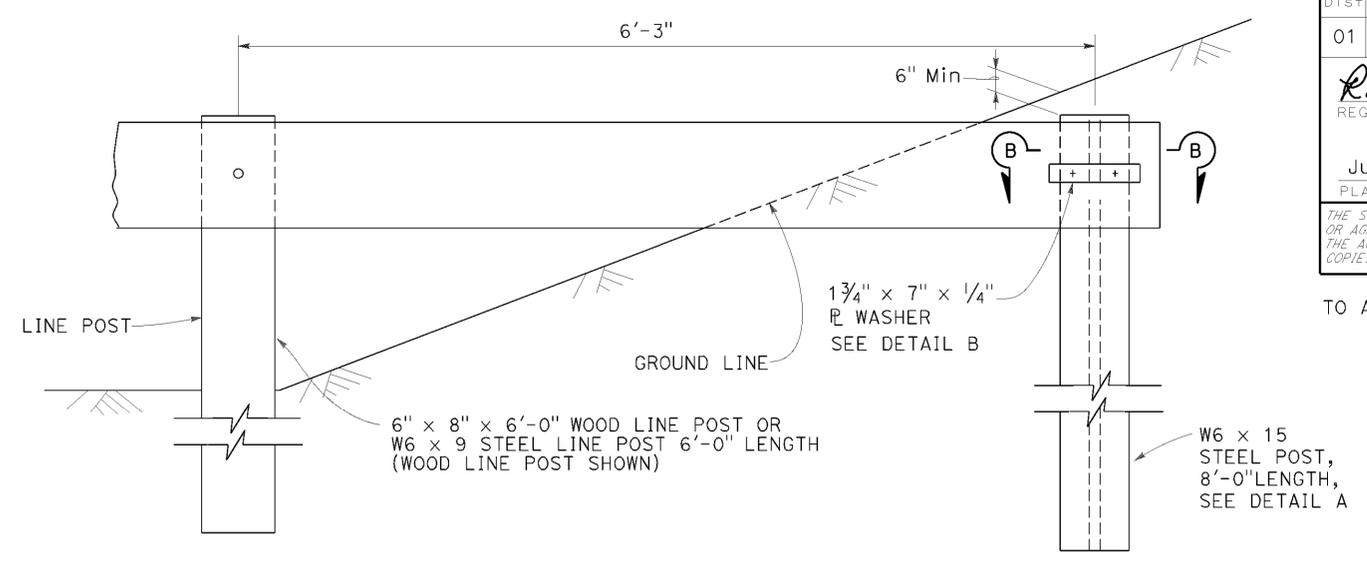
RANDALL D. HIATT
 REGISTERED CIVIL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



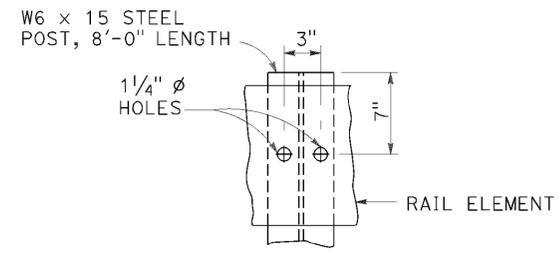
TO ACCOMPANY PLANS DATED 11/09/15



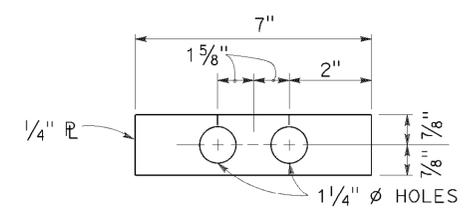
**ELEVATION
END ANCHOR
ASSEMBLY (TYPE SFT)**



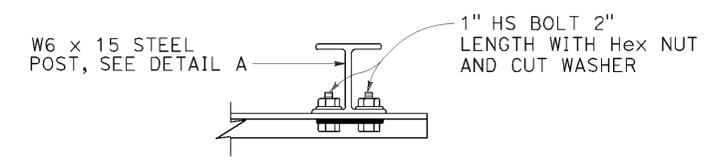
BURIED POST END ANCHOR



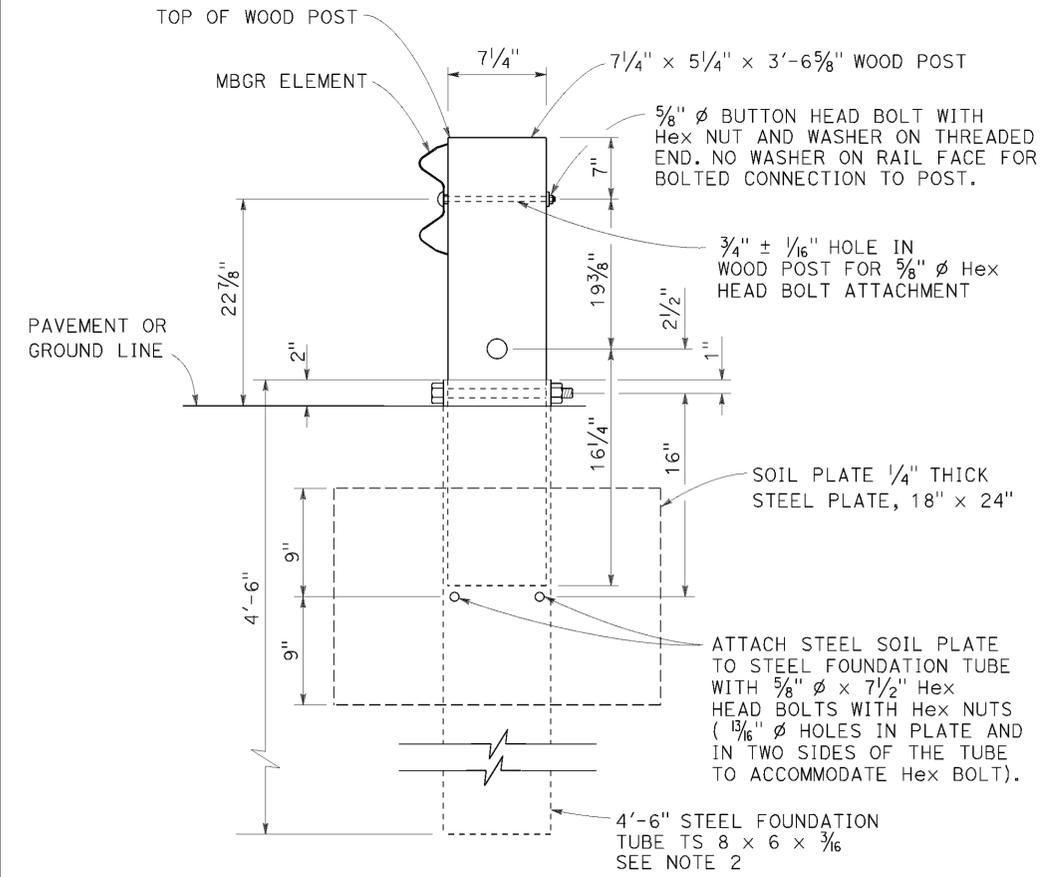
DETAIL A



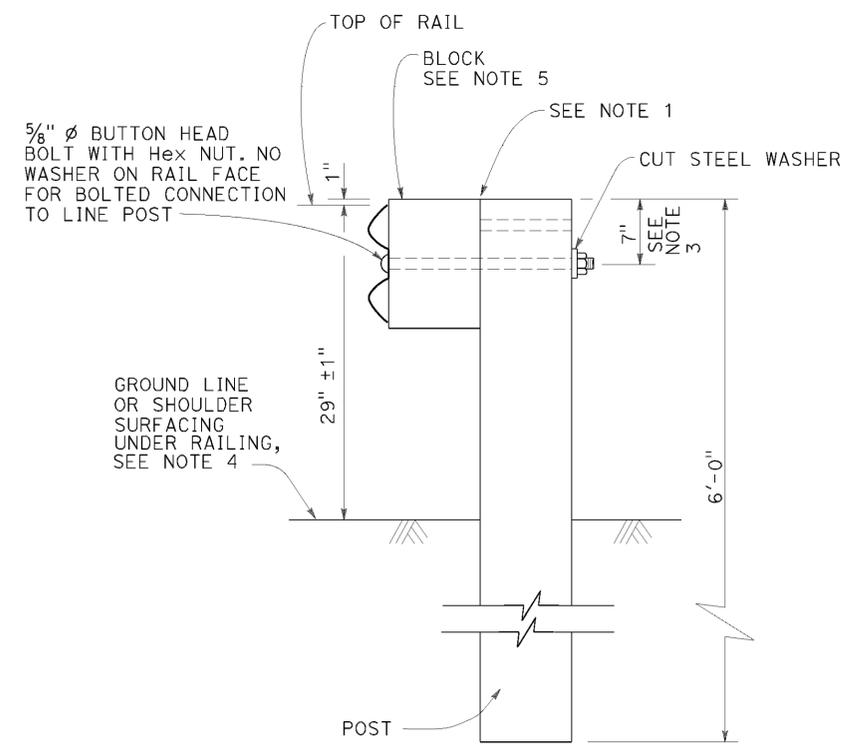
DETAIL B



SECTION B-B



SECTION A-A



**TYPICAL LINE
POST INSTALLATION**

NOTES:

- For wood post and wood block, toenail with 2-16d Galv nails in top of block. For steel post and notched wood or plastic block, notched face of block faces steel post.
- A 6'-0" length steel foundation tube, TS 8 x 6 x 3/16, without a soil plate, may be furnished and installed in place of the 4'-6" length steel foundation tube and soil plate shown. Minimum embedment of the 6'-0" length tube shall be 5'-9". A 5/8" diameter hex head bolt and nut shall be installed in the hole in the 6'-0" length tube to keep the wood post from dropping into the tube.
- To connect railing to 27" terminal system end treatment, transition the top of railing height at a ratio of 120:1 to terminal system end treatment height plus one 12'-6" standard railing section at the transitioned height for a horizontal connection to the end treatment.
- Install posts in soil.
- See Revised Standard Plans RSP A77N1 and RSP A77N2 for details.
- Holes excavation in the slope to construct the buried post end anchor shall be backfilled with selected earth, placed in layers approximately 1'-0" thick. Each layer shall be moistened and thoroughly compacted.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING
RECONSTRUCT INSTALLATION**

NO SCALE

RSP A77L3 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77L3

2010 REVISED STANDARD PLAN RSP A77L3

P:\PROJ\01\001\00\dr\aff\ing\01_0a1004\01120000231va002.dgn

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	20	34

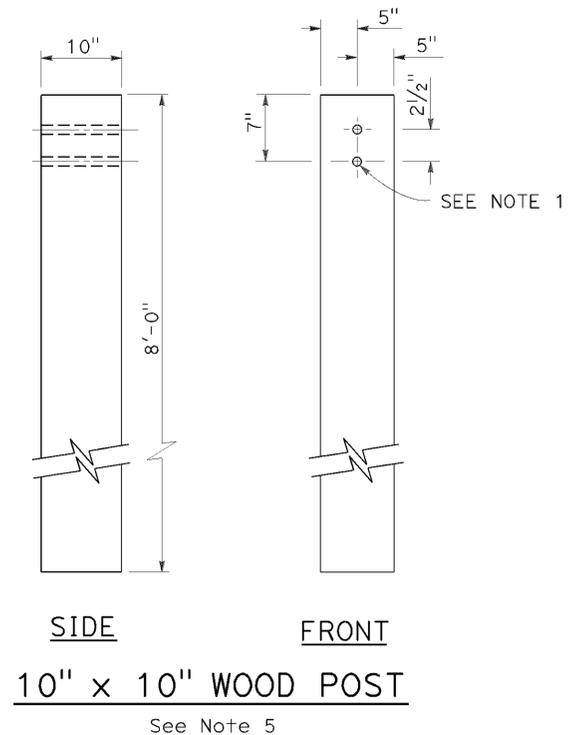
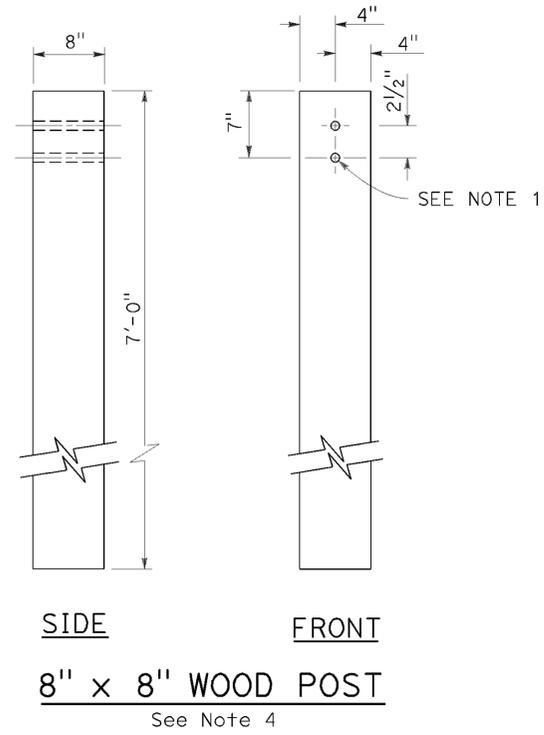
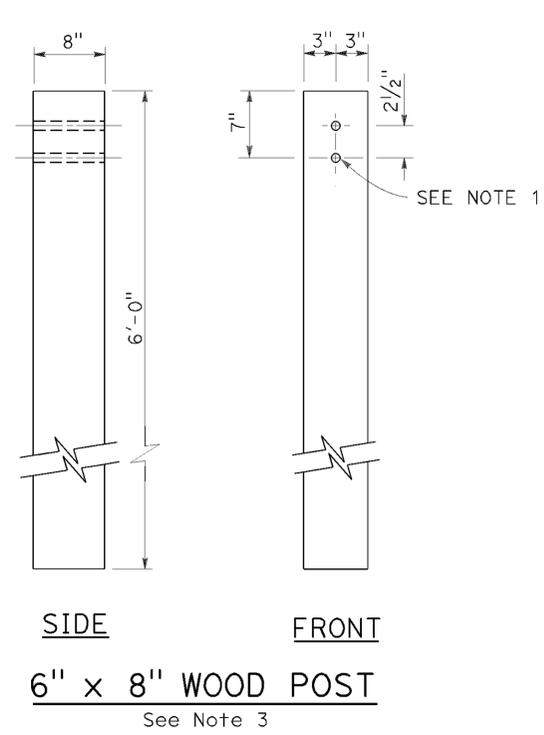
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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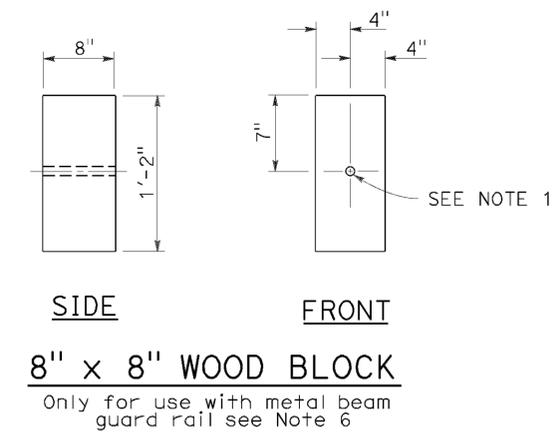
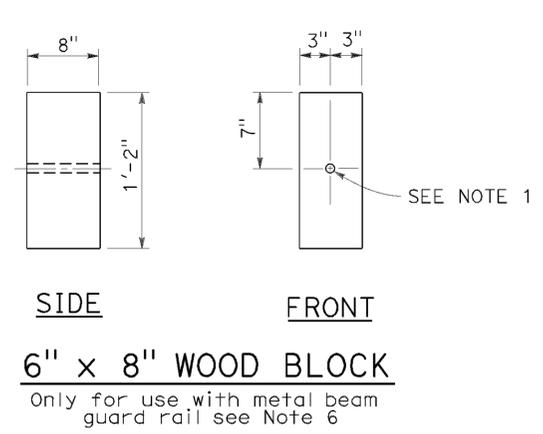
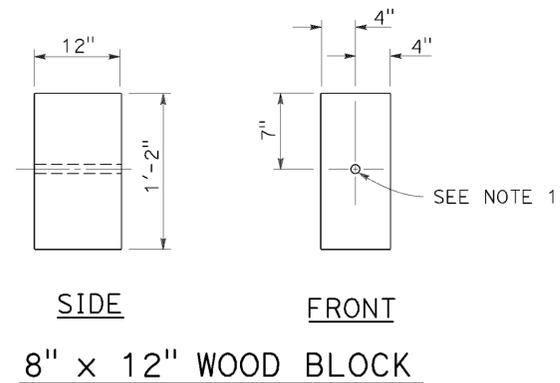
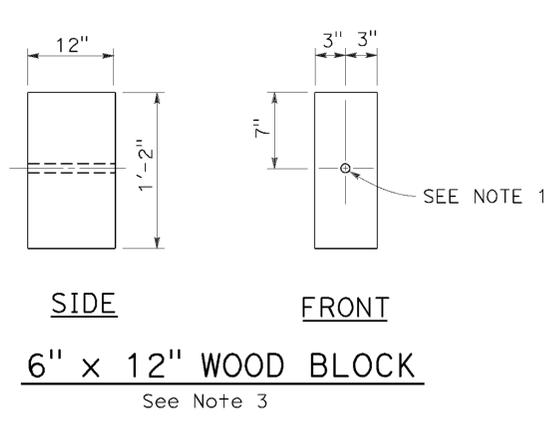
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 11/09/15



