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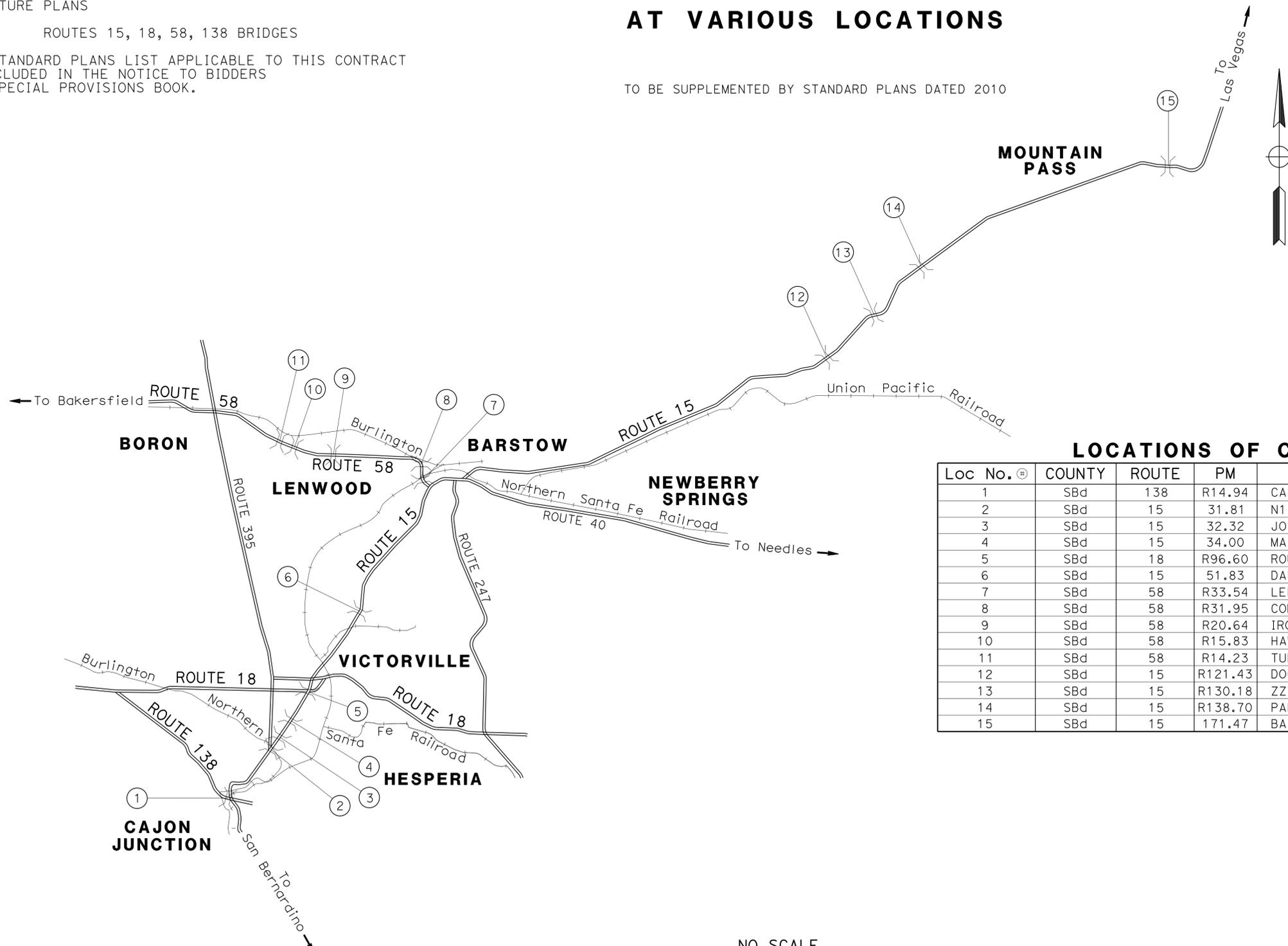
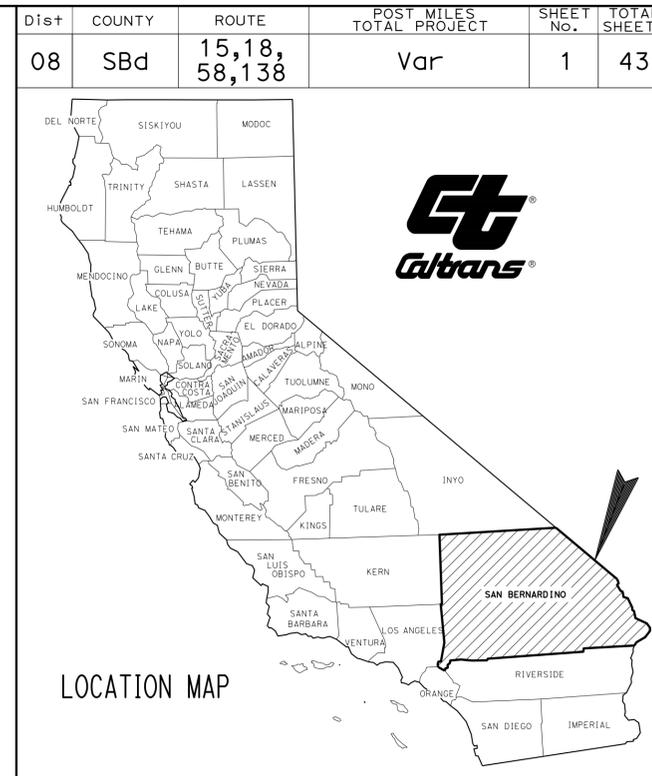
STRUCTURE PLANS

