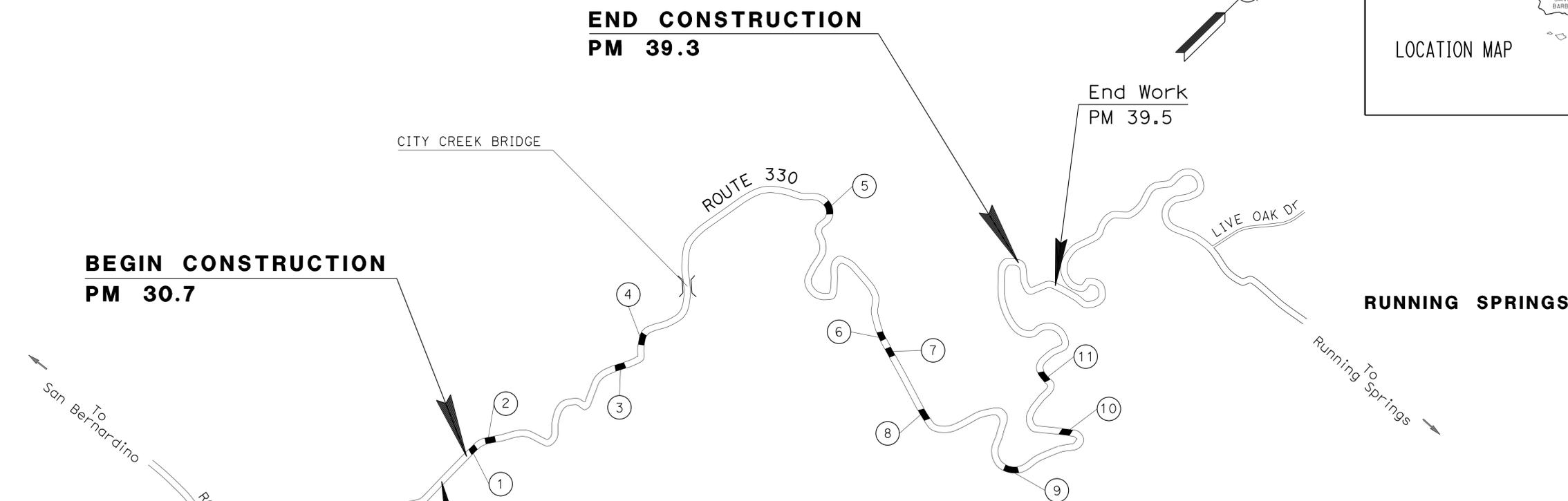
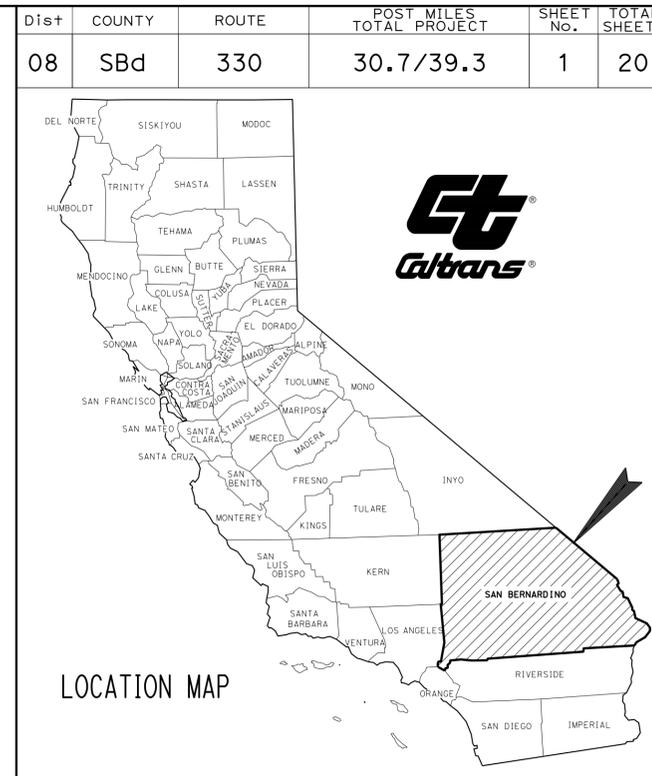


INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-7	TYPICAL CROSS SECTIONS
8-12	CONSTRUCTION DETAILS
13	DRAINAGE QUANTITIES
14	CONSTRUCTION AREA SIGNS
15	SUMMARY OF QUANTITIES
16-20	REVISED STANDARD PLANS

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN SAN BERNARDINO COUNTY
NEAR RUNNING SPRINGS AT VARIOUS LOCATIONS
FROM 1.8 MILES SOUTH CITY CREEK BRIDGE TO
2.5 MILES SOUTH OF LIVE OAK DRIVE
 TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



LOCATION OF CONSTRUCTION

No. (X)	POST MILE	PIPE LINER	DESCRIPTION
1	30.77	SPIRAL, CIPP, CEMENT	36" CMP
2	30.79	SPIRAL, CIPP, CEMENT	24" CMP
3	31.83	SPIRAL, CEMENT	18", 24" CMP
4	32.04	SPIRAL, CEMENT	24" CMP
5	33.75	SPIRAL, CEMENT	24" CMP
6	35.20	SPIRAL, CEMENT	30" CMP
7	35.25	SPIRAL, CEMENT	42" CMP
8	35.71	SPIRAL, CEMENT	24" CMP
9	36.67	SPIRAL, CIPP, CEMENT	24" CMP
10	37.30	SPIRAL, CIPP, CEMENT	24" CMP
11	37.84	SPIRAL, CIPP, CEMENT	24" CMP

PROJECT ENGINEER
 REGISTERED CIVIL ENGINEER
 DATE: 3-3-16
 March 4, 2016
 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.



CONTRACT No.	08-0J8104
PROJECT ID	0800000320

PROJECT MANAGER
MICHAEL P. RISTIC
 DESIGN MANAGER
H. CHRISTIAN NATOR

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

NO SCALE



USERNAME => s102458
 DGN FILE => 0800000320ab001.dgn

DATE PLOTTED => 16-MAR-2016
 TIME PLOTTED => 06:54
 LAST REVISION: 03-03-16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	330	30.7/39.3	2	20

<i>Michael P. Ristic</i>	3-3-16
REGISTERED CIVIL ENGINEER	DATE
3-4-16	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER MICHAEL P. RISTIC No. 69429 Exp. 06/30/16 CIVIL STATE OF CALIFORNIA
--

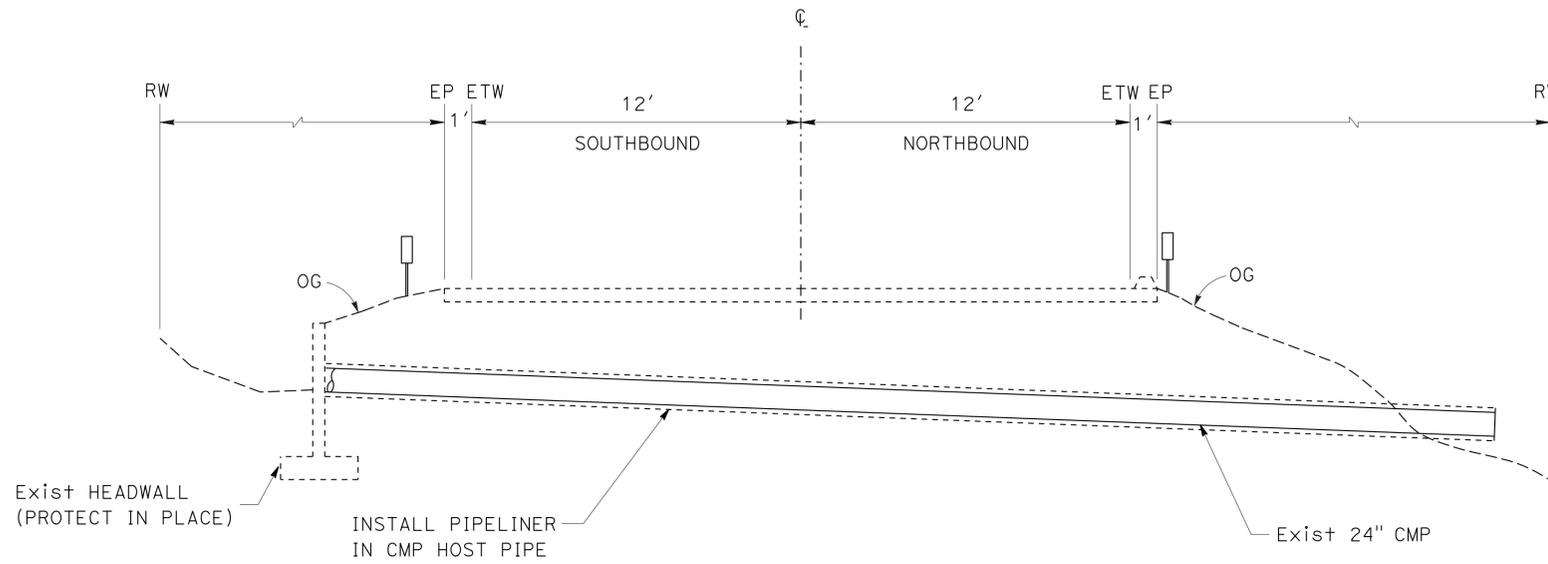
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

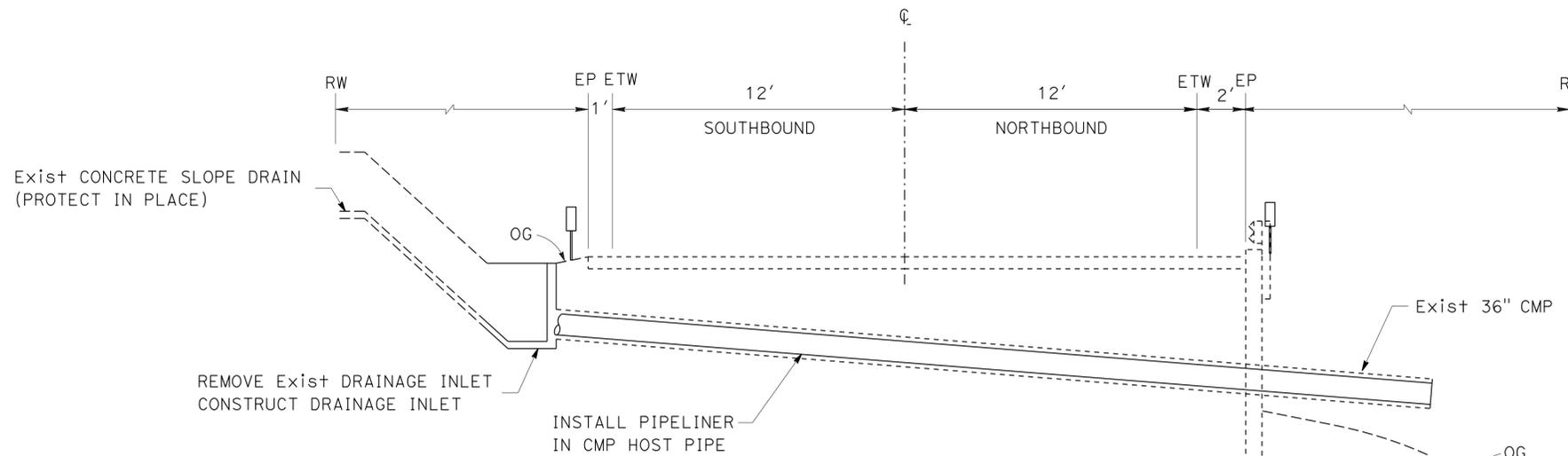
1. EXACT LOCATION OF CULVERT MARKER SHALL BE DETERMINED BY THE ENGINEER.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