NOTES:

1. All holes in wood posts and blocks shall be 3/4" Dia ± 1/16".
2. Dimensions shown for wood post are nominal.
3. This post and block combination used for standard line post sections of MGS.
4. This post and 8" x 12" block combination used for line post sections of MGS on narrow roadways.
5. This post and 8" x 12" block combination is typically used where strengthened line post sections of MGS are warranted to shield fixed objects.
6. See Revised Standard Plan RSP A77L3 for use of 6" x 8" and 8" x 8" wood blocks.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
WOOD POST AND
WOOD BLOCK DETAILS**

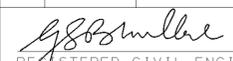
NO SCALE

RSP A77N1 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77N1

2010 REVISED STANDARD PLAN RSP A77N1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	21	34


 REGISTERED CIVIL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE



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TO ACCOMPANY PLANS DATED 11/09/15

TABLE 1

TAPER LENGTH CRITERIA AND CHANNELIZING DEVICE SPACING							
SPEED (S)	MINIMUM TAPER LENGTH * FOR WIDTH OF OFFSET 12 FEET (W)				MAXIMUM CHANNELIZING DEVICE SPACING		
	TANGENT 2L	MERCING L	SHIFTING L/2	SHOULDER L/3	X	Y	Z **
					TAPER	TANGENT	CONFLICT
mph	ft	ft	ft	ft	ft	ft	ft
20	160	80	40	27	20	40	10
25	250	125	63	42	25	50	12
30	360	180	90	60	30	60	15
35	490	245	123	82	35	70	17
40	640	320	160	107	40	80	20
45	1080	540	270	180	45	90	22
50	1200	600	300	200	50	100	25
55	1320	660	330	220	55	110	27
60	1440	720	360	240	60	120	30
65	1560	780	390	260	65	130	32
70	1680	840	420	280	70	140	35

* - For other offsets, use the following merging taper length formula for L:
 For speed of 40 mph or less, $L = WS^2/60$
 For speed of 45 mph or more, $L = WS$

Where: L = Taper length in feet
 W = Width of offset in feet
 S = Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

** - Use for taper and tangent sections where there are no pavement markings or where there is a conflict between existing pavement markings and channelizers (CA).

TABLE 2

LONGITUDINAL BUFFER SPACE AND FLAGGER STATION SPACING				
SPEED *	Min D **	DOWNGRADE Min D ***		
		-3%	-6%	-9%
		ft	ft	ft
mph	ft	ft	ft	ft
20	115	116	120	126
25	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785
70	730	771	825	891

* - Speed is posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph
 ** - Longitudinal buffer space or flagger station spacing
 *** - Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

TABLE 3

ADVANCE WARNING SIGN SPACING			
ROAD TYPE	DISTANCE BETWEEN SIGNS *		
	A	B	C
	ft	ft	ft
URBAN - 25 mph OR LESS	100	100	100
URBAN - MORE THAN 25 mph TO 40 mph	250	250	250
URBAN - MORE THAN 40 mph	350	350	350
RURAL	500	500	500
EXPRESSWAY / FREEWAY	1000	1500	2640

* - The distances are approximate, are intended for guidance purposes only, and should be applied with engineering judgment. These distances should be adjusted by the Engineer for field conditions, if necessary, by increasing or decreasing the recommended distances.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM TABLES FOR LANE AND RAMP CLOSURES

NO SCALE

RSP T9 DATED JULY 19, 2013 SUPERSEDES RSP T9 DATED APRIL 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T9

2010 REVISED STANDARD PLAN RSP T9

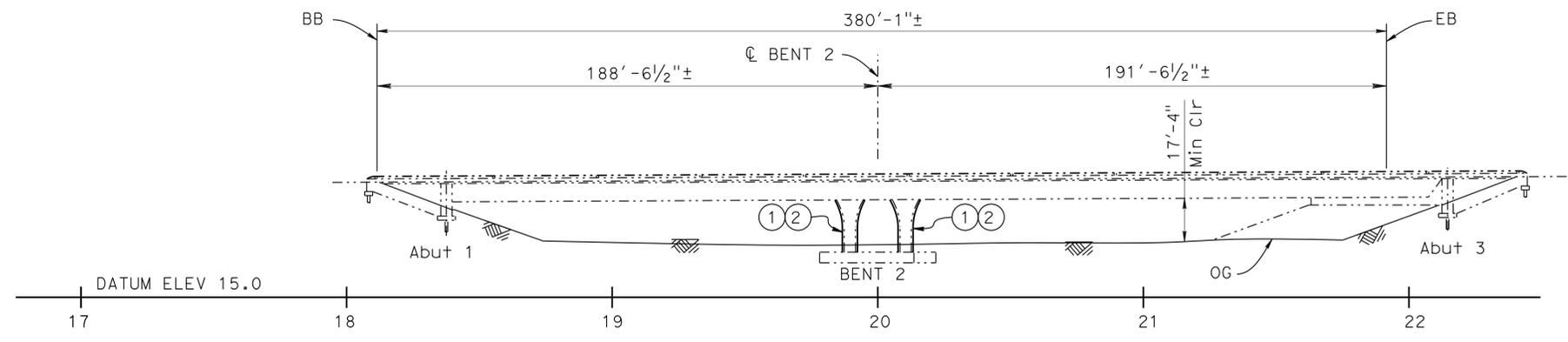
DATE PLOTTED => 30-DEC-2015
 TIME PLOTTED => 13:00

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	23	34

REGISTERED CIVIL ENGINEER **LARRY WU** DATE **7-21-15**
 November 09, 2015
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 LARRY WU
 No. 57035
 Exp. 6-30-17
 CIVIL
 STATE OF CALIFORNIA

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ELEVATION
1" = 30'-0"

QUANTITIES

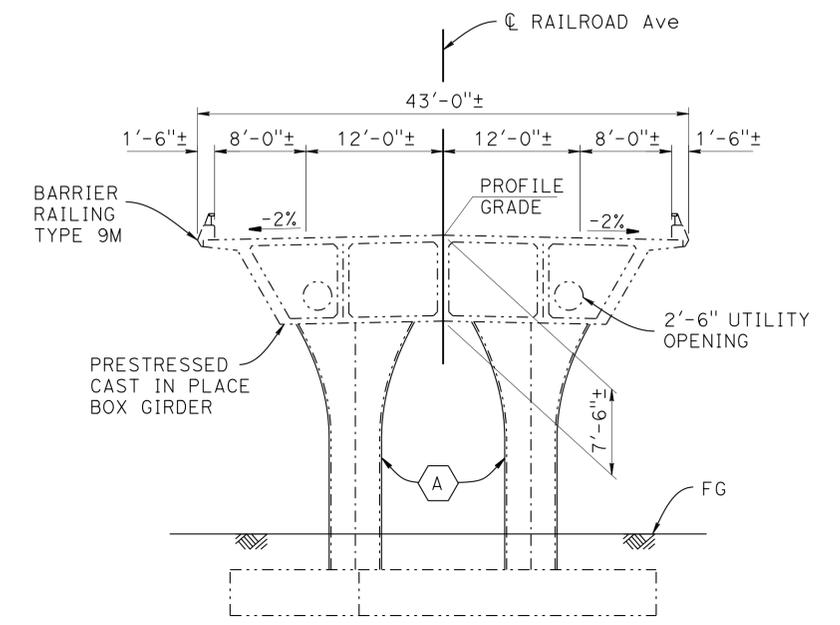
STRUCTURE EXCAVATION (BRIDGE)	19	CY
STRUCTURE BACKFILL (BRIDGE)	19	CY
ASPHALT MEMBRANE WATERPROOFING	77	SQFT
COLUMN CASING	16,736	LB

INDEX TO PLANS

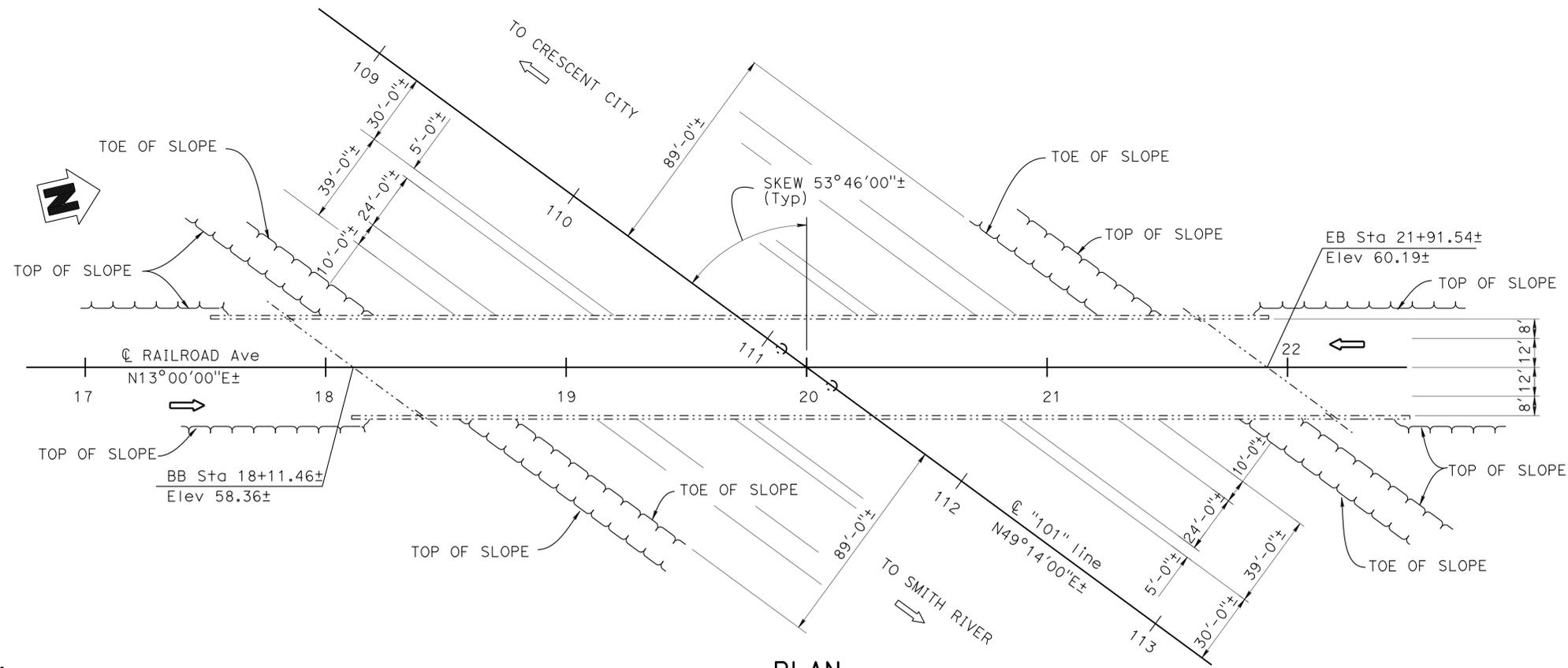
Sheet No.	Title
1	GENERAL PLAN
2	BENT 2 DETAILS
3	COLUMN CASING-STEEL

RETROFIT LEGEND:
 (A) CLASS P/F COLUMN CASING

LEGEND:
 — Indicates new construction
 - - - Indicates existing structure



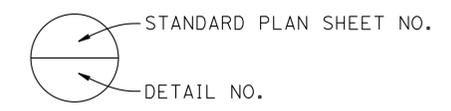
TYPICAL SECTION
1/8" = 1'-0"



PLAN
1" = 30'-0"

STANDARD PLANS DATED 2010

- A10A ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
- A10B ACRONYMS AND 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)



- NOTES:
- ① Paint "BR. No 01-0063"
 - ② Paint "RAILROAD AVENUE OVERCROSSING"

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

NOTE: FOR GENERAL NOTES, SEE "BENT 2 DETAILS" SHEET

DANIEL ADAMS DESIGN ENGINEER	DESIGN	BY F. Chen	CHECKED L. WU	LOAD & RESISTANCE FACTOR DESIGN	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	01-0063	
	DETAILS	BY D. Wooten	CHECKED L. WU	LAYOUT		BY F. Chen	POST MILE	28.3
	QUANTITIES	BY F. Chen	CHECKED L. WU	SPECIFICATIONS		BY S. Nelapatla	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 10	

SEISMIC RETROFIT

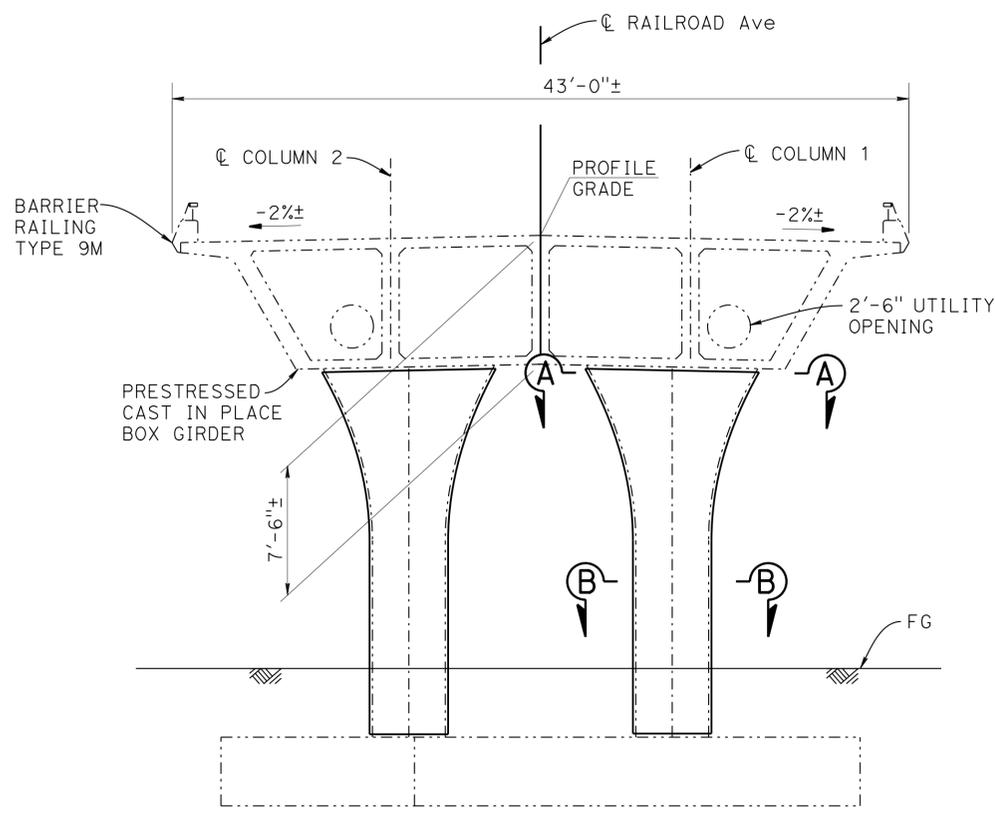
RAILROAD AVENUE OVERCROSSING

GENERAL PLAN

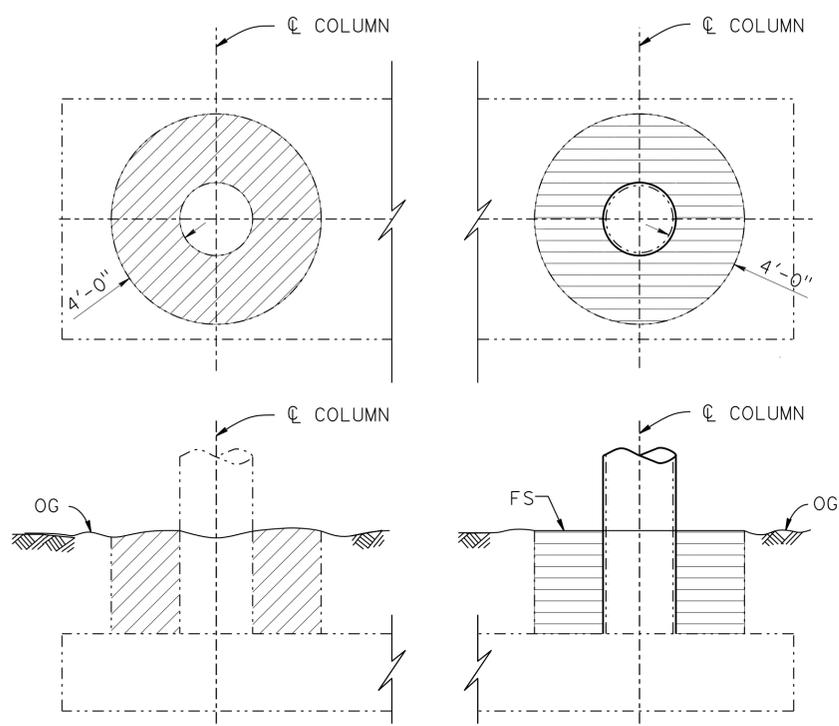
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	24	34

