

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5,89	Var	2	32
Roy & Cahill		12-15-14		REGISTERED CIVIL ENGINEER DATE	
12-15-14		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>					

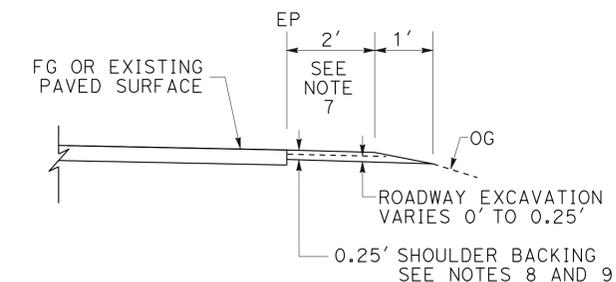
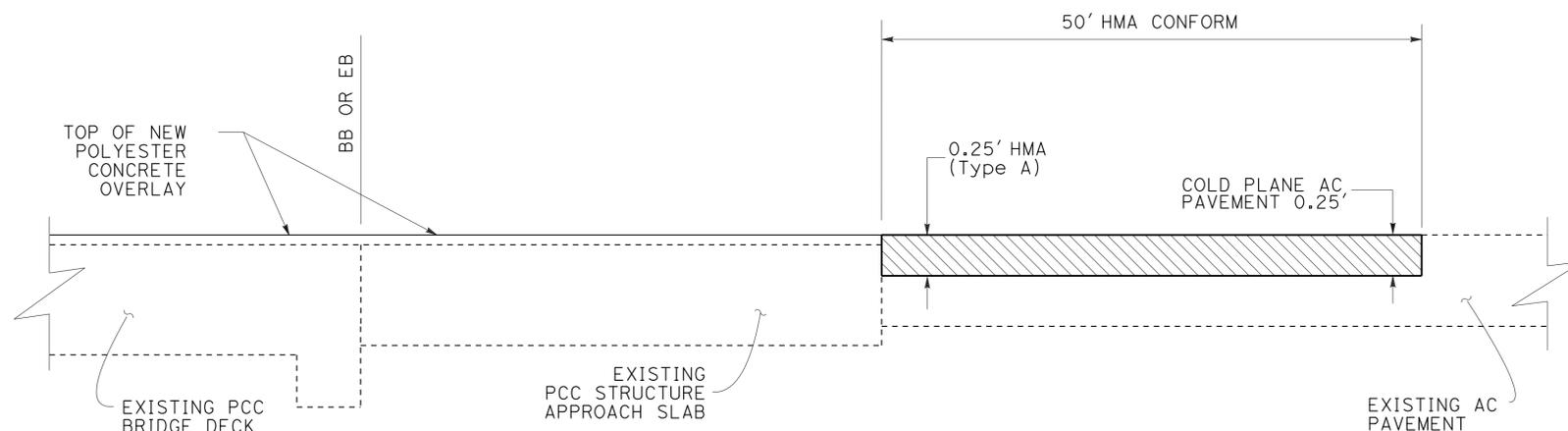
NOTES:

- DIMENSIONS OF THE STRUCTURAL SECTIONS ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
- SUPERELEVATION AND CROSS SLOPE TO MATCH EXISTING OR AS DIRECTED BY THE ENGINEER.
- COLD PLANE FULL WIDTH OF PAVED ROADWAY.
- SEE GENERAL PLANS FOR DETAILS NOT SHOWN.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN INCLUDED ON THESE PLANS.
- EXISTING BRIDGE JOINTS ARE NOT SHOWN ON THIS SHEET.
- EXISTING GUARDRAIL IS NOT SHOWN ON THIS SHEET.
- PLACE SHOULDER BACKING ON BOTH SIDES OF EACH NEW HMA CONFORM FOR THE FULL LENGTH OF THE HMA CONFORM.
- PLACE SHOULDER BACKING IN FRONT OF AND UNDER NEW GUARDRAIL, AS DIRECTED BY THE ENGINEER.

LEGEND:

HOT MIX ASPHALT (TYPE A)

PAVEMENT CLIMATE REGIONS	LOCATION
HIGH MOUNTAIN	1, 2, 3, 4, 9
HIGH DESERT	5, 6, 7, 8



PROFILE
HMA CONFORM TYPICAL
 MOTT ROAD UC, Br No. 02-0180L
 JULIEN CREEK, Br No. 02-0146R
 KILLGORE HILLS ROAD UC, Br No. 02-0153L
 YREKA CREEK, Br No. 02-0143
 NORTH YREKA SEPARATION, Br No. 02-0150R
 KLAMATH RIVER BRIDGE & SEPARATION, Br No. 02-0134L

SHOULDER BACKING DETAIL (Typ)
 MOTT ROAD UC, Br No. 02-0180L&R
 JULIEN CREEK, Br No. 02-0146R
 KILLGORE HILLS ROAD UC, Br No. 02-0153L
 YREKA CREEK, Br No. 02-0143
 NORTH YREKA SEPARATION, Br No. 02-0150R
 KLAMATH RIVER BRIDGE & SEPARATION, Br No. 02-0134L

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE
 FUNCTIONAL SUPERVISOR LANCE BROWN
 CALCULATED/DESIGNED BY CHECKED BY
 ROY CAHILL MIKE CONNER
 REVISED BY DATE REVISED
 USERNAME => s115152
 DGN FILE => 24g720ga001.dgn

CONSTRUCTION DETAILS

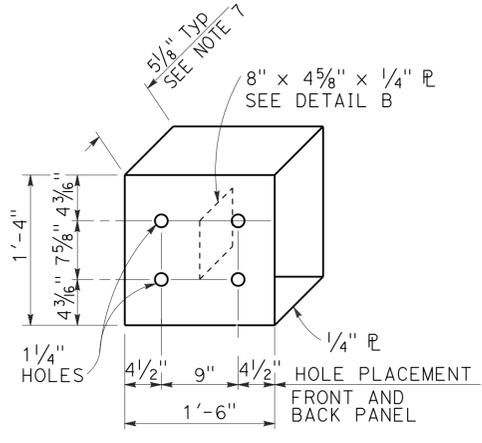
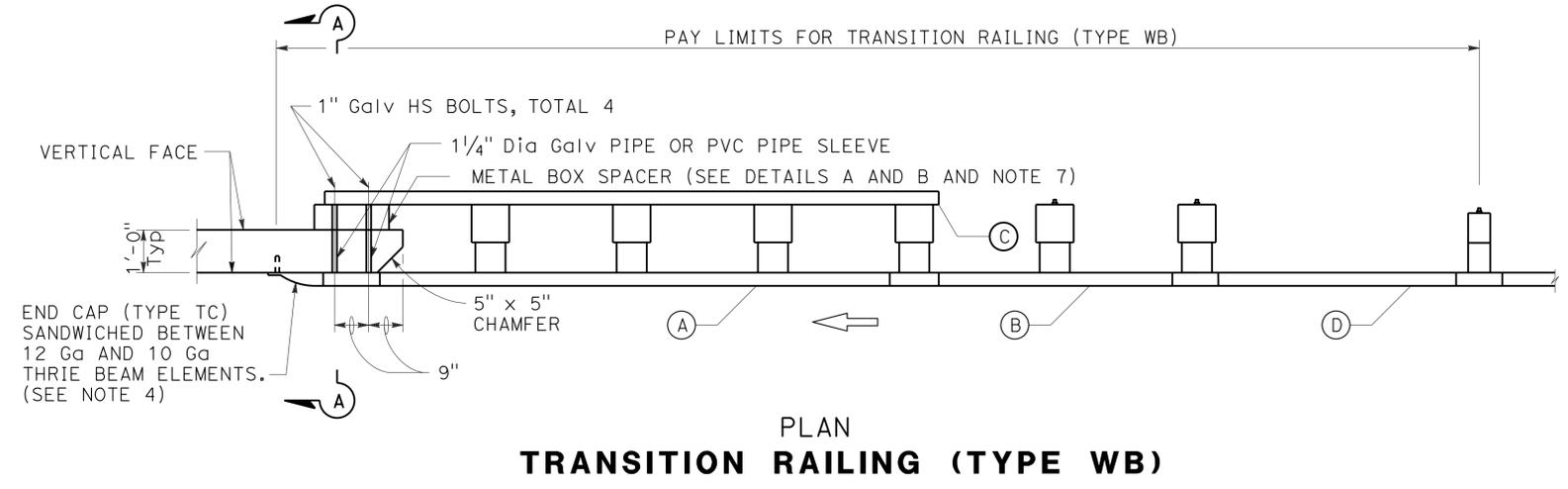
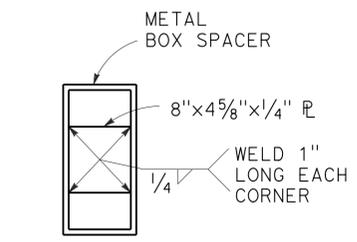
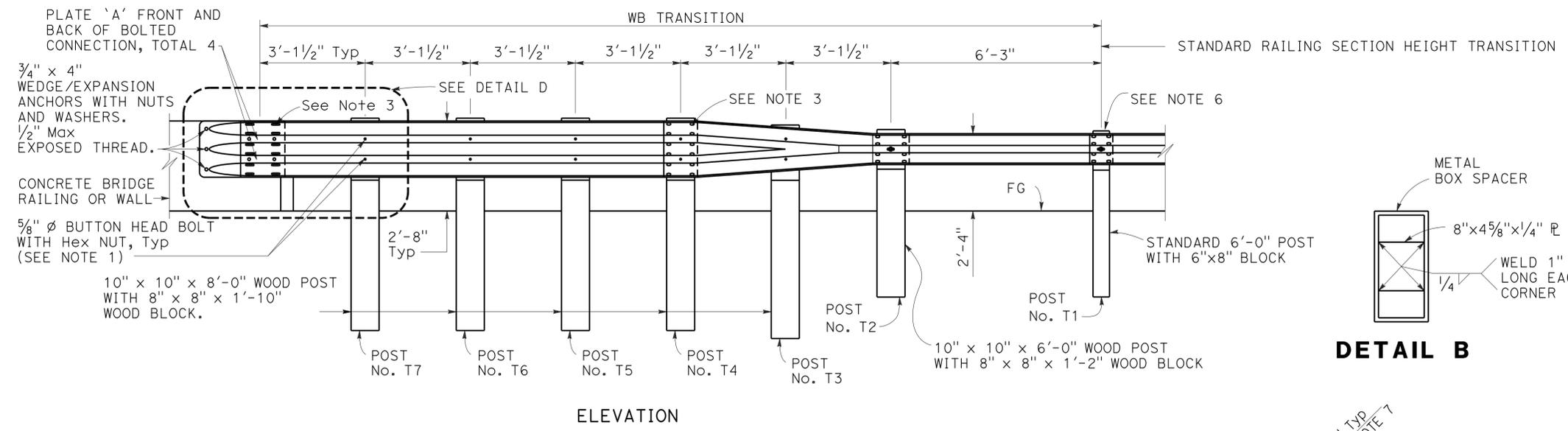
NO SCALE

C-1

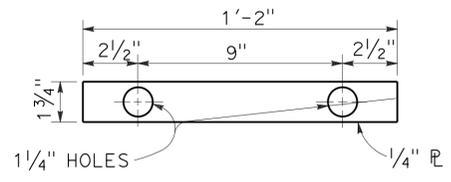
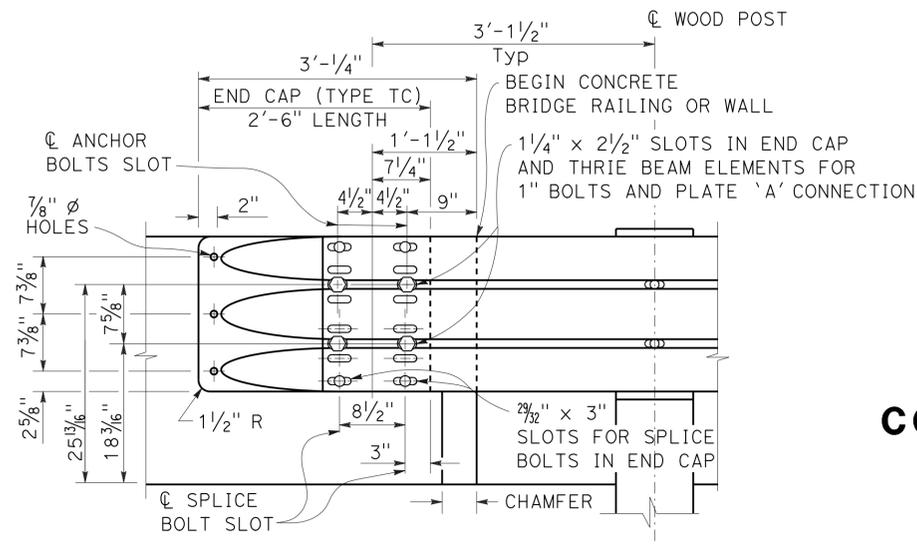
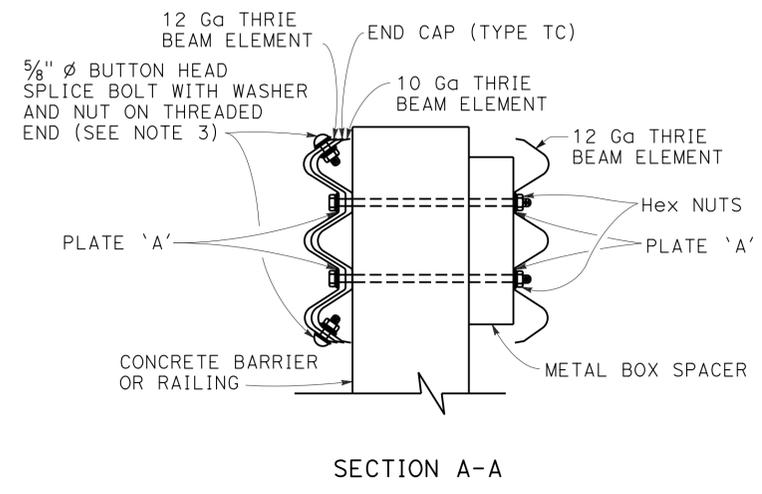


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5,89	Var	3	32

DWIGHT WINTERLIN 12-15-14
 REGISTERED CIVIL ENGINEER DATE
 12-15-14
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



- LEGEND**
- (A) NESTED THRIE BEAM ELEMENTS (ONE 12 Ga ELEMENT NESTED OVER ONE 10 Ga ELEMENT).
 - (B) ONE 10 Ga "W" BEAM TO THRIE BEAM ELEMENT.
 - (C) ONE 12 Ga THRIE BEAM ELEMENT.
 - (D) ONE 10 Ga "W" BEAM RAIL ELEMENT (7'-3 1/2" LENGTH)



- NOTES:**
- USE 5/8" Dia BUTTON HEAD BOLTS AND HEX NUTS FOR CONNECTIONS TO POSTS.
 - THE NESTED RAIL ELEMENTS, END CAP, AND "W" BEAM TO THRIE BEAM ELEMENT MAY BE SPLICED TOGETHER PRIOR TO BOLTING THE ELEMENTS TO THE WOOD POST AND CONCRETE BARRIER OR RAILING.
 - EXTERIOR SPLICE BOLT HOLES FOR RAIL ELEMENT (SPLICES) AT POST No. T4 AND THE CONNECTION TO THE CONCRETE BARRIER OR RAILING SHALL BE THE STANDARD 13/16" x 1 1/8" SLOT SIZE. INTERIOR SPLICE BOLT HOLES AT THESE LOCATIONS MAY BE INCREASED UP TO 1 1/4" Dia. ONLY THE TOP 4 AND THE BOTTOM 4 SPLICE BOLTS WITH WASHERS AND NUTS ARE REQUIRED FOR RAIL SPLICES AT POST No. T4 AND THE CONNECTION TO THE CONCRETE BARRIER OR RAILING.
 - END CAP MAY BE INSTALLED OVER 12 Ga AND 10 Ga THRIE BEAM ELEMENTS WHERE TRANSITION RAILING IS INSTALLED ON THE DEPARTURE END OF BRIDGE RAILING. FOR DETAILS NOT SHOWN, SEE STANDARD PLAN A78C1.
 - THE TOP ELEVATION OF POSTS No. T2 THROUGH No. T7 SHALL NOT PROJECT MORE THAN 1" ABOVE THE TOP ELEVATION OF THE RAIL ELEMENT.
 - THE GUARDRAILING CONNECTED TO TRANSITION RAILING (TYPE WB) WILL BE A STANDARD RAILING SECTION OF METAL BEAM GUARDRAILING WITH HEIGHT TRANSITION RATIO OF 120:1 FROM POST No. T1.
 - THE DEPTH OF THE METAL BOX SPACER VARIES FROM 5 1/8" TO 1 1/2" AND IS DEPENDENT ON THE WIDTH OF THE CONCRETE RAILING OR WALL. THE COMBINED DIMENSION FOR THE DEPTH OF THE METAL BOX SPACER PLUS THE WIDTH OF RAILING OR WALL SHOULD BE 17 1/8".
 - EXISTING UTILITY FACILITIES HAVE NOT BEEN INCLUDED ON THESE PLANS.

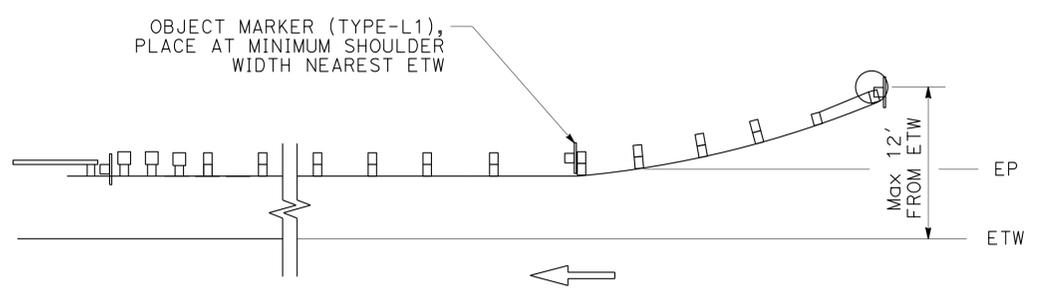
**CONSTRUCTION DETAILS
GUARDRAILING
TRANSITION
(TYPE WB)**

NO SCALE **C-2**

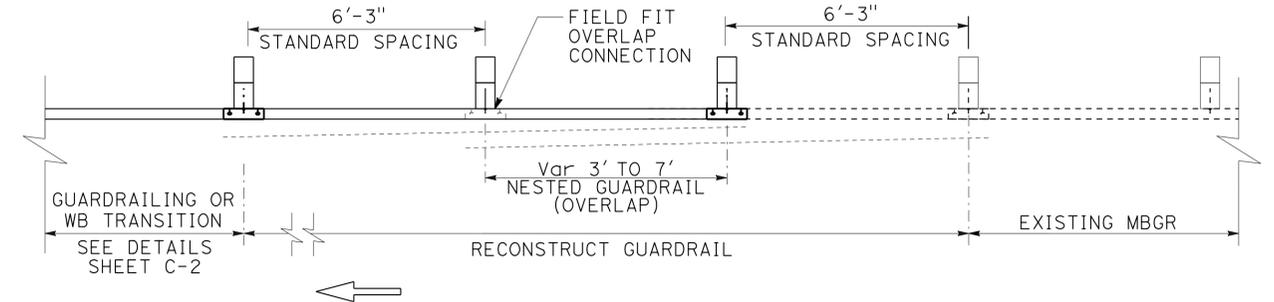
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - TRAFFIC
 DWIGHT WINTERLIN
 ROY CAHILL
 KRISTI WESTOBY
 USERNAME => s115152
 DGN FILE => 24g720ga002.dgn
 BORDER LAST REVISED 7/2/2010
 RELATIVE BORDER SCALE IS IN INCHES
 UNIT 0148
 PROJECT NUMBER & PHASE 02-1400-0052-1 EA 02-4G7201

DATE PLOTTED => 15-DEC-2014
 TIME PLOTTED => 12:45

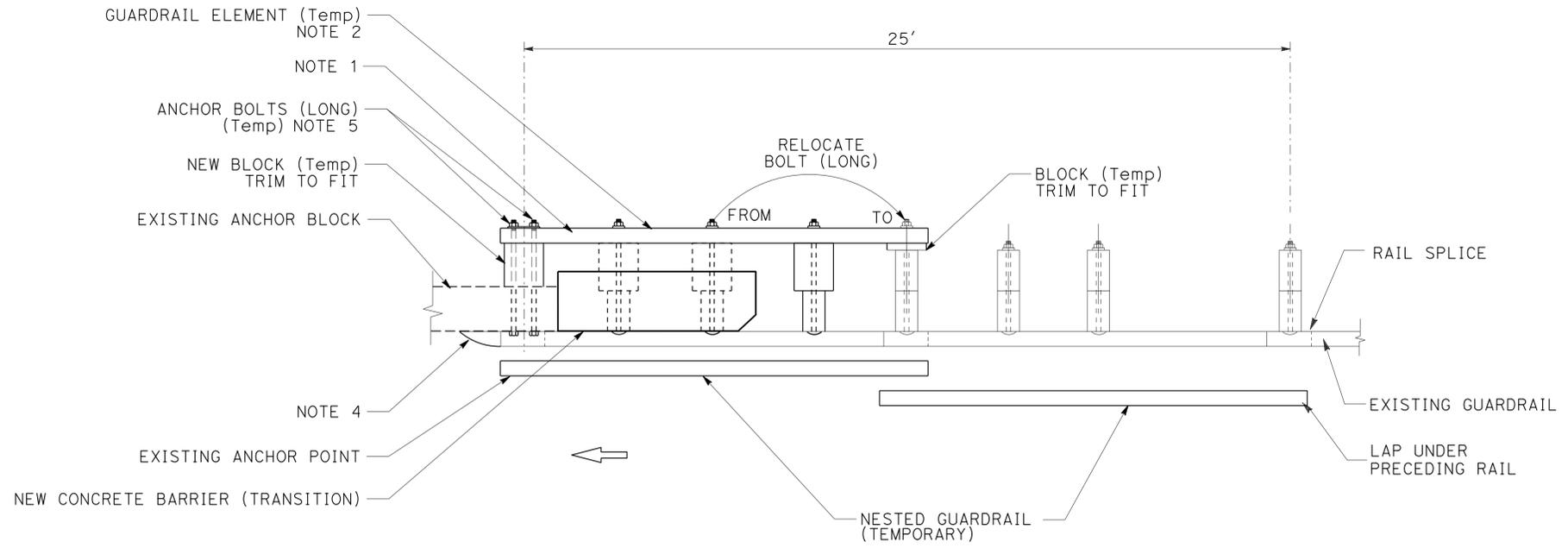
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5,89	Var	4	32
Dwight Winterlin			12-15-14	REGISTERED CIVIL ENGINEER DATE	
12-15-14			PLANS APPROVAL DATE		
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TYPICAL OBJECT MARKER LOCATIONS