LEGEND:

 REMOVE AND REPLACE CULVERT MARKER



ROUTE 330
PM 30.79
LOCATION 2



ROUTE 330
PM 30.77
LOCATION 1

TYPICAL CROSS SECTIONS
NO SCALE
X-1

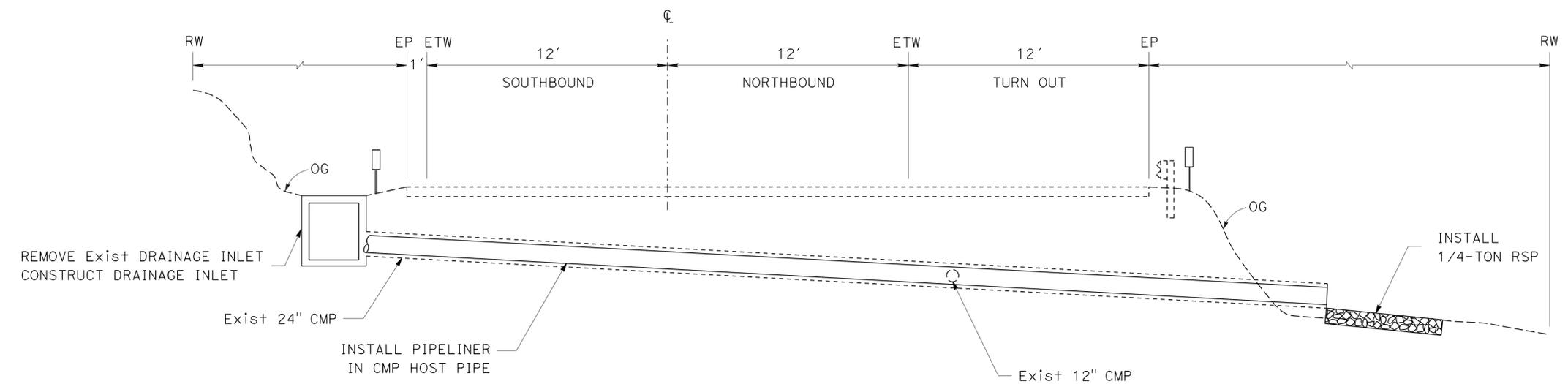
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CHECKED BY	DESIGNED BY	REVISOR	DATE
Caltrans MAINTENANCE DESIGN	MICHAEL P. RISTIC	MICHAEL P. RISTIC	CHRIS NATOR		

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	330	30.7/39.3	3	20
			3-3-16	DATE	
			3-4-16	PLANS APPROVAL DATE	

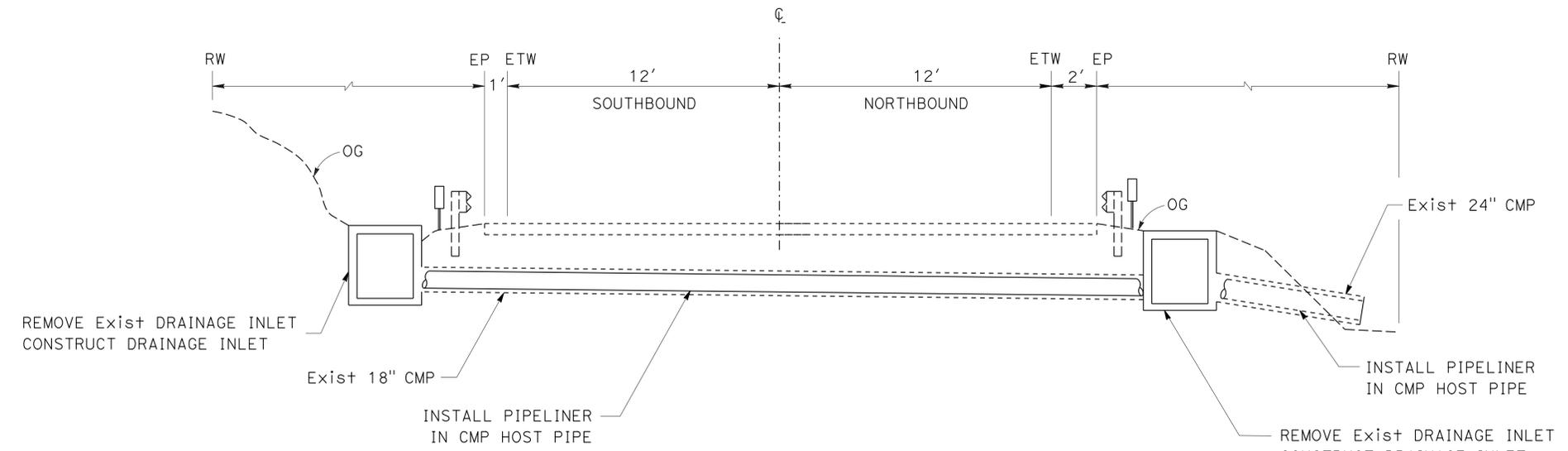
REGISTERED CIVIL ENGINEER	DATE
3-3-16	

REGISTERED PROFESSIONAL ENGINEER	STATE OF CALIFORNIA
MICHAEL P. RISTIC	
No. 69429	
Exp. 06/30/16	
CIVIL	

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.



ROUTE 330
PM 32.04
LOCATION 4



ROUTE 330
PM 31.83
LOCATION 3

TYPICAL CROSS SECTIONS
NO SCALE
X-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
Caltrans MAINTENANCE DESIGN	MICHAEL P. RISTIC	CHRIS NATOR	
		MICHAEL P. RISTIC	

USERNAME => s102458
DGN FILE => 0800000320cca002.dgn

RELATIVE BORDER SCALE IS IN INCHES
0 1 2 3

UNIT 2344

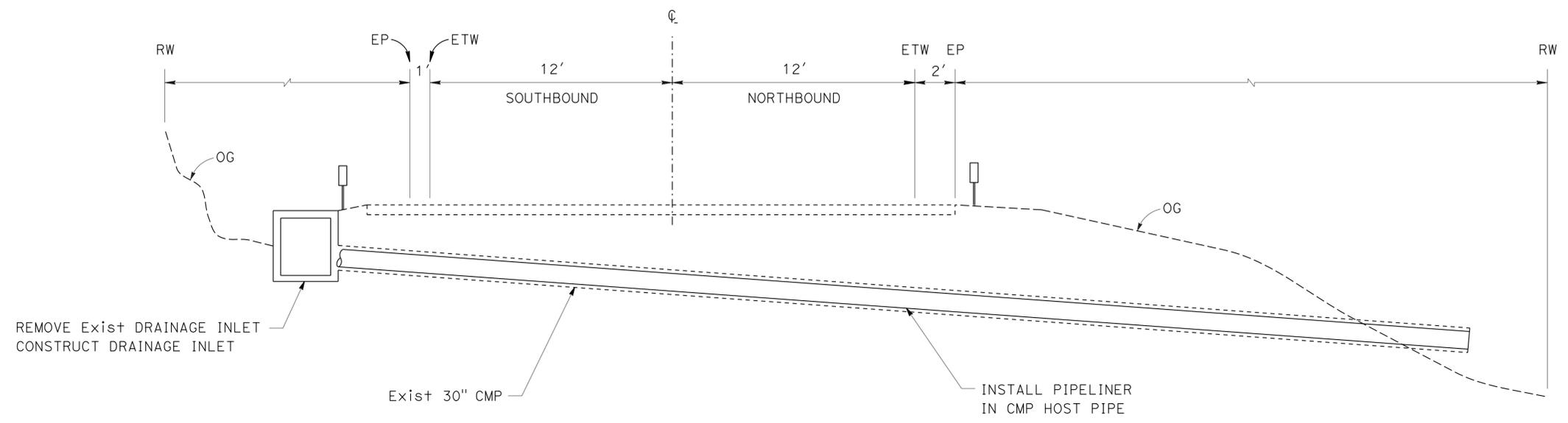
PROJECT NUMBER & PHASE 08000003201

LAST REVISION DATE PLOTTED => 16-MAR-2016
03-03-16 TIME PLOTTED => 06:54

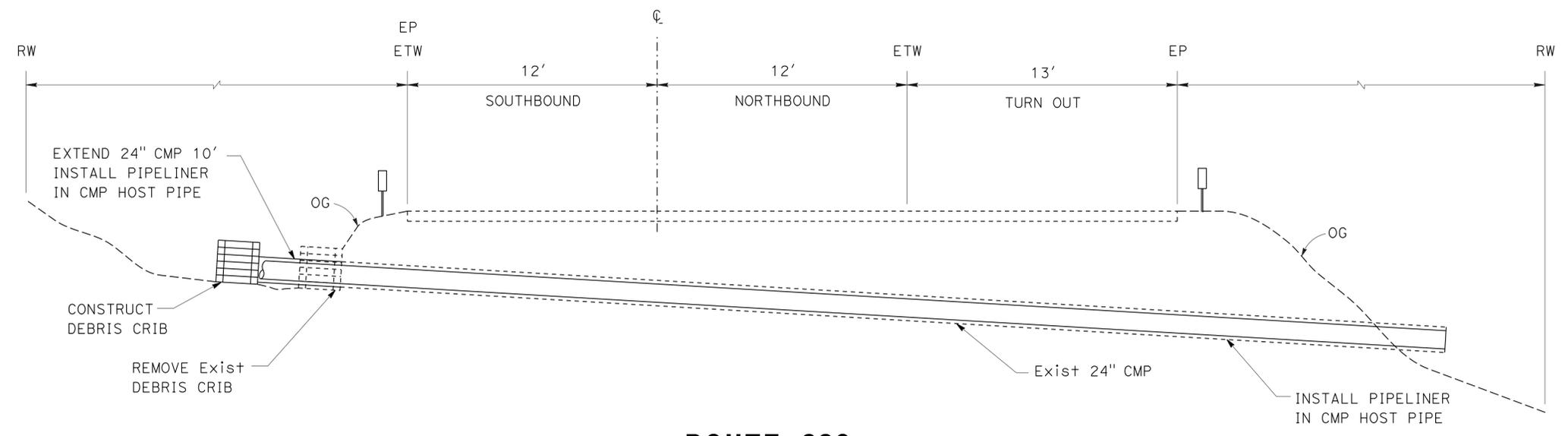
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	330	30.7/39.3	4	20
 REGISTERED CIVIL ENGINEER			3-3-16	DATE	
PLANS APPROVAL DATE			3-4-16	DATE	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans MAINTENANCE DESIGN	MICHAEL P. RISTIC	CHECKED BY	DATE
		CHRIS NATOR	
		MICHAEL P. RISTIC	