REGISTERED CIVIL ENGINEER **LARRY WU** DATE **7-21-15**
 No. **57035** Exp. **6-30-17**
 CIVIL
 STATE OF CALIFORNIA
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COLUMN No.	COLUMN HEIGHT	COLUMN DIAMETER	CASING TYPE	CASING THICKNESS	OG ELEVATION	TOP OF FOOTING Elev
1	21'-7 1/2"±	4'-3"±	P/F	1/2"	34'-5"±	32'-0"±
2	21'-6"±	4'-3"±	P/F	1/2"	34'-5"±	32'-0"±



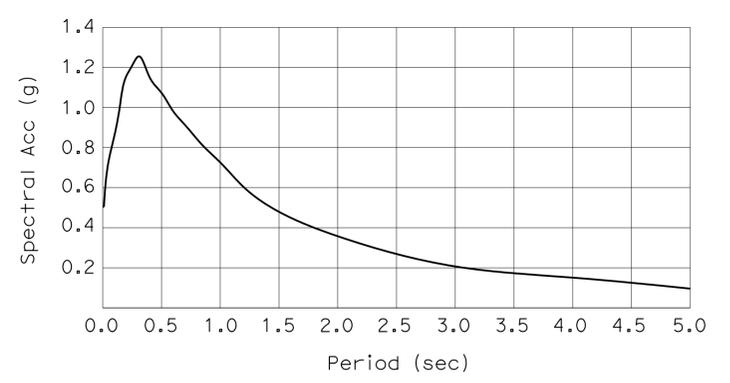
TYPICAL SECTION
3/16" = 1'-0"



BENT 2 EXCAVATION AND BACKFILL PAY LIMITS
3/16" = 1'-0"

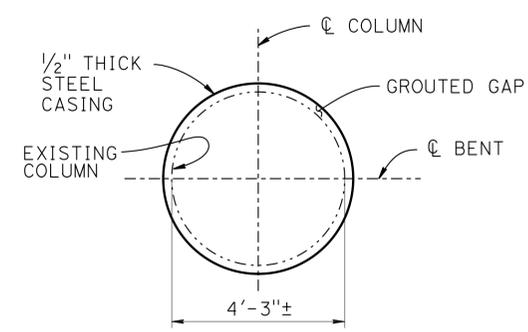
GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN

DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 6th Edition with California Amendments, preface dated January 2014
 SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC) Version 1.7, April 2013
 SEISMIC LOADING: Soil Profile: Vs30 = 984 ft/s, Moment Magnitude: Mmax = 7.5 Peak Ground Acceleration: 0.51 g
 EXISTING REINFORCED CONCRETE: $f_y = 60,000$ psi
 $f'_c = 3250$ psi
 STRUCTURAL STEEL: Steel Casing, $F_y = 36$ ksi

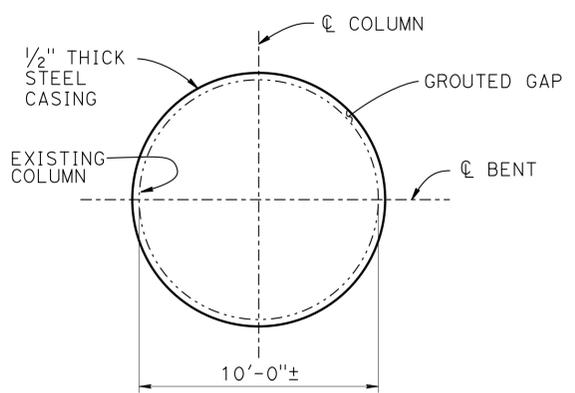


ACCELERATION RESPONSE SPECTRUM

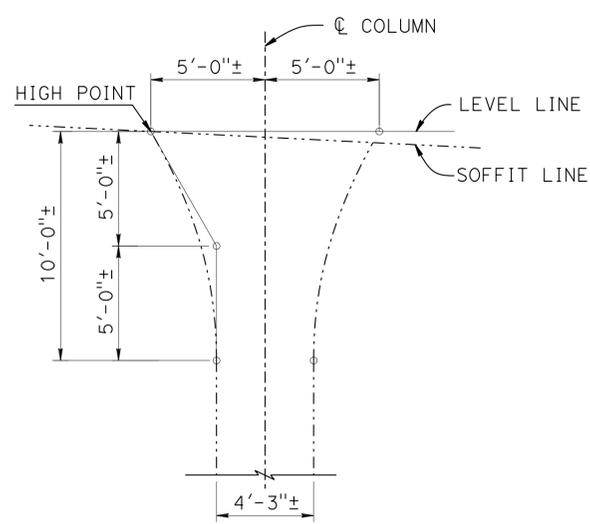
LEGEND:
 — Indicates new construction
 - - - Indicates existing structure
 [Hatched Area] Indicates limits of payment for structure excavation (Bridge)
 [Dotted Area] Indicates limits of payment for structure backfill (Bridge)



SECTION B-B
NO SCALE



SECTION A-A
NO SCALE



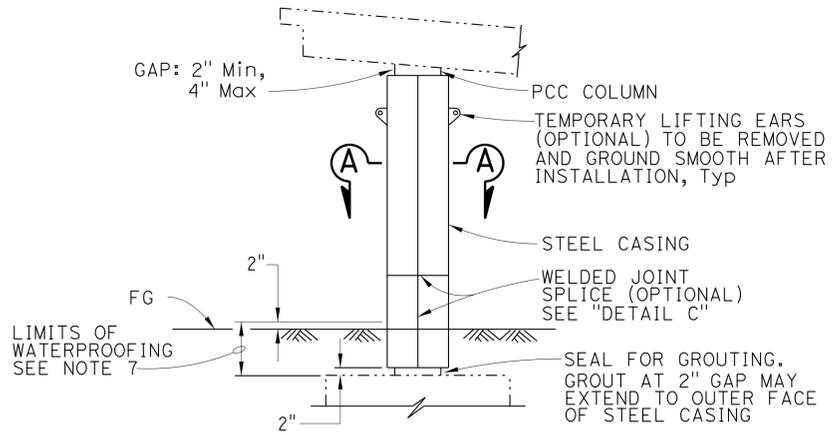
FLARE DETAIL
1/4" = 1'-0"

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

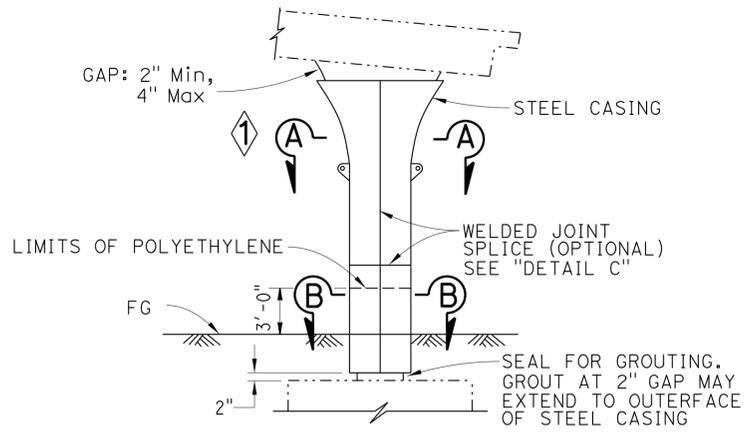
DESIGN	BY F. Chen	CHECKED L. Wu	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DESIGN BRANCH 10	BRIDGE NO.	01-0063	SEISMIC RETROFIT RAILROAD AVENUE OVERCROSSING BENT 2 DETAILS
DETAILS	BY Y. Tang	CHECKED L. Wu		POST MILE	28.3	
QUANTITIES	BY F. Chen	CHECKED L. Wu				

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 UNIT: 3589 PROJECT NUMBER & PHASE: 0112000023 CONTRACT NO.: 01-0A1004
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 12-15-14, 03-06-15, 05-27-15
 SHEET 2 OF 3

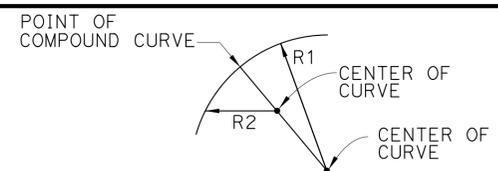
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	25	34
 REGISTERED CIVIL ENGINEER			7-21-15	DATE	
November 09, 2015			PLANS APPROVAL DATE		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



CLASS F COLUMN

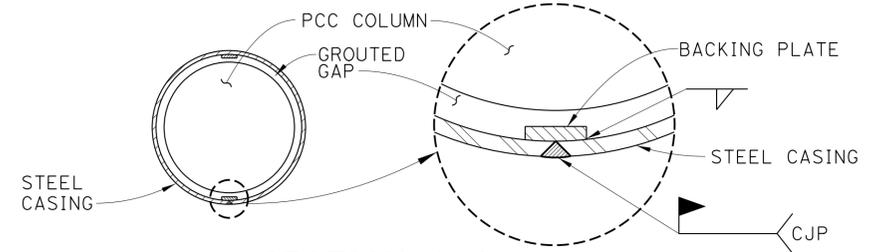


CLASS P/F COLUMN

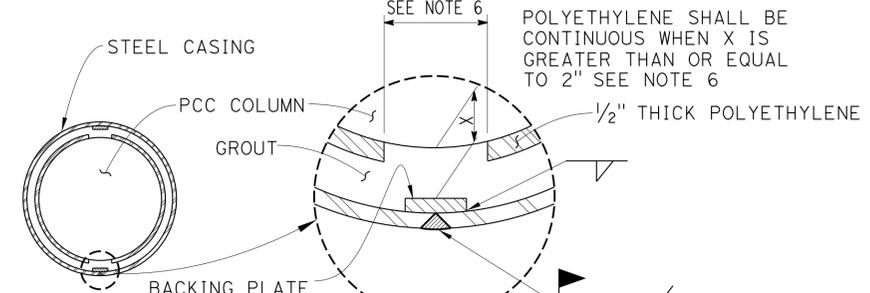


ELLIPTICAL CASING DETAIL CLASS F AND P/F COLUMN

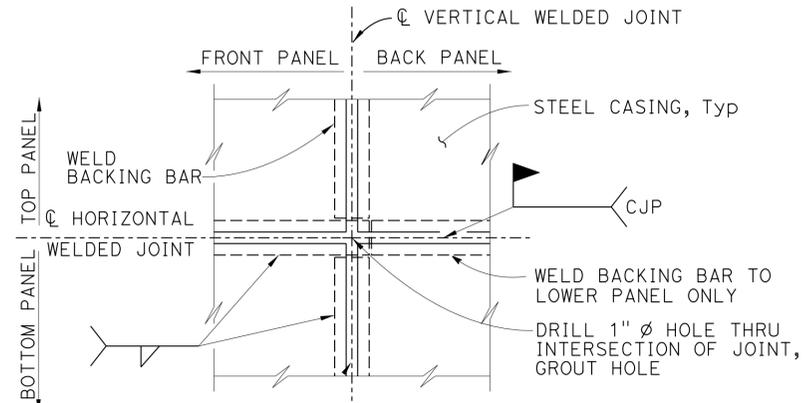
RADII R1 AND R2 TO BE DETERMINED BY THE CONTRACTOR SUBJECT TO THE APPROVAL OF THE ENGINEER



SECTION A-A



SECTION B-B



WELD FIELD SPLICE (OPTIONAL) DETAIL C

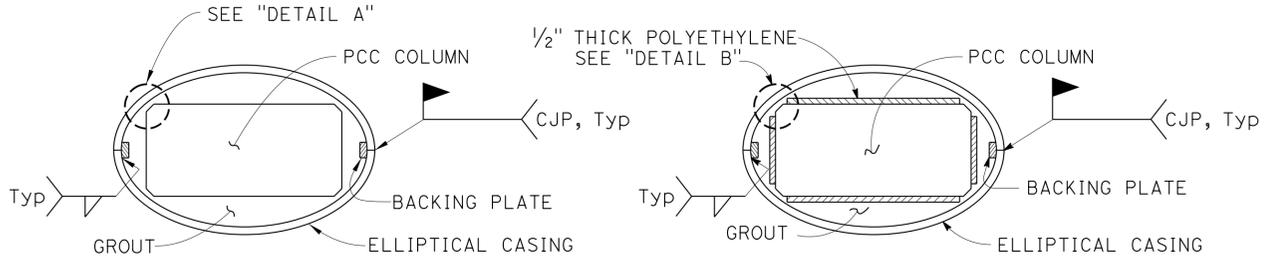
LEGEND:
 - - - - - Indicates Existing structure
 ——— Indicates new structure

- NOTES:
- For varying thickness, steel casing inside surface to remain flush. Minimum clearance from PCC column to casing shall be maintained.
 - Appropriate injection nozzles to be provided on casing, but removed and ground flush following completion of grouting operation.
 - All voids between steel casing and polyethylene (TYPE P/F), and steel casing and PCC column (TYPE F) to be filled with grout.
 - Location and number of vertical and horizontal welds to be determined by the Contractor and subject to the approval of the Engineer. The location of casing welds are for illustration. No skip welds allowed.
 - Circular steel casing to be 1/4" thick minimum for casings with a 4'-4" diameter or less; all other steel casings to be 3/8" thick unless noted differently on contract plans. Backing plates to be the same thickness as casing up to maximum 3/8" thick.
 - Contractor must remove 12" polyethylene strip behind backing plate if backing plate is closer than 2" from face of column.
 - Waterproof limits for steel casings. Typical for TYPE "F" and "P/F".
 - For pipe extensions, opening must be no more than 1/4" greater than the pipe extension diameter. For other openings, the opening diameter to be determined by the Engineer.
 - Minimum size of fillet weld must not be less than opening reinforcement.