GUARDRAIL OVERLAP CONNECTION DETAIL



TEMPORARY NESTED GUARDRAIL TO ACCOMODATE CONSTRUCTION OF CONCRETE BARRIER (TRANSITION)*

- * NOTES:**
1. Max 2 EXISTING POSTS MAY BE REMOVED
 2. GUARDRAIL ELEMENT ON BACK OF POST NOT REQUIRED IF NEW TRANSITION IS COMPLETED WITHIN 20 WORKING DAYS FROM POST REMOVAL.
 3. Max 2" OF ADDITIONAL BLOCKING MAY BE ADDED BETWEEN RAIL ELEMENT AND EXISTING POST OR ANCHOR BLOCK TO ACCOMMODATE FORM WORK.
 4. ATTACH END CAP FLUSH TO EXISTING ANCHOR BLOCK WITHIN CLEAR RECOVERY ZONE FOR OPPOSING TRAFFIC.
 5. USE 2 EACH, 1" HIGH STRENGTH THROUGH BOLTS TO ATTACH RAILING TO EXISTING ANCHOR BLOCK. USE EXISTING $\frac{1}{2}$ " WASHERS FOR CONNECTION.
 6. EXISTING UTILITY FACILITIES HAVE NOT BEEN INCLUDED ON THESE PLANS

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 TRAFFIC
 DWIGHT WINTERLIN
 ROY CAHILL
 KRISTI WESTOBY
 REVISIONS: 12-01-14 DATE PLOTTED => 15-DEC-2014 TIME PLOTTED => 12:45

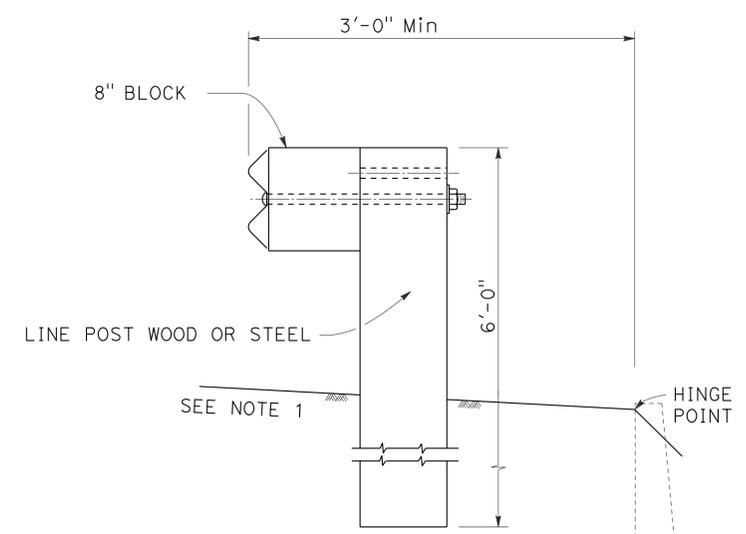
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5,89	Var	5	32

Dwight D. Winterlin 12-15-14	
REGISTERED CIVIL ENGINEER	DATE
12-15-14	
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>	

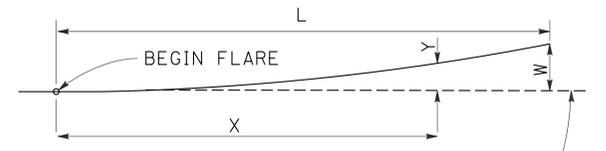
REGISTERED PROFESSIONAL ENGINEER
DWIGHT WINTERLIN
 No. C68438
 Exp. 9-30-15
 CIVIL
 STATE OF CALIFORNIA

NOTES:

1. Max 10:1 SLOPE IN FRONT OF GUARDRAIL.
2. FOR POST AND BLOCK DETAILS SEE RSP A77N1 AND A77N2.
3. POST AND HARDWARE SHOWN FOR MIDWEST GUARDRAIL ARE VALID FOR METAL BEAM GUARDRAIL.
4. FOR 8' POST USE W6 X 15 STEEL OR 10" x 10" WOOD POST.
5. BLOCKS MUST HAVE MEANS TO RESIST ROTATION OTHER THAN THROUGH BOLT.
6. PLACE RUB RAIL (GUARDRAIL ELEMENT) AND ATTACH TO POST WITH NO BLOCK WHEN HEIGHT OF GUARDRAIL IS Min 32" ABOVE FINISH GRADE UNDER FACE OF RAIL.
7. EXISTING UTILITY FACILITIES HAVE NOT BEEN INCLUDED ON THESE PLANS.
8. FOR DETAILS OF STANDARD HARDWARE USED TO CONSTRUCT GUARDRAIL, SEE STANDARD PLAN A77M1.



**DETAIL A
TYPICAL ROADWAY
INSTALLATION**
SEE NOTE 2

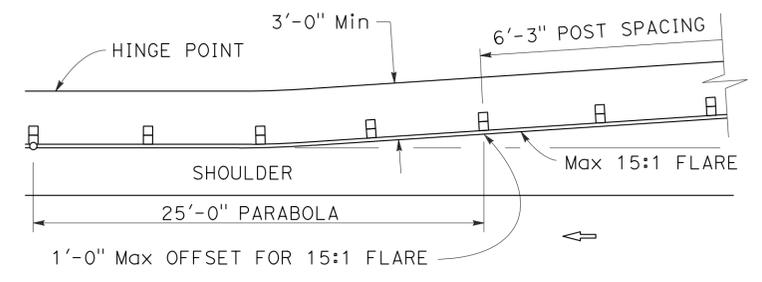


BASE LINE (EDGE OF PAVED SHOULDER OR OFFSET LINE OF EDGE OF TRAVELED WAY)

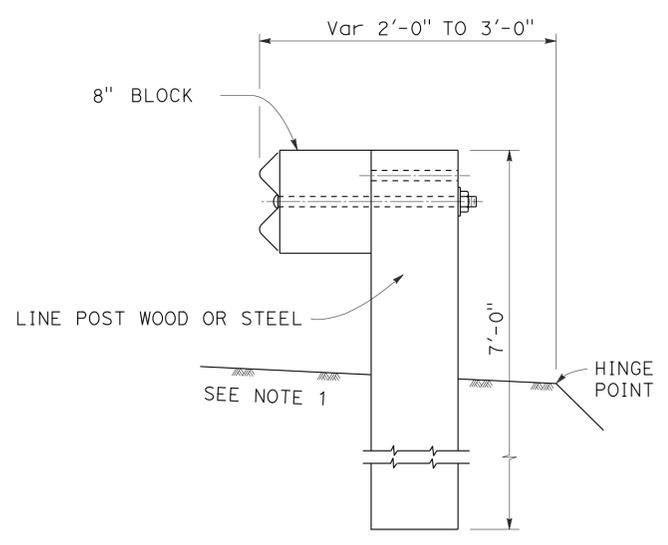
Y = OFFSET FROM BASE LINE
 W = MAXIMUM OFFSET
 X = DISTANCE ALONG BASE LINE
 L = LENGTH OF FLARE

$$Y = \frac{WX^2}{L^2}$$

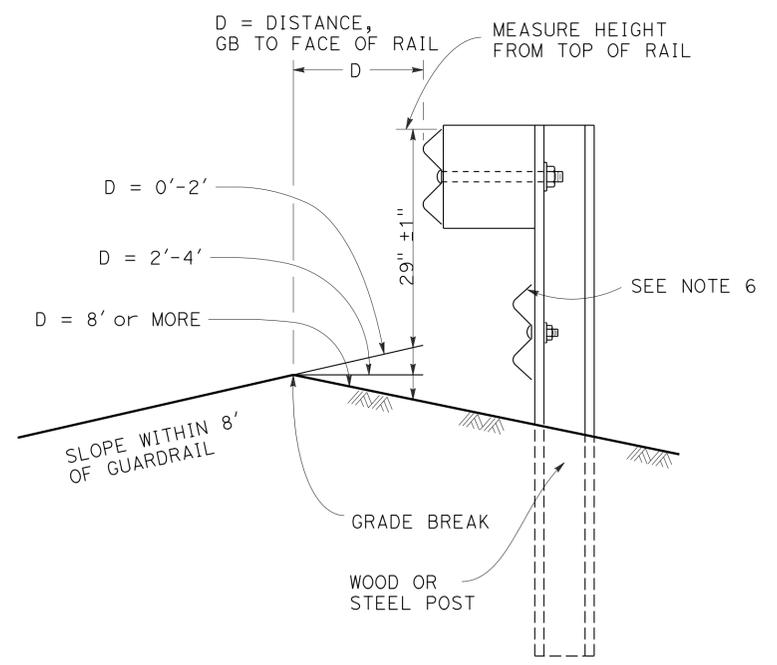
PARABOLIC FLARE OFFSETS



GUARDRAIL WITH FLARED ALIGNMENT



**DETAIL B
NARROW ROADWAY
INSTALLATION**
SEE NOTE 2



**MEASURE HEIGHT DETAIL
AT GRADE BREAK (GB)**
WHEN THERE IS A BREAK POINT IN FRONT OF GUARDRAIL MEASURE HEIGHT OF GUARDRAIL BASED ON DISTANCE FROM GRADE BREAK TO ADJUST FOR TRAJECTORY.

**CONSTRUCTION DETAILS
METAL BEAM GUARDRAILING
TYPICAL LINE POST
EMBEDMENT AND
HINGE POINT OFFSET DETAILS**

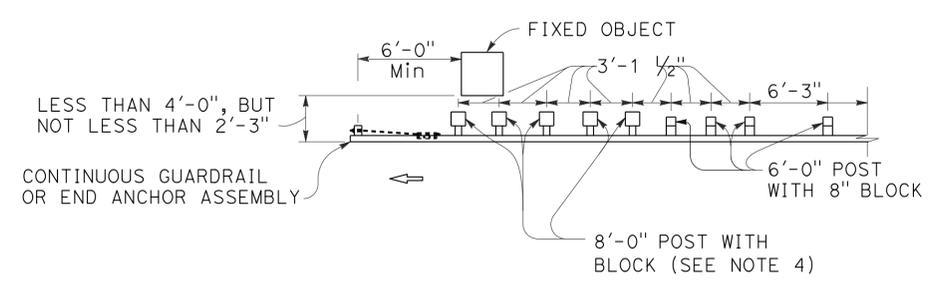
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C-4

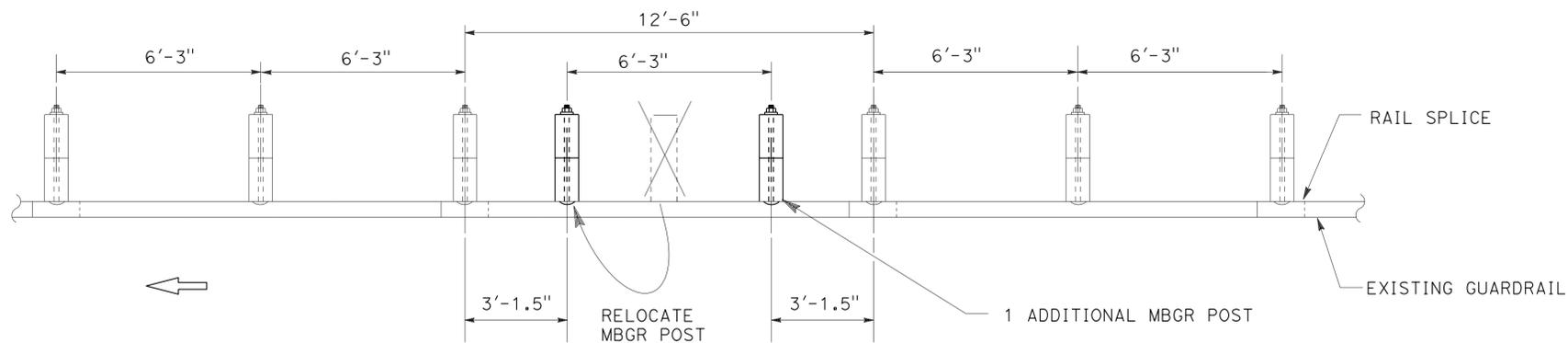
DWIGHT WINTERLIN
 ROY CAHILL
 KRISTI WESTOBY
 DEPARTMENT OF TRANSPORTATION
TRAFFIC
 STATE OF CALIFORNIA
 Caltrans

NOTE A:
 FOR A SERIES OF FIXED OBJECTS (BRIDGE COLUMNS, OVERHEAD SIGN SUPPORTS, ETC.) ADDITIONAL 8'-0" POST WITH BLOCKS AT 3'-1 1/2" CENTER TO CENTER SPACING ARE TO BE USED BETWEEN FIXED OBJECTS.

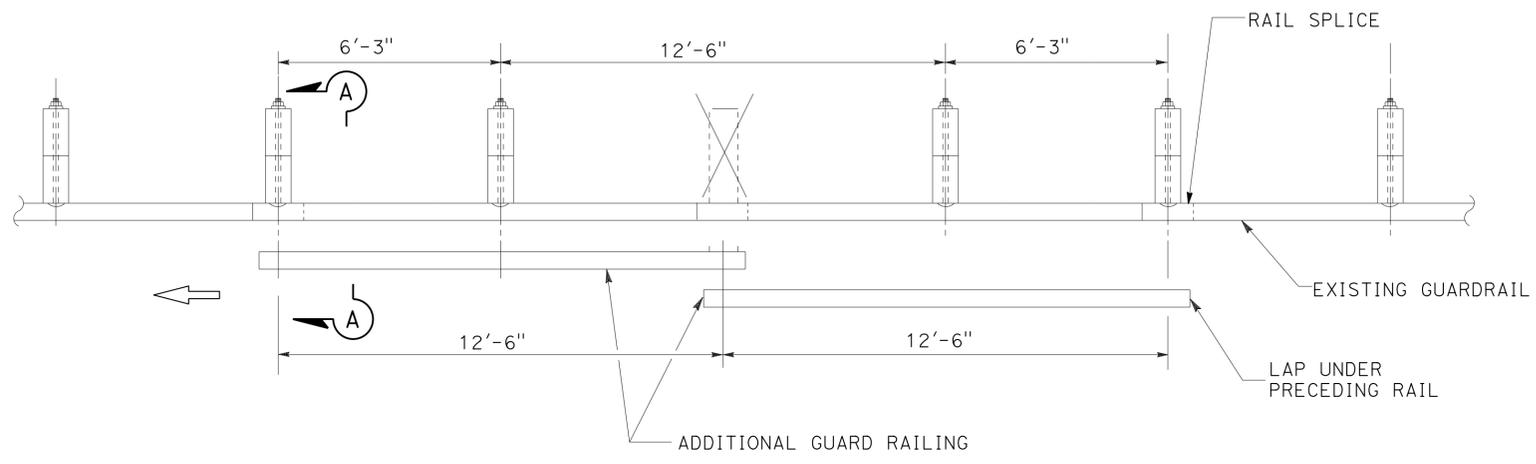
**STRENGTHENED RAILING SECTIONS
FOR FIXED OBJECT**



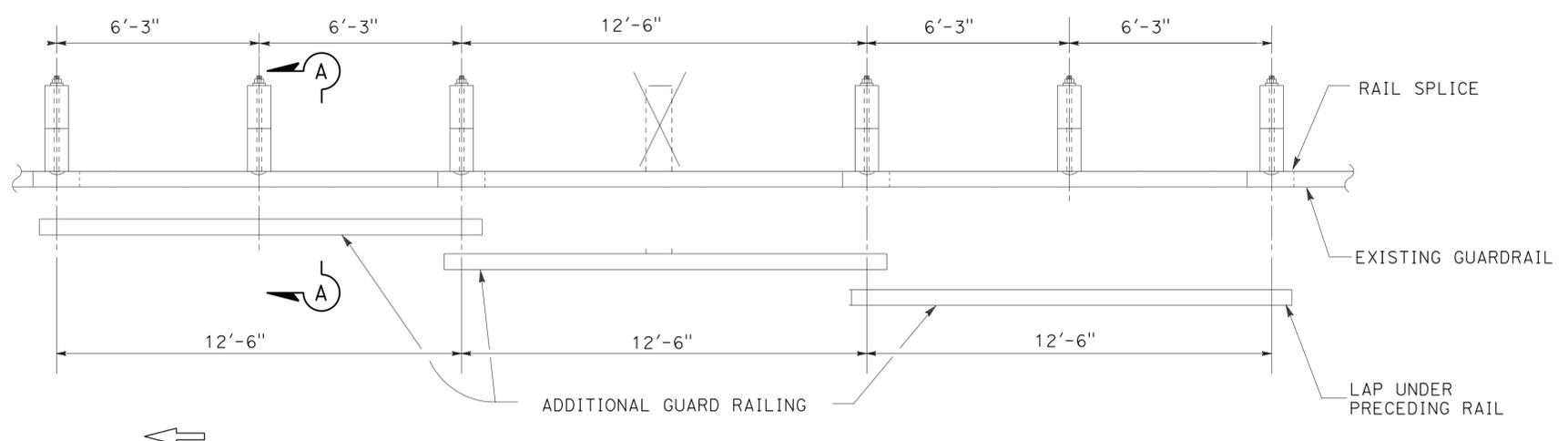
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5,89	Var	6	32
Dwight Winterlin			12-15-14	DATE	
REGISTERED CIVIL ENGINEER			DATE		
12-15-14			PLANS APPROVAL DATE		
No. C68438			Exp. 9-30-15		
CIVIL			STATE OF CALIFORNIA		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					



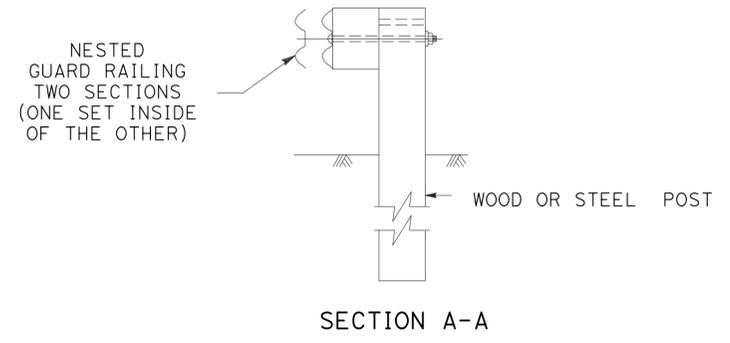
CASE 1
(ONE POST CONFLICT, MOVE THE POST and ADD ONE POST)
(NO NESTED RAIL REQUIRED)



CASE 2
(ONE POST OMITTED AT JUNCTION OF TWO ELEMENTS)
(NEST TWO LENGTHS OF RAIL REQUIRED)



CASE 3
(ONE POST OMITTED AT CENTER OF ELEMENT)
(NEST THREE LENGTHS OF RAIL REQUIRED)
(ONE ADDITIONAL POST MAY BE OMITTED SEE NOTE 3)



TYPICAL RAILING OVERLAP INSTALLATION AT POST

NOTES:

1. NEST ALL RAILS AT EXISTING RAIL LAPS
2. WHEN A POST IS REMOVED AND THE RAIL ELEMENTS ARE NESTED, THE NESTED ELEMENTS MUST BE SUPPORTED BY A Min OF 2 POSTS EACH SIDE OF THE MISSING POST OR ADD ADDITIONAL LENGTH OF NESTED ELEMENTS.
3. USING CASE 3, A SECOND ADJACENT POST CAN BE REMOVED IF THE NESTED RAIL ELEMENTS ARE SUPPORTED BY A Min OF 2 POSTS EACH SIDE OF THE MISSING POSTS. THE 2-POST OPTION USES CASE 3 BUT NOT SHOWN.
4. EXISTING UTILITY FACILITIES HAVE NOT BEEN INCLUDED ON THESE PLANS.

**CONSTRUCTION DETAILS
METAL BEAM GUARDRAILING
REMOVE POST OPTIONS**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 TRAFFIC
 DWIGHT WINTERLIN
 ROY CAHILL
 KRISTI WESTOBY
 REVISIONS: 12-01-14 DATE PLOTTED => 12-01-14 TIME PLOTTED => 12:45

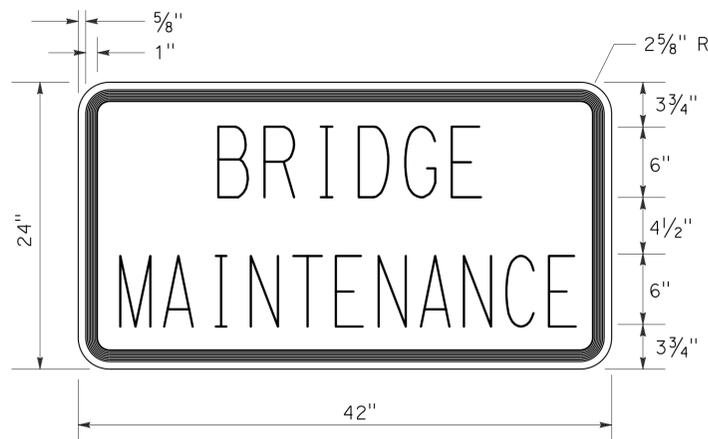
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5,89	Var	9	32
<i>Roy & Cahill</i> REGISTERED CIVIL ENGINEER			12-15-14 DATE		
12-15-14 PLANS APPROVAL DATE			<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>		

NOTES:

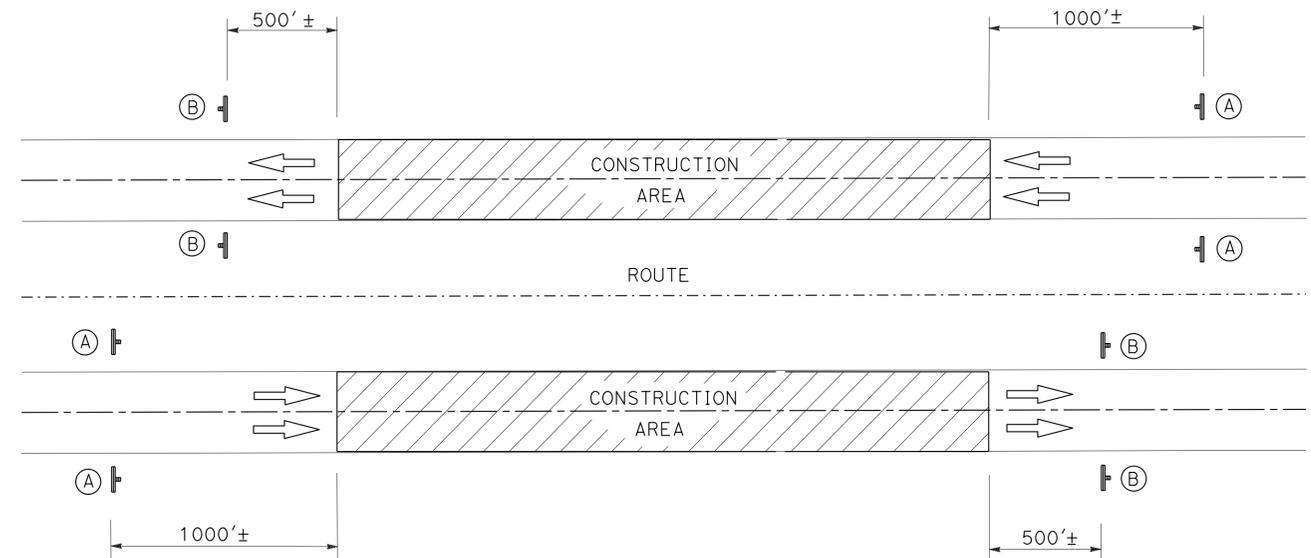
1. EXACT LOCATION OF ALL SIGNS TO BE DETERMINED BY THE ENGINEER.
2. CALIFORNIA CODES ARE DESIGNATED BY (CA), OTHERWISE FEDERAL CODES ARE SHOWN.
3. EXISTING UTILITY FACILITIES HAVE NOT BEEN INCLUDED ON THESE PLANS.
4. NO CONSTRUCTION AREA SIGNS ARE REQUIRED FOR LOCATIONS 3 AND 4.
5. ONLY PLACE CONSTRUCTION AREA SIGNS ON THAT SIDE OF THE FREEWAY WHERE CONSTRUCTION WILL TAKE PLACE.