ROUTE 330
PM 35.20
LOCATION 6



ROUTE 330
PM 33.75
LOCATION 5

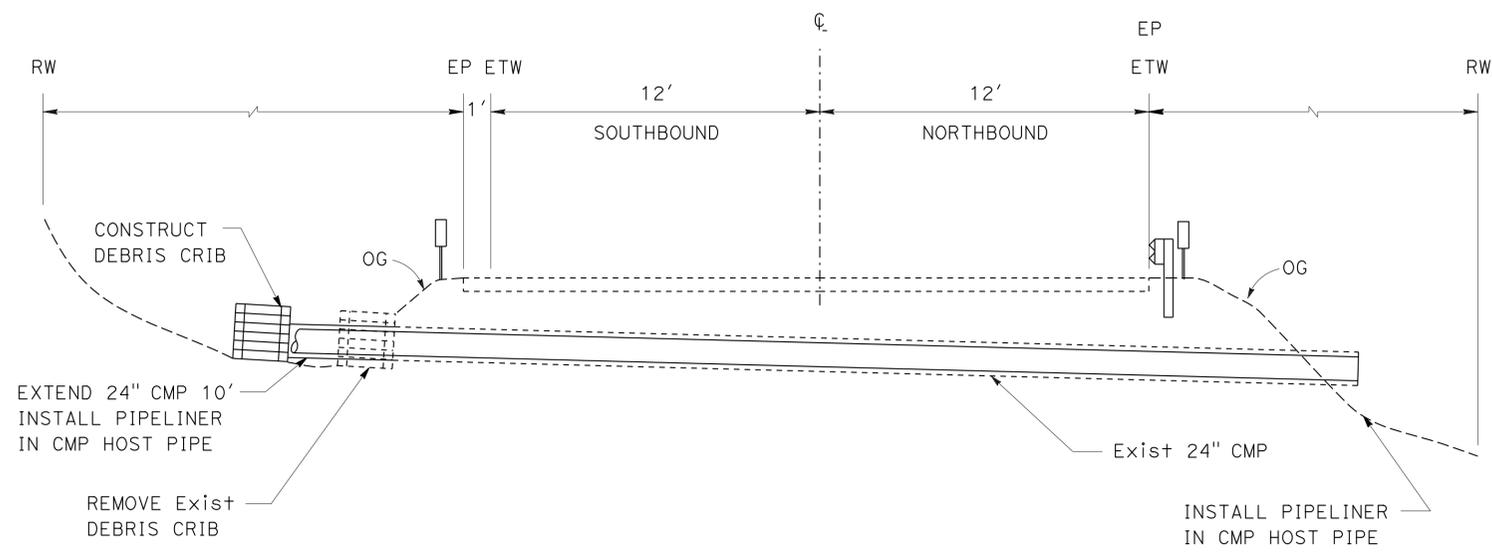
TYPICAL CROSS SECTIONS
NO SCALE
X-3

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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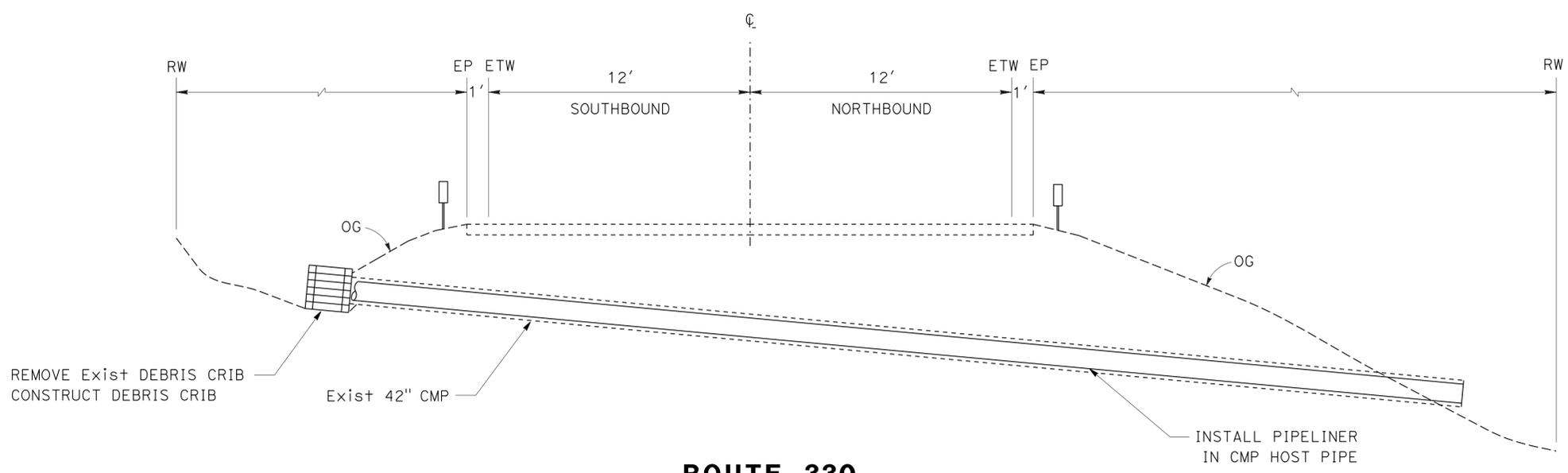
<i>Michael P. Ristic</i>	3-3-16
REGISTERED CIVIL ENGINEER	DATE
3-4-16	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
MICHAEL P. RISTIC
No. 69429
Exp. 06/30/16
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.



ROUTE 330
PM 35.71
LOCATION 8



ROUTE 330
PM 35.25
LOCATION 7

TYPICAL CROSS SECTIONS
NO SCALE

X-4

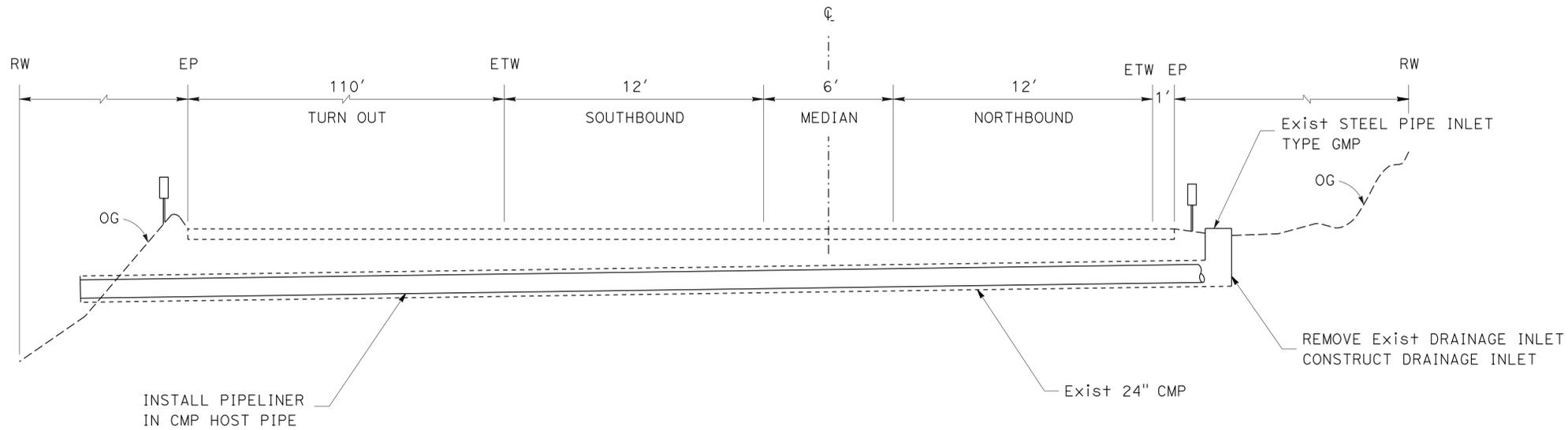
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE DESIGN
FUNCTIONAL SUPERVISOR
MICHAEL P. RISTIC
CALCULATED/DESIGNED BY
CHECKED BY
CHRIS NATOR
MICHAEL P. RISTIC
REVISOR
DATE
REVISION
DATE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	330	30.7/39.3	6	20

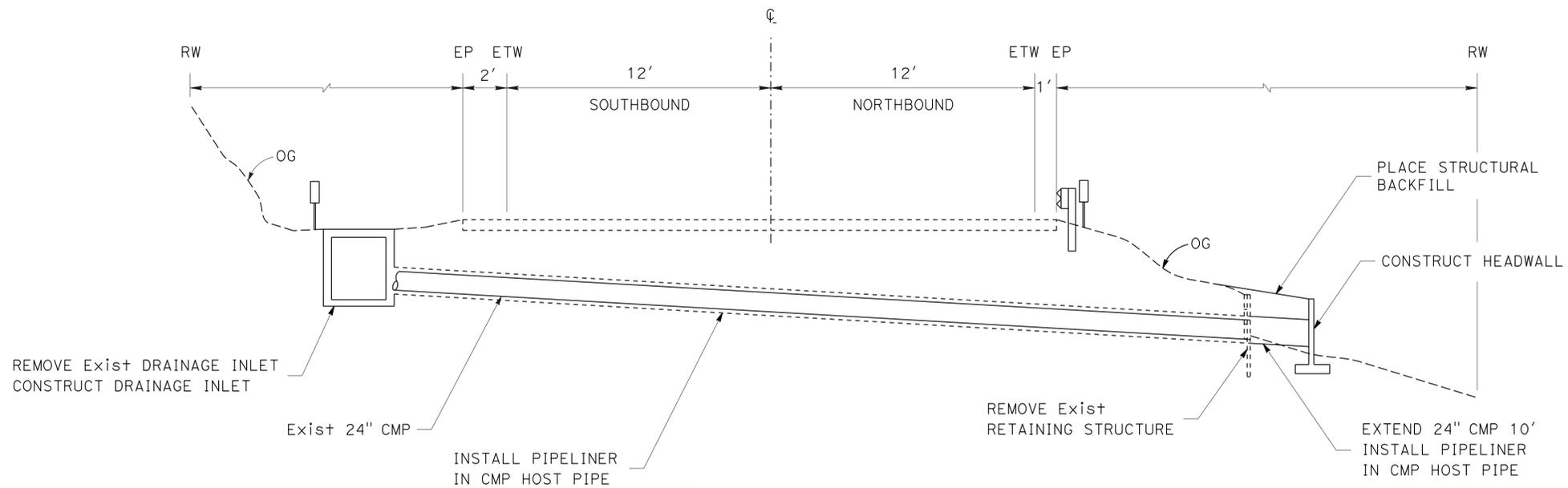
<i>Michael P. Ristic</i>	3-3-16
REGISTERED CIVIL ENGINEER	DATE
3-4-16	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
MICHAEL P. RISTIC
No. 69429
Exp. 06/30/16
CIVIL

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.