MINIMUM INSIDE DIAMETER OF STEEL CASING = 1 1/2" GREATER THAN NOMINAL COLUMN DIAMETER FOR TYPE F AND 2 1/2" FOR TYPE P/F

MINIMUM INSIDE DIAMETER OF STEEL CASING = 2 1/2" GREATER THAN NOMINAL COLUMN DIAMETER FOR TYPE P/F

ROUND COLUMN



SECTION A-A

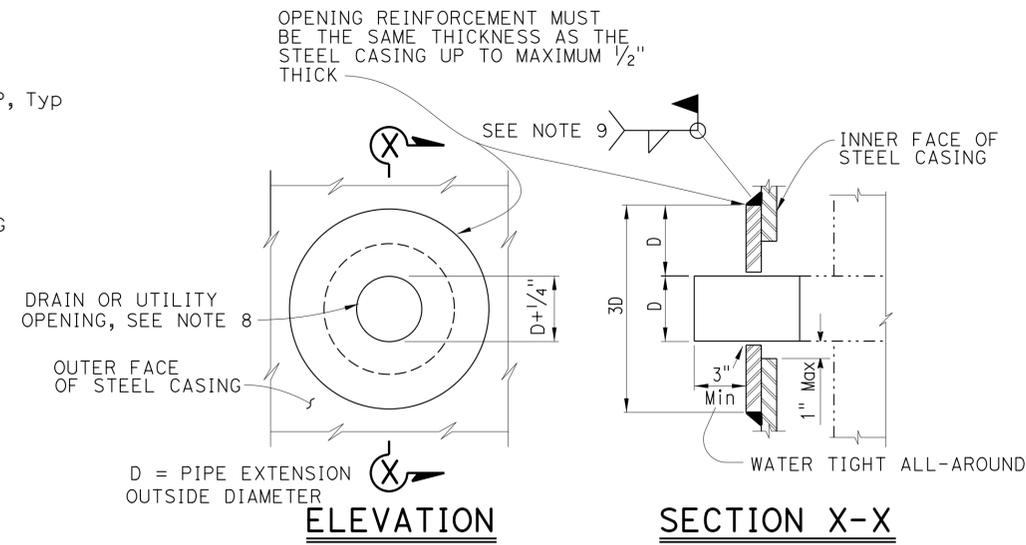
SECTION B-B

RECTANGULAR COLUMN



DETAIL A

DETAIL B



CASING OPENING

NOTE: OPENING REINFORCEMENT REQUIRED FOR DRAIN OR UTILITY OPENINGS LARGER THAN 4"

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

REVISED STANDARD DRAWING		Revised Detail
FILE NO. xs7-010	APPROVAL DATE July 2014	

STATE OF CALIFORNIA	DIVISION OF ENGINEERING SERVICES	BRIDGE NO. 01-0063
DEPARTMENT OF TRANSPORTATION		POST MILE 28.3

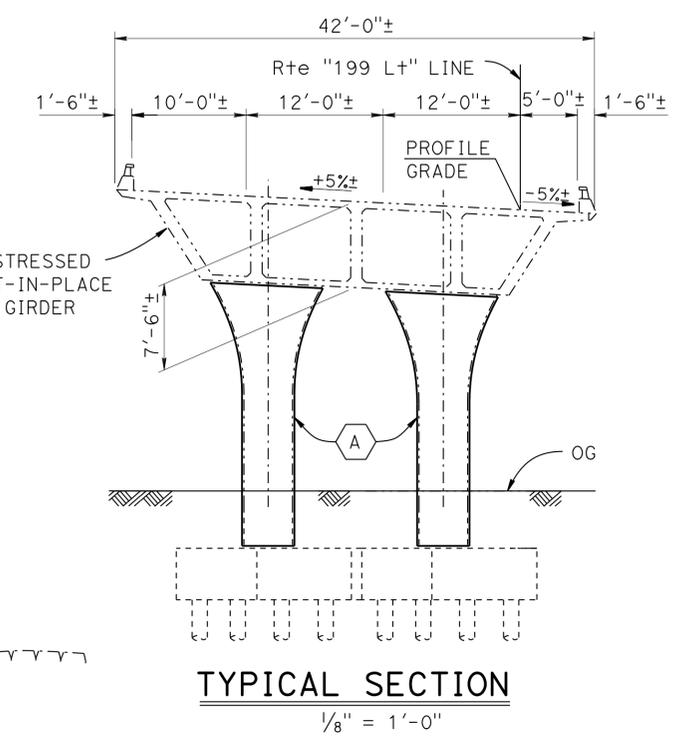
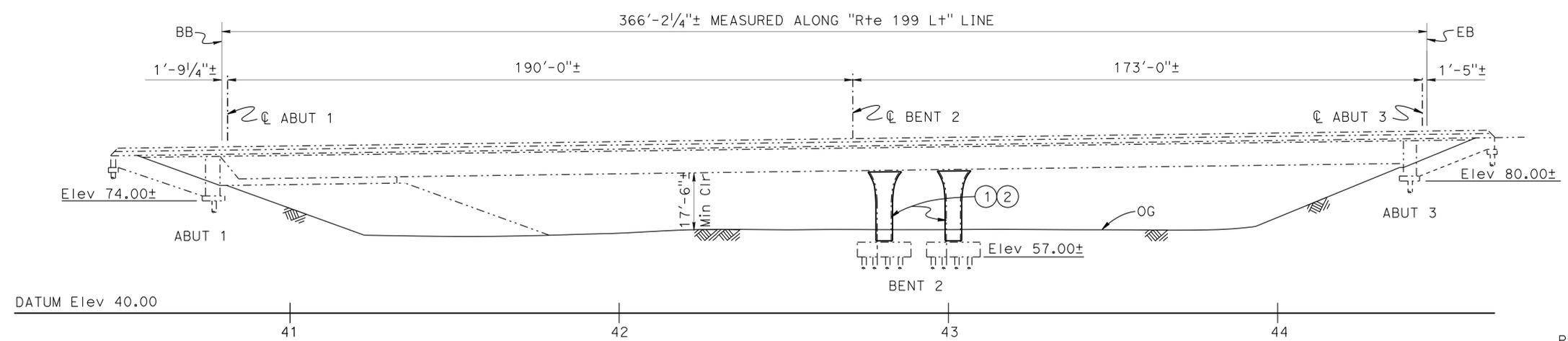
SEISMIC RETROFIT	
RAILROAD AVENUE OVERCROSSING	
COLUMN CASING - STEEL	

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	26	34

REGISTERED CIVIL ENGINEER **LARRY WU** DATE **7-21-15**
 November 09, 2015
 PLANS APPROVAL DATE

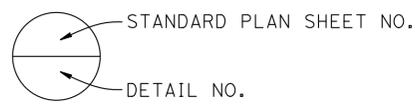
REGISTERED PROFESSIONAL ENGINEER
LARRY WU
 No. 57035
 Exp. 6-30-17
 CIVIL
 STATE OF CALIFORNIA

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



STANDARD PLANS DATED 2010

- A10A ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
- RSP A10B ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
- A10C LINES AND SYMBOLS (SHEET 10F 3)
- A10D LINES AND SYMBOLS (SHEET 2 OF 3)
- A10E LINES AND SYMBOLS (SHEET 3 OF 3)



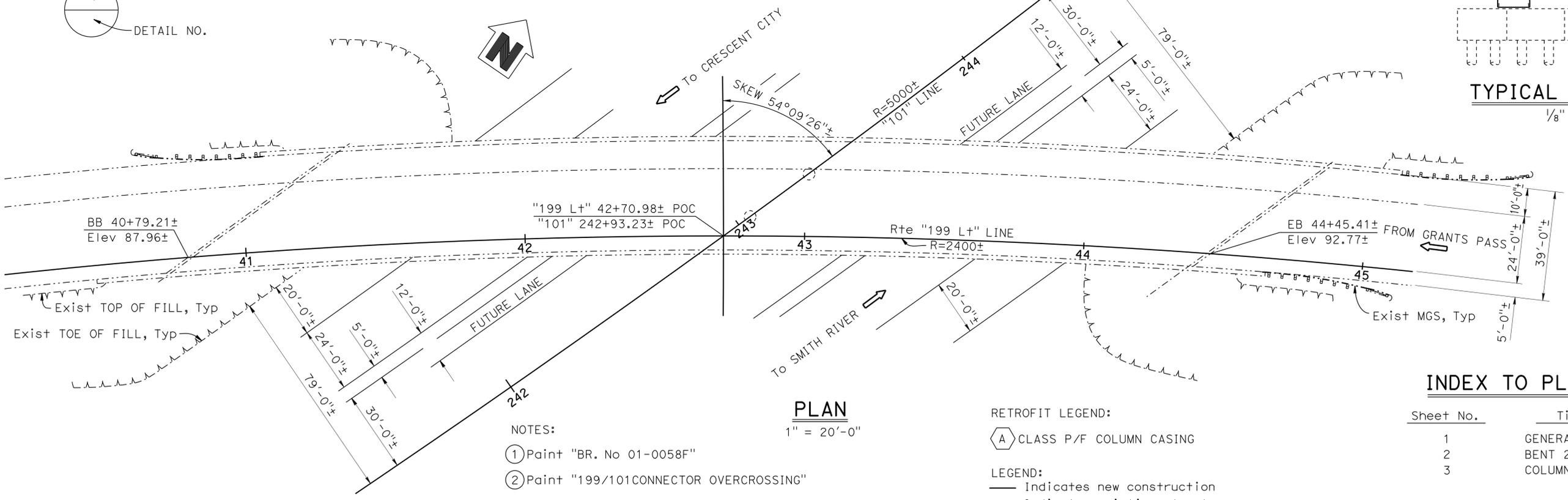
CURVE DATA

"101" Line	"199 L+" Line
R=5000'	R=2400'
Δ=42°19'00"	Δ=42°28'04"
T=1935.190	T=932.532
L=3692.826	L=1,778.886

ELEVATION
1" = 20'-0"

QUANTITIES

STRUCTURE EXCAVATION (BRIDGE)	39	CY
STRUCTURE BACKFILL (BRIDGE)	39	CY
ASPHALT MEMBRANE WATERPROOFING	154	SQFT
COLUMN CASING	17,441	LB



PLAN
1" = 20'-0"

- NOTES:
- ① Paint "BR. No 01-0058F"
 - ② Paint "199/101CONNECTOR OVERCROSSING"

RETROFIT LEGEND:

⊕ CLASS P/F COLUMN CASING

LEGEND:

- Indicates new construction
- - - Indicates existing structure

INDEX TO PLANS

Sheet No.	Title
1	GENERAL PLAN
2	BENT 2 DETAILS
3	COLUMN CASING-STEEL

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

NOTE: FOR GENERAL NOTES, SEE "BENT 2 DETAILS" SHEET

DESIGN ENGINEER DANIEL ADAMS	DESIGN	BY: F. Chen	CHECKED: L. WU	LOAD & RESISTANCE FACTOR DESIGN	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 10	BRIDGE NO. 01-0058F	199/101 CONNECTOR OVERCROSSING GENERAL PLAN
	DETAILS	BY: Y. Tang	CHECKED: L. WU	LAYOUT		BY: F. Chen	CHECKED: L. WU	
	QUANTITIES	BY: F. Chen	CHECKED: L. WU	SPECIFICATIONS	BY: S. Nelapatla	PLANS AND SPECS COMPARED S. Nelapatla		

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3
 UNIT: 3589
 PROJECT NUMBER & PHASE: 0112000023
 CONTRACT NO.: 01-0A1004
 DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
07-25-14 05-27-15 12-18-14 03-08-15	1	3

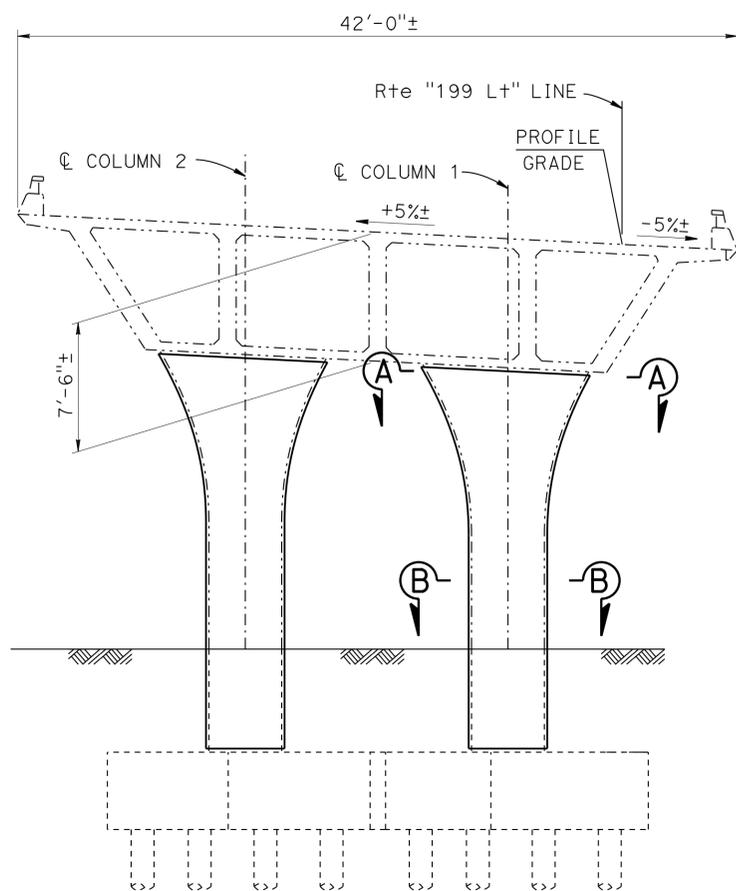
STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV.09-01-10) FILE => z4010058fagp01.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	27	34

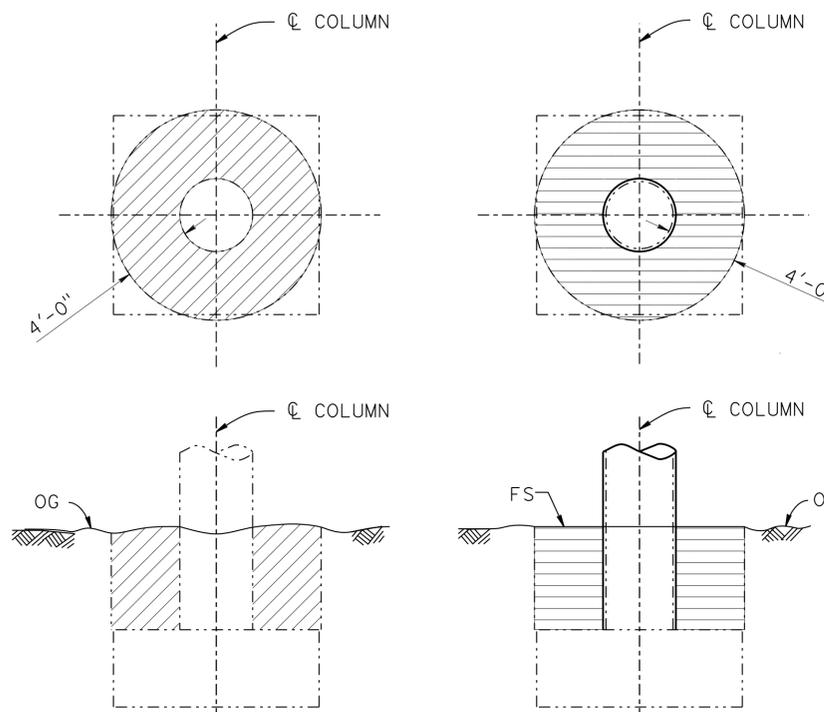
REGISTERED CIVIL ENGINEER **LARRY WU** No. 57035
 DATE 7-21-15
 PLANS APPROVAL DATE November 09, 2015
 Exp. 6-30-17
 CIVIL
 STATE OF CALIFORNIA

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COLUMN No.	COLUMN HEIGHT	COLUMN DIAMETER	CASING TYPE	CASING THICKNESS	OG ELEVATION	TOP OF FOOTING Elev
1	22'-2"±	4'-3"±	P/F	1/2"	66'-6"±	61'-6"±
2	23'-2"±	4'-3"±	P/F	1/2"	66'-6"±	61'-6"±