**CONSTRUCTION AREA SIGNS
(STATIONARY MOUNTED)**

SIGN No.	TYPE	PANEL SIZE INCHES	SIGN MESSAGE	No. OF POSTS AND SIZE	No. OF SIGNS
Ⓐ	W20-1 C23B(CA)	48" x 48" 42" x 24"	ROAD WORK AHEAD BRIDGE MAINTENANCE	1 - 4" x 6"	16
Ⓑ	G20-2	36" x 18"	END ROAD WORK	1 - 4" x 4"	16



C23B(CA) SIGN PANEL DETAIL



CONSTRUCTION AREA SIGNS

- MOTT ROAD UC, Br No. 02-0180L
- MOTT ROAD UC, Br No. 02-0180R
- JULIEN CREEK, Br No. 02-0146R
- KILLGORE HILLS ROAD UC, Br No. 02-0153L
- YREKA CREEK, Br No. 02-0143
- NORTH YREKA SEPARATION, Br No. 02-0150R
- KLAMATH RIVER BRIDGE & SEPARATION, Br No. 02-0134L

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Caltrans
 FUNCTIONAL SUPERVISOR: LANCE BROWN
 ROY CAHILL
 MIKE CONNER
 REVISIONS: REVISED BY, DATE, REVISED
 CALCULATED/DESIGNED BY, CHECKED BY
 USERNAME => s115152
 DGN FILE => 24g7201a001.dgn
 BORDER LAST REVISED 7/2/2010
 RELATIVE BORDER SCALE 15 IN INCHES
 UNIT 0156
 PROJECT NUMBER & PHASE 02-1400-0052-1
 EA: 02-4G7201

LAST REVISION DATE PLOTTED => 15-DEC-2014
 12-15-14 TIME PLOTTED => 12:45

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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE
 FUNCTIONAL SUPERVISOR LANCE BROWN
 CALCULATED/DESIGNED BY CHECKED BY
 ROY CAHILL MIKE CONNER
 REVISED BY DATE REVISED
 x x x x

NOTES:

1. NEW TRAFFIC STRIPE PATTERN TO MATCH EXISTING TRAFFIC STRIPE PATTERN.
2. REMOVE THERMOPLASTIC TRAFFIC STRIPE QUANTITIES APPLY ONLY TO TRAFFIC STRIPE NOT REMOVED CONCURRENTLY WITH AC OR POLYESTER CONCRETE OVERLAY.
3. STRIPING QUANTITIES INCLUDE THE LENGTH OF EACH BRIDGE, STRUCTURE APPROACH SLABS, HMA CONFORM TAPERS AND APPROXIMATELY 50' BEYOND THE END OF EACH HMA CONFORM TAPER.
4. NO RECESSED PAVEMENT MARKERS SHALL BE PLACED ON BRIDGE DECKS OR STRUCTURE APPROACH SLABS.
5. PLACE NEW RUMBLE STRIP IN SAME LOCATION AS EXISTING RUMBLE STRIP WHICH WAS REMOVED DUE TO CONSTRUCTION OF NEW HMA CONFORMS.

EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS TO BE MAINTAINED

Loc	Co-Rte-PM	TYPE	LOCATION	NOTES
1-2	Sis-5-5.92	CCTV	MOTT ROAD	PROTECT IN PLACE
3	Sis-5-R8.47	CCTV	ROUTE 89/5 Conn Sep	PROTECT IN PLACE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5,89	Var	11	32

Roy & Cahill 12-15-14
 REGISTERED CIVIL ENGINEER DATE
 12-15-14
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 ROY S. CAHILL
 No. C48876
 Exp. 9-30-16
 CIVIL
 STATE OF CALIFORNIA

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PAVEMENT DELINEATION QUANTITIES

Loc	Co	Rte	PM	BRIDGE NUMBER	BRIDGE NAME	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)				PAVEMENT MARKER (RETROREFLECTIVE-RECESSED)			REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	REMOVE PAVEMENT MARKER
						DETAIL 12	DETAIL 22	DETAIL 25	DETAIL 27B	TYPE D	TYPE G	TYPE H			
						LF	LF	LF	LF	EA	EA	EA			
1	Sis	5	5.90	02-0180L	MOTT ROAD UC	545		273	273		4	4			
2	Sis	5	5.90	02-0180R	MOTT ROAD UC	538		269	269		4	4			8
3	Sis	89	R34.60	02-0127E	ROUTE 89/5 CONNECTOR SEPARATION		426		852	8			652	652	8
4	Sis	5	R19.85	02-0164R	ROUTE 5/265 SEPARATION										
5	Sis	5	R40.12	02-0146R	JULIEN CREEK	268		268	268		4	4			
6	Sis	5	R42.51	02-0153L	KILLGORE HILLS ROAD UC	252		252	252		4	4			
7	Sis	5	R46.79	02-0143	YREKA CREEK	574		574	574		8	8			
8	Sis	5	R48.23	02-0150R	NORTH YREKA SEPARATION	293		293	293		4	4			
9	Sis	5	R58.18	02-0134L	KLAMATH RIVER BRIDGE & SEPARATION	1022		1022	1022		4	4			
SUBTOTAL						3492	426	2951	3803	8	32	32			
TOTAL						10,672				72			652	652	16

ROADWAY QUANTITIES SUMMARY

Loc	Co	Rte	PM	BRIDGE NUMBER	BRIDGE NAME	PAVEMENT QUANTITIES			SHOULDER BACKING	ROADWAY EXCAVATION	SHOULDER RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS)
						COLD PLANE AC PAVEMENT	HMA (TYPE A)	TACK COAT			
						SQYD	TON	TON			
1	Sis	5	5.90	02-0180L	MOTT ROAD UC	575	101	0.4	4.7	4.6	2.0
2	Sis	5	5.90	02-0180R	MOTT ROAD UC				4.7	4.6	
3	Sis	89	R34.60	02-0127E	ROUTE 89/5 CONNECTOR SEPARATION						
4	Sis	5	R19.85	02-0164R	ROUTE 5/265 SEPARATION						
5	Sis	5	R40.12	02-0146R	JULIEN CREEK	435	76	0.3	4.7	4.6	2.0
6	Sis	5	R42.51	02-0153L	KILLGORE HILLS ROAD UC	435	76	0.3	4.7	4.6	2.0
7	Sis	5	R46.79	02-0143	YREKA CREEK	867	152	0.8	9.5	9.3	4.0
8	Sis	5	R48.23	02-0150R	NORTH YREKA SEPARATION	435	76	0.3	4.7	4.6	2.0
9	Sis	5	R58.18	02-0134L	KLAMATH RIVER BRIDGE & SEPARATION	435	76	0.3	4.7	4.6	2.0
TOTAL						3182	557	2.4	37.7	36.9	14.0

SUMMARY OF QUANTITIES Q-1

LAST REVISION DATE PLOTTED => 15-DEC-2014
 12-15-14 TIME PLOTTED => 12:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5,89	Var	12	32

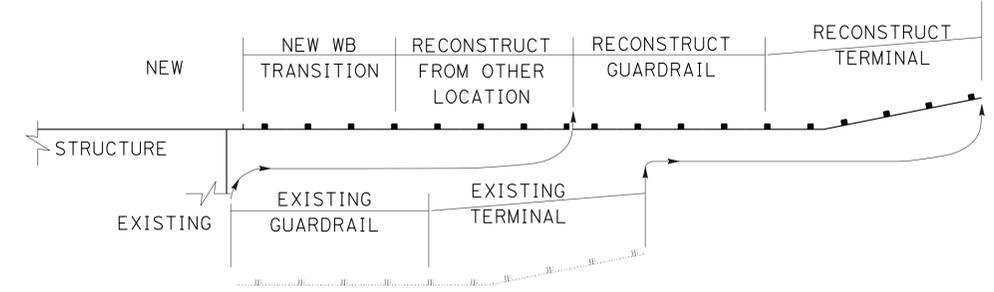
D Dwight Winterlin 12-15-14
 REGISTERED CIVIL ENGINEER DATE
 12-15-14
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 DWIGHT WINTERLIN
 No. C68438
 Exp. 9-30-15
 CIVIL
 STATE OF CALIFORNIA

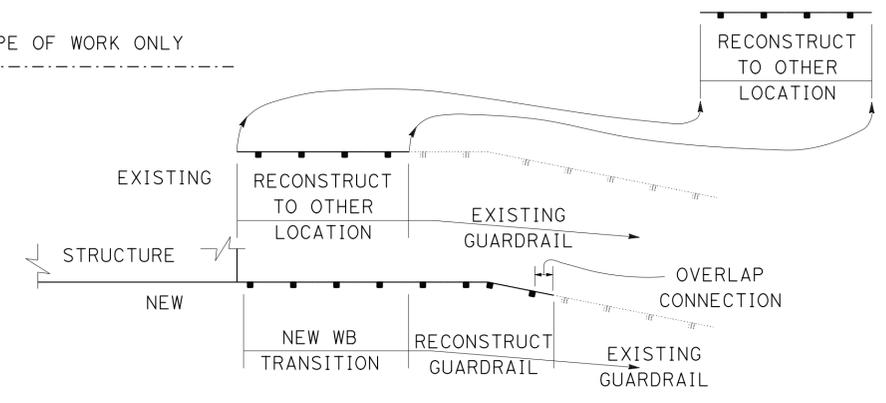
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. NESTED GUARDRAIL OVERLAP TO BE WITHIN RECONSTRUCT GUARDRAIL AREA.
2. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
3. LENGTH OF RECONSTRUCT GUARDRAIL MAY REQUIRE USING ELEMENTS FROM RECONSTRUCT GUARDRAIL AT OTHER LOCATIONS.
4. (N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.



DRAWING FOR TYPE OF WORK ONLY



GUARDRAIL WORK DESCRIPTION

GUARDRAIL QUANTITIES

Loc	Co	Rte	PM	BRIDGE No.	BRIDGE NAME	BRIDGE QUADRANT	REMOVE GUARDRAIL	RECONSTRUCT GUARDRAIL (WOOD POST)	RECONSTRUCT TERMINAL SYSTEM		GUARD RAILING TRANSITION (TYPE WB)	OBJECT MARKER (TYPE-L1)	TREATED WOOD WASTE	(N) RECONSTRUCT TO OTHER LOCATION	(N) RECONSTRUCT FROM OTHER LOCATION		
							LF	LF	EA	TYPE (N)	EA	EA	LB	LF	LF		
1	Sis	5	5.90	02-0180L	MOTT Rd UC	BB	L+						3166				
							R+										
						EB	L+		50	1	SRT, 9P	1		1			
							R+		25			1		1		25	
2	Sis	5	5.90	02-0180R	MOTT Rd UC	BB	L+										
							R+		25	1	SRT, 9P	1		1		25	
						EB	L+		50								
							R+										
9	Sis	5	R58.18	02-0134L	KLAMATH RIVER Br AND Sep	BB	L+										
							R+										
						EB	L+		37.5	1	SRT, 9P	1	1			12.5	
							R+		12.5			1					
TOTAL							12.5	237.5	3		6	5	3166		12.5		

SUMMARY OF QUANTITIES Q-2

P:\proj\1\02\46720\plans\pse\24g720pa002.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 TRAFFIC
 KRISTI WESTOBY
 DWIGHT WINTERLIN
 ROY CAHILL
 REVISOR BY DATE
 REVISOR BY DATE
 CALCULATED/DESIGNED BY
 CHECKED BY
 FUNCTIONAL SUPERVISOR
 KRISTI WESTOBY

LAST REVISION DATE PLOTTED => 15-DEC-2014
 12-01-14 TIME PLOTTED => 12:45

	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
Tel	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
02	Sis	5,89	Var	13	32

Grace M. Tsushima
 REGISTERED CIVIL ENGINEER

REGISTERED PROFESSIONAL ENGINEER

Grace M. Tsushima

No. C49814

Exp. 9-30-14

CIVIL

STATE OF CALIFORNIA

July 19, 2013
 PLANS APPROVAL DATE

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TO ACCOMPANY PLANS DATED 12-15-14

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5,89	Var	14	32

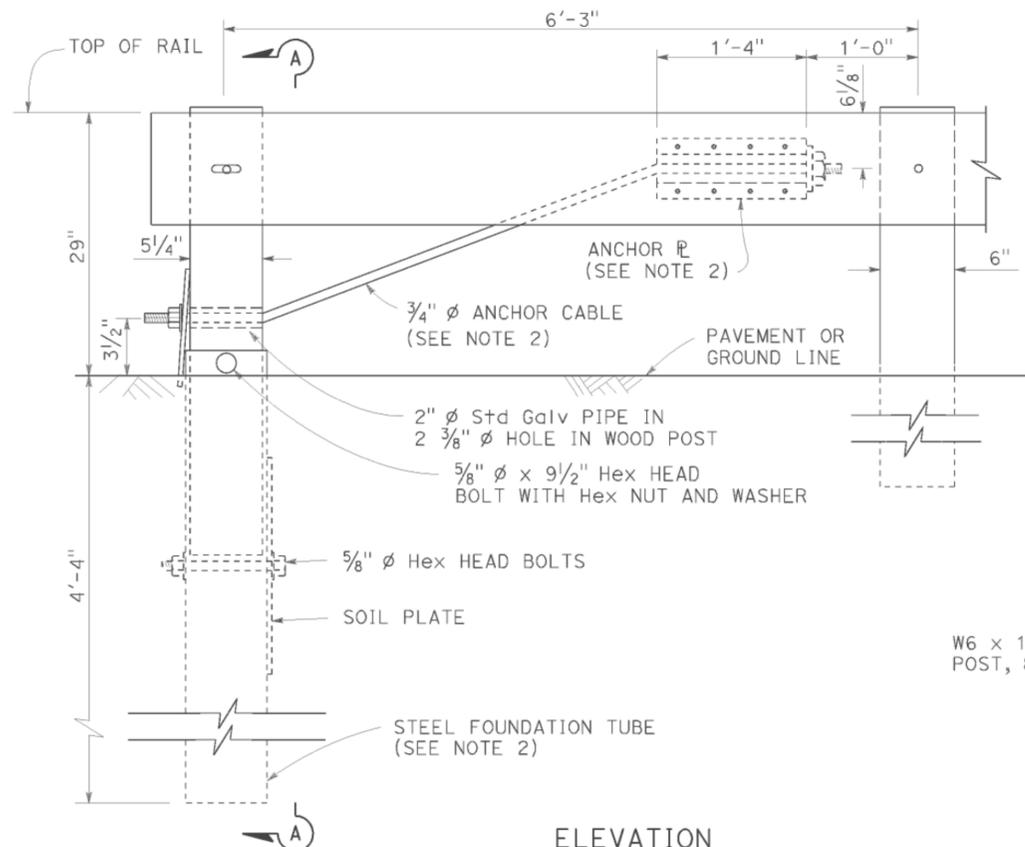
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

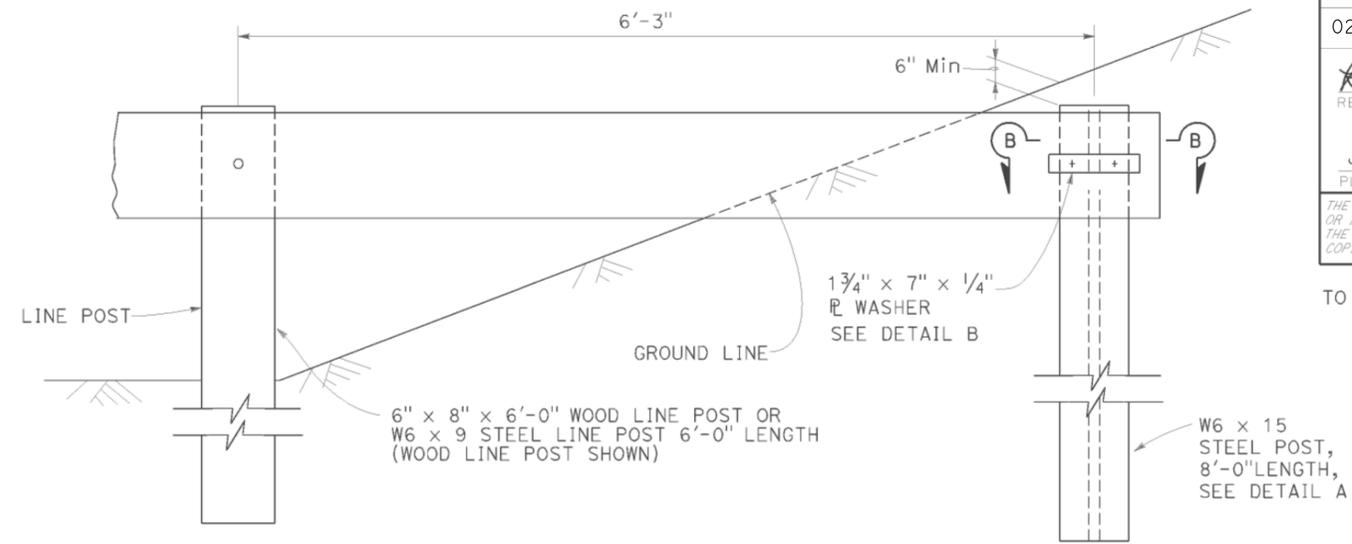
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TO ACCOMPANY PLANS DATED 12-15-14

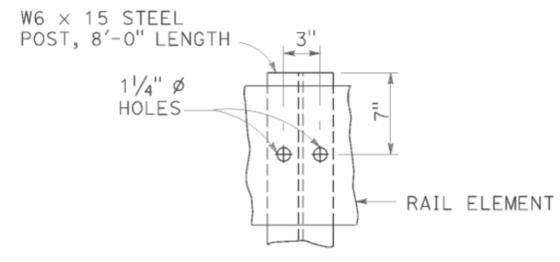
REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA



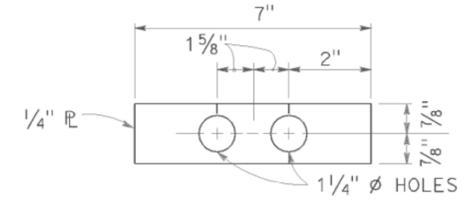
**ELEVATION
END ANCHOR
ASSEMBLY (TYPE SFT)**



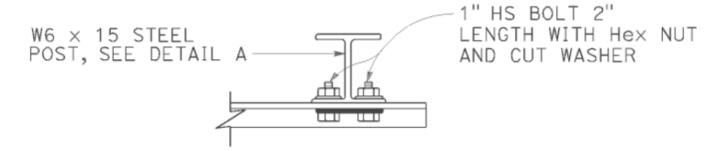
BURIED POST END ANCHOR



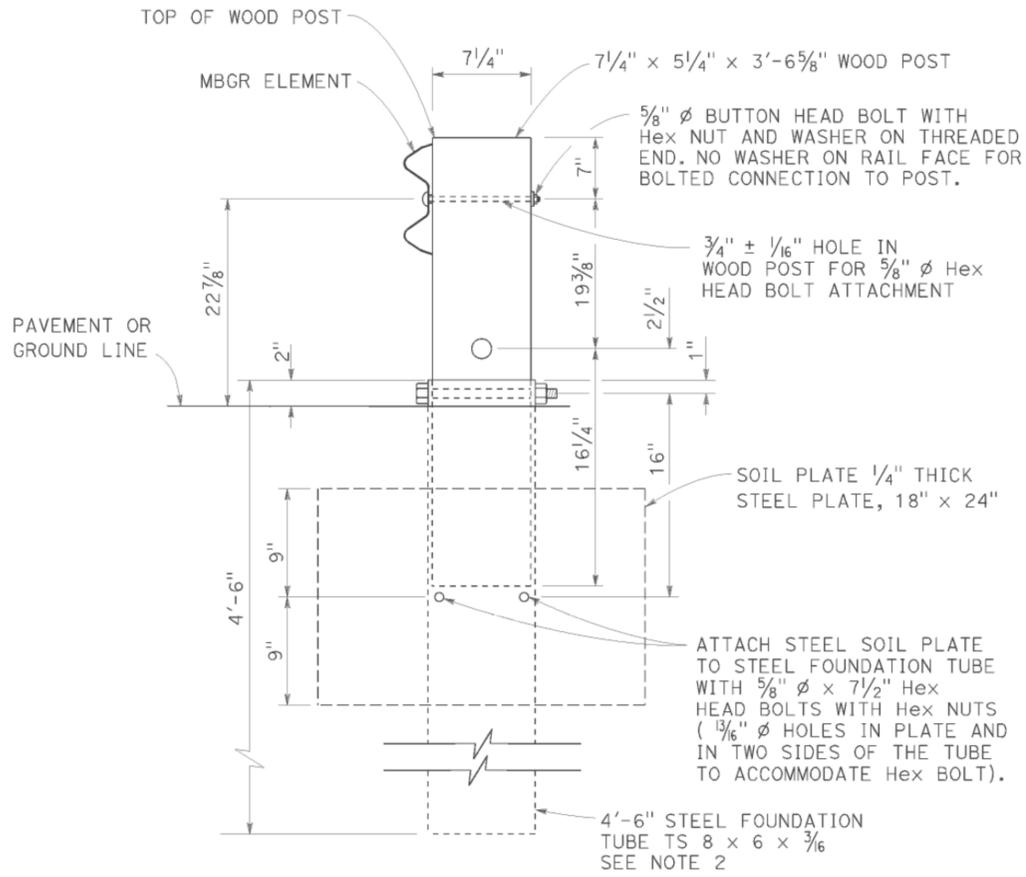
DETAIL A



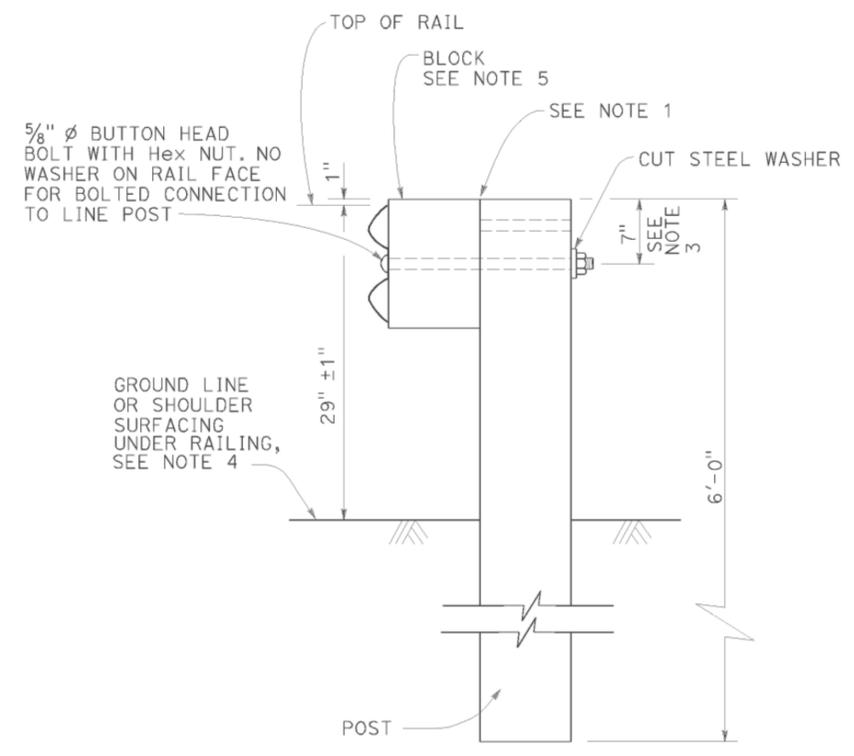
DETAIL B



SECTION B-B



SECTION A-A



**TYPICAL LINE
POST INSTALLATION**

NOTES:

1. 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.
2. 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.
3. 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.
4. Install posts in soil.
5. See Revised Standard Plans RSP A77N1 and RSP A77N2 for details.
6. 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

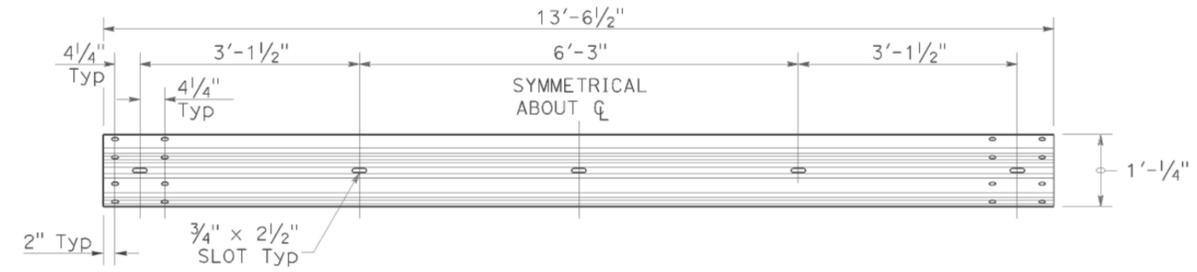
**METAL BEAM GUARD RAILING
RECONSTRUCT INSTALLATION**

NO SCALE

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

REVISED STANDARD PLAN RSP A77L3

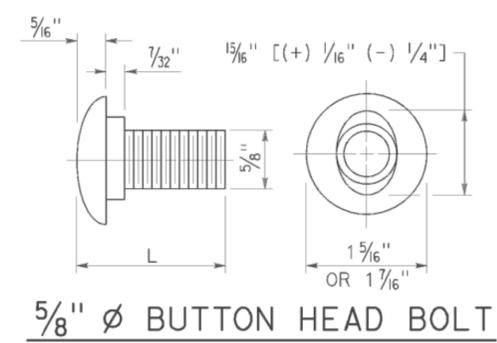
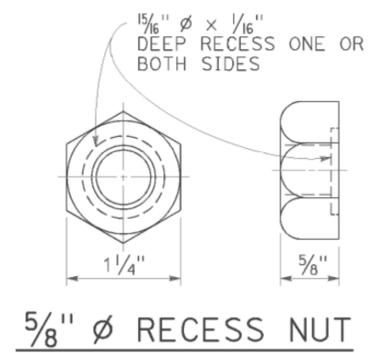
TO ACCOMPANY PLANS DATED 12-15-14



TYPICAL RAIL ELEMENT

NOTE:

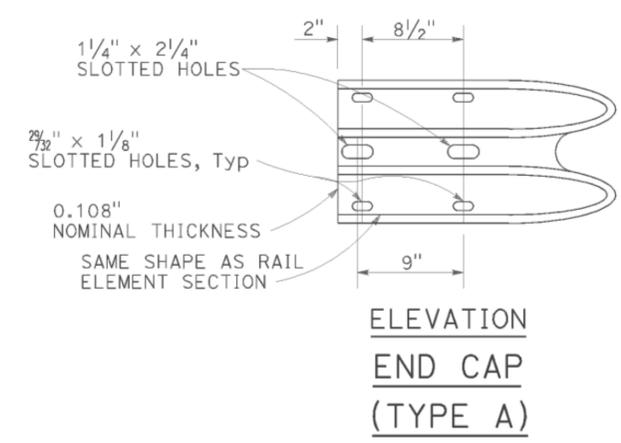
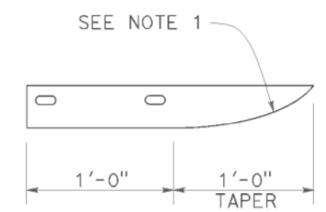
1. Slotted holes for splice bolts to overlap ends of rail element.



BUTTON HEAD BOLT

L	THREAD LENGTH
1 3/8"	FULL THREAD LENGTH
2"	FULL THREAD LENGTH
10"	4" Min THREAD LENGTH
18"	4" Min THREAD LENGTH
20"	4" Min THREAD LENGTH
22"	4" Min THREAD LENGTH
26"	4" Min THREAD LENGTH
36"	4" Min THREAD LENGTH
** 2 3/4"	2" Min THREAD LENGTH
** 19"	4" Min THREAD LENGTH

** For nested rail applications.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

MIDWEST GUARDRAIL SYSTEM
STANDARD HARDWARE

NO SCALE

RSP A77M1 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77M1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5,89	Var	16	32

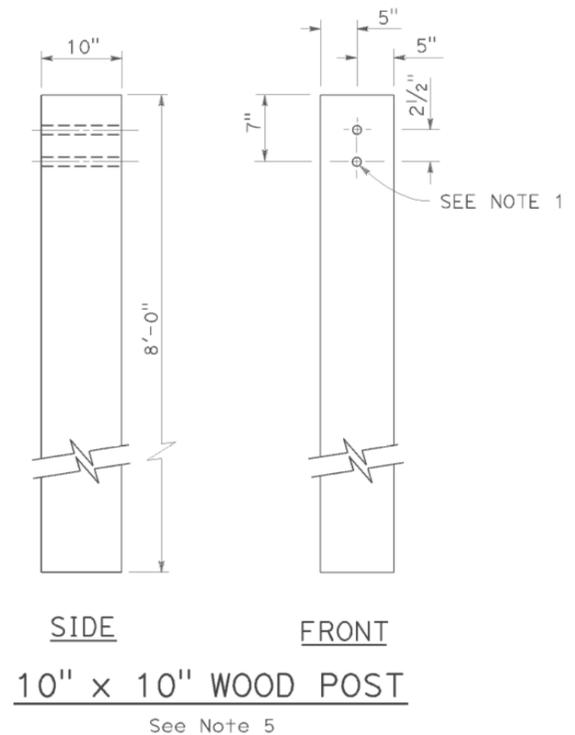
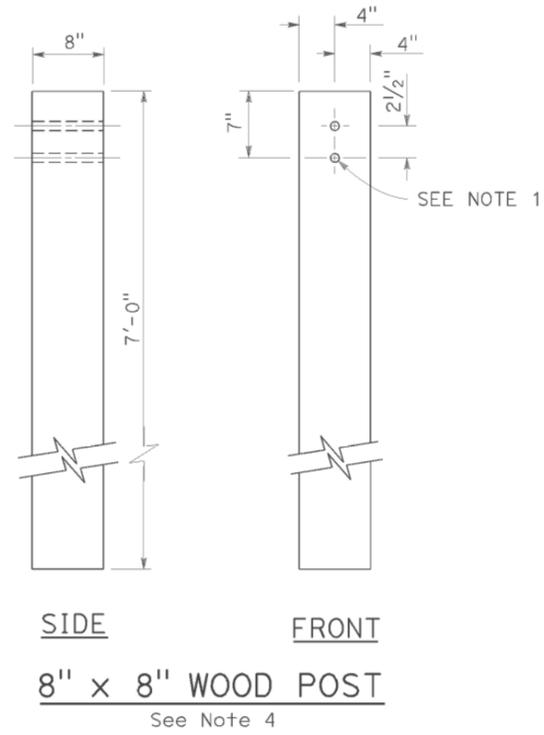
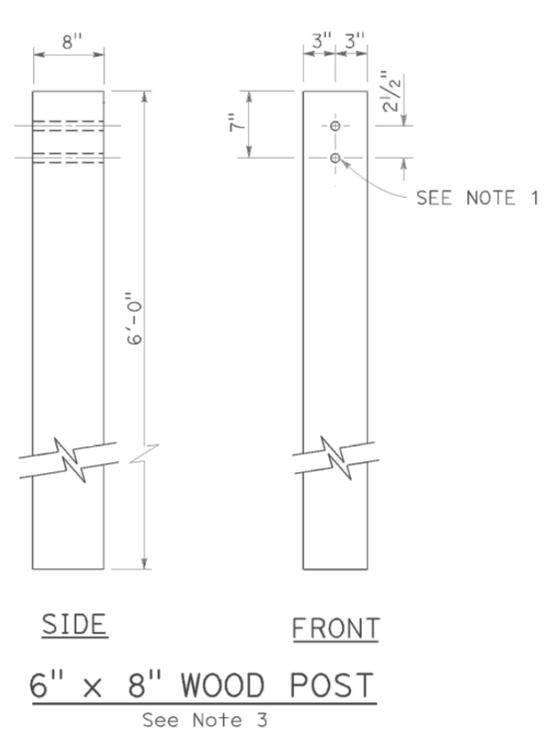
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

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.

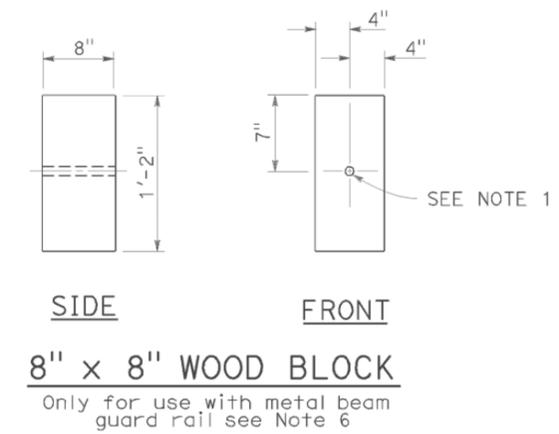
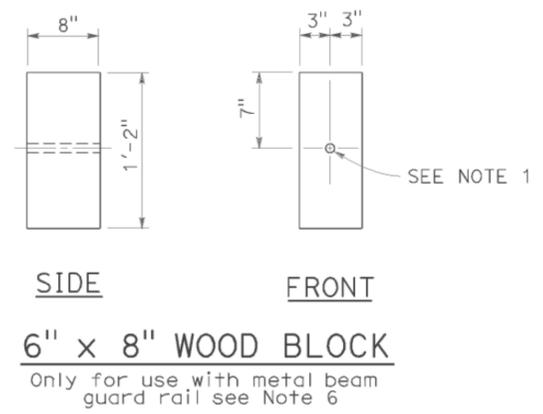
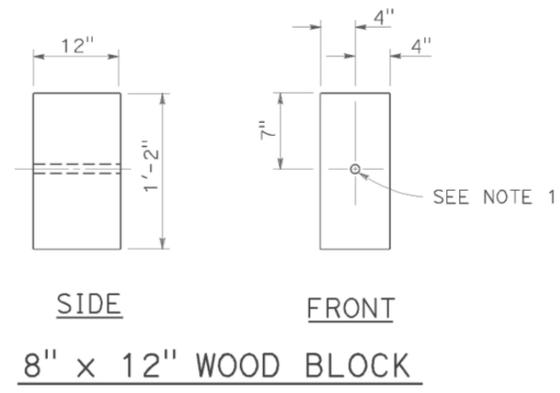
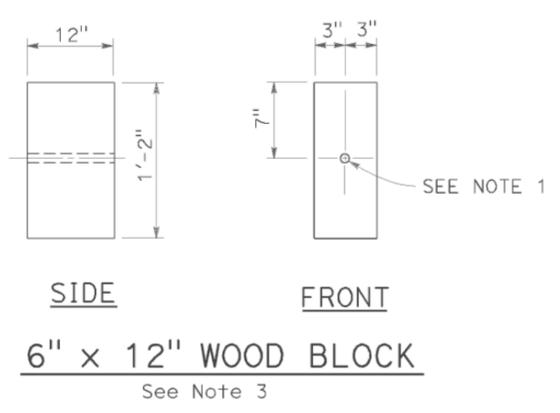
REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 12-15-14



NOTES:

1. All holes in wood posts and blocks shall be $\frac{3}{4}$ " Dia \pm $\frac{1}{16}$ ".
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
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**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

DATE PLOTTED => 15-DEC-2014
TIME PLOTTED => 12:45

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5,89	Var	17	32

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

November 15, 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.

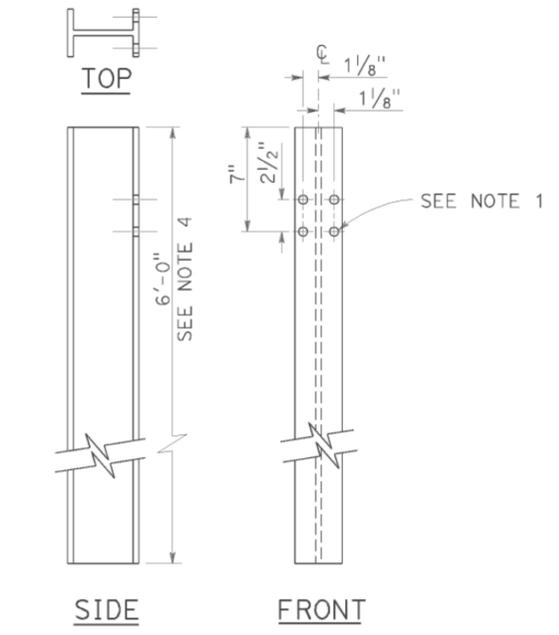
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 12-15-14

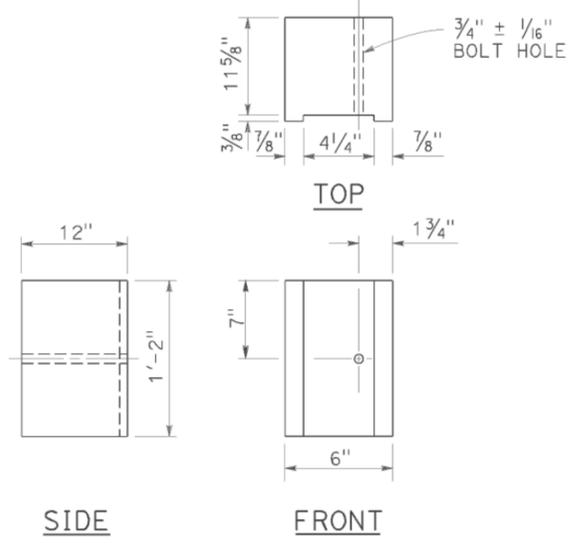
NOTES:

1. All holes in steel post shall be $\frac{3}{8}$ " Dia maximum.
2. Dimensions shown for wood block are nominal.
3. Notched face of block faces steel post.
4. 6'-0" length posts to be used for typical roadway installation. See Revised Standard Plan RSP A77N3.
5. See Revised Standard Plan RSP A77L3 for use of 6" x 8" and 8" x 8" notched wood blocks.
6. This post and 8" x 12" block combination to be used for line post sections of MGS on narrow roadways and where strengthened line post sections of MGS are warranted to shield fixed objects.

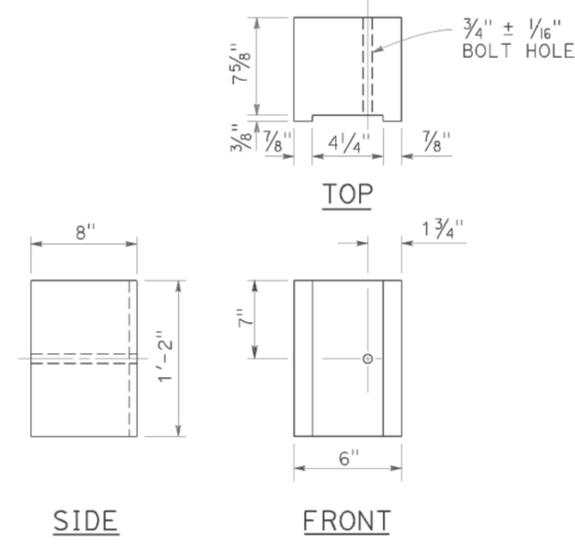
2010 REVISED STANDARD PLAN RSP A77N2



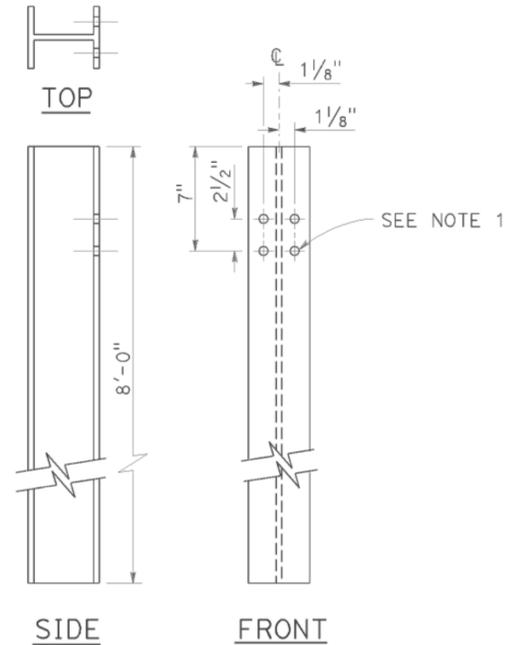
W6 x 9 OR W6 x 8.5
STEEL POST
See Note 4



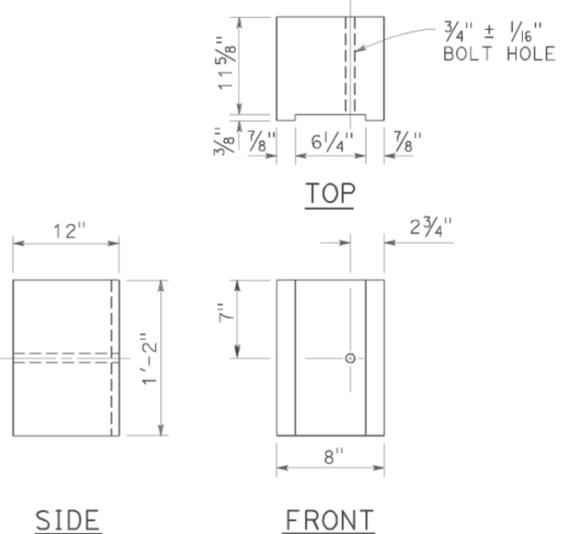
6" x 12"
NOTCHED WOOD BLOCK
See Notes 2 and 3



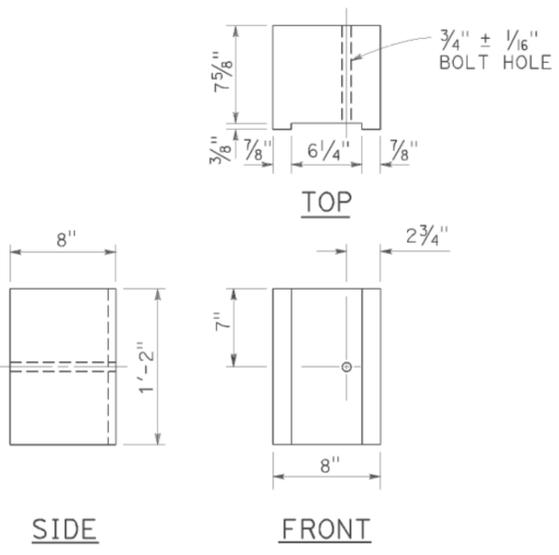
6" x 8"
NOTCHED WOOD BLOCK
Only for use with metal beam guard railing. See Note 5



W6 x 15
STEEL POST
See Note 6



8" x 12"
NOTCHED WOOD BLOCK
See Notes 2 and 3



8" x 8"
NOTCHED WOOD BLOCK
Only for use with metal beam guard railing. See Note 5

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

MIDWEST GUARDRAIL SYSTEM
STEEL POST AND
NOTCHED WOOD BLOCK DETAILS

NO SCALE

RSP A77N2 DATED NOVEMBER 15, 2013 SUPERSEDES RSP A77N2
DATED JULY 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77N2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5,89	Var	18	32