ROUTE 330
PM 37.30
LOCATION 10



ROUTE 330
PM 36.67
LOCATION 9

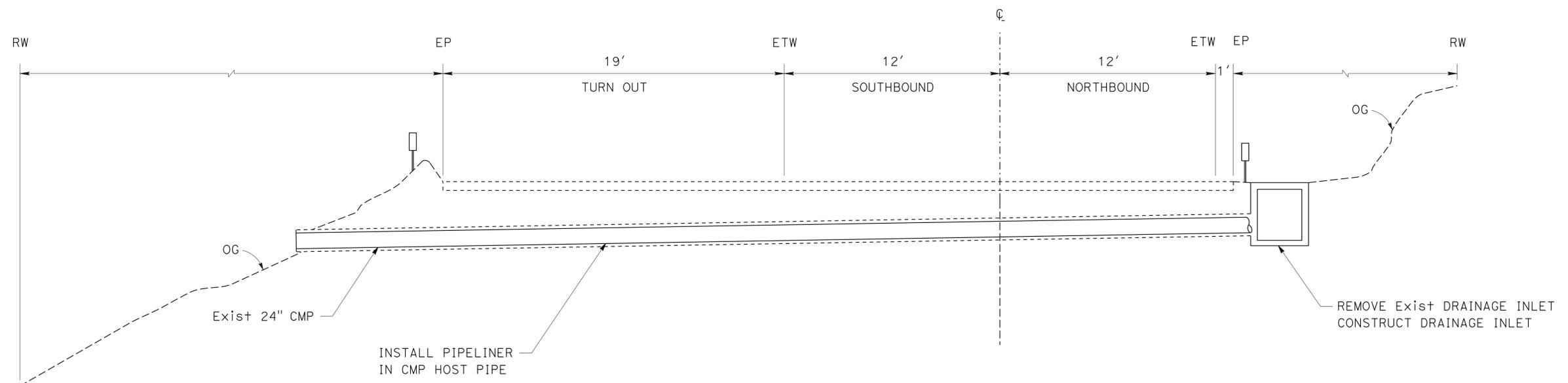
TYPICAL CROSS SECTIONS
NO SCALE
X-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE DESIGN
FUNCTIONAL SUPERVISOR
MICHAEL P. RISTIC
CALCULATED/DESIGNED BY
CHECKED BY
CHRIS NATOR
MICHAEL P. RISTIC
REVISED BY
DATE
REVISOR
DATE



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	330	30.7/39.3	7	20
			3-3-16	DATE	
			3-4-16	PLANS APPROVAL DATE	
REGISTERED CIVIL ENGINEER No. 69429 Exp 06/30/16 CIVIL					
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	CHRIS NATOR	REVISOR BY	
Caltrans MAINTENANCE DESIGN	MICHAEL P. RISTIC	CHECKED BY	MICHAEL P. RISTIC	DATE	



ROUTE 330
 PM 37.84
 LOCATION 11

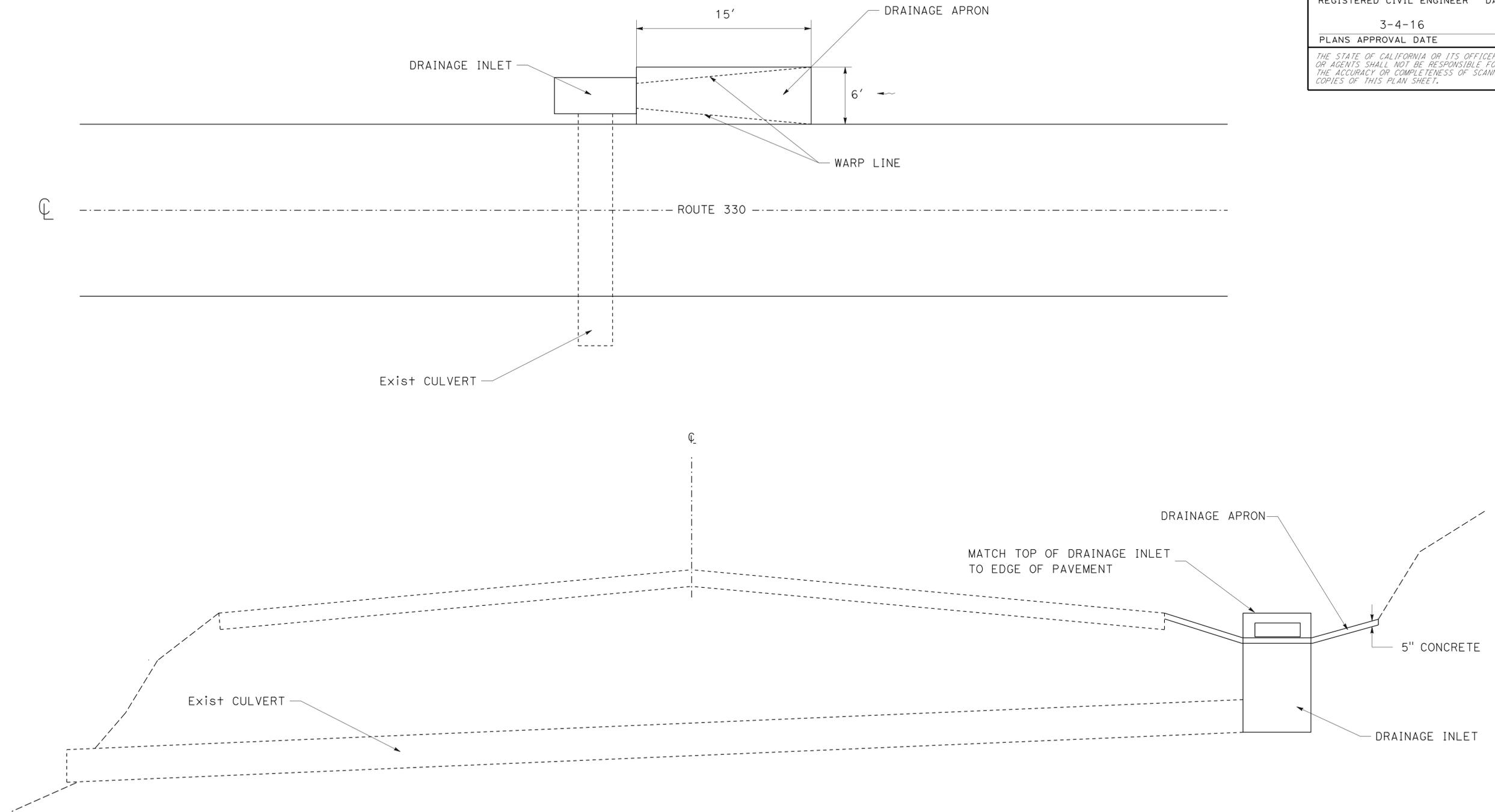
TYPICAL CROSS SECTIONS
 NO SCALE
X-6

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	330	30.7/39.3	8	20

REGISTERED CIVIL ENGINEER DATE 3-3-16
 3-4-16
 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
 MICHAEL P. RISTIC
 No. 69429
 Exp. 06/30/16
 CIVIL
 STATE OF CALIFORNIA

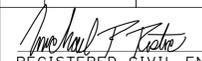


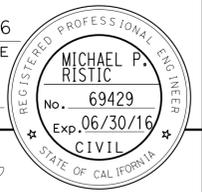
DRAINAGE APRON

LOCATIONS OF CONSTRUCTION

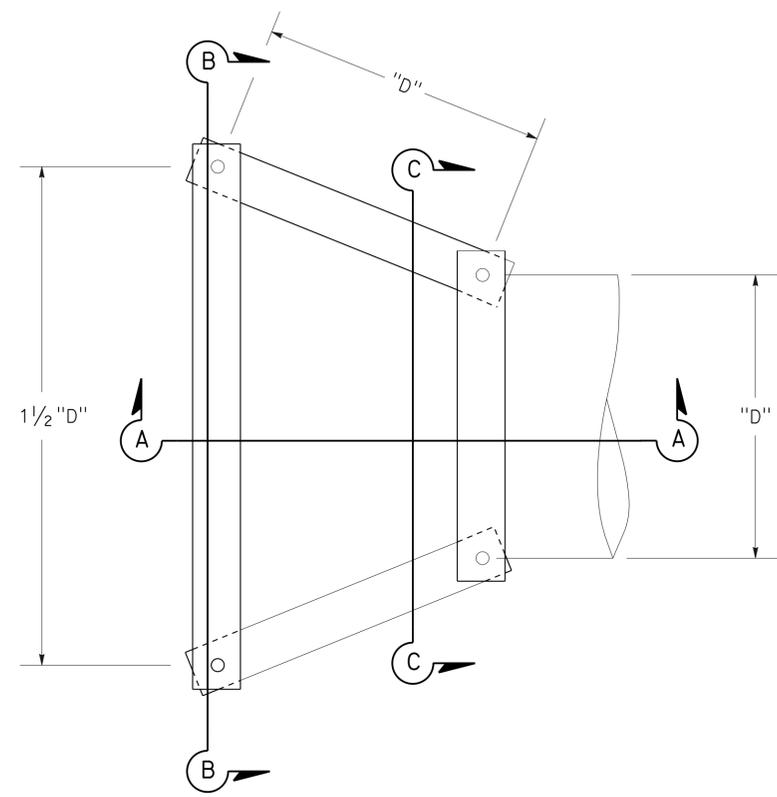
LOCATION No.⊕	PM	SIZE	TYPE
4	32.04	24"	CMP
9	36.67	24"	CMP
11	37.84	24"	CMP

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE DESIGN
 FUNCTIONAL SUPERVISOR MICHAEL P. RISTIC
 CHECKED BY
 DESIGNED BY
 CHRIS NATOR MICHAEL P. RISTIC
 REVISED BY DATE REVISED
 REVISIONS: x, x, x, x, x

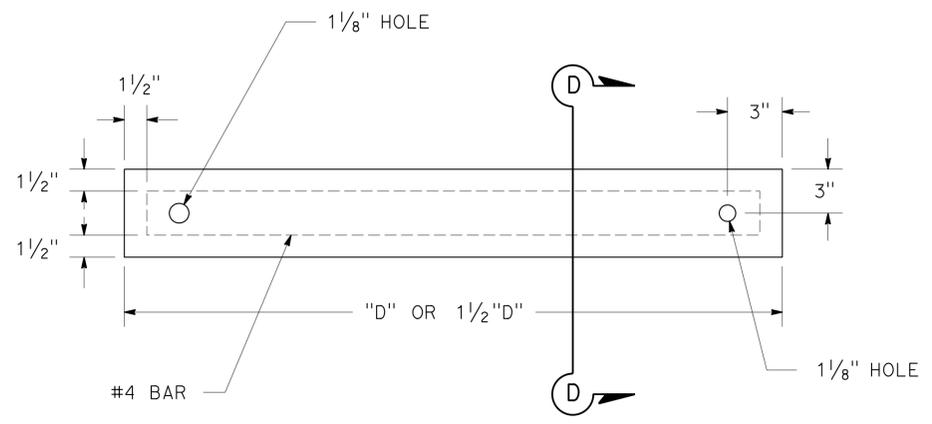
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	330	30.7/39.3	9	20
 REGISTERED CIVIL ENGINEER			3-3-16	DATE	
PLANS APPROVAL DATE			3-4-16	DATE	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					