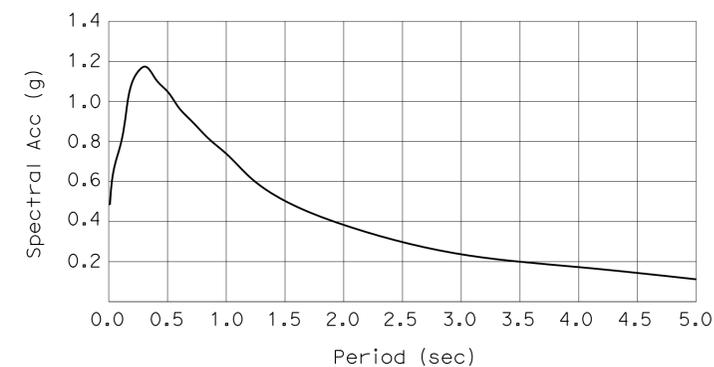
TYPICAL SECTION
3/16" = 1'-0"



BENT 2 EXCAVATION AND BACKFILL PAY LIMITS
3/16" = 1'-0"

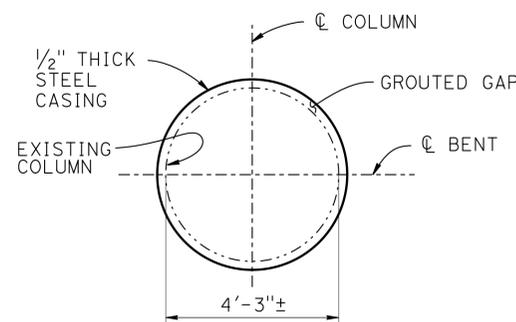
GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN

DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 6th Edition with California Amendments, preface dated January 2014
 SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC) Version 1.7, April 2013
 SEISMIC LOADING: Soil Profile: Vs30 = 1312 ft/s, Moment Magnitude: Mmax = 7.5 Peak Ground Acceleration: 0.45 g
 EXISTING REINFORCED CONCRETE: $f_y = 60,000$ psi
 $f'_c = 3250$ psi
 STRUCTURAL STEEL: Steel Casing, $F_y = 36$ ksi

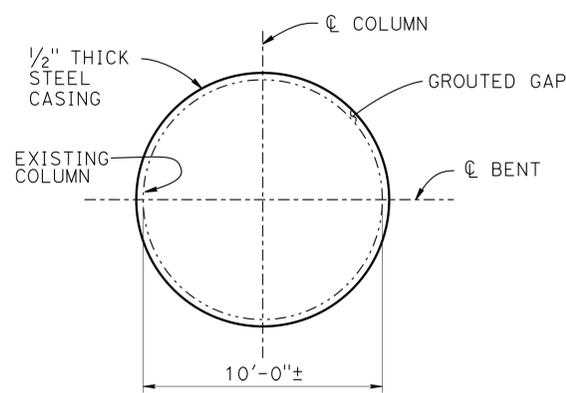


ACCELERATION RESPONSE SPECTRUM

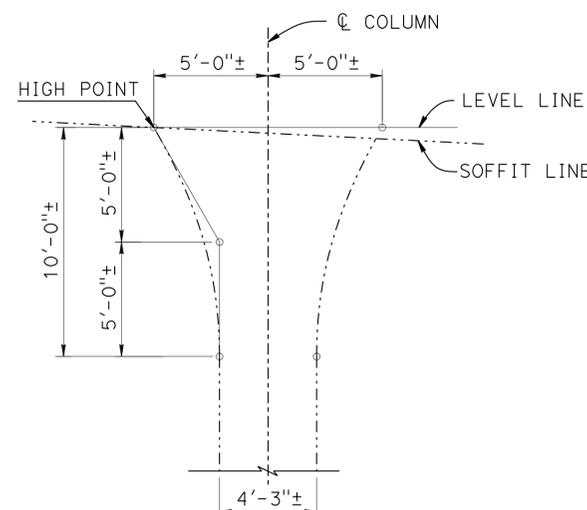
LEGEND:
 — Indicates new construction
 - - - Indicates existing structure
 [Hatched Area] Indicates limits of payment for structure excavation (Bridge)
 [Cross-hatched Area] Indicates limits of payment for structure backfill (Bridge)



SECTION B-B
NO SCALE



SECTION A-A
NO SCALE



FLARE DETAIL
1/4" = 1'-0"

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

DESIGN	BY F. Chen	CHECKED L. Wu	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 10	BRIDGE NO.	199/101 CONNECTOR OVERCROSSING
DETAILS	BY Y. Tang	CHECKED L. Wu			01-0058F	BENT 2 DETAILS
QUANTITIES	BY F. Chen	CHECKED L. Wu			POST MILE TO.51	

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

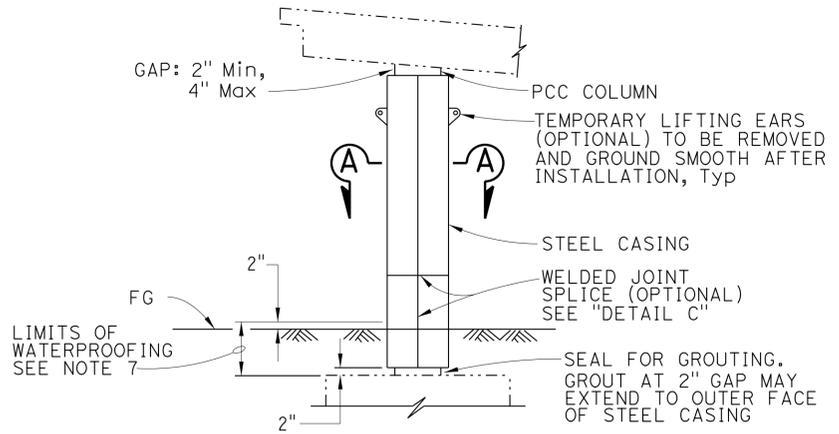
UNIT: 3589 PROJECT NUMBER & PHASE: 0112000023 CONTRACT NO.: 01-0A1004

DISREGARD PRINTS BEARING EARLIER REVISION DATES

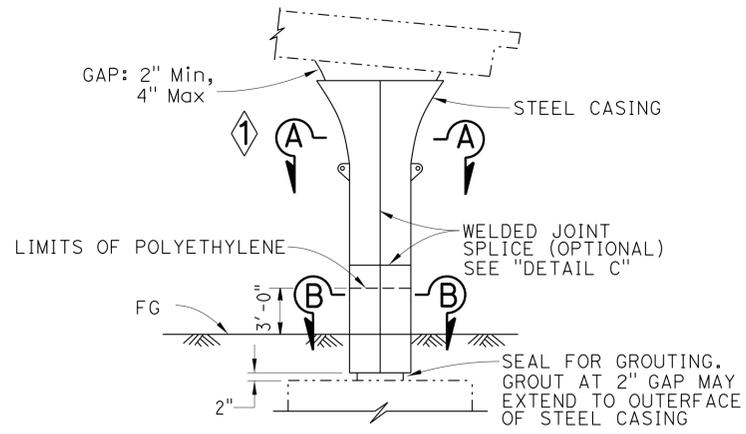
REVISION DATES	SHEET	OF
12-12-14 12-31-14 03-06-15 05-27-15	2	3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	28	34

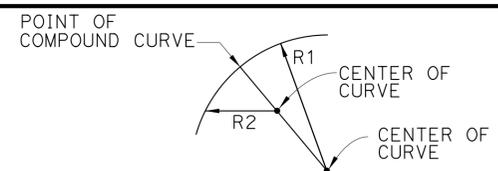
REGISTERED CIVIL ENGINEER **LARRY WU** DATE **7-21-15**
 PLANS APPROVAL DATE
 November 09, 2015
 No. 57035
 Exp. 6-30-17
 CIVIL
 STATE OF CALIFORNIA



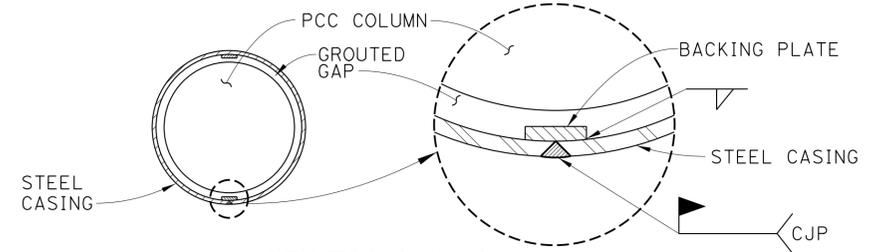
CLASS F COLUMN



CLASS P/F COLUMN

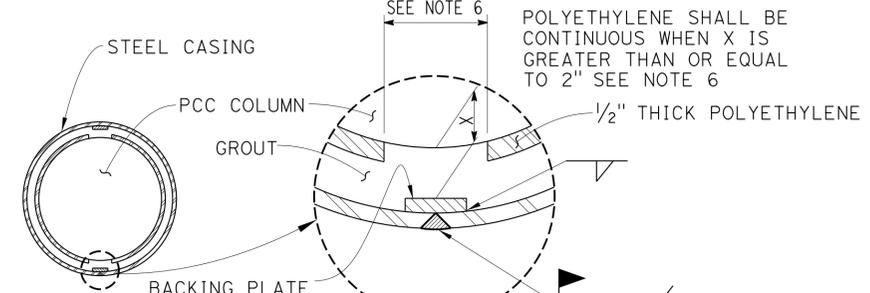


ELLIPTICAL CASING DETAIL CLASS F AND P/F COLUMN
 RADII R1 AND R2 TO BE DETERMINED BY THE CONTRACTOR SUBJECT TO THE APPROVAL OF THE ENGINEER



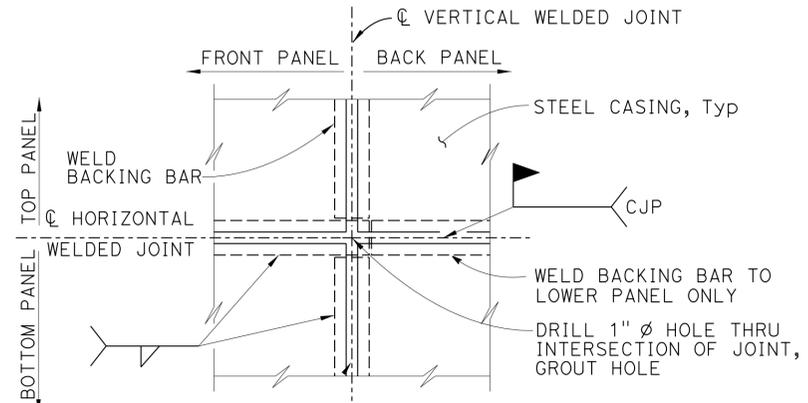
SECTION A-A

MINIMUM INSIDE DIAMETER OF STEEL CASING = 1 1/2" GREATER THAN NOMINAL COLUMN DIAMETER FOR TYPE F AND 2 1/2" FOR TYPE P/F



SECTION B-B

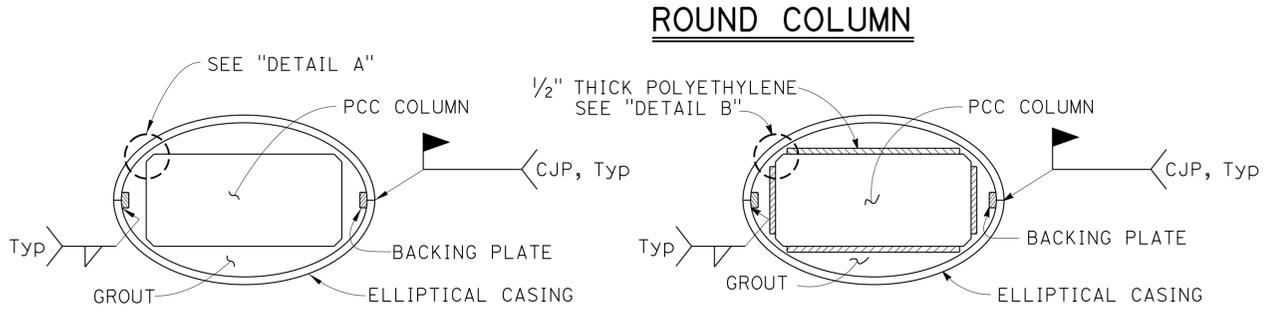
MINIMUM INSIDE DIAMETER OF STEEL CASING = 2 1/2" GREATER THAN NOMINAL COLUMN DIAMETER FOR TYPE P/F



WELD FIELD SPLICE (OPTIONAL) DETAIL C

LEGEND:
 - - - - - Indicates Existing structure
 ——— Indicates new structure

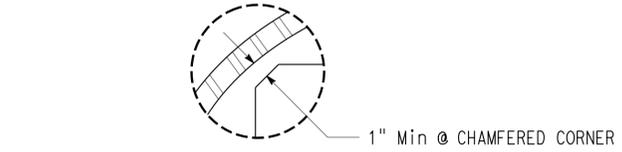
- NOTES:
- For varying thickness, steel casing inside surface to remain flush. Minimum clearance from PCC column to casing shall be maintained.
 - Appropriate injection nozzles to be provided on casing, but removed and ground flush following completion of grouting operation.
 - All voids between steel casing and polyethylene (TYPE P/F), and steel casing and PCC column (TYPE F) to be filled with grout.
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 - Contractor must remove 12" polyethylene strip behind backing plate if backing plate is closer than 2" from face of column.
 - Waterproof limits for steel casings. Typical for TYPE "F" and "P/F".
 - For pipe extensions, opening must be no more than 1/4" greater than the pipe extension diameter. For other openings, the opening diameter to be determined by the Engineer.
 - Minimum size of fillet weld must not be less than opening reinforcement.