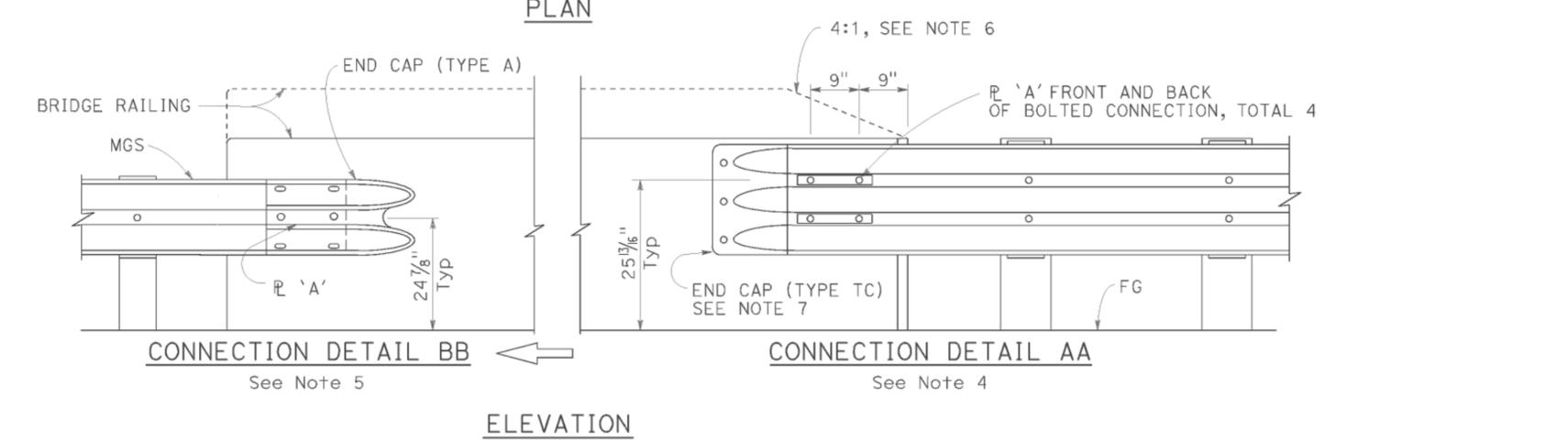
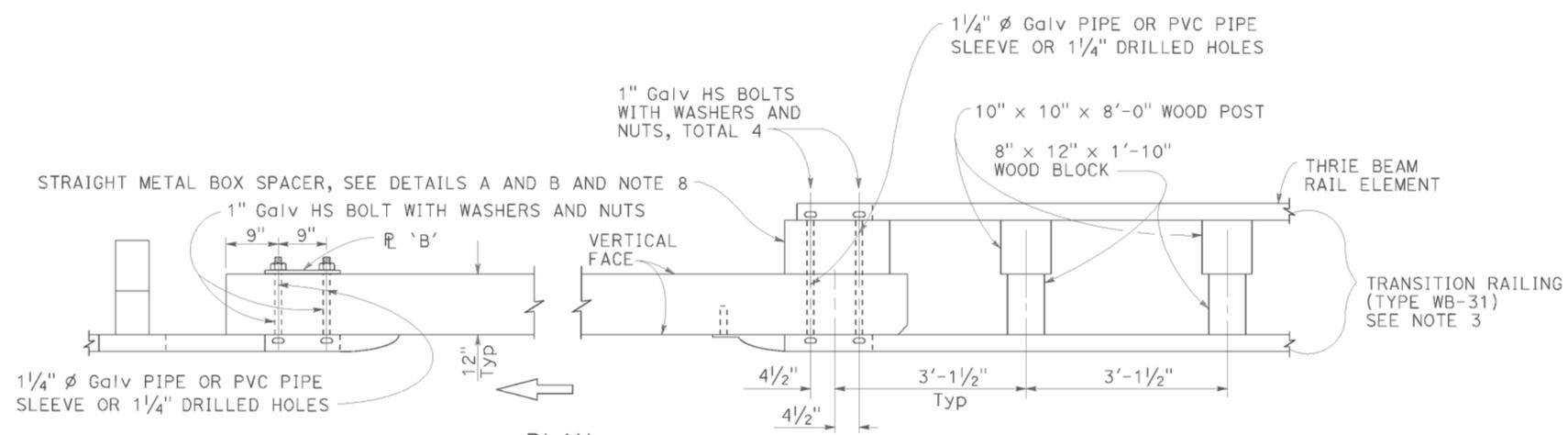
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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

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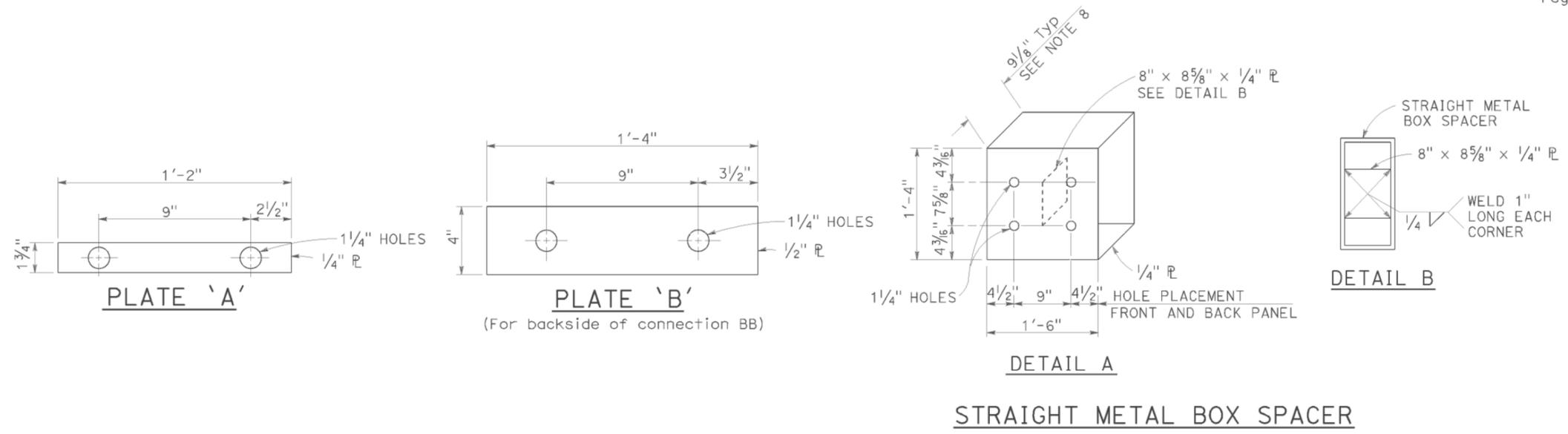
TO ACCOMPANY PLANS DATED 12-15-14



MIDWEST GUARDRAIL SYSTEM CONNECTION TO BRIDGE RAILING WITHOUT SIDEWALK

NOTES:

1. See Revised Standard Plan RSP A77U2 for additional connection details to bridges without sidewalks.
2. Additional details of posts, blocks and hardware are shown on Revised Standard Plans RSP A77M1, RSP A77N1 and RSP A77N2.
3. For additional details of Transition Railing (Type WB-31), see Revised Standard Plan RSP A77U4. Transition Railing (Type WB-31) transitions the 12 gauge MGS railing section to a heavier gage nested thrie beam railing section which is connected to the concrete bridge railing.
4. For typical use of Connection Detail AA, see Layout Types 12A and 12B on Revised Standard Plan RSP A77Q1, Layout Types 12C and 12D on Revised Standard Plan RSP A77Q2, and Layout Type 12E on Revised Standard Plan RSP A77Q3.
5. For typical use of Connection Detail BB, see Layout Type 12D (structure departure railing connection) on Revised Standard Plan RSP A77Q2 and Layout Type 12DD on Revised Standard Plan RSP A77Q5.
6. Where the height of the bridge railing exceeds the height of the thrie beam railing by more than 1" at Connection Detail AA, taper the top of the end of the bridge railing at 4:1 to match the top elevation of the thrie beam rail.
7. For details of End Cap (Type TC), see Revised Standard Plan RSP A77U4.
8. See Revised Standard Plan RSP A77U4 for additional details regarding depth dimension for straight metal box spacer.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
MIDWEST GUARDRAIL SYSTEM CONNECTIONS TO BRIDGE RAILINGS WITHOUT SIDEWALKS
DETAILS No. 1
NO SCALE

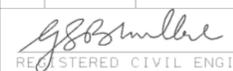
RSP A77U1 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77U1

2010 REVISED STANDARD PLAN RSP A77U1

DATE PLOTTED => 15-OCT-2014
TIME PLOTTED => 12:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5,89	Var	19	32


 REGISTERED CIVIL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE



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TO ACCOMPANY PLANS DATED 12-15-14

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
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

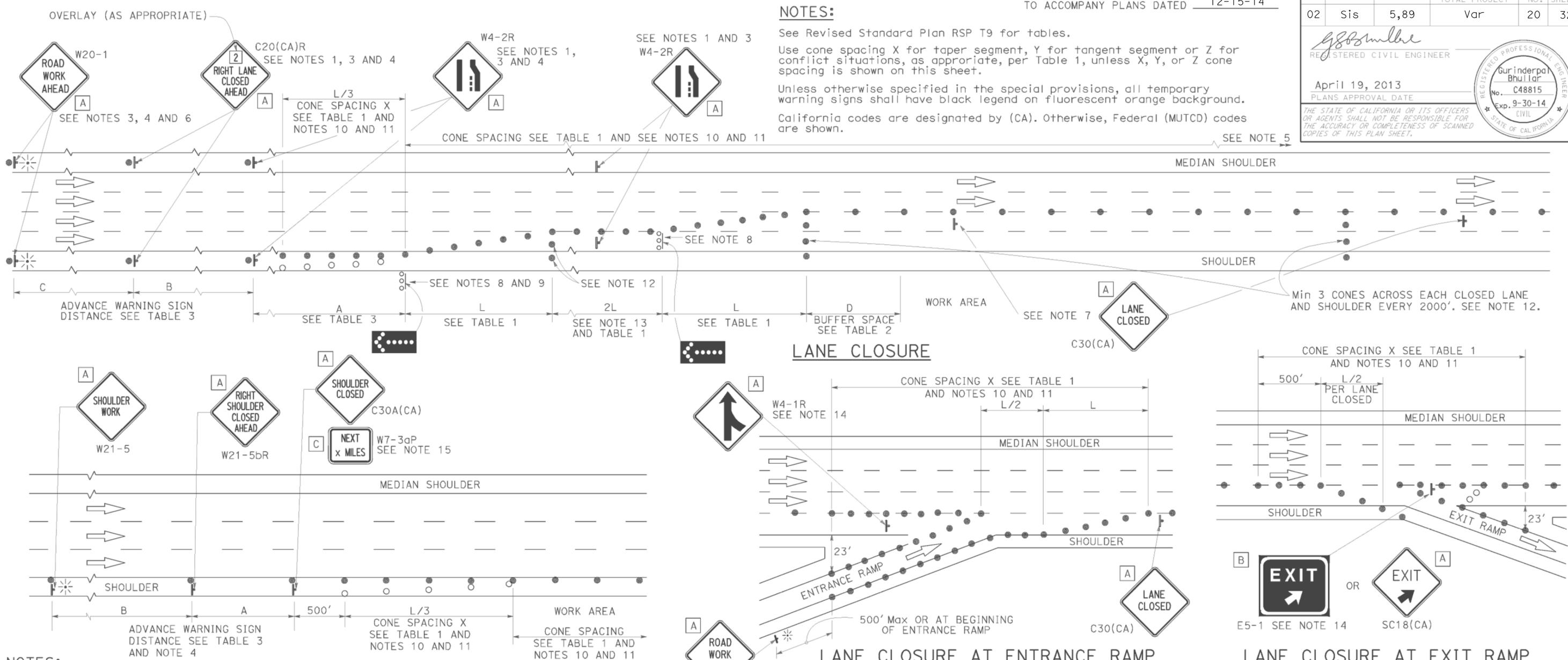
RSP T9 DATED JULY 19, 2013 SUPERSEDES RSP T9 DATED APRIL 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5,89	Var	20	32

REGISTERED CIVIL ENGINEER
 April 19, 2013
 PLANS APPROVAL DATE

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- 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.

- SHOULDER CLOSURE**
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

2010 REVISED STANDARD PLAN RSP T10

NOTES:

See Revised Standard Plan RSP T9 for tables.

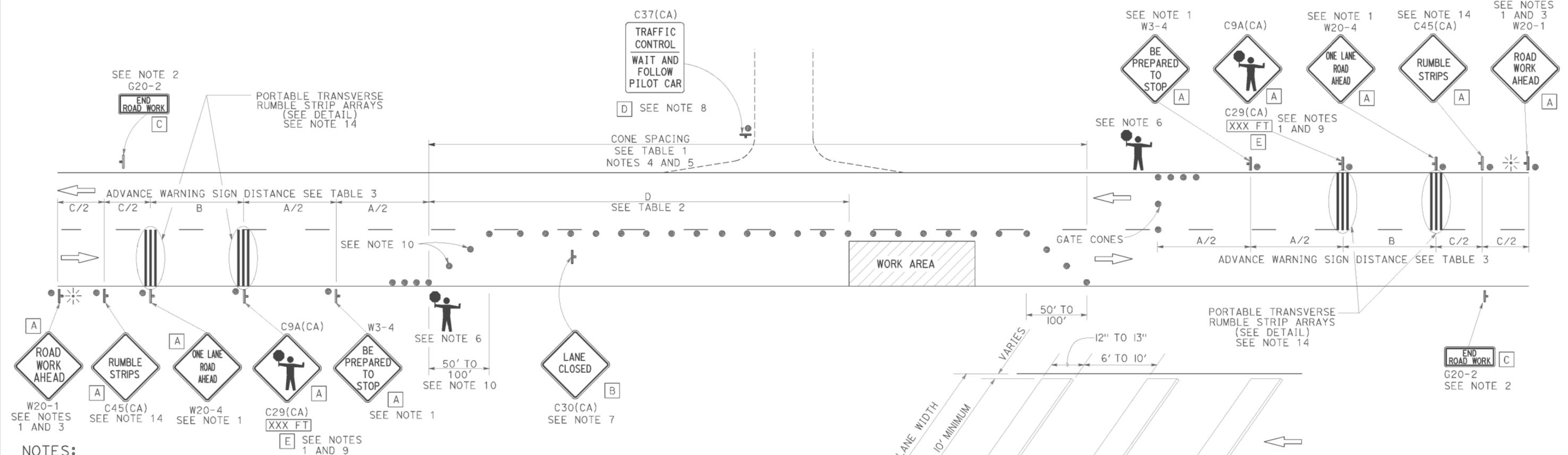
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

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.

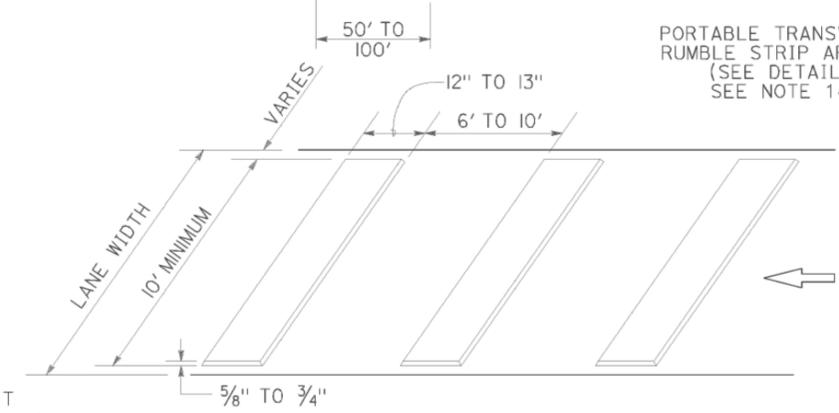
TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL

TO ACCOMPANY PLANS DATED 12-15-14



- 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



SIGN PANEL SIZE (Min)

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

LEGEND

- TRAFFIC CONE
- † TEMPORARY TRAFFIC CONTROL SIGN
- ☼ PORTABLE FLASHING BEACON
- 🚧 FLAGGER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
FOR LANE CLOSURE ON
TWO LANE CONVENTIONAL
HIGHWAYS**

NO SCALE

RSP T13 DATED OCTOBER 17, 2014 SUPERSEDES 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.

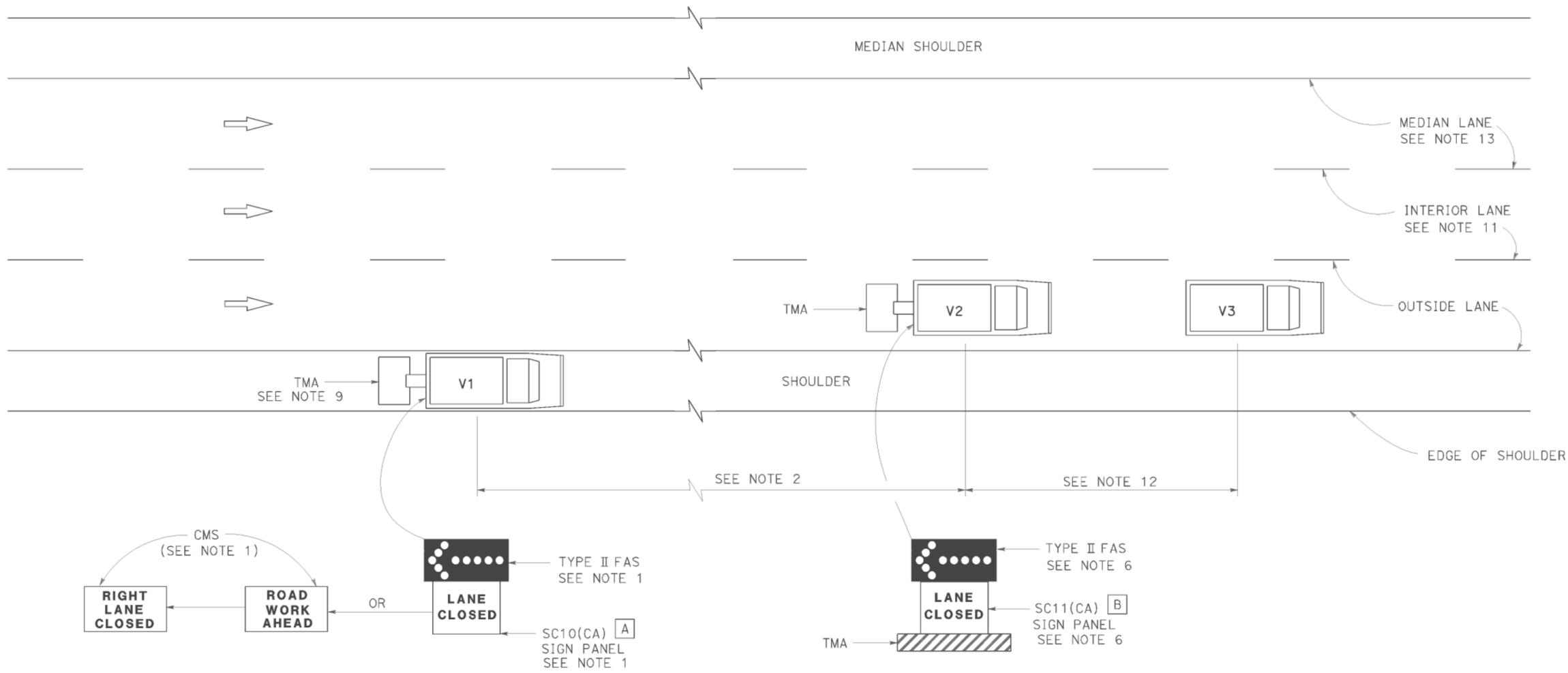
REVISED STANDARD PLAN RSP T13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5,89	Var	22	32

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.



TO ACCOMPANY PLANS DATED 12-15-14



SIGN PANEL SIZE (Min)

- A 66" x 36"
- B 54" x 42"

LEGEND

- V1 SIGN VEHICLE
- V2 SHADOW VEHICLE
- V3 WORK/APPLICATION VEHICLE
- FLASHING ARROW SIGN (FAS)
- CMS CHANGEABLE MESSAGE SIGN
- TMA TRUCK-MOUNTED ATTENUATOR

MOVING LANE CLOSURE ON MEDIAN LANE OR OUTSIDE LANE OF MULTILANE HIGHWAYS

NOTES:

1. Either a changeable message sign or a SC10(CA) sign panel and a Type II flashing arrow sign shall be mounted on the rear of sign vehicle V1. The changeable message sign shall be sequenced to show the "ROAD WORK AHEAD" message first, followed by the "RIGHT LANE CLOSED" message. For median lane closure, the flashing arrow symbol shall be reversed with the arrowhead on the right and the changeable message sign shall show "LEFT LANE CLOSED".
2. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue. Sign vehicle V1 shall be positioned where highly visible when shoulders are not available.
3. A minimum sight distance of 1500' should be provided in advance of sign vehicle V1.
4. Sign vehicle V1 should remain at the beginning of horizontal or vertical curves until the other vehicles (V2 and V3) are far enough beyond the curve to resume the minimum sight distance of 1500'.
5. Vehicle-mounted sign panels shall have Type III or above retroreflective sheeting, black on white, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
6. Shadow vehicle V2 shall be equipped with a truck-mounted attenuator. The sign panel shown and a Type II flashing arrow sign shall be mounted on the rear of shadow vehicle V2. For median lane closure the flashing arrow sign symbol shall be displayed with the arrowhead on the right.
7. All vehicles used for lane closures shall be equipped with two-way radios, and the vehicle operators shall maintain communication during the work or application operation.
8. All vehicles shall be equipped with flashing or rotating amber lights.
9. If sign vehicle V1 encroaches into the traffic lane due to insufficient shoulder width, sign vehicle V1 shall be equipped with a truck-mounted attenuator. Sign vehicle V1 shall stay as close to the edge of shoulder as practicable.
10. Where workers would be on foot in the work area, a stationary type lane closure (Revised Standard Plan T10, T11, etc., as applicable) shall be used instead of this plan.
11. For moving lane closure on interior lane of multilane highways, use Revised Standard Plan T16.
12. The spacing between work vehicle(s) and the shadow vehicles, and between each shadow vehicle should be minimized to deter road users from driving in between.
13. When the work/application vehicle V3 occupies the median lane, sign vehicle V1 should drive in the median shoulder and indicate left lane closed ahead.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURE ON MULTILANE HIGHWAYS
NO SCALE

RSP T15 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T15 DATED MAY 20, 2011 - PAGE 243 OF THE STANDARD PLANS BOOK DATED 2010.

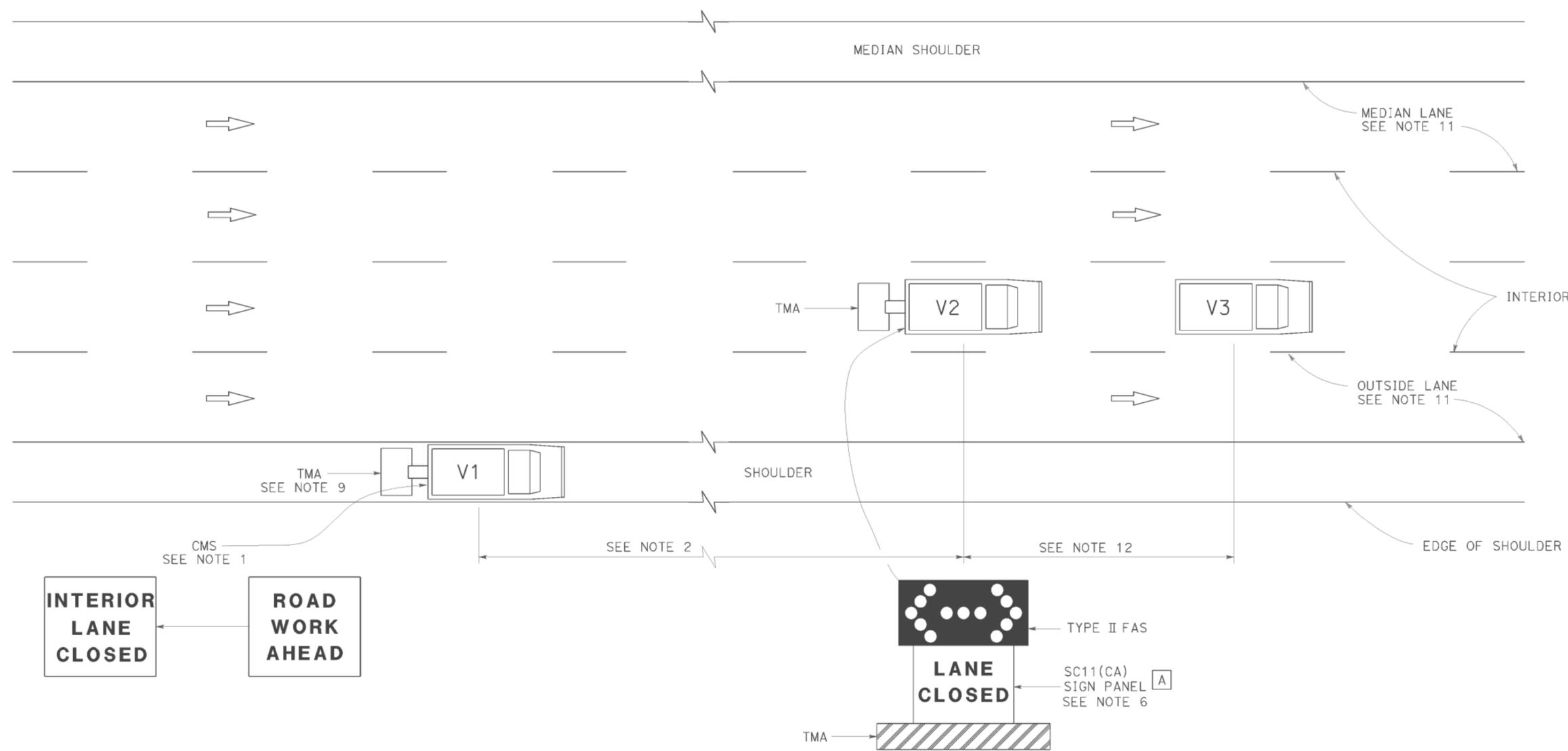
REVISED STANDARD PLAN RSP T15

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5,89	Var	23	32

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.