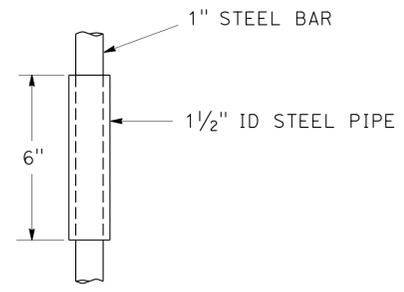
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	CHRTS NATOR	REVISED BY
Caltrans MAINTENANCE DESIGN	MICHAEL P. RISTIC	CHECKED BY	MICHAEL P. RISTIC	DATE REVISED



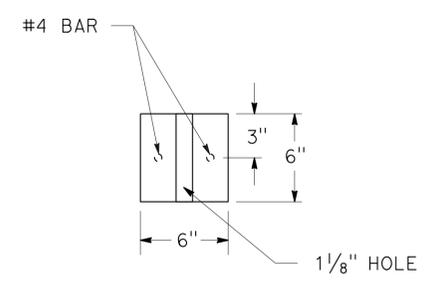
DEBRIS CRIB PLAN VIEW



CRIB MEMBER

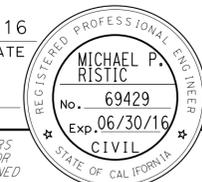


STEEL PIPE FILLER

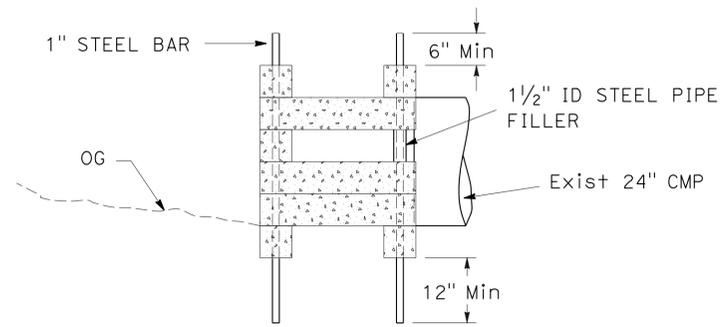


SECTION D-D

CONSTRUCTION DETAILS
NO SCALE
C-2

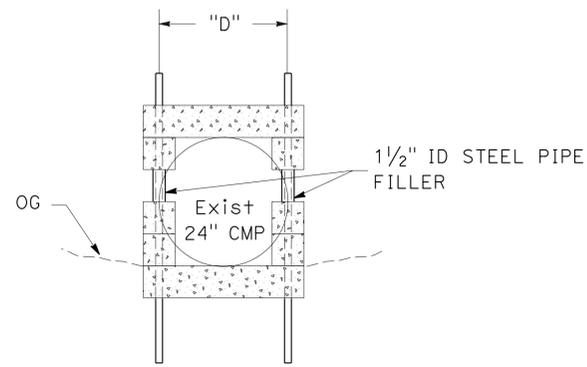
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	330	30.7/39.3	10	20
 REGISTERED CIVIL ENGINEER			3-3-16	DATE	
PLANS APPROVAL DATE			3-4-16		
					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

LOCATION No.	POST MILE	"D"	1/2"D"
5	33.75	24	36
7	35.25	42	63
8	35.71	24	36



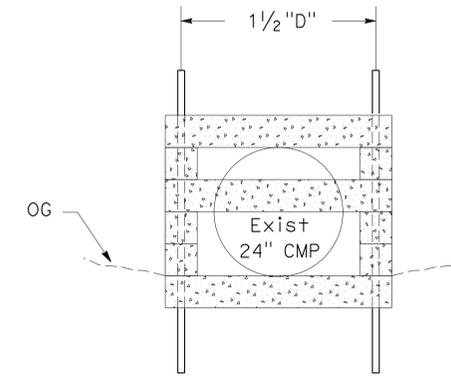
SECTION A-A

(5) (8)



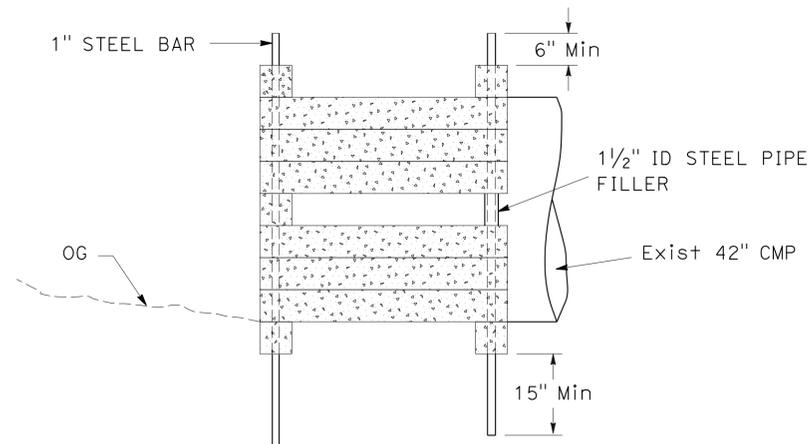
SECTION B-B

(5) (8)

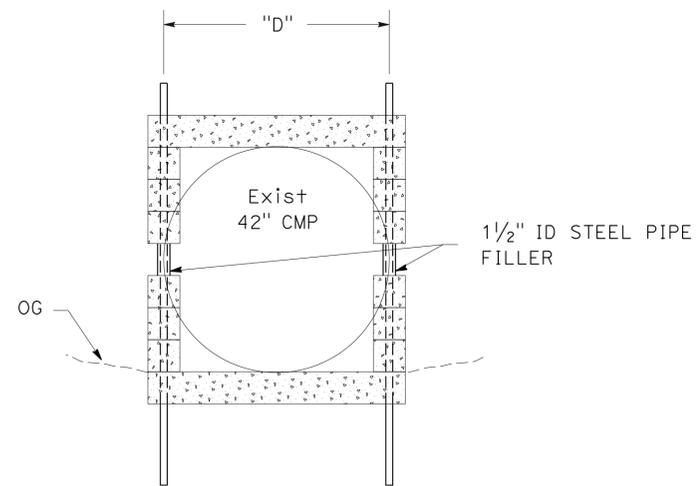


SECTION C-C

(5) (8)

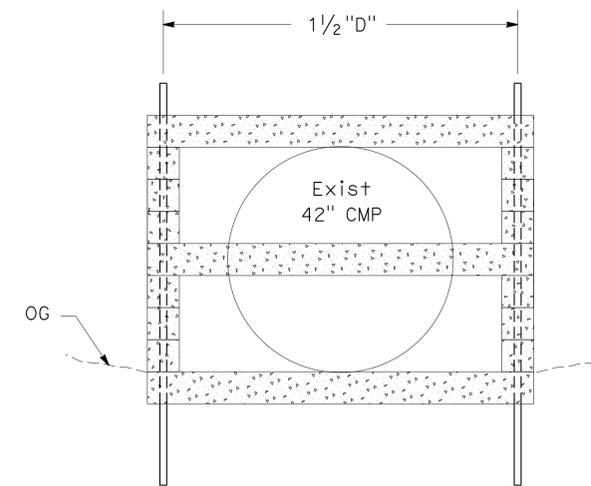


SECTION A-A



SECTION B-B

(7)



SECTION C-C

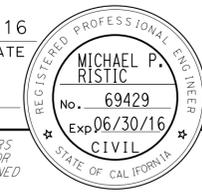
(7)

DEBRIS CRIB INLET

CONSTRUCTION DETAILS

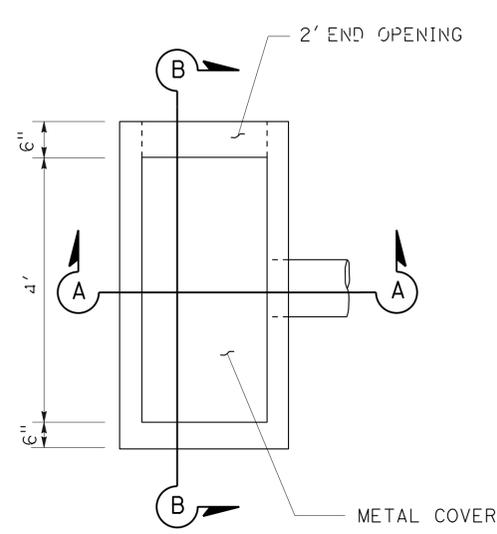
NO SCALE

C-3

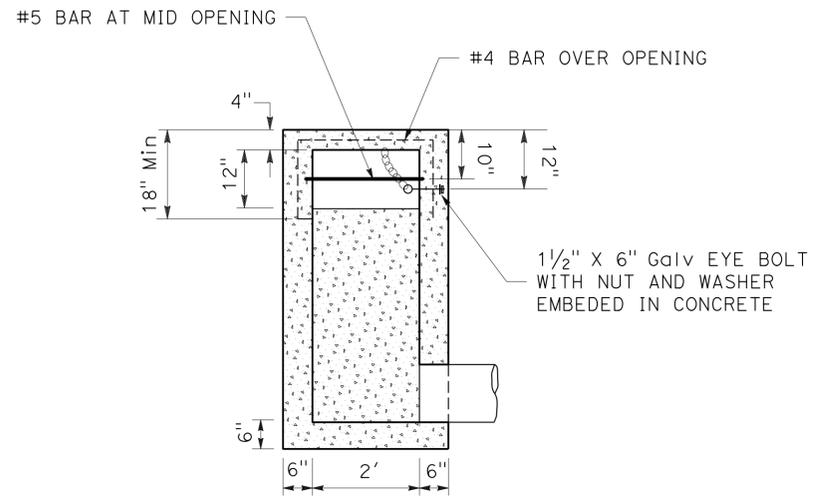
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	330	30.7/39.3	11	20
			3-3-16	DATE	
REGISTERED CIVIL ENGINEER			DATE		
PLANS APPROVAL DATE			3-4-16	DATE	
			<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>		

NOTES:

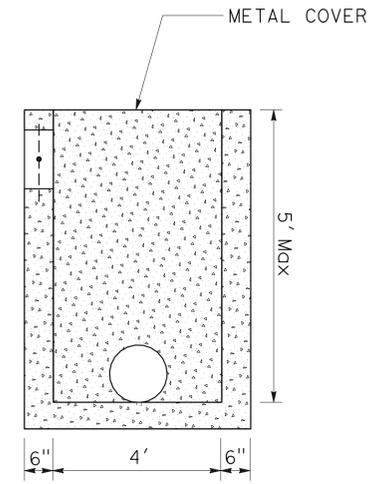
1. PLACE 1/4" X 18" Galv CHAIN WELDED TO COVER AND EYE BOLT. LENGTH OF CHAIN SHALL BE 18" MINIMUM.
2. TOP OF ALL WALLS TO BE FINISHED TO A FLAT PLANE TO PROVIDE EVEN BEARING FOR PLATE COVER.
3. ALL METAL SHALL BE GALVANIZED.