28-43 ROUTES 15, 18, 58, 138 BRIDGES

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
AT VARIOUS LOCATIONS

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



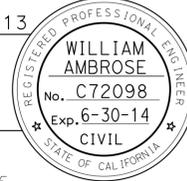
LOCATIONS OF CONSTRUCTION

Loc No. ⊕	COUNTY	ROUTE	PM	BRIDGE NAME	BRIDGE No.
1	SBd	138	R14.94	CAJON CREEK	54-0561
2	SBd	15	31.81	N15-N395 CONNECTOR OC	54-0665G
3	SBd	15	32.32	JOSHUA STREET OC	54-0666
4	SBd	15	34.00	MAIN STREET OC	54-1273
5	SBd	18	R96.60	ROUTE 18/15 SEPARATION	54-0470
6	SBd	15	51.83	DALE EVANS ROAD OC	54-0564
7	SBd	58	R33.54	LENWOOD OVERHEAD	54-1112L/R
8	SBd	58	R31.95	COMMUNITY Blvd UC	54-1109L/R
9	SBd	58	R20.64	IRON WASH	54-1091L/R
10	SBd	58	R15.83	HAWES WASH	54-1090L/R
11	SBd	58	R14.23	TURTLE WASH	54-1089L/R
12	SBd	15	R121.43	DOCK DITCH	54-0246L/R
13	SBd	15	R130.18	ZZYZX ROAD OC	54-0398
14	SBd	15	R138.70	PANO DITCH	54-0281L/R
15	SBd	15	171.47	BAILEY ROAD OC	54-0613

PROJECT MANAGER
CATALINO PINING

 DESIGN ENGINEER
WILLIAM AMBROSE

William Ambrose 2-28-13
 PROJECT ENGINEER DATE
 REGISTERED CIVIL ENGINEER
March 25, 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.