TO ACCOMPANY PLANS DATED 12-15-14



SIGN PANEL SIZE (Min)

A 54" x 42"

LEGEND

- V1 SIGN VEHICLE
- V2 SHADOW VEHICLE
- V3 WORK/APPLICATION VEHICLE
- FLASHING ARROW SIGN (FAS) IN FLASHING DOUBLE ARROW MODE
- CMS CHANGEABLE MESSAGE SIGN
- TMA TRUCK-MOUNTED ATTENUATOR

MOVING LANE CLOSURE ON INTERIOR LANE OF MULTILANE HIGHWAYS

NOTES:

1. A changeable message sign shall be mounted on the rear of sign vehicle V1. The changeable message sign shall be sequenced to show the "ROAD WORK AHEAD" message first, followed by the "INTERIOR LANE CLOSED" message. The message "CENTER LANE CLOSED" may be used in place of the "INTERIOR LANE CLOSED" message.
2. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue. Sign vehicle V1 shall be positioned where highly visible when shoulders are not available.
3. A minimum sight distance of 1500' should be provided in advance of sign vehicle V1.
4. Sign vehicle V1 should remain at the beginning of horizontal or vertical curves until the other vehicles (V2 and V3) are far enough beyond the curve to resume the minimum sight distance of 1500'.
5. Vehicle-mounted sign panels shall have Type III or above retroreflective sheeting, black on white, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
6. Shadow vehicle V2 shall be equipped with a truck-mounted attenuator. The sign panel shown and a Type II flashing arrow sign shall be mounted on the rear of shadow vehicle V2.
7. All vehicles used for lane closures shall be equipped with two-way radios, and the vehicle operators shall maintain communication during the work or application operation.
8. All vehicles shall be equipped with flashing or rotating amber lights.
9. If sign vehicle V1 encroaches into the traffic lane due to insufficient shoulder width, sign vehicle V1 shall be equipped with a truck-mounted attenuator. Sign vehicle V1 shall stay as close to the edge of shoulder as practicable.
10. Where workers would be on foot in the work area, a stationary type lane closure (Revised Standard Plan T10, T11 etc., as applicable) shall be used instead of this plan.
11. For moving lane closure on median lane or outside lane of multilane highways, use Revised Standard Plan T15.
12. The spacing between work vehicle(s) and the shadow vehicles, and between each shadow vehicle should be minimized to deter road users from driving in between.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 FOR MOVING LANE CLOSURE
 ON MULTILANE HIGHWAYS**
 NO SCALE

RSP T16 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T16 DATED MAY 20, 2011 - PAGE 244 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T16

2010 REVISED STANDARD PLAN RSP T16

DATE PLOTTED => 15-DEC-2014
 TIME PLOTTED => 12:46

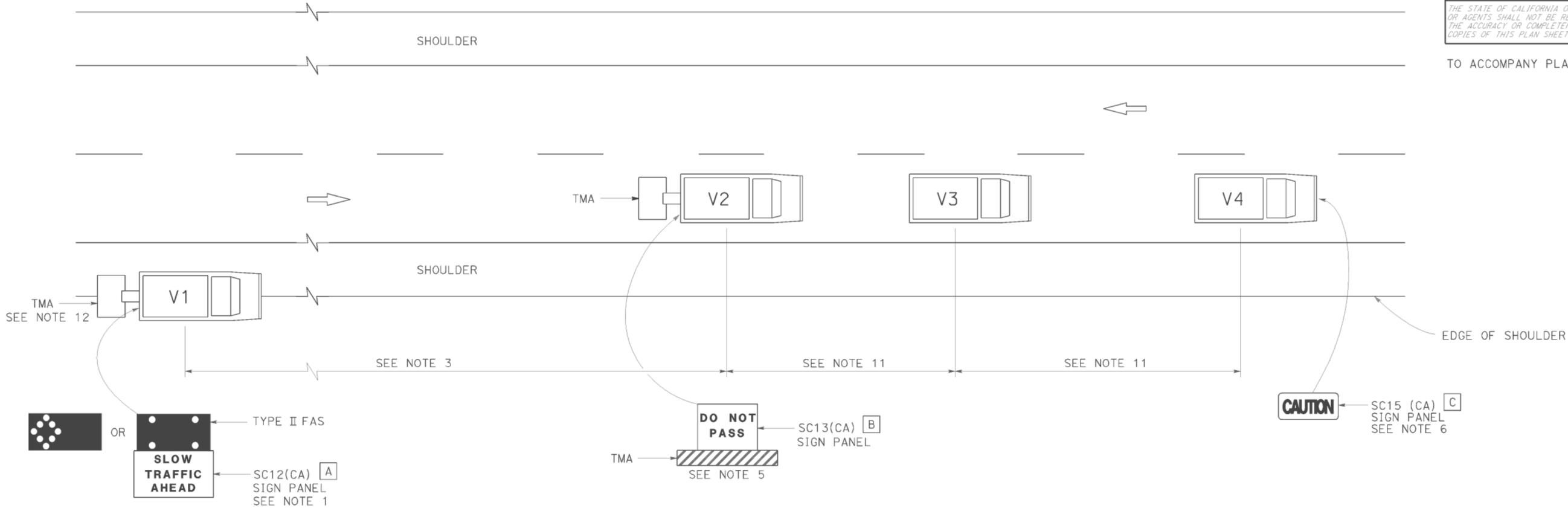
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5,89	Var	24	32

Gurinderpal Bhullar
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.

TO ACCOMPANY PLANS DATED 12-15-14



NOTES:

1. Either a changeable message sign or a SC12(CA) "SLOW TRAFFIC AHEAD" sign shall be mounted on the rear of sign vehicle V1. The changeable message sign shall be sequenced to show the "CAUTION" message first, follow by the "SLOW TRAFFIC AHEAD" message. A Type II flashing arrow sign may be used with the SC12(CA) sign panel.
2. Sign vehicle V1 should be positioned where highly visible when shoulders are not available.
3. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue.
4. Vehicle-mounted sign panels shall have Type III or above retroreflective sheeting, black on white, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
5. Shadow vehicle shall be equipped with a truck-mounted attenuator. The sign panel shown shall be mounted on the rear of shadow vehicle V2. The message "LANE CLOSED" may be used in place of the "DO NOT PASS" message.
6. The sign panel shown shall be mounted on the front of sign vehicle V4, facing opposing traffic.

7. All vehicles shall be equipped with flashing or rotating amber lights.
8. Sign vehicle V4 will not be required when the work and vehicles V2 and V3 are 2' or more from the centerline of the highway during the work or application operations.
9. All vehicles used for lane closures shall be equipped with two-way radios and the vehicle operators shall maintain communication during the work or application operation.
10. This plan shall not be used where workers would be on foot in the work area. Use a stationary type lane closure (Revised Standard Plan T13) for this condition.
11. Minimize spacing between vehicles V2 and V3 and vehicles V3 and V4 to deter road users from driving in between them.
12. If sign vehicle V1 encroaches into the traffic lane due to insufficient shoulder width, sign vehicle V1 shall be equipped with a truck-mounted attenuator. Sign vehicle V1 shall stay as close to the edge of shoulder as practicable.

LEGEND

- V1 SIGN VEHICLE
- V2 SHADOW VEHICLE
- V3 WORK/APPLICATION VEHICLE
- V4 SIGN VEHICLE
- TMA TRUCK-MOUNTED ATTENUATOR
- FLASHING ARROW SIGN (FAS) IN FLASHING CAUTION MODE
- FLASHING ARROW SIGN (FAS) IN ALTERNATING DIAMOND CAUTION

SIGN PANEL SIZE (Min)

- A 72" x 42"
- B 54" x 42"
- C 54" x 24"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
FOR MOVING LANE CLOSURE
ON TWO LANE HIGHWAYS**

NO SCALE

RSP T17 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T17
DATED MAY 20, 2011 - PAGE 245 OF THE STANDARD PLANS BOOK DATED 2010.

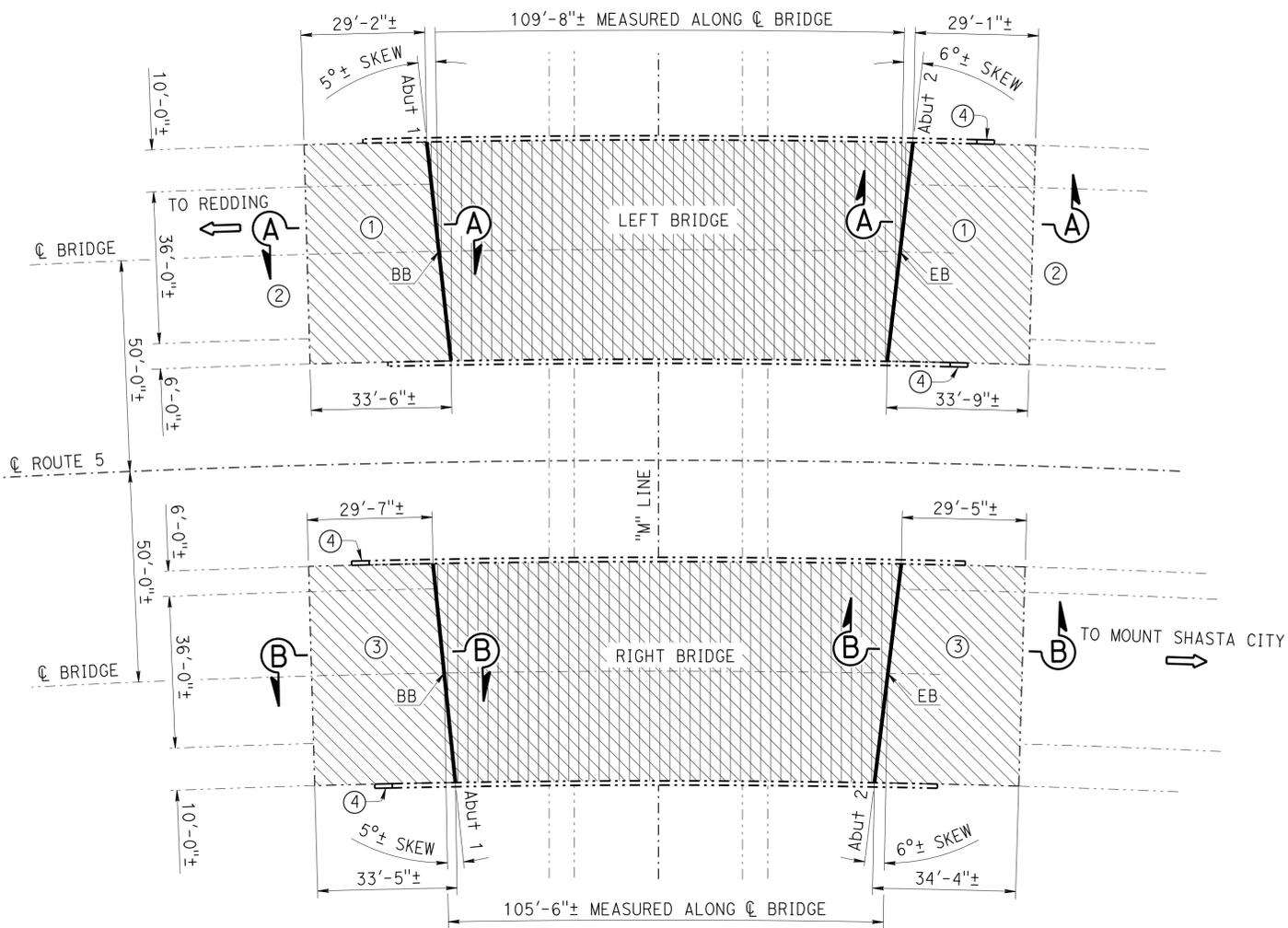
REVISED STANDARD PLAN RSP T17

2010 REVISED STANDARD PLAN RSP T17

DATE PLOTTED => 15-DEC-2014
TIME PLOTTED => 12:46

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5, 89	Var	25	32
<i>Peter B. Kang</i> 10-1-14 REGISTERED CIVIL ENGINEER DATE				12-15-14 PLANS APPROVAL DATE	
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.					

NOTE: (APPLY TO ALL SHEETS)
 ----- Indicates existing.



MOTT ROAD UNDERCROSSING
 Br. No. 02-0180L/R, ROUTE 5, Sis, PM 5.90
 1" = 20'

MOTT ROAD UNDERCROSSING BRIDGE NO. 02-0180L/R

QUANTITIES

RAPID SETTING CONCRETE (PATCH)	46	CF
REMOVE POLYESTER CONCRETE OVERLAY	11,710	SQFT
REMOVE UNSOUND CONCRETE	46	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	18,470	SQFT
FURNISH POLYESTER CONCRETE OVERLAY	1,847	CF
PLACE POLYESTER CONCRETE OVERLAY	18,470	SQFT
GRIND EXISTING BRIDGE DECK	751	SQYD
CLEAN EXPANSION JOINT	212	LF
JOINT SEAL (MR 1/2")	212	LF
CONCRETE BARRIER (TRANSITION)	17	LF

NOTES: (APPLY TO THIS SHEET ONLY)

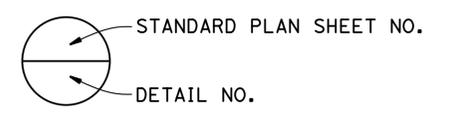
- Indicates limits of remove 3/4"± polyester concrete overlay.
- Indicates limits of remove unsound concrete, place rapid setting concrete patches, prepare concrete deck surface, and place 1" minimum depth polyester concrete overlay. For details, see the "JOINT SEAL DETAILS" sheet.
- Indicates limits of clean expansion joint and install new joint seal. For details, see "JOINT SEAL DETAILS" sheet.
- ① Indicates limits of grind existing approach slab to match the PCC bridge deck. For details, see "JOINT SEAL DETAILS" sheet.
- ② For approach roadway taper, see "ROADWAY PLANS".
- ③ Indicates limits of grind existing approach slab lowering approach slab below PCC roadway. For details, see "JOINT SEAL DETAILS" sheet.
- ④ Construct concrete barrier (transition). For details, see "THRIE BEAM CONNECTION - TYPE 9" sheet.

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN NO. 1
2	GENERAL PLAN NO. 2
3	GENERAL PLAN NO. 3
4	GENERAL PLAN NO. 4
5	GENERAL PLAN NO. 5
6	BENERAL PLAN NO. 6
7	JOINT SEAL DETAILS
8	THRIE BEAM CONNECTION - TYPE 9

STANDARD PLANS 2010

SHEET NO.	TITLE
A10A	ABBREVIATIONS (SHEET 1 OF 2)
RSP A10B	ABBREVIATIONS (SHEET 2 OF 2)
RSP A77U1	MIDWEST GUARDRAIL SYSTEM CONNECTIONS TO BRIDGE RAILINGS WITHOUT SIDEWALKS DETAILS No. 1
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")



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

Matthew Lee 10-1-14
 DESIGN ENGINEER

DESIGN	BY P. Kang	CHECKED M. Hashimoto	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Dale Kubochi	CHECKED M. Hashimoto	LAYOUT	BY Dale Kubochi
QUANTITIES	BY P. Kang	CHECKED M. Hashimoto	SPECIFICATIONS	BY D. Klein

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	VARIOUS
POST MILE	VARIES

**ROUTE 5, 89 BRIDGES
 GENERAL PLAN NO. 1**

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: 3488
 PROJECT NUMBER & PHASE: 0214000052

CONTRACT NO.: 02-4G7201

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
6-26-14 8-19-14 9-29-14	1	8

FILE => 02-4g7201-a-gp01.dgn

USERNAME => s115152 DATE PLOTTED => 15-DEC-2014 TIME PLOTTED => 12:46

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5, 89	Var	26	32

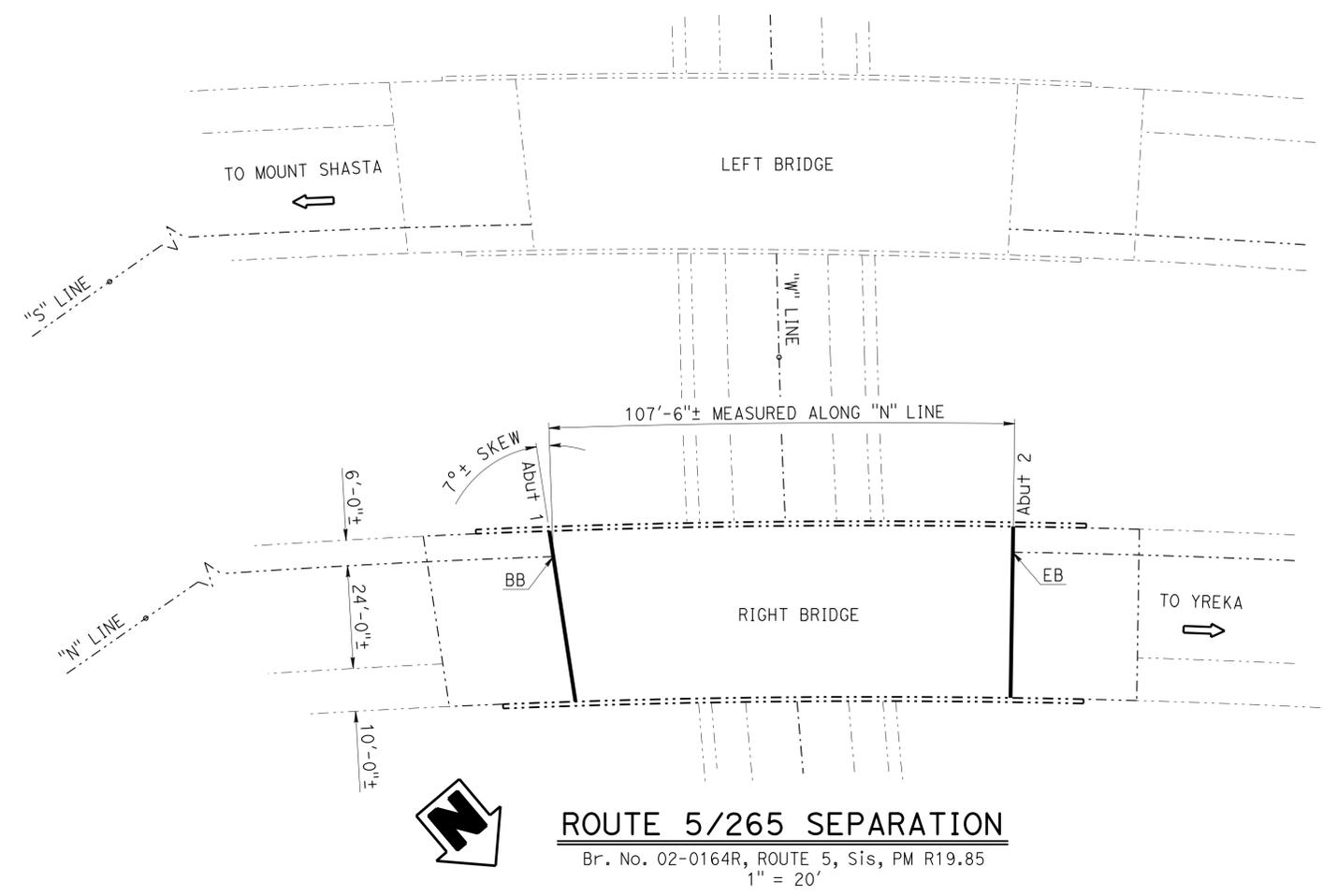
<i>Peter B. Kang</i> 10-1-14	
REGISTERED CIVIL ENGINEER	DATE
12-15-14	
PLANS APPROVAL DATE	

PETER B. KANG	
No. C 70336	
Exp. 9-30-16	
CIVIL	
STATE OF CALIFORNIA	

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NOTES: (APPLY TO THIS SHEET ONLY)

-  Indicates limits of remove 3/4"± polyester concrete overlay.
-  Indicates limits of remove unsound concrete, place rapid setting concrete patches, prepare concrete deck surface, and place 1" minimum depth polyester concrete overlay. For details, see the "JOINT SEAL DETAILS" sheet.
-  Indicates limits of clean expansion joint and install new joint seal. For details, see "JOINT SEAL DETAILS" sheet.
- ① Indicates limits of grind existing approach slabs to match the PCC bridge deck. For details, see "JOINT SEAL DETAILS" sheet.
- ② For approach roadway taper, see "ROADWAY PLANS".