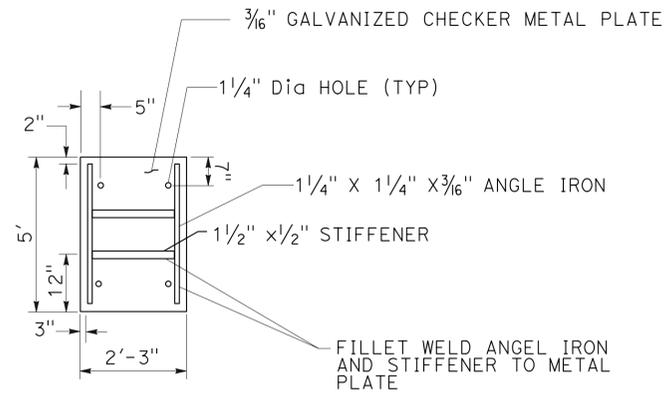
PLAN VIEW



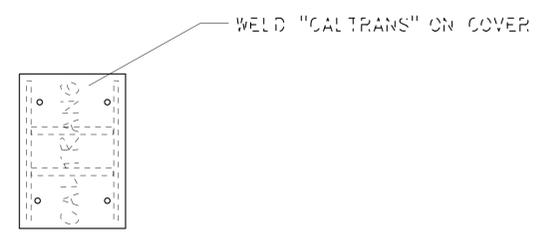
SECTION A-A



SECTION B-B



**METAL COVER
BOTTOM**



**METAL COVER
TOP**

DRAINAGE INLET

**CONSTRUCTION DETAILS
NO SCALE
C-4**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE DESIGN
 FUNCTIONAL SUPERVISOR: MICHAEL P. RISTIC
 CALCULATED/DESIGNED BY: MICHAEL P. RISTIC
 CHECKED BY:
 REVISOR: CHRIS NATOR
 DATE: MICHAEL P. RISTIC
 REVISION: DATE PLOTTED => 16-MAR-2016
 TIME PLOTTED => 06:55

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	330	30.7/39.3	12	20

<i>Michael P. Ristic</i>	3-3-16
REGISTERED CIVIL ENGINEER	DATE
3-4-16	
PLANS APPROVAL DATE	

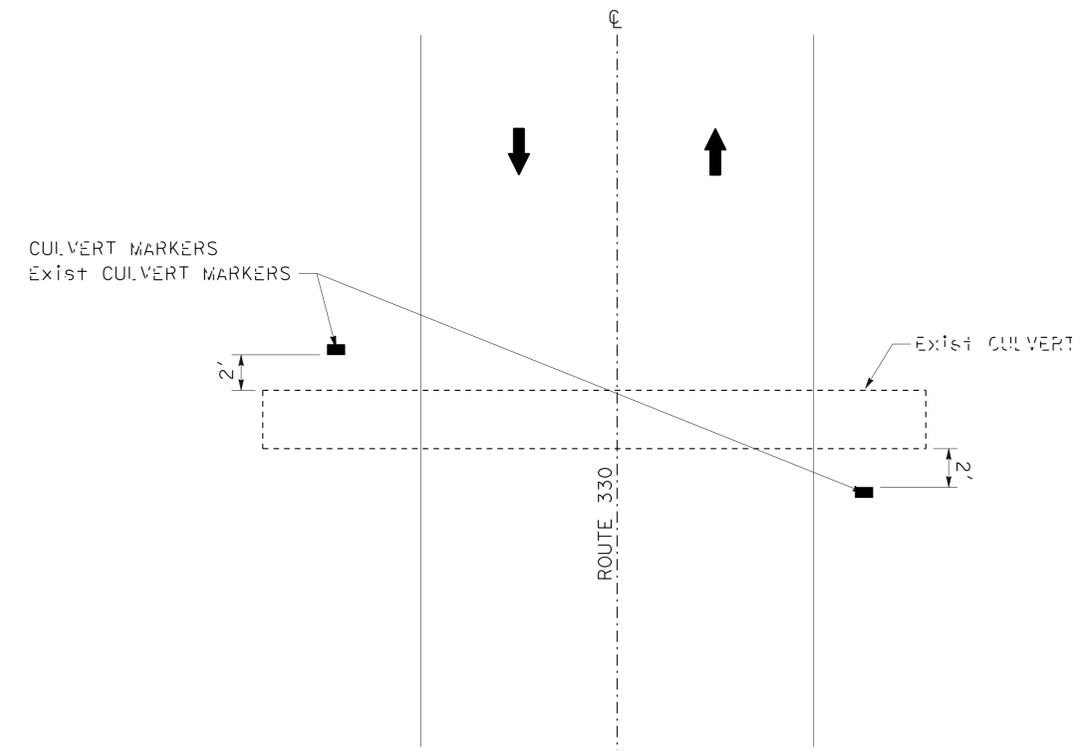
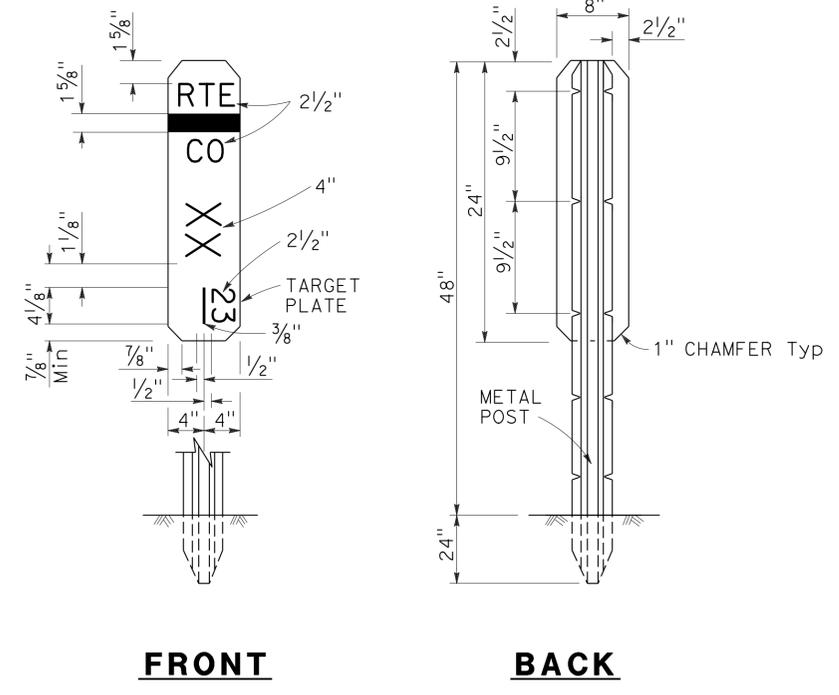
REGISTERED PROFESSIONAL ENGINEER	MICHAEL P. RISTIC
No. 69429	
Exp. 06/30/16	
CIVIL	

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. THE MARKER SHALL BE WHITE (NON-REFLECTIVE) TARGET PLATE WITH BLACK SERIES D NUMVERALS AND LETTERS.
2. A POST MILE PREFIX, SUCH AS "R", SHALL APPLY ONLY WHEN DIRECTED BY THE ENGINEER.
3. ALL INFORMATION SHALL BE IN U.S. CUSTOMARY UNITS (MILES).

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	CHRIS NATOR	REVISOR BY	
Caltrans MAINTENANCE DESIGN	MICHAEL P. RISTIC	CHECKED BY	MICHAEL P. RISTIC	DATE	



**CULVERT MARKERS
(HIGHWAY POST MARKERS)**

CONSTRUCTION DETAILS
NO SCALE
C-5

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	330	30.7/39.3	13	20

3-3-16
 REGISTERED CIVIL ENGINEER DATE
 3-4-16
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 MICHAEL P. RISTIC
 No. 69429
 Exp. 06/30/16
 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.

DRAINAGE QUANTITIES

LOCATION No. ⊗	POST MILE	DIAMETER	PIPE LINER TYPE	ALTERNATIVE PIPELINER					CLEANING, INSPECTING AND PREPARING CULVERT	24" CORRUGATED STEEL PIPE (.064" THICK)	STRUCTURAL BACKFILL	ROCK SLOPE PROTECTION (1/4TON METHOD B)	REMOVE INLET	REMOVE CONCRETE MISCELLANEOUS	REMOVE HEADWALL	CORRUGATED STEEL PIPE INLET	MISCELLANEOUS IRON AND STEEL
				18"	24"	30"	36"	42"									
				LF	LF	LF	LF	LF									
1	30.77	36"	SPIRAL, CIPP, CEMENT				40								4	90	
2	30.79	24"	SPIRAL, CIPP, CEMENT		60												
3	31.83	18"	SPIRAL, CEMENT	40								1				90	
3	31.83	24"	SPIRAL, CEMENT		15							1				90	
4	32.04	24"	SPIRAL, CEMENT		195						10	1				90	
5	33.75	24"	SPIRAL, CEMENT		60								0.5			50	
6	35.20	30"	SPIRAL, CEMENT			180						1				90	
7	35.25	42"	SPIRAL, CEMENT					160					1.0			70	
8	35.71	24"	SPIRAL, CEMENT		125								0.5			50	
9	36.67	24"	SPIRAL, CIPP, CEMENT		65					10		1		1		90	
10	37.30	24"	SPIRAL, CIPP, CEMENT		155							1					
11	37.84	24"	SPIRAL, CIPP, CEMENT		65							1				90	
TOTAL				40	740	180	40	160	1160	30	10	10	8	2	1	4	800

SPIRAL = MACHINE SPIRAL WOUND POLYVINYL CHLORIDE (PVC) PIPELINER
 CIPP = CURED IN PLACE PIPELINER
 CEMENT = CEMENTITIOUS PIPELINER

MINOR CONCRETE (MISCELLANEOUS CONSTRUCTION)

LOCATION No. ⊗	POST MILE	DIAMETER	DEBRIS CRIB	DRAINAGE INLET	HEADWALL	DRAINAGE APRON
			CY	CY	CY	CY
1	30.77	36"		2.7		
2	30.79	24"				
3	31.83	18"		2.7		
3	31.83	24"		2.7		
4	32.04	24"		2.7		1.4
5	33.75	24"	0.5			
6	35.20	30"		2.7		
7	35.25	42"	1.0			
8	35.71	24"	0.5			
9	36.67	24"		2.7	1.1	1.4
10	37.30	24"				
11	37.84	24"		2.7		1.4
SUBTOTAL			2.0	18.9	1.1	7.0
TOTAL			29.0			