SECTION A-A

RECTANGULAR COLUMN

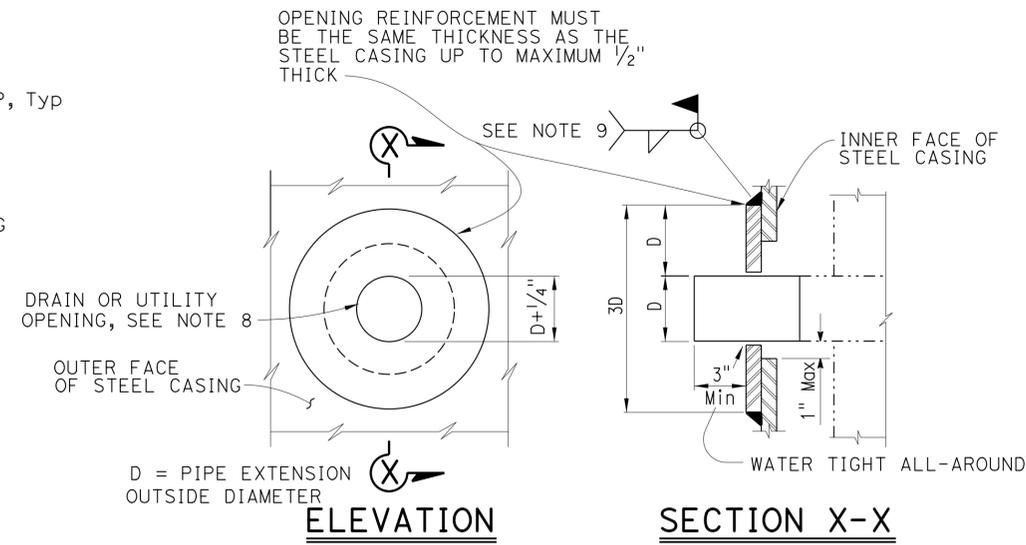
SECTION B-B



DETAIL A



DETAIL B



CASING OPENING
 NOTE: OPENING REINFORCEMENT REQUIRED FOR DRAIN OR UTILITY OPENINGS LARGER THAN 4"

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

REVISED STANDARD DRAWING	Revised Detail
FILE NO. xs7-010	APPROVAL DATE <u>July 2014</u>

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE NO. 01-0058F POST MILE TO.51
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SEISMIC RETROFIT	
199/101 CONNECTOR OVERCROSSING	
COLUMN CASING - STEEL	

STANDARD PLANS DATED 2010

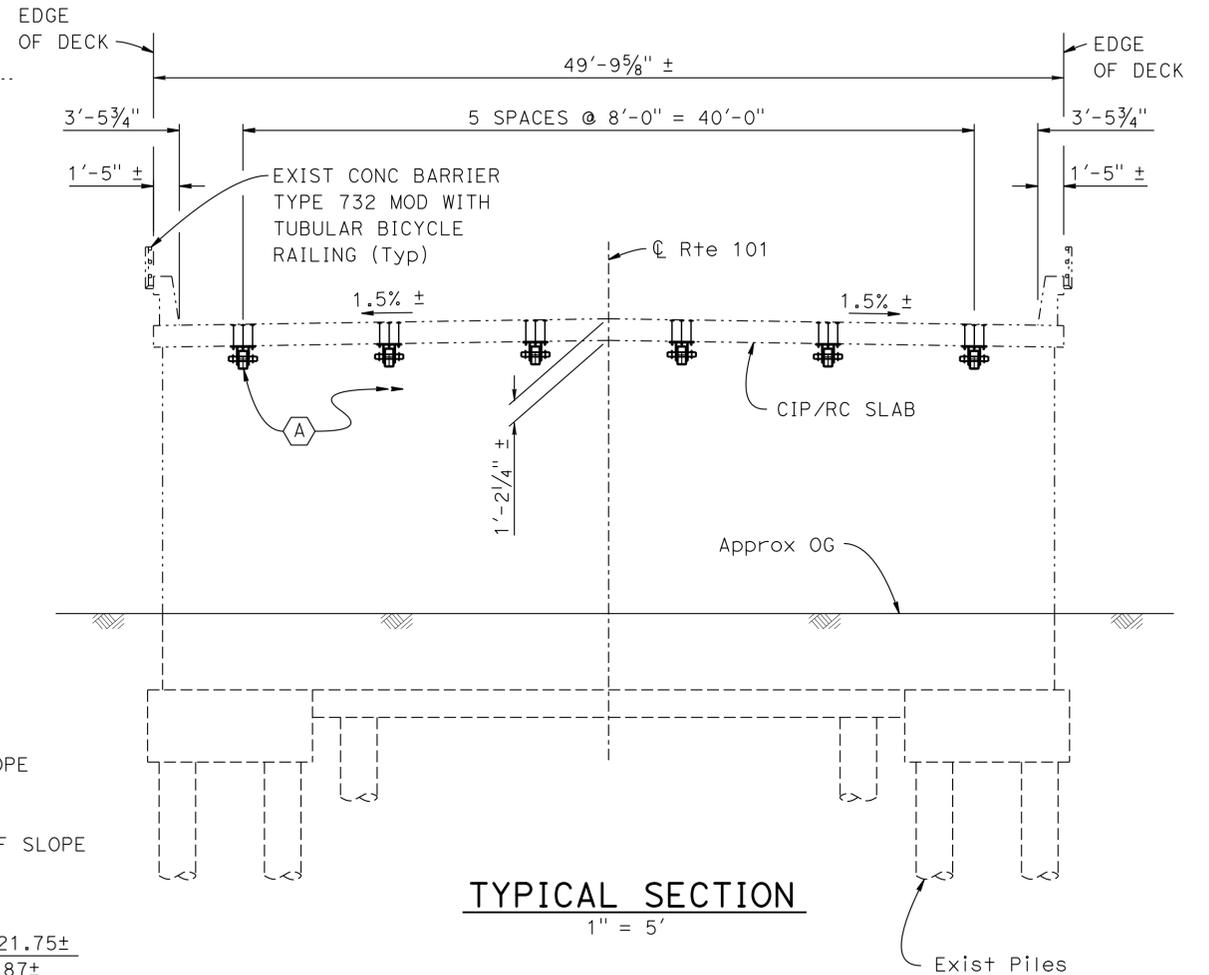
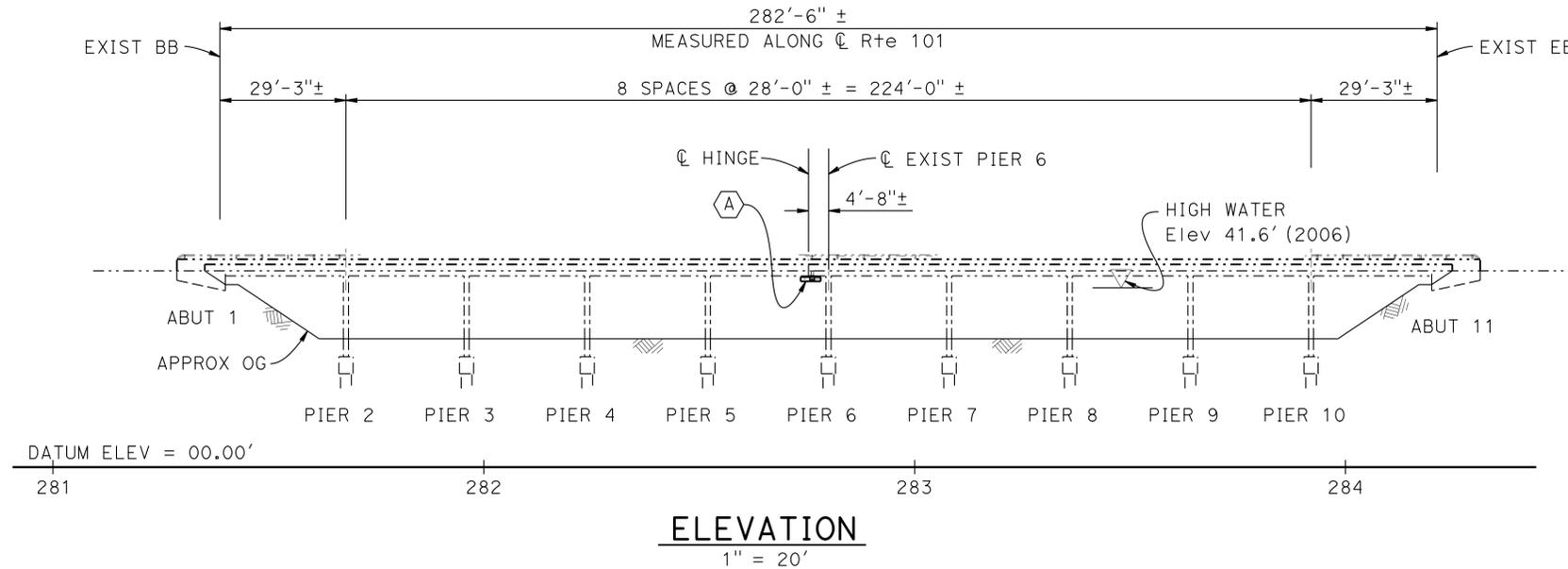
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	29	34

Larry Wu
 REGISTERED CIVIL ENGINEER
 DATE: 7-21-15
 November 09, 2015
 PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER
 LARRY WU
 No. 57035
 Exp. 6-30-17
 CIVIL
 STATE OF CALIFORNIA

- A10A ABBREVIATIONS (SHEET 1 OF 2)
- A10B ABBREVIATIONS (SHEET 2 OF 2)
- A10C LINES & SYMBOLS (SHEET 1 OF 3)
- A10D LINES & SYMBOLS (SHEET 2 OF 3)
- A10E LINES & SYMBOLS (SHEET 3 OF 3)

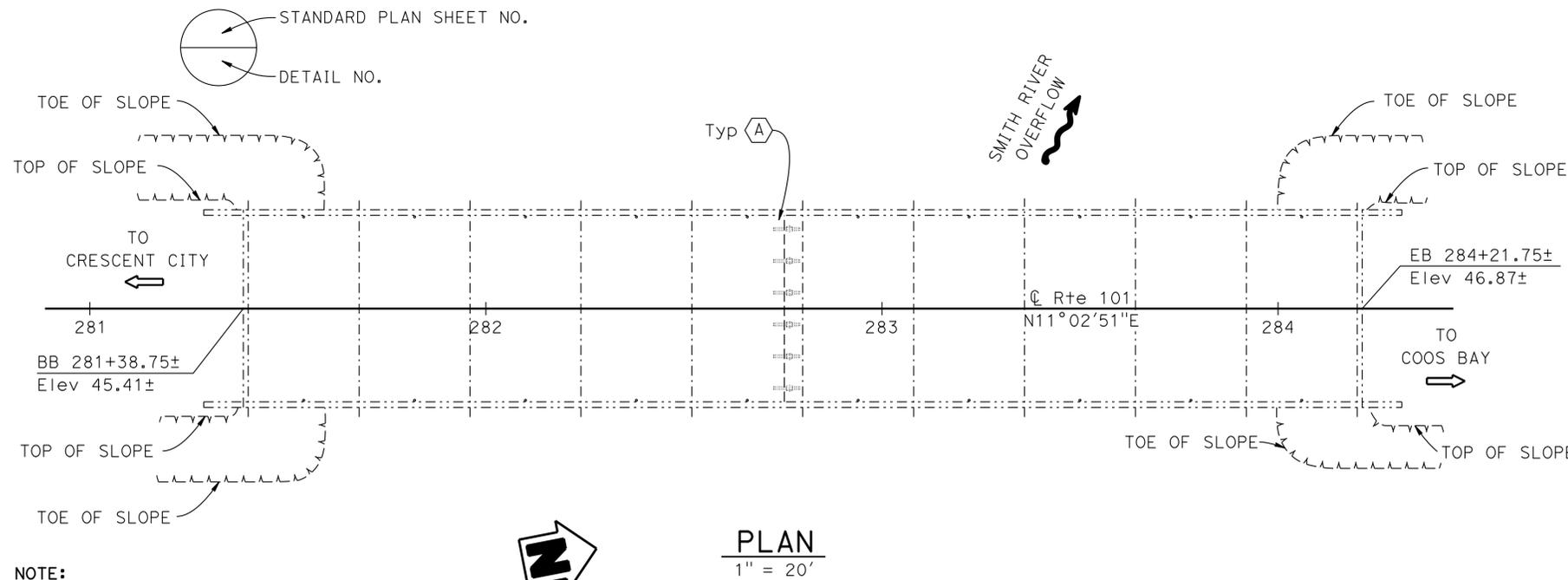


QUANTITIES

CORE CONCRETE (1")	65	LF
ELASTOMERIC BEARING PAD (2"X4"X6")	12	EA
STRUCTURAL STEEL (BRIDGE)	2,082	LB

INDEX TO PLANS

Sheet No.	Title
1	GENERAL PLAN
2	SLAB BRIDGE SEAT EXTENDER-DETAILS NO. 1
3	SLAB BRIDGE SEAT EXTENDER-DETAILS NO. 2



RETROFIT LEGEND:

(A) Slab Bridge Seat Extender, see "SLAB BRIDGE SEAT EXTENDER DETAILS NO. 1" and "SLAB BRIDGE SEAT EXTENDER DETAILS NO. 2" sheets for details.

LEGEND:

- - - - - Indicates existing structure
 _____ Indicates new construction

NOTE:
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For General Notes, see "SLAB BRIDGE SEAT EXTENDER-DETAILS NO. 1" sheet

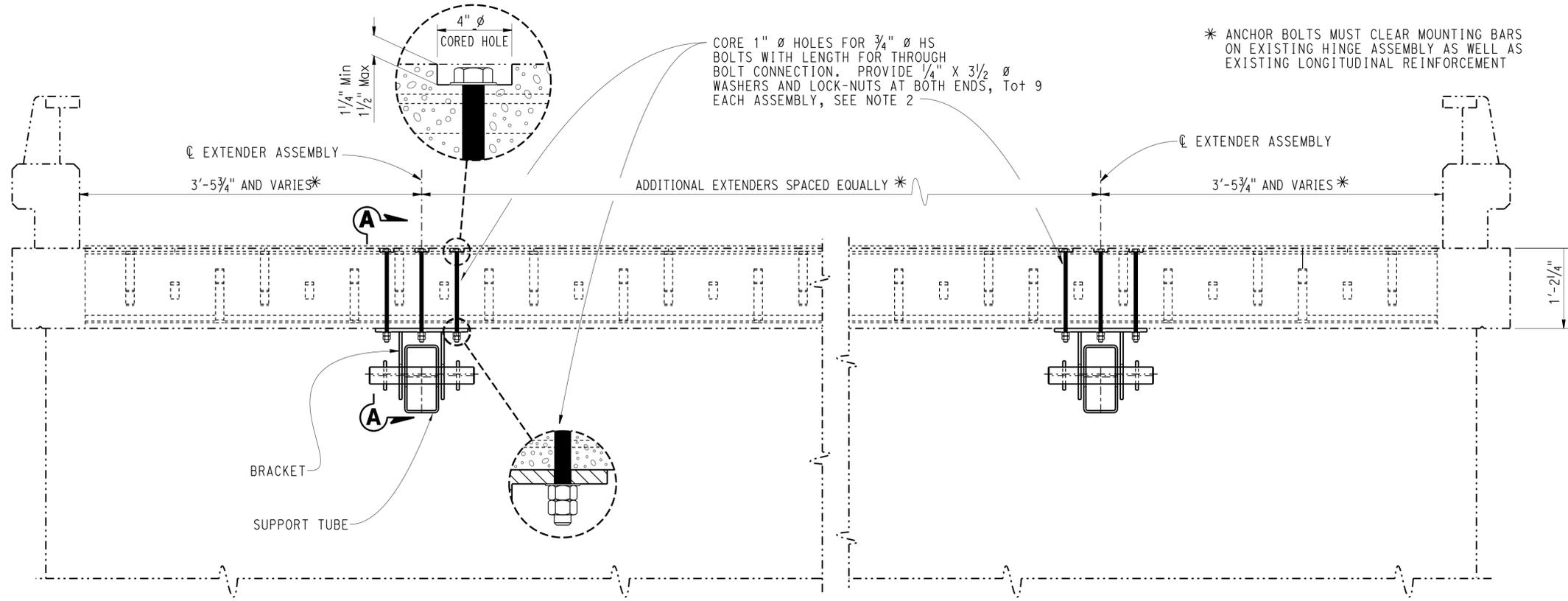
SEISMIC RETROFIT
SMITH RIVER OVERFLOW BRIDGE
GENERAL PLAN

Daniel T. Adams DESIGN ENGINEER	DESIGN	BY J. Szabo	CHECKED L. WU	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 10	BRIDGE NO.	01-0046	
	DETAILS	BY R. Kirkland	CHECKED L. WU	LAYOUT	BY J. Szabo			CHECKED L. WU	POST MILE	35.77
	QUANTITIES	BY J. Szabo	CHECKED L. WU	SPECIFICATIONS	BY S. Nelapatla			PLANS AND SPECS COMPARED S. Nelapatla		