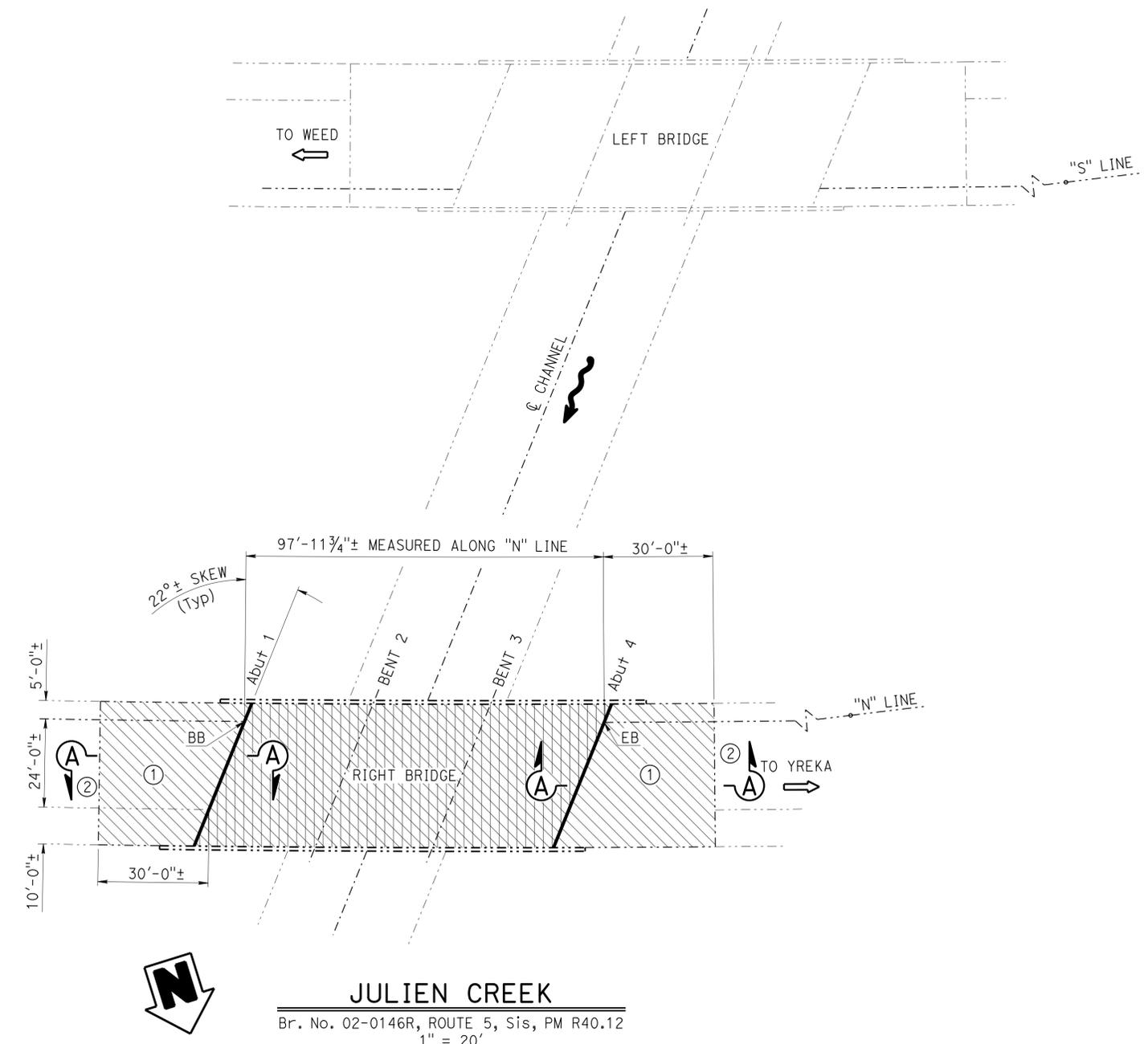


ROUTE 5/265 SEPARATION
 Br. No. 02-0164R, ROUTE 5, Sis, PM R19.85
 1" = 20'

ROUTE 5/265 SEPARATION	BRIDGE NO. 02-0164R
QUANTITIES	
CLEAN EXPANSION JOINT	82 LF
JOINT SEAL (MR 1/2")	82 LF

JULIEN CREEK	BRIDGE NO. 02-0146R
QUANTITIES	
RAPID SETTING CONCRETE (PATCH)	17 CF
REMOVE POLYESTER CONCRETE OVERLAY	3,821 SQFT
REMOVE UNSOUND CONCRETE	17 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	6,776 SQFT
FURNISH POLYESTER CONCRETE OVERLAY	678 CF
PLACE POLYESTER CONCRETE OVERLAY	6,776 SQFT
GRIND EXISTING BRIDGE DECK	328 SQYD
CLEAN EXPANSION JOINT	86 LF
JOINT SEAL (MR 1/2")	86 LF

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



JULIEN CREEK
 Br. No. 02-0146R, ROUTE 5, Sis, PM R40.12
 1" = 20'

Matthew Lee 10-1-14
 DESIGN ENGINEER

DESIGN	BY P. Kang	CHECKED M. Hashimoto	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Dale Kubochi	CHECKED M. Hashimoto	LAYOUT	BY Dale Kubochi
QUANTITIES	BY P. Kang	CHECKED M. Hashimoto	SPECIFICATIONS	BY D. Klein

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	VARIOUS
POST MILE	VARIES

ROUTE 5, 89 BRIDGES
GENERAL PLAN NO. 2



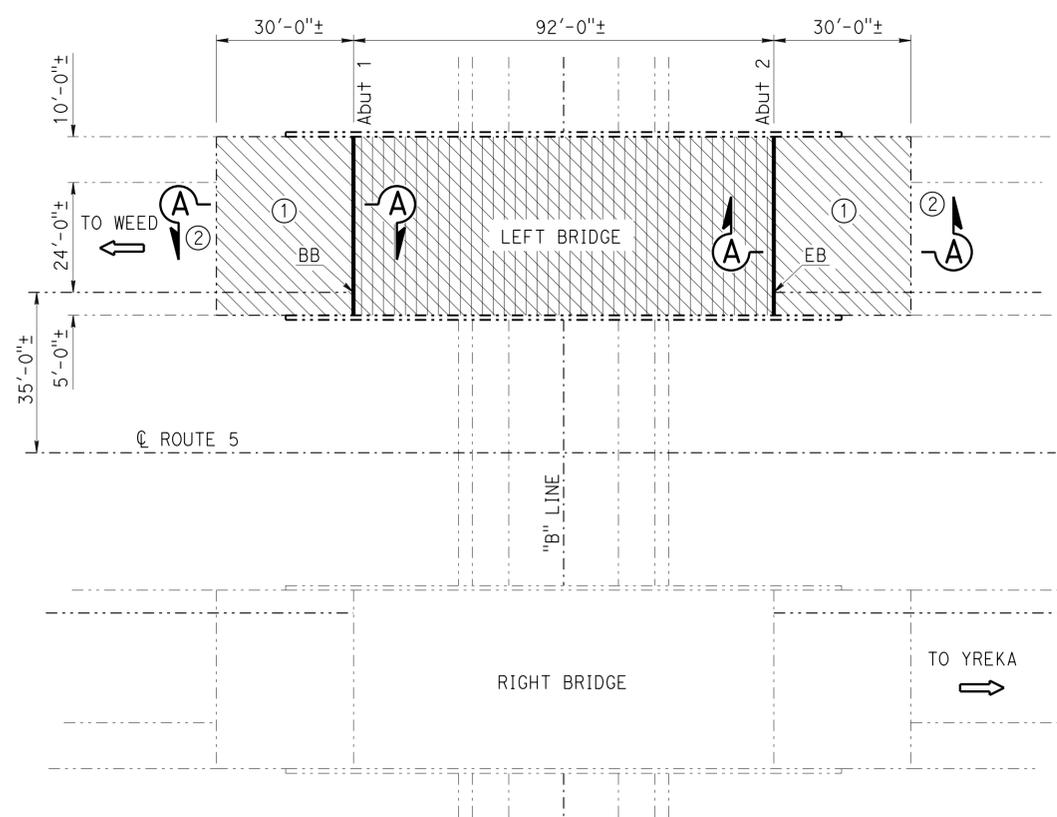
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5, 89	Var	27	32

Peter B. Kang 10-1-14
 REGISTERED CIVIL ENGINEER DATE

12-15-14
 PLANS APPROVAL DATE

PETER B. KANG
 No. C 70336
 Exp. 9-30-16
 CIVIL
 STATE OF CALIFORNIA

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KILLGORE HILLS ROAD UNDERCROSSING

Br. No. 02-0153L, ROUTE 5, Sis, PM R42.51
1" = 20'

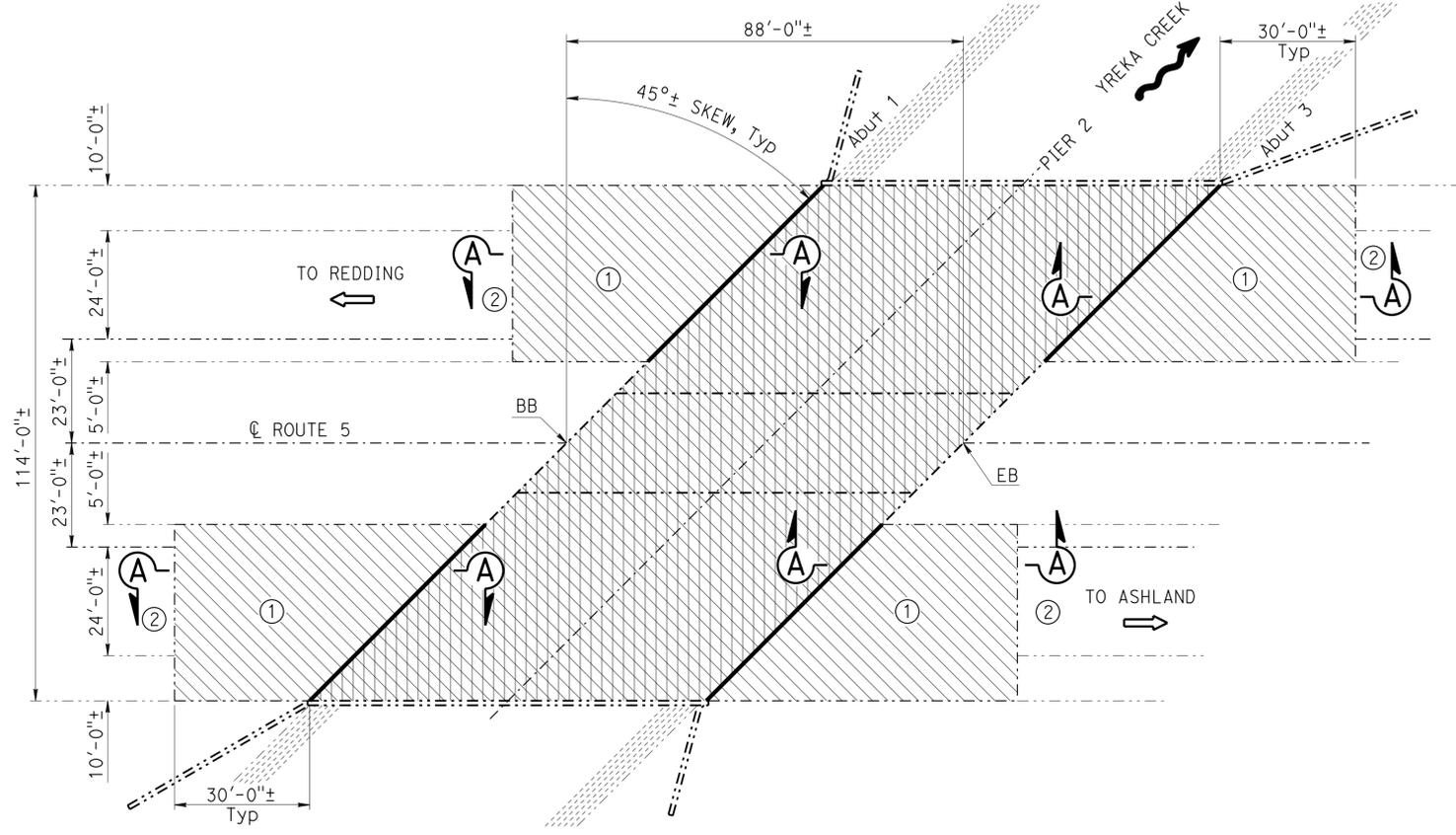
KILLGORE HILLS ROAD UNDERCROSSING BRIDGE NO. 02-0153L

QUANTITIES	
RAPID SETTING CONCRETE (PATCH)	15 CF
REMOVE POLYESTER CONCRETE OVERLAY	3,588 SQFT
REMOVE UNSOUND CONCRETE	15 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	5,928 SQFT
FURNISH POLYESTER CONCRETE OVERLAY	593 CF
PLACE POLYESTER CONCRETE OVERLAY	5,928 SQFT
GRIND EXISTING BRIDGE DECK	260 SQYD
CLEAN EXPANSION JOINT	80 LF
JOINT SEAL (MR 1/2")	80 LF

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

NOTES: (APPLY TO THIS SHEET ONLY)

- Indicates limits of remove 3/4"± polyester concrete overlay.
- Indicates limits of remove unsound concrete, place rapid setting concrete patches, prepare concrete deck surface, and place 1" minimum depth polyester concrete overlay. For details, see the "JOINT SEAL DETAILS" sheet.
- Indicates limits of clean expansion joint and install new joint seal. For details, see "JOINT SEAL DETAILS" sheet.
- ① Indicates limits of grind existing approach slabs to match the PCC bridge deck. For details, see "JOINT SEAL DETAILS" sheet.
- ② For approach roadway taper, see "ROADWAY PLANS".



YREKA CREEK

Br. No. 02-0143, ROUTE 5, Sis, PM R46.79
1" = 20'

YREKA CREEK BRIDGE NO. 02-0143

QUANTITIES	
RAPID SETTING CONCRETE (PATCH)	45 CF
REMOVE POLYESTER CONCRETE OVERLAY	10,032 SQFT
REMOVE UNSOUND CONCRETE	45 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	17,754 SQFT
FURNISH POLYESTER CONCRETE OVERLAY	1,775 CF
PLACE POLYESTER CONCRETE OVERLAY	17,754 SQFT
GRIND EXISTING BRIDGE DECK	858 SQYD
CLEAN EXPANSION JOINT	224 LF
JOINT SEAL (MR 1/2")	224 LF

Matthew W. Lee 10-1-14
DESIGN ENGINEER

DESIGN	BY P. Kang	CHECKED M. Hashimoto	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Dale Kubochi	CHECKED M. Hashimoto	LAYOUT	BY Dale Kubochi
QUANTITIES	BY P. Kang	CHECKED M. Hashimoto	SPECIFICATIONS	BY D. Klein

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. VARIOUS
POST MILE VARIES

ROUTE 5, 89 BRIDGES GENERAL PLAN NO. 3

TIME PLOTTED => 12:46
USERNAME => s115152 DATE PLOTTED => 15-DEC-2014

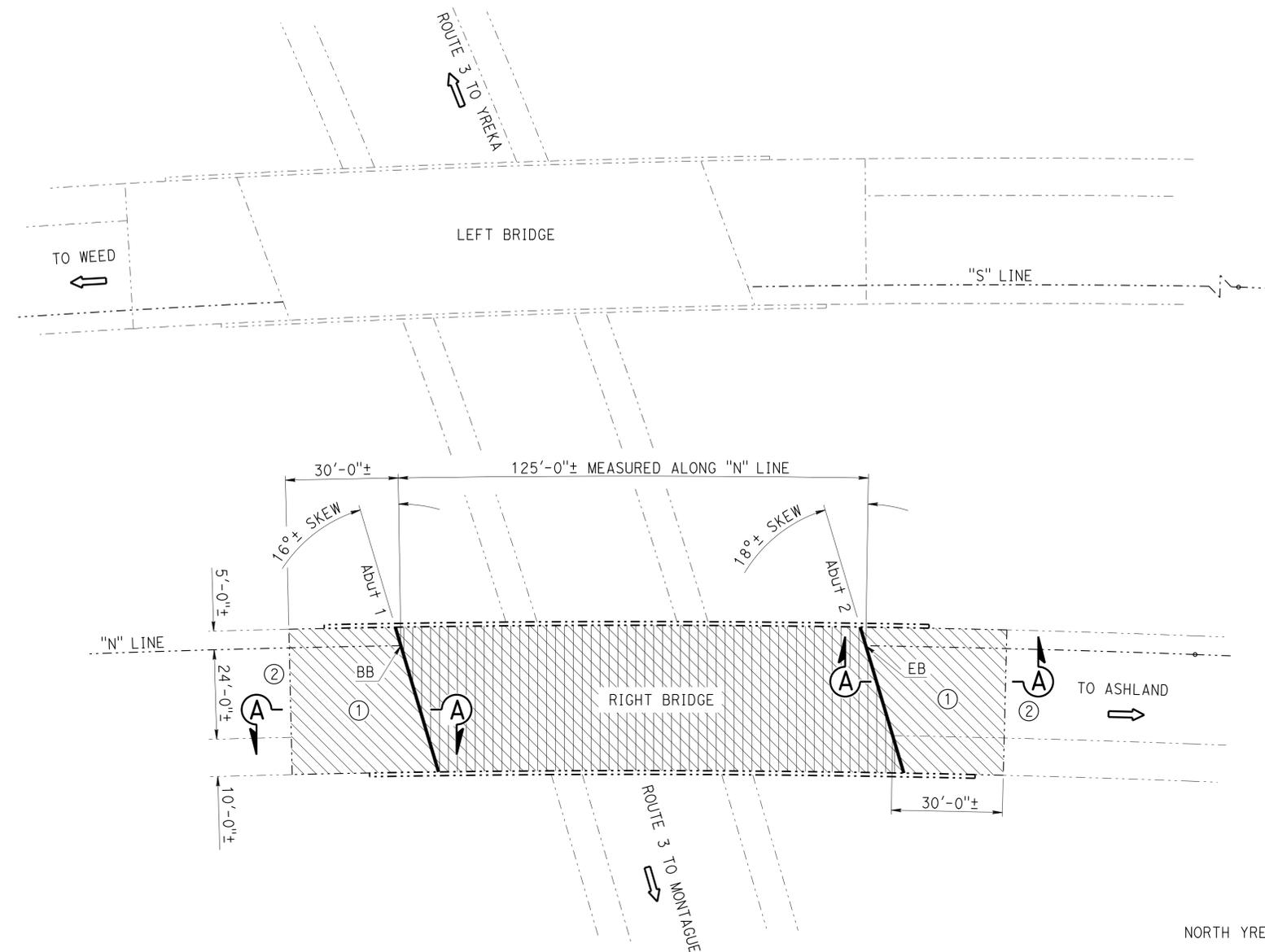
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5, 89	Var	28	32

Peter B. Kang 10-1-14
REGISTERED CIVIL ENGINEER DATE

12-15-14
PLANS APPROVAL DATE

PETER B. KANG
No. C 70336
Exp. 9-30-16
CIVIL
STATE OF CALIFORNIA

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- NOTES: (APPLY TO THIS SHEET ONLY)
- Indicates limits of remove 3/4"± polyester concrete overlay.
 - Indicates limits of remove unsound concrete, place rapid setting concrete patches, prepare concrete deck surface, and place 1" minimum depth polyester concrete overlay. For details, see the "JOINT SEAL DETAILS" sheet.
 - Indicates limits of clean expansion joint and install new joint seal. For details, see "JOINT SEAL DETAILS" sheet.
 - ① Indicates limits of grind existing approach slabs to match the PCC bridge deck. For details, see "JOINT SEAL DETAILS" sheet.
 - ② For approach roadway taper, see "ROADWAY PLANS".



NORTH YREKA SEPARATION
Br. No. 02-0150R, ROUTE 5, Sis, PM R48.23
1" = 20'

NORTH YREKA SEPARATION BRIDGE NO. 02-0150R

QUANTITIES

RAPID SETTING CONCRETE (PATCH)	19	CF
REMOVE POLYESTER CONCRETE OVERLAY	4,875	SQFT
REMOVE UNSOUND CONCRETE	19	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	7,680	SQFT
FURNISH POLYESTER CONCRETE OVERLAY	768	CF
PLACE POLYESTER CONCRETE OVERLAY	7,680	SQFT
GRIND EXISTING BRIDGE DECK	312	SQYD
CLEAN EXPANSION JOINT	83	LF
JOINT SEAL (MR 1/2")	83	LF

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

 DESIGN ENGINEER 10-1-14	DESIGN	BY P. Kang	CHECKED M. Hashimoto	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
	DETAILS	BY Dale Kubochi	CHECKED M. Hashimoto	LAYOUT	BY Dale Kubochi
	QUANTITIES	BY P. Kang	CHECKED M. Hashimoto	SPECIFICATIONS	BY D. Klein

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. VARIOUS
POST MILE VARIES

ROUTE 5, 89 BRIDGES
GENERAL PLAN NO. 4

USERNAME => s115152 DATE PLOTTED => 15-DEC-2014 TIME PLOTTED => 12:46

NOTES: (APPLY TO THIS SHEET ONLY)

-  Indicates limits of remove 3/4"± polyester concrete overlay.
-  Indicates limits of remove unsound concrete, place rapid setting concrete patches, prepare concrete deck surface, and place 1" minimum depth polyester concrete overlay. For details, see the "JOINT SEAL DETAILS" sheet.
-  Indicates limits of clean expansion joint and install new joint seal. For details, see "JOINT SEAL DETAILS" sheet.
-  Indicates existing deck drain (Tot 4).
- ① Indicates limits of grind existing approach slabs to match the PCC bridge deck. For details, see "JOINT SEAL DETAILS" sheet.
- ② For approach roadway taper, see "ROADWAY PLANS".
- ③ Construct concrete barrier (transition). For details, see "THREE BEAM CONNECTION - TYPE 9" sheet.