TEMPORARY WATER POLLUTION CONTROL

ITEM	UNIT	QUANTITY
TEMPORARY CONCRETE WASHOUT (PORTABLE)	LS	1
TEMPORARY GRAVEL BAG BERM	LF	270

DRAINAGE QUANTITIES DQ-1



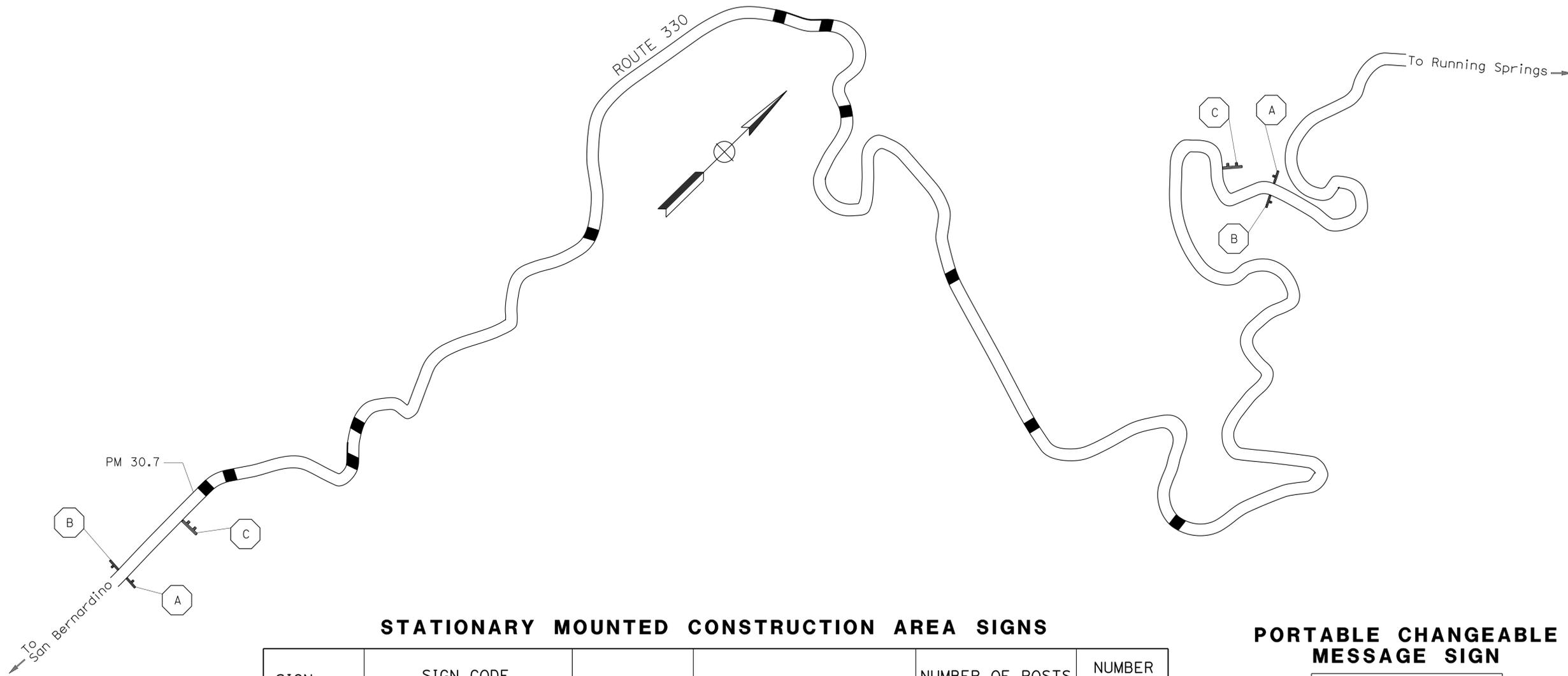
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Sbd	330	30.7/39.3	14	15
Daryush Nami		3-3-16		REGISTERED CIVIL ENGINEER DATE	
3-4-16		PLANS APPROVAL DATE			
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTES:

- LOCATIONS OF CONSTRUCTION AREA SIGNS AND PCMS' ARE APPROXIMATE. EXACT LOCATIONS AND THE PCMS' MESSAGES WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
- REFER TO STANDARD PLANS (RSP T9), (RSP T10), (RSP T11), (RSP T12) AND (RSP T13) FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS FOR ALL THE WORK LOCATIONS SHOWN ON THE TITLE SHEET- ADDITIONAL FLAGGERS REQUIRED.

LEGEND:

CONSTRUCTION AREA



STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No. (X)	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
	FEDERAL	CALIFORNIA				
A	G20-1		36" x 18"	SHOULDER WORK NEXT 10 MILES	1 - 4" x 4"	2
B	G20-2		36" x 18"	END ROAD WORK	1 - 4" x 4"	2
C		C40	108" x 42"	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	2 - 6" x 6"	2

PORTABLE CHANGEABLE MESSAGE SIGN

QUANTITY (EACH)
4

CONSTRUCTION AREA SIGNS CS-1
NO SCALE

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

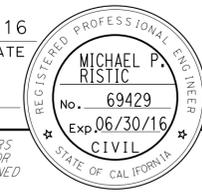
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: MARIO AMANCIO
 CALCULATED/DESIGNED BY: MARIO AMANCIO
 CHECKED BY: MARIO AMANCIO
 DARYUSH NAMI
 MARIO AMANCIO
 REVISOR BY: DATE
 DATE:

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	330	30.7/39.3	15	20

 3-3-16
 REGISTERED CIVIL ENGINEER DATE

3-4-16
 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.



CULVERT MARKERS (HIGHWAY POST MARKERS)

LOCATION	MARKER (CULVERT)	NOTE
30.70	2	24"
30.77	2	36"
30.78	2	48"
30.79	2	24"
	2	60"
30.85	2	24"
30.92	2	24"
32.04	3	24"
32.14	2	Var
32.20	2	24"
32.29	2	54"
32.84	2	24"
32.91	2	24"
33.00	2	24"
33.07	2	24"
33.12	2	24"
32.19	2	24"
33.27	2	24"
33.34	2	24"
33.75	2	24"
33.76	2	24"
33.80	2	24"
33.88	2	24"
33.98	2	54"
34.05	2	36"
34.16	2	42"
34.43	2	24"
34.55	2	24"
SUBTOTAL 1	57	

LOCATION	MARKER (CULVERT)	NOTE
34.63	2	24"
34.91	2	60"
35.08	2	24"
35.13	2	30"
35.20	2	30"
35.25	2	42"
35.30	2	30"
35.50	2	30"
35.55	2	36"
35.63	2	24"
35.67	2	24"
35.71	2	24"
35.75	2	24"
35.67	2	24"
35.99	2	48"
36.08	2	24"
36.15	2	54"
36.20	2	24"
36.25	2	132"
36.35	2	30"
36.53	2	36"
36.57	2	24"
36.67	2	24"
36.70	2	24"
36.77	2	24"
36.82	2	36"
37.00	2	Arch
SUBTOTAL 2	54	

LOCATION	MARKER (CULVERT)	NOTE
37.02	2	42"
37.30	2	24"
37.36	2	36"
37.48	2	24"
37.62	2	24"
37.75	2	24"
37.80	2	30"
37.84	2	24"
38.00	2	24"
38.10	2	Arch
38.23	2	30"
38.26	2	48"
38.32	2	24"
38.36	2	24"
38.43	2	24"
38.50	2	24"
38.54	2	30"
38.58	2	24"
38.66	2	24"
38.74	2	24"
38.77	2	24"
38.81	2	24"
38.88	2	24"
38.93	2	24"
39.00	2	18"
39.19	2	30"
39.25	2	24"
SUBTOTAL 3	54	
SUBTOTAL 1	57	
SUBTOTAL 2	54	
TOTAL	165	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE DESIGN
 FUNCTIONAL SUPERVISOR: MICHAEL P. RISTIC
 CHECKED BY: MICHAEL P. RISTIC
 DESIGNED BY: MICHAEL P. RISTIC
 REVISIONS: 3-3-16, 3-4-16
 REVISOR: CHRIS NATOR
 DATE: 7/2/2010

SUMMARY OF QUANTITIES Q-1

LAST REVISION DATE PLOTTED => 16-MAR-2016
 03-03-16 TIME PLOTTED => 06:55

	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	
MtI	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	
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	
Rt	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
08	SBd	330	30.7/39.3	16	20

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 3-4-16

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.

2010 REVISED STANDARD PLAN RSP A10B

TO ACCOMPANY PLANS DATED 3-4-16

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	MERGING 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.

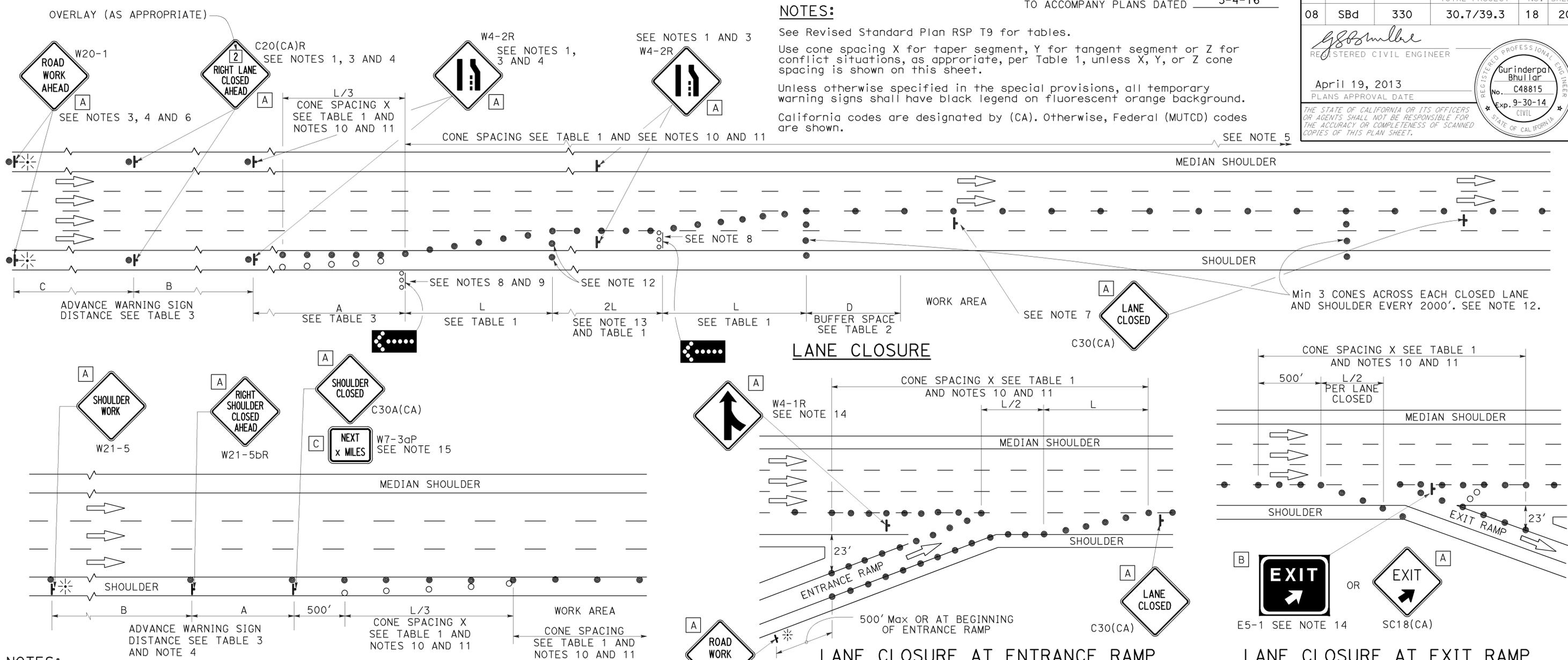
2010 REVISED STANDARD PLAN RSP T9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	330	30.7/39.3	18	20

REGISTERED CIVIL ENGINEER
 April 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.