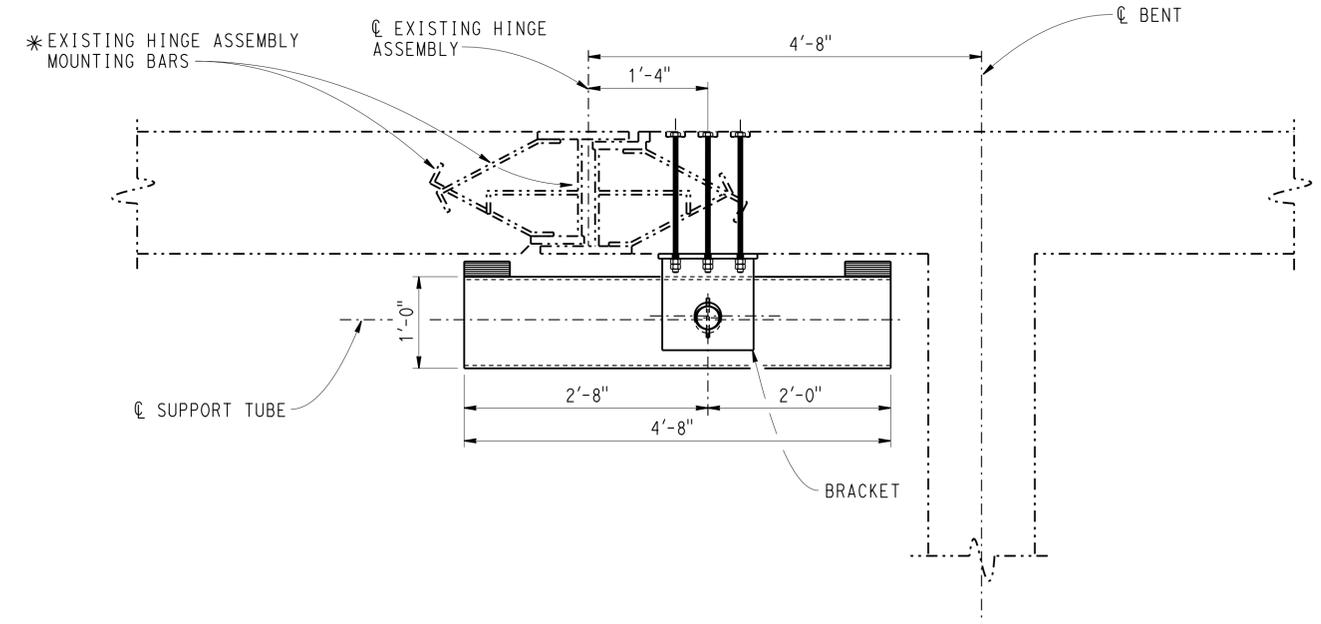
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	30	34

REGISTERED CIVIL ENGINEER **LARRY WU** DATE **7-21-15**
 PLANS APPROVAL DATE **November 09, 2015**
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REGISTERED PROFESSIONAL ENGINEER
LARRY WU
No. 57035
Exp. 6-30-17
CIVIL
STATE OF CALIFORNIA



TYPICAL SECTION AT HINGE
NO SCALE

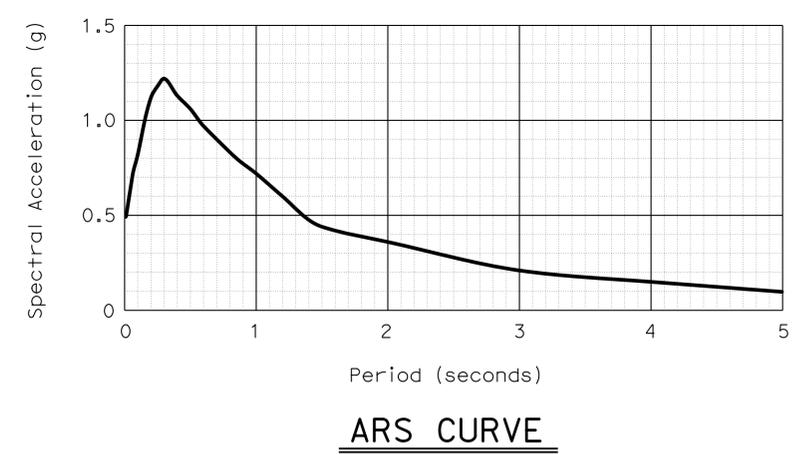


PART SECTION A-A
1" = 1'-0"

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

GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN

- DESIGN: AASHTO LRFD Bridge Design Specifications 6th Edition, with California Amendments, preface dated January 2014
- SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC) version 1.7, April 2013
- SEISMIC LOAD: Soil Profile: $V_S 30 = 984$ ft/s
Moment Magnitude: $M_{max} = 7.5$
Peak Ground Acceleration: 0.49 g
- REINFORCED CONCRETE: Existing: $f'_c = 3600$ psi
 $f_y = 60$ ksi
- STRUCTURAL STEEL: $f_y = 50$ ksi



- NOTES:
- Extender capacity = 30 kips at center of cantilever bearing pad
 - Plug holes with epoxy mortar or rapid setting concrete patch after placing bolts.
 - Galvanize all steel and bolts after fabrication.

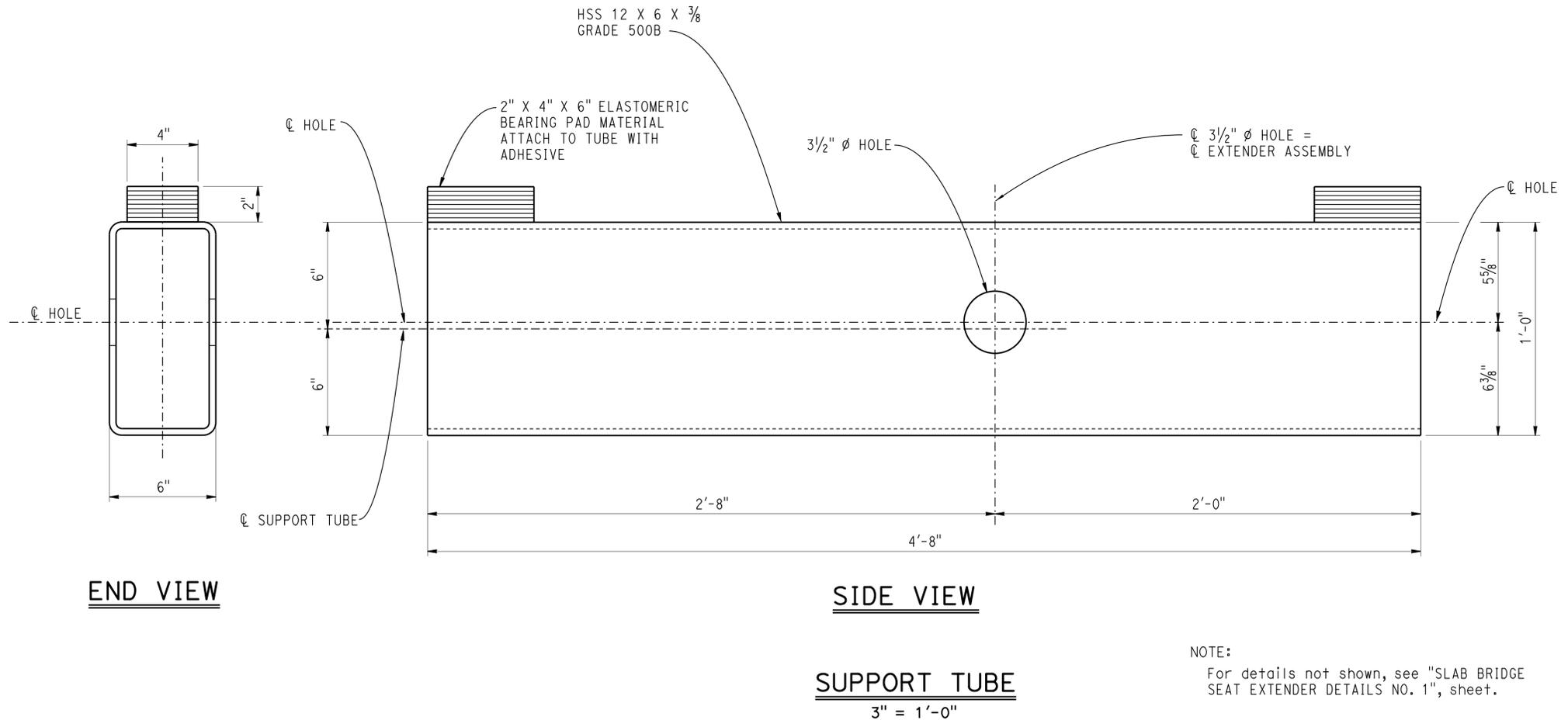
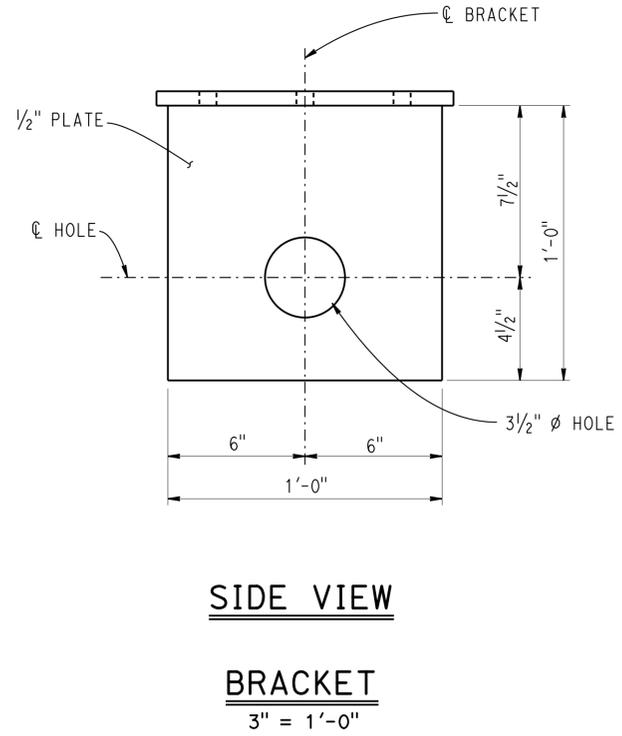
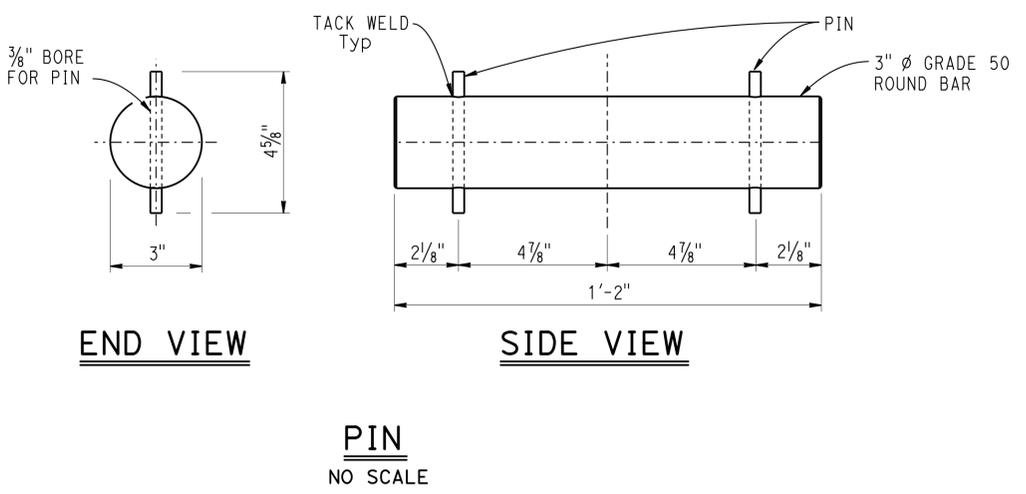
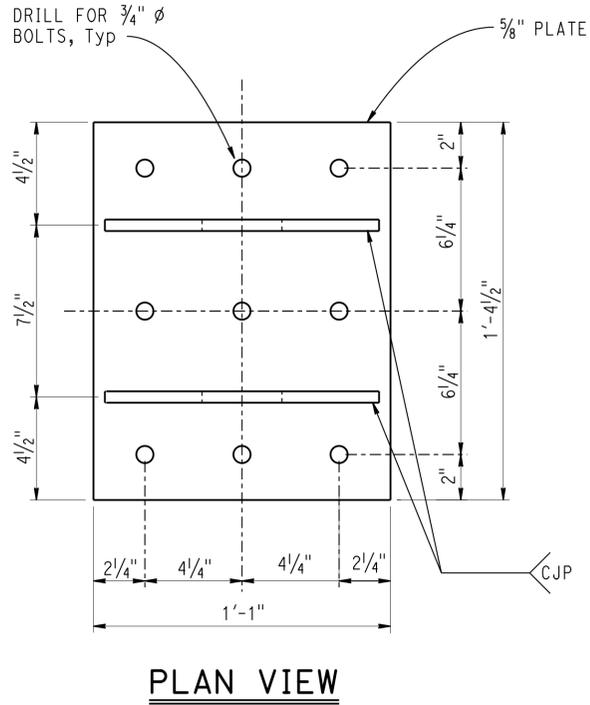
DESIGN BY J. Szabo CHECKED L. Wu DETAILS BY R. Kirkland CHECKED L. Wu QUANTITIES BY J. Szabo CHECKED L. Wu	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 10	BRIDGE NO. 01-0046	SEISMIC RETROFIT SMITH RIVER OVERFLOW BRIDGE SLAB BRIDGE SEAT EXTENDER-DETAILS NO. 1
			POST MILE 35.77	
			UNIT: 3589 PROJECT NUMBER & PHASE: 0112000023 CONTRACT NO.: 01-0A1004	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				DISREGARD PRINTS BEARING EARLIER REVISION DATES
REVISION DATES: 7-28-14, 12-31-14, 03-26-15, 05-27-15				SHEET 2 OF 3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	31	34

REGISTERED CIVIL ENGINEER **LARRY WU** DATE **7-21-15**
 November 09, 2015
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 LARRY WU
 No. 57035
 Exp. 6-30-17
 CIVIL
 STATE OF CALIFORNIA

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

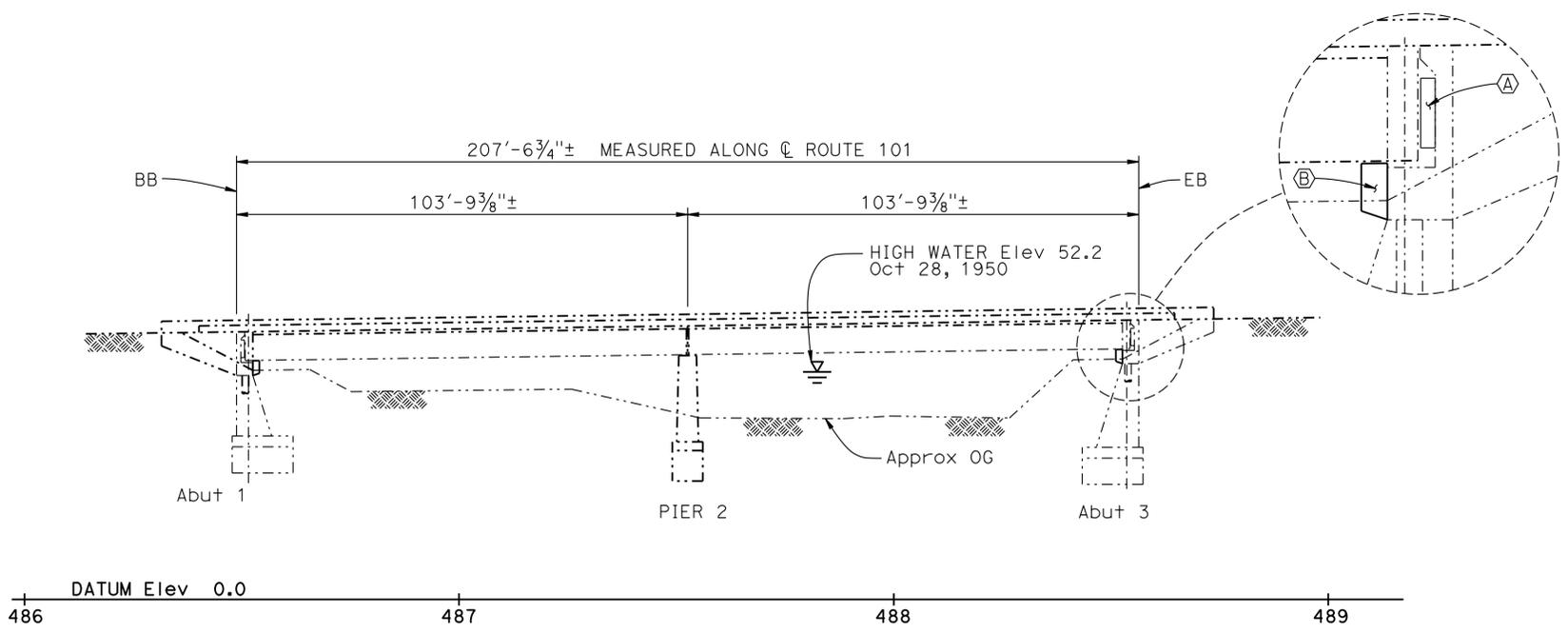
NOTE:
For details not shown, see "SLAB BRIDGE SEAT EXTENDER DETAILS NO. 1", sheet.