KLAMATH RIVER BRIDGE & SEPARATION BRIDGE NO. 02-0134L

QUANTITIES

	LUMP	SUM
PUBLIC SAFETY PLAN	90	CF
RAPID SETTING CONCRETE (PATCH)	33,634	SQFT
REMOVE POLYESTER CONCRETE OVERLAY	90	CF
REMOVE UNSOUND CONCRETE	35,974	SQFT
PREPARE CONCRETE BRIDGE DECK SURFACE	3,597	CF
FURNISH POLYESTER CONCRETE OVERLAY	35,974	SQFT
PLACE POLYESTER CONCRETE OVERLAY	260	SQYD
GRIND EXISTING BRIDGE DECK	80	LF
CLEAN EXPANSION JOINT	40	LF
JOINT SEAL (MR 1 1/2")	40	LF
JOINT SEAL (MR 1")	13	LF
CONCRETE BARRIER (TRANSITION)		

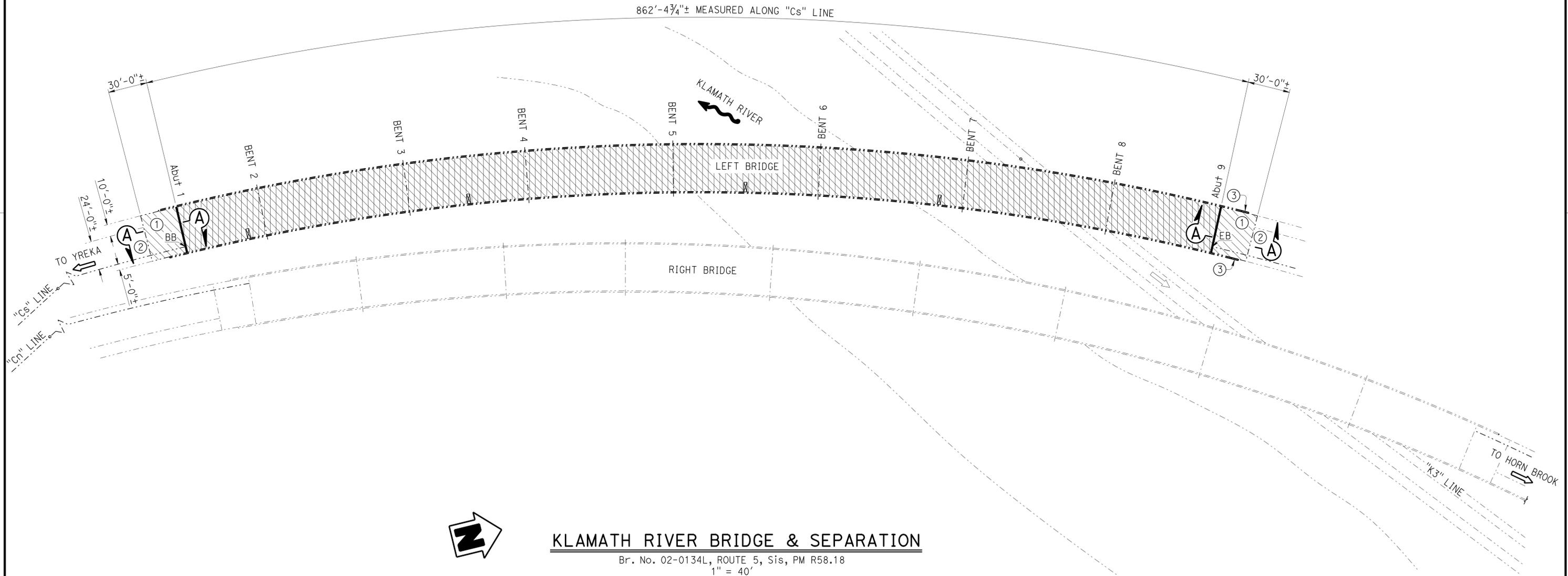
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5, 89	Var	29	32

Peter B. Kang 10-1-14
 REGISTERED CIVIL ENGINEER DATE

12-15-14
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 PETER B. KANG
 No. C 70336
 Exp. 9-30-16
 CIVIL
 STATE OF CALIFORNIA

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KLAMATH RIVER BRIDGE & SEPARATION

Br. No. 02-0134L, ROUTE 5, Sis, PM R58.18
 1" = 40'

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

Matthew Lee 10-1-14
 DESIGN ENGINEER

DESIGN	BY	CHECKED	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DESIGN	P. Kang	M. Hashimoto		
DETAILS	Dale Kubochi	M. Hashimoto	LAYOUT	BY Dale Kubochi
QUANTITIES	P. Kang	M. Hashimoto	SPECIFICATIONS	BY D. Klein
				CHECKED P. Kang
				PLANS AND SPECS COMPARED D. Klein

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. VARIOUS
 POST MILE VARIES

ROUTE 5, 89 BRIDGES
 GENERAL PLAN NO. 5

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: 3488
 PROJECT NUMBER & PHASE: 0214000052 CONTRACT NO.: 02-4G7201

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
6-26-14 9-29-14 9-16-14	5	8

FILE => 02-4g7201-a-gp05.dgn

USERNAME => s115152 DATE PLOTTED => 15-DEC-2014 TIME PLOTTED => 12:46

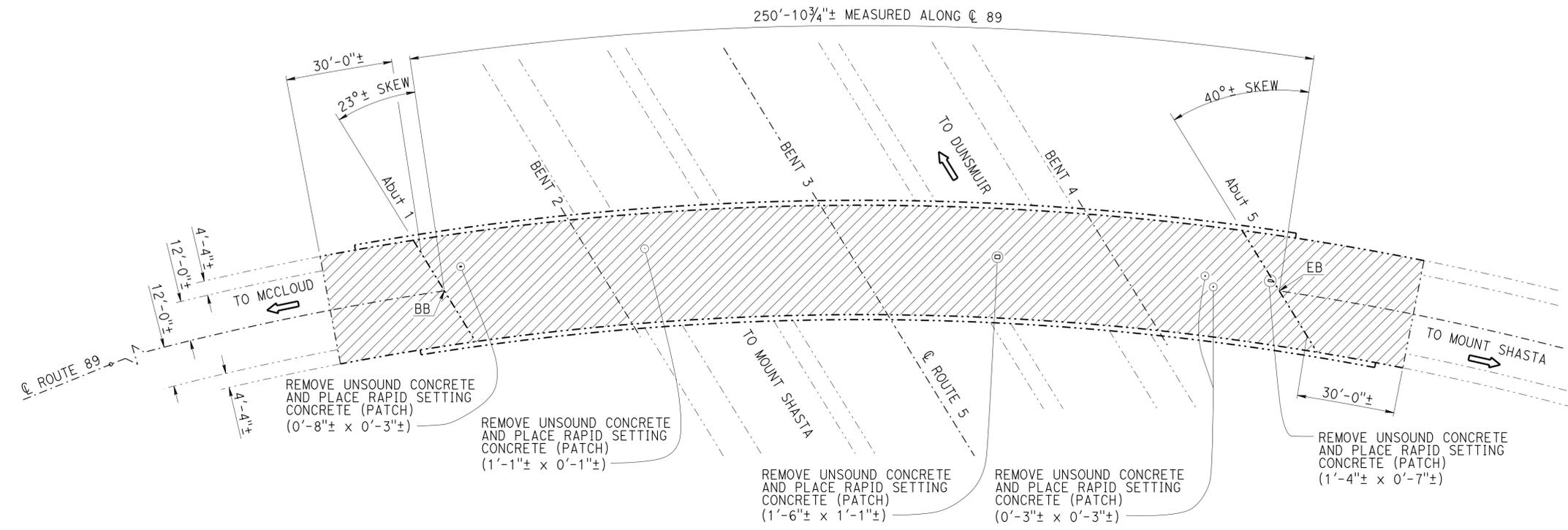
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5, 89	Var	30	32

Peter B. Kang 10-1-14
REGISTERED CIVIL ENGINEER DATE

12-15-14
PLANS APPROVAL DATE

PETER B. KANG
No. C 70336
Exp. 9-30-16
CIVIL
STATE OF CALIFORNIA

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NOTES: (APPLY TO THIS SHEET ONLY)

Indicates limits of prepare concrete bridge deck surface and treat bridge deck and approach slabs.



ROUTE 89/5 CONNECTOR SEPARATION

Br. No. 02-0127E, ROUTE 89, Sis, PM R34.60
1" = 20'

ROUTE 89/5 CONNECTOR SEPARATION BRIDGE NO. 02-0127E

QUANTITIES

	LUMP SUM
PUBLIC SAFETY PLAN	
RAPID SETTING CONCRETE (PATCH)	1 CF
REMOVE UNSOUND CONCRETE	1 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	11,504 SQFT
TREAT BRIDGE DECK	11,504 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	128 GAL

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

Matthew Lee 10-1-14
DESIGN ENGINEER

DESIGN	BY P. Kang	CHECKED M. Hashimoto	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Dale Kubochi	CHECKED M. Hashimoto	LAYOUT	BY Dale Kubochi
QUANTITIES	BY P. Kang	CHECKED M. Hashimoto	SPECIFICATIONS	BY D. Klein

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	VARIOUS
POST MILE	VARIES

ROUTE 5, 89 BRIDGES GENERAL PLAN NO. 6

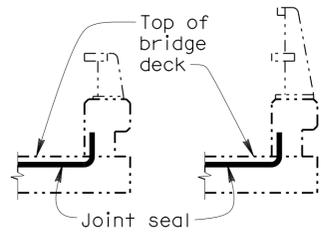
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USERNAME => s115152

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5, 89	Var	31	32

P. B. Kang 10-1-14
 REGISTERED CIVIL ENGINEER DATE
 12-15-14
 PLANS APPROVAL DATE
 PETER B. KANG
 No. C 70336
 Exp. 9-30-16
 CIVIL
 STATE OF CALIFORNIA
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JOINT SEAL TABLE

BRIDGE NAME	BRIDGE NUMBER	LOCATION	MINIMUM "MR" (INCHES)	APPROXIMATE LENGTH (FEET)	EXISTING WATERSTOP	APPROX DEPTH TO CLEAN EXP JOINT (INCHES)	
MOTT AVENUE UNDERCROSSING	02-0180L	* Abut 1	BB	1/2	53	NO	12
		* Abut 2	EB	1/2	53	NO	12
	02-0180R	* Abut 1	BB	1/2	53	NO	12
		* Abut 2	EB	1/2	53	NO	12
ROUTE 5/265 SEPARATION	02-0164R	Abut 1	BB	1/2	41	NO	12
		Abut 2	EB	1/2	41	NO	12
JULIEN CREEK	02-0146R	* Abut 1	BB	1/2	43	NO	12
		* Abut 4	EB	1/2	43	NO	12
KILLGORE HILLS ROAD UNDERCROSSING	02-0153L	* Abut 1	BB	1/2	40	NO	12
		* Abut 2	EB	1/2	40	NO	12
YREKA CREEK	02-0143	Abut 1 (LEFT)	BB	1/2	56	NO	12
		Abut 1 (RIGHT)	BB	1/2	56	NO	12
		Abut 3 (LEFT)	EB	1/2	56	NO	12
		Abut 3 (RIGHT)	EB	1/2	56	NO	12
NORTH YREKA SEPARATION	02-0150R	* Abut 1	BB	1/2	41	NO	12
		* Abut 2	EB	1/2	42	NO	12
KLAMATH RIVER BRIDGE & SEPARATION	02-0134L	Abut 1	BB	1 1/2	40	NO	12
		Abut 9	BW	1	40	NO	12



BARRIER RAIL JOINT SEAL AT LOW SIDE OF DECK

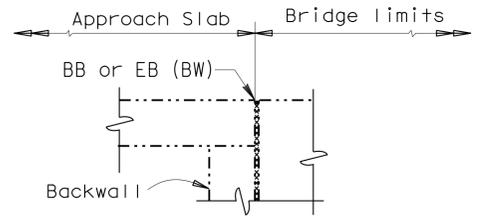
Notes: Details shown for illustration purposes only. For use only where deck joint matches the sidewalk, curb or barrier rail joint.

DECK REPAIR TABLE REMOVE UNSOUND CONCRETE AND RAPID SETTING CONCRETE (PATCH)

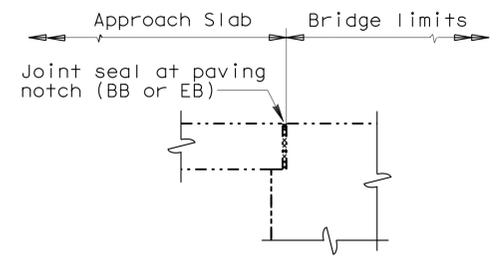
BRIDGE NAME	BRIDGE NUMBER	APPROXIMATE AREA DAMAGED (PERCENT)	APPROXIMATE DEPTH (INCHES)
MOTT AVENUE UNDERCROSSING	02-0180L	1	3
MOTT AVENUE UNDERCROSSING	02-0180R	1	3
JULIEN CREEK	02-0146R	1	3
KILLGORE HILLS ROAD UNDERCROSSING	02-0153L	1	3
YREKA CREEK	02-0143	1	3
NORTH YREKA SEPARATION	02-0150R	1	3
KLAMATH RIVER BRIDGE & SEPARATION	02-0134L	1	3

- The following notes apply to JOINT SEAL TYPE B:
- Seal must satisfy both minimum Movement Rating (MR) and minimum W1 requirements.
 - Minimum W1 is the calculated maximum width of the joint based on field measurements. After the joints have been cleaned, minimum W1 is to be calculated by the Engineer.
 - W1 must be the smaller of the values determined as follows:
 - 0.85 times the manufacturer's designed minimum uncompressed width of the seal.
 - The width of the seal on the third successive test cycle of the pressure deflection test, when compressed to an average pressure of 3 psi.
 - Bend Type B joint seal 6" up into curb or rail on the low side of the deck where deck joint matches curb or rail joint.
 - For details not shown, see B6-21

LEGEND:
 BB - Paving Notch at beginning of bridge
 EB - Paving Notch at end of bridge
 BW - Abutment backwall joint
 * - Use Type B Joint Seal



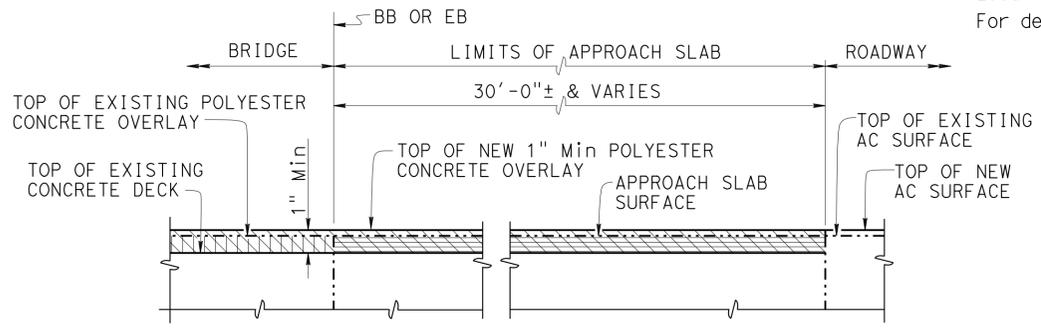
ABUTMENT WITH BACKWALL



DIAPHRAGM ABUTMENT

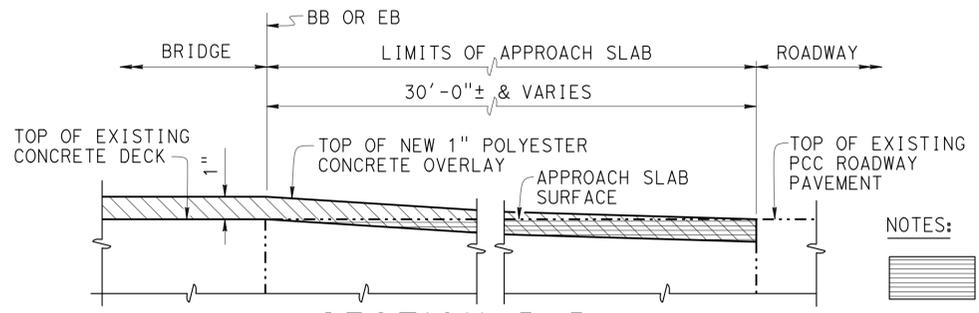
JOINT SEAL LOCATION

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



SECTION A-A

No Scale

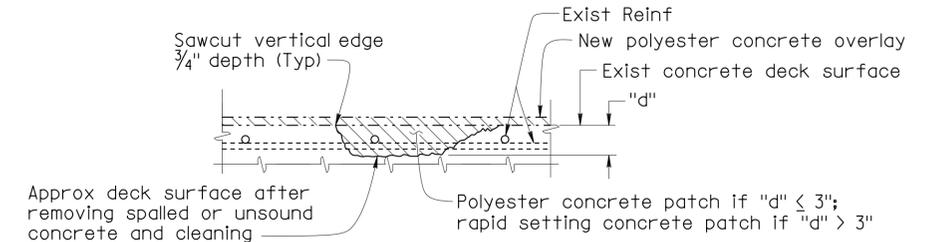


SECTION B-B

No Scale

Locations to be determined by the Engineer. For details see "Deck Repair Detail - Overlay".

- NOTES:**
- Indicates limits of grind existing bridge deck.
 - Indicates limits of remove polyester concrete overlay.
 - Indicates limits of prepare concrete bridge deck surface and place new 1" minimum depth polyester concrete overlay.



DECK REPAIR DETAIL - OVERLAY

Note: Locations to be determined by the Engineer. Reinforcement may be encountered during deck concrete removal.
 NO SCALE

DESIGN	BY P. Kang	CHECKED M. Hashimoto
DETAILS	BY Dale Kubochi	CHECKED M. Hashimoto
QUANTITIES	BY P. Kang	CHECKED M. Hashimoto

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

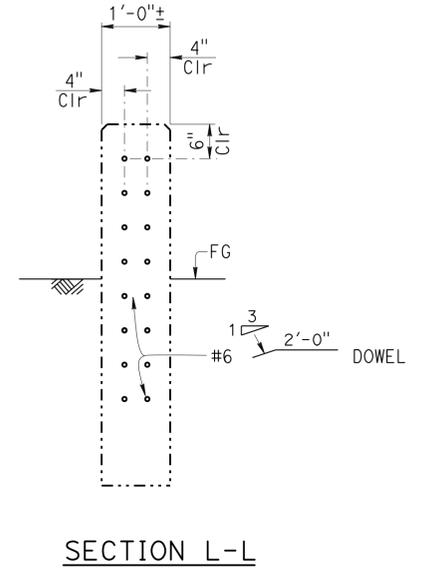
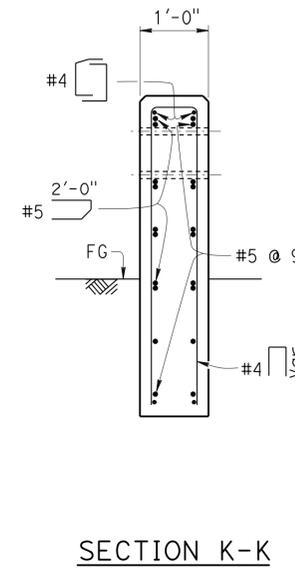
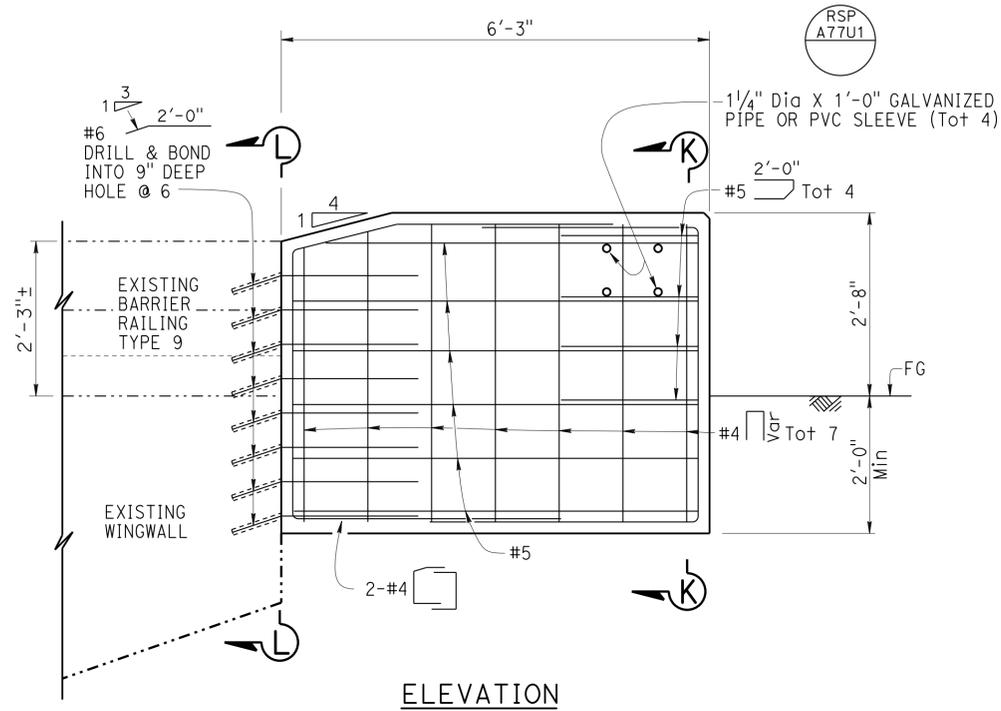
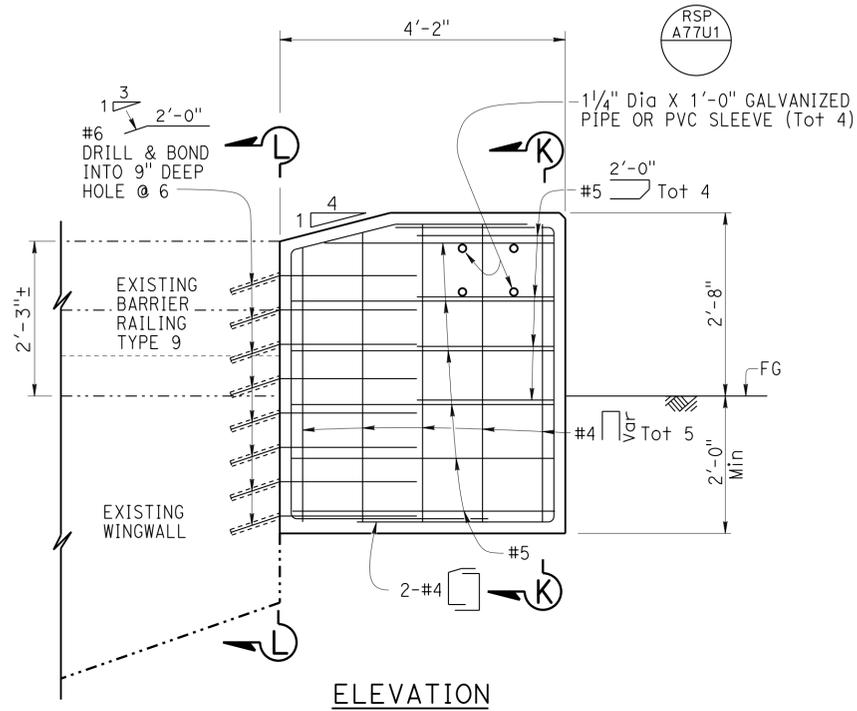
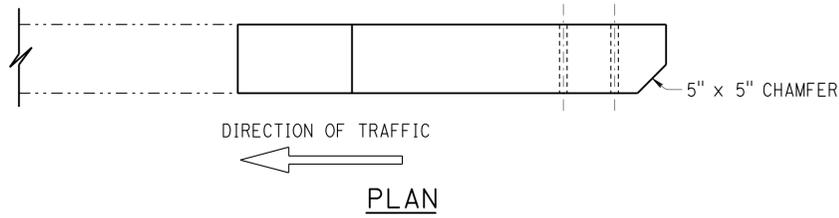
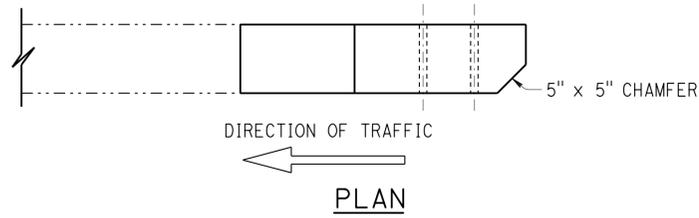
BRIDGE NO.	VARIOUS
POST MILE	VARIES

ROUTE 5, 89 BRIDGES JOINT SEAL DETAILS

USERNAME => s115152 DATE PLOTTED => 15-DEC-2014 TIME PLOTTED => 12:46

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sis	5,89	Var	32	32

Peter B. Kang 10-1-14
 REGISTERED CIVIL ENGINEER DATE
 12-15-14
 PLANS APPROVAL DATE
 PETER B. KANG
 No. C 70336
 Exp. 9-30-16
 CIVIL
 STATE OF CALIFORNIA
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



Br. No. 02-0180L/R

Br. No. 02-0134L

CONCRETE BARRIER (TRANSITION) DETAILS

3/4" = 1'-0"

LEGEND:
 - - - - - Indicates Existing Structure
 _____ Indicates New Structure

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

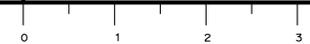
DESIGN	BY P. Kang	CHECKED M. Hashimoto
DETAILS	BY Dale Kubochi	CHECKED M. Hashimoto
QUANTITIES	BY P. Kang	CHECKED M. Hashimoto

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	VARIOUS
POST MILE	VARIES

ROUTE 5, 89 BRIDGES
 THRIE BEAM CONNECTION-TYPE 9



REVISION DATES	SHEET	OF
7-14 8-5-14	8	8