2010 REVISED STANDARD PLAN RSP T10



- NOTES:**
1. Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
 2. At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
 3. Duplicate sign installations are not required:
 - a) On opposite shoulder if at least one-half of the available lanes remain open to traffic.
 - b) In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
 4. Each advance warning sign on each side of the roadway shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
 5. A G20-2 "END ROAD WORK" sign, with minimum size of 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.

- NOTES:**
6. If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT _____ MILES", use a C20(CA)L and W4-2L signs shall be used.
 7. Place a C30(CA) sign every 2000' throughout length of lane closure.
 8. One flashing arrow sign for each lane closed. The flashing arrow signs shall be Type I.
 9. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at top of crest vertical curve or on a horizontal curve.
 10. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
 11. Portable delineators, placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.

12. Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 2000' as shown on the "Lane Closure" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
13. Unless otherwise specified in the special provisions, the 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
14. Unless otherwise specified in the special provisions, the E5-1 or SC18(CA) and W4-1 signs shall be used as shown.
15. A W7-3aP "NEXT _____ MILES" plaque must be used if the shoulder closure extends beyond the distance that can be perceived by road users.

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- ⊥ TEMPORARY TRAFFIC CONTROL SIGN
- ⬢ FLASHING ARROW SIGN (FAS)
- ⊞ FAS SUPPORT OR TRAILER
- ⊛ PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

A	48" x 48"
B	72" x 60"
C	36" x 30"

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
 FOR LANE CLOSURE ON
 FREEWAYS AND EXPRESSWAYS**

NO SCALE

RSP T10 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T10 DATED MAY 20, 2011 - PAGE 237 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T10

LEGEND

- TRAFFIC CONE
- ⌋ TEMPORARY TRAFFIC CONTROL SIGN
- ⬢ FLASHING ARROW SIGN (FAS)
- ⦿ FAS SUPPORT OR TRAILER
- ⊛ PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

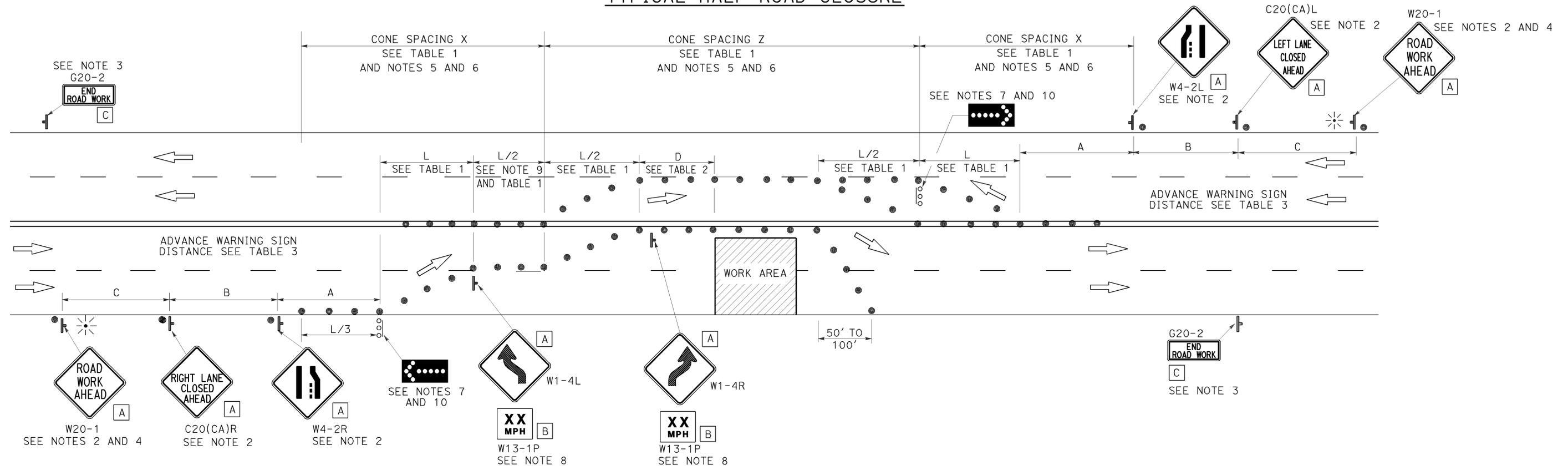
- A 48" x 48"
- B 24" x 24"
- C 36" x 18"

NOTES:

See Revised Standard Plan RSP T9 for tables.
 Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
 Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.
 California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

TO ACCOMPANY PLANS DATED 3-4-16

TYPICAL HALF ROAD CLOSURE



NOTES:

1. At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closure unless, otherwise directed by the Engineer.
2. Each advance warning sign in each direction of travel shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
3. A G20-2 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious, or ends within a larger project's limits.
4. If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT _____ MILES", use a C20(CA) sign for the first advance warning sign.
5. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
6. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
7. Flashing arrow signs shall be either Type I or Type II.
8. Advisory speed will be determined by the Engineer. The W13-1P Plaque will not be required when advisory speed is more than the posted or maximum speed limit.
9. Unless otherwise specified in the special provisions, the tangent (L/2) shall be used.
10. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 FOR HALF ROAD CLOSURE ON
 MULTILANE CONVENTIONAL
 HIGHWAYS AND EXPRESSWAYS**

NO SCALE

RSP T12 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T12 DATED MAY 20, 2011 - PAGE 240 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T12

2010 REVISED STANDARD PLAN RSP T12

NOTES:

See Revised Standard Plan RSP T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.

California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	330	30.7/39.3	20	20

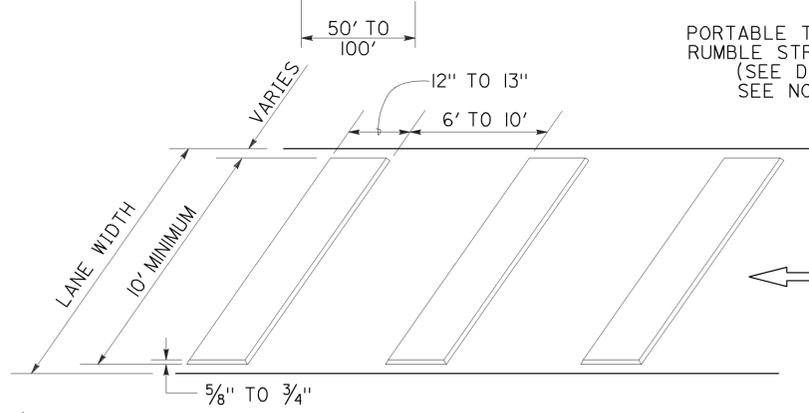
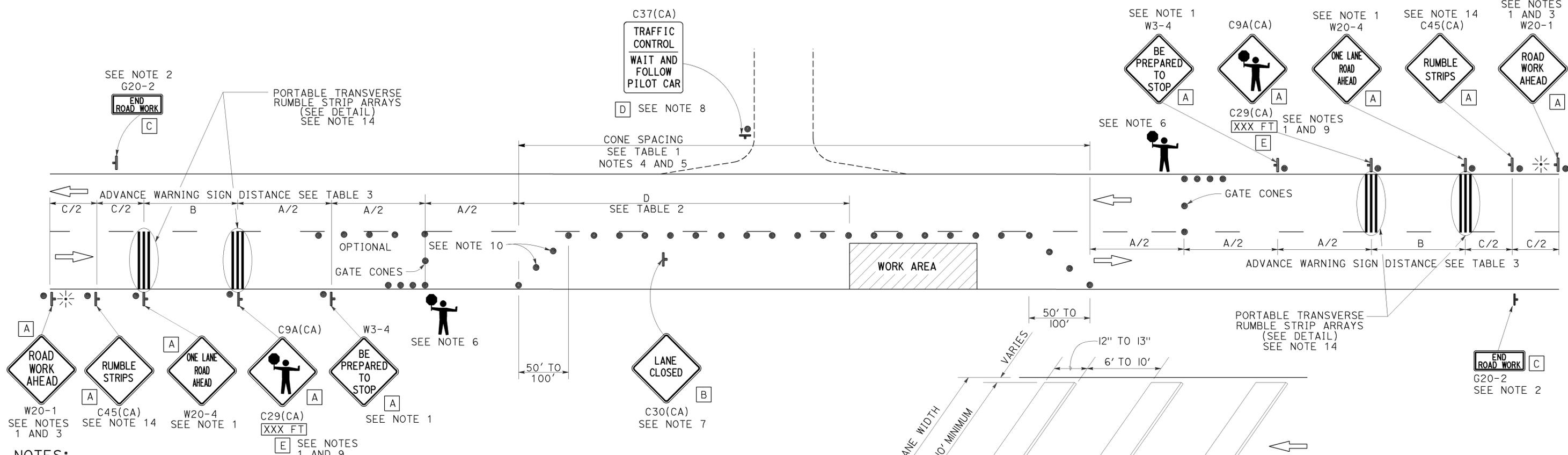
Devinder Singh
 REGISTERED CIVIL ENGINEER
 No. C50470
 Exp. 6-30-17
 CIVIL
 STATE OF CALIFORNIA

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.

TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL

TO ACCOMPANY PLANS DATED 3-4-16



LEGEND

- TRAFFIC CONE
- ⊥ TEMPORARY TRAFFIC CONTROL SIGN
- ⚡ PORTABLE FLASHING BEACON
- 👤 FLAGGER

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 30" x 30"
- C 36" x 18"
- D 36" x 42"
- E 20" x 7"

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON TWO LANE CONVENTIONAL HIGHWAYS

NO SCALE

RSP T13 DATED OCTOBER 30, 2015 SUPERSEDES RSP T13 DATED OCTOBER 17, 2014, RSP T13 DATED JULY 18, 2014 AND RSP T13 DATED APRIL 19, 2013 AND STANDARD PLAN T13 DATED MAY 20, 2011 - PAGE 241 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T13

NOTES:

- Each advance warning sign in each direction of travel shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control unless the end of work area is obvious, or ends within a larger project's limits.
- If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT _____ MILES", use a W20-4 sign for the first advance warning sign.
- All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
- Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. During the hours of darkness, the flagging-station and flagger shall be illuminated and clearly visible to approaching traffic. The illumination footprint of the lighting on the ground shall be at least 20' in diameter. Place a minimum of four cones at 50' intervals in advance of flagger station as shown.
- Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.
- When a pilot car is used, place a C37(CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign with black legend on white background at all intersections, driveways and alleys without a flagger within traffic control area. Signs shall be clean and visible at all times. Where traffic can not be effectively self-regulated, at least one flagger shall be used at each intersection within traffic control area.
- An optional C29(CA) sign may be placed below the C9A(CA) sign.
- Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.
- The color of the portable transverse rumble strips shall be black or orange. Use 2 arrays, each array shall consist of 3 rumble strips.
- Portable transverse rumble strips shall not be placed on sharp horizontal or vertical curves nor shall they be placed through pedestrian crossings.
- If the portable transverse rumble strips become out of alignment (skewed) by more than 6 inches, measured from one end to the other, they shall be readjusted to bring the placement back to the original location.
- Portable transverse rumble strips are not required if any one of the following conditions is satisfied:
 - Work duration occupies a location for four hours or less
 - Posted speed limit is below 45 MPH
 - Work is of emergency nature
 - Work zone is in snow or icy weather conditions

2010 REVISED STANDARD PLAN RSP T13