DESIGN BY J. Szabo CHECKED L. WU DETAILS BY R. Kirkland CHECKED L. WU QUANTITIES BY J. Szabo CHECKED L. WU			STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 10	BRIDGE NO. 01-0046 POST MILE 35.77	SEISMIC RETROFIT SMITH RIVER OVERFLOW BRIDGE SLAB BRIDGE SEAT EXTENDER-DETAILS NO. 2
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)			ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3589 PROJECT NUMBER & PHASE: 0112000023	CONTRACT NO.: 01-0A1004	DISREGARD PRINTS BEARING EARLIER REVISION DATES REVISION DATES: 7-28-14, 12-22-14, 03-05-15 SHEET 3 OF 3

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	32	34

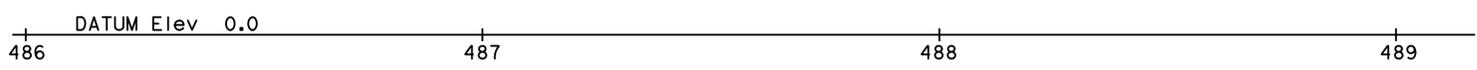
REGISTERED CIVIL ENGINEER **LARRY WU** DATE **7-21-15**
 PLANS APPROVAL DATE **November 09, 2015**
 No. 57035 Exp. 6-30-17
 LARRY WU
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL
 STATE OF CALIFORNIA
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QUANTITIES

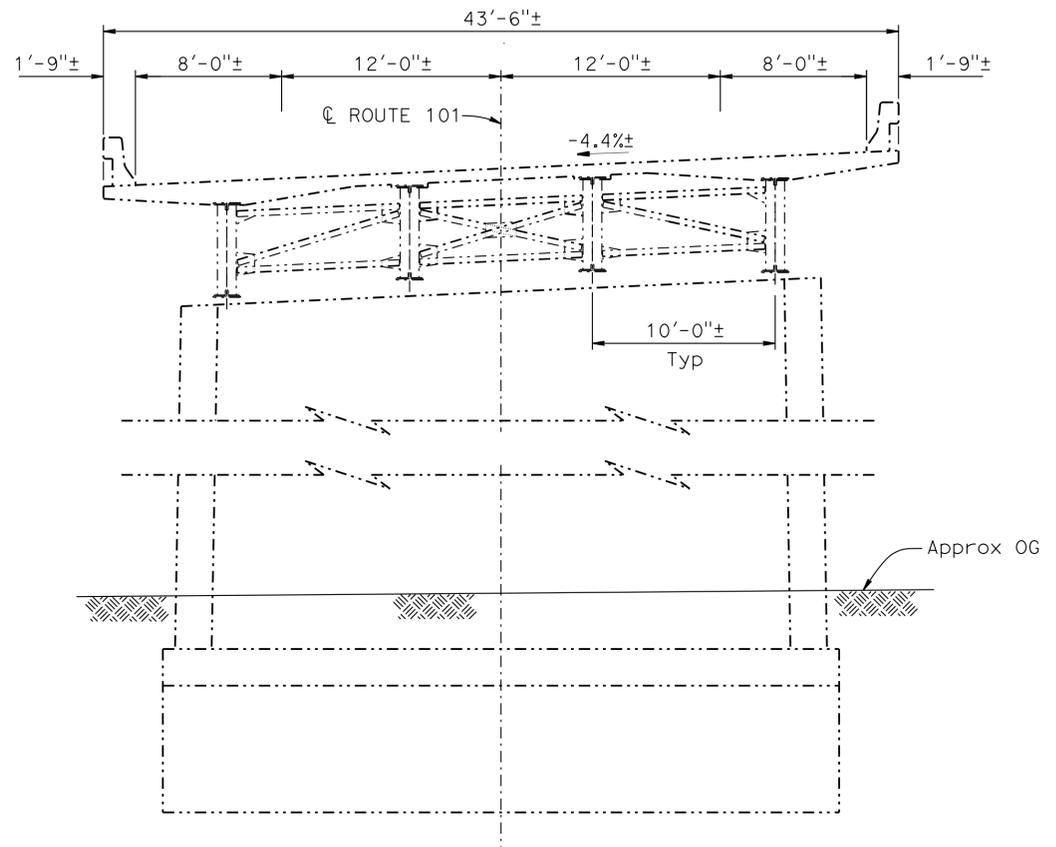
LEAD COMPLIANCE PLAN	LUMP	SUM
WORK AREA MONITORING (BRIDGE)	LUMP	SUM
STRUCTURE EXCAVATION (BRIDGE)	11	CY
STRUCTURE BACKFILL (BRIDGE)	2	CY
STRUCTURAL CONCRETE, BRIDGE	7	CY
DRILL AND BOND DOWEL	96	LF
BAR REINFORCING STEEL (BRIDGE)	967	LB
ABUTMENT LUMBER BLOCKING	1.5	MFBM
CLEAN STRUCTURAL STEEL (EXISTING BRIDGE)	LUMP	SUM
PAINT STRUCTURAL STEEL (EXISTING BRIDGE)	LUMP	SUM
SPOT BLAST CLEAN AND PAINT UNDERCOAT	1,547	SQFT

ELEVATION
1" = 20'-0"

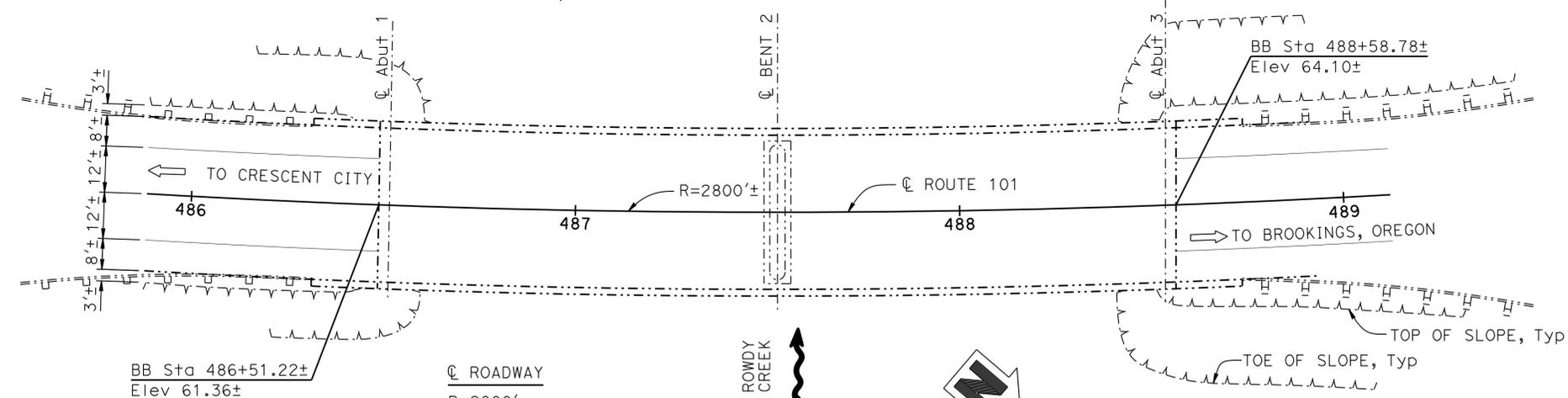


INDEX TO PLANS

Sheet No.	Title
1.	GENERAL PLAN NO. 1
2.	GENERAL PLAN NO. 2
3.	SEISMIC RETROFIT DETAILS



TYPICAL SECTION
1" = 5'-0"



PLAN
1" = 20'-0"

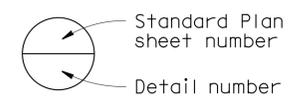
STANDARD PLANS DATED 2010

RSP	A10A	ABBREVIATIONS (SHEET 1 OF 2)
	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)

- RETROFIT LEGEND:**
- Ⓐ Treated Lumber Abutment Blocking
 - Ⓑ Concrete Abutment Seat Extender
 - Indicates new construction
 - - - Indicates existing structure

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

For "GENERAL NOTES", see "SEISMIC RETROFIT DETAILS" Sheet.



DANIEL T. ADAMS DESIGN ENGINEER	DESIGN	BY L. Wu	CHECKED C. Rice	LOAD & RESISTANCE FACTOR DESIGN		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 10	BRIDGE NO.	01-0023	
	DETAILS	BY G. Hallstrom	CHECKED C. Rice	LAYOUT	BY L. Wu			CHECKED C. Rice	POST MILE	39.63
	QUANTITIES	BY L. Wu	CHECKED C. Rice	SPECIFICATIONS	BY S. Nelapatla			PLANS AND SPECS COMPARED S. Nelapatla		

**SEISMIC RETROFIT
ROWDY CREEK BRIDGE
GENERAL PLAN NO. 1**

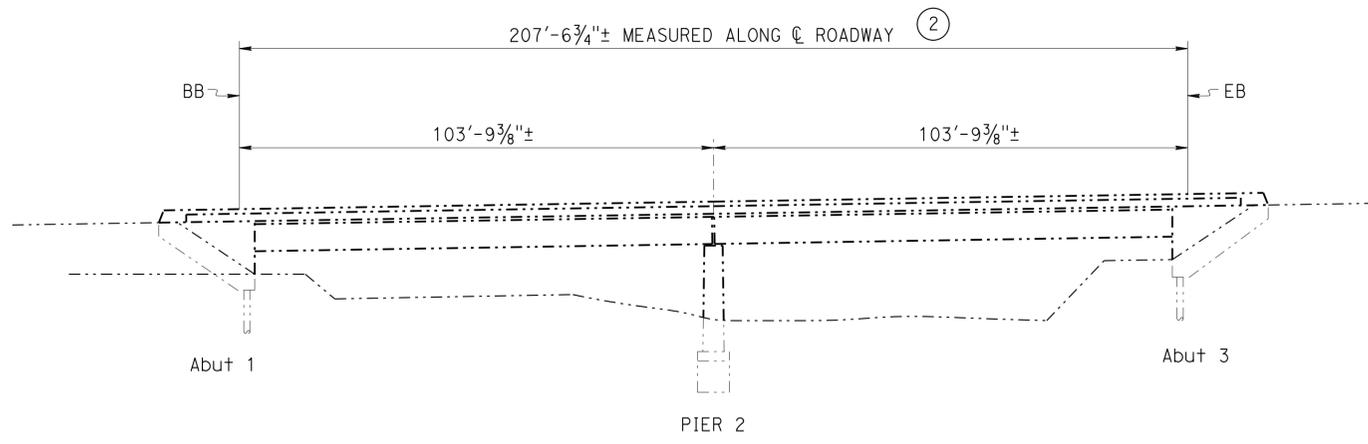
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	VAR	33	34

Arlene Frank 7-21-15
 REGISTERED CIVIL ENGINEER DATE

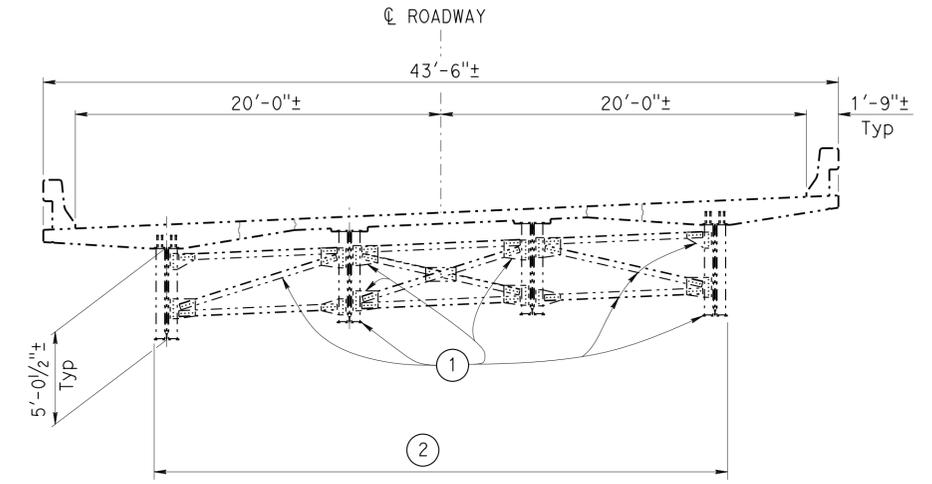
November 09, 2015
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 ARLENE FRANK
 No. C 55562
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA

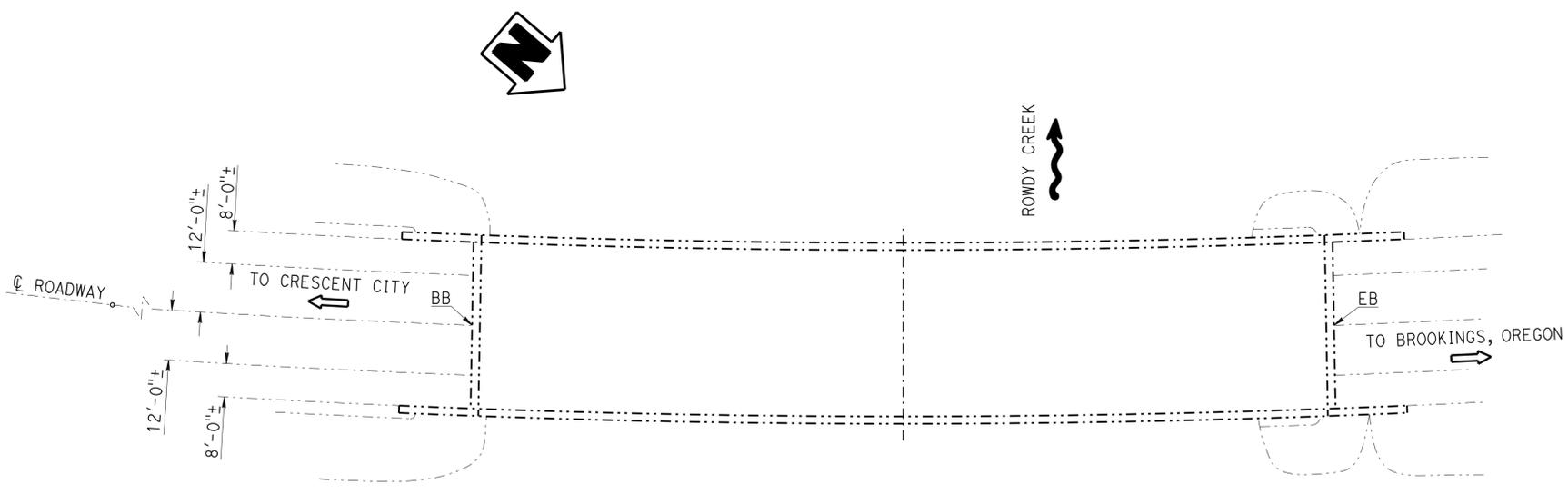
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ELEVATION
1" = 20'



TYPICAL SECTION
1" = 5'



PLAN
1" = 20'

NOTES:

- Indicates existing.
- ① Spot blast clean and paint undercoat at rusted areas of girder flanges, of bracing members and their connecting members, and bearing systems at Abutment 1, Abutment 3, and Bent 2. Approximately 1547 sqft of existing Structural Steel, locations to be determined by the Engineer.
- ② Limits of clean structural steel (existing bridge) and paint structural steel (existing bridge).

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

Matthew W. Lee
DESIGN ENGINEER

DESIGN	BY A. Frank	CHECKED Ali Nojumi	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Dale Kubochi	CHECKED Ali Nojumi	LAYOUT	BY Dale Kubochi
QUANTITIES	BY A. Frank	CHECKED Ali Nojumi	SPECIFICATIONS	BY S. Nelapatla

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	01-0023
POST MILE	39.63

ROWDY CREEK BRIDGE
GENERAL PLAN NO. 2

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: 3589
PROJECT NUMBER & PHASE: 0112000023

CONTRACT NO.: 01-0A1004

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
2-8-14 11-18-14 03-05-15 06-01-15	2	3