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

NO SCALE

DATE PLOTTED => 27-MAR-2013 TIME PLOTTED => 14:26
 LAST REVISION 02-28-13

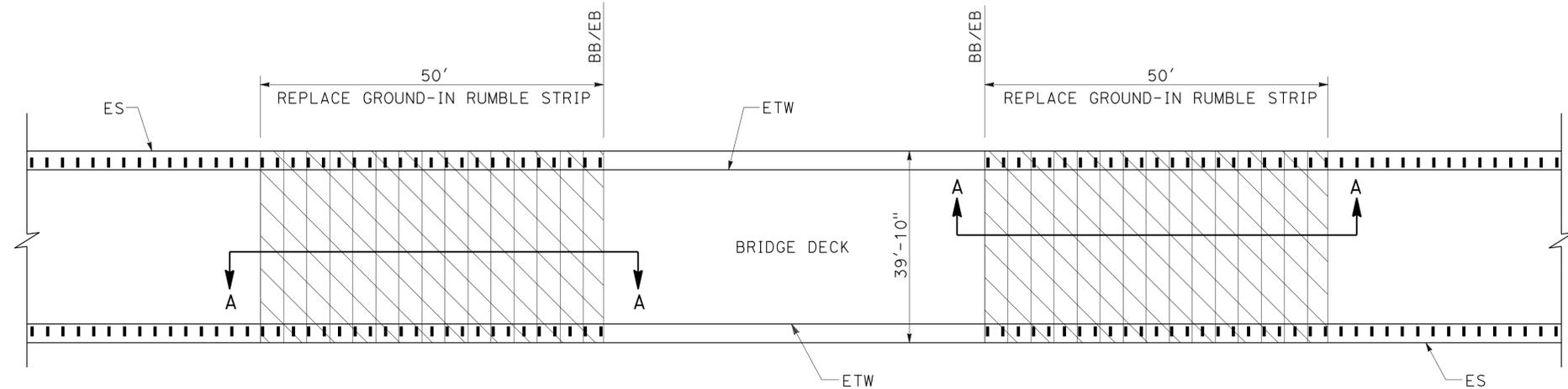
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18, 58,138	Var	2	43
<i>William Ambrose</i> 2-28-13 REGISTERED CIVIL ENGINEER DATE					
3-25-13			PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTE:

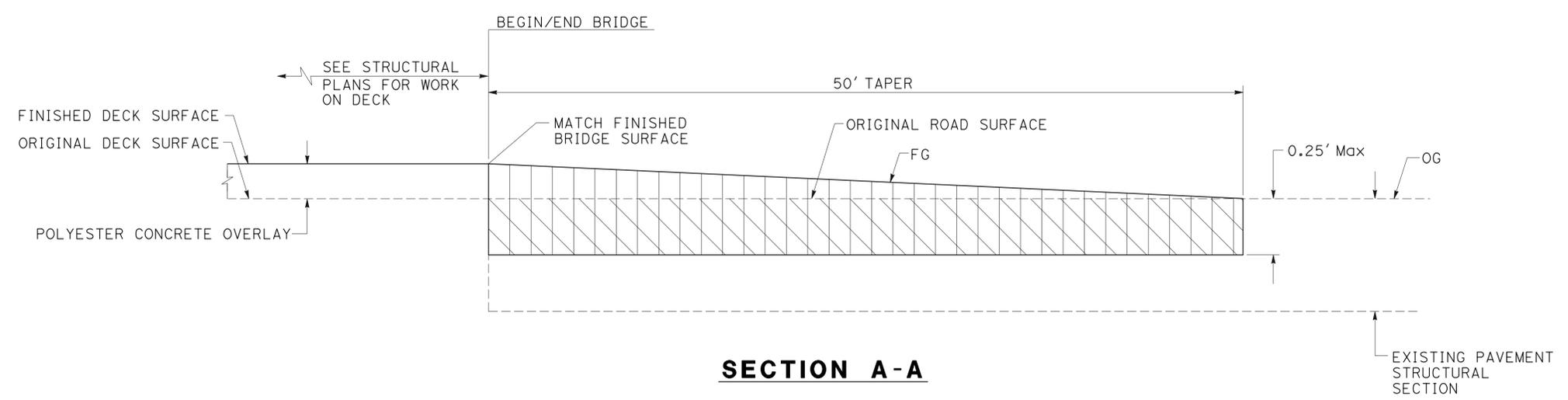
1. SEE STANDARD PLAN A40B FOR RUMBLE STRIP DETAILS.

LEGEND:

- COLD PLANE 0.25'
- HMA-A (HMA, TYPE A)
- GROUND-IN RUMBLE STRIP



**TYPICAL PAVING CONFORM AT BEGIN AND END
OF BRIDGE DECK POLYESTER OVERLAY
ROUTE 15 DOCK DITCH Br No. 54-0246 L/R
LOCATION 12**



SECTION A-A

CONSTRUCTION DETAILS
NO SCALE **C-1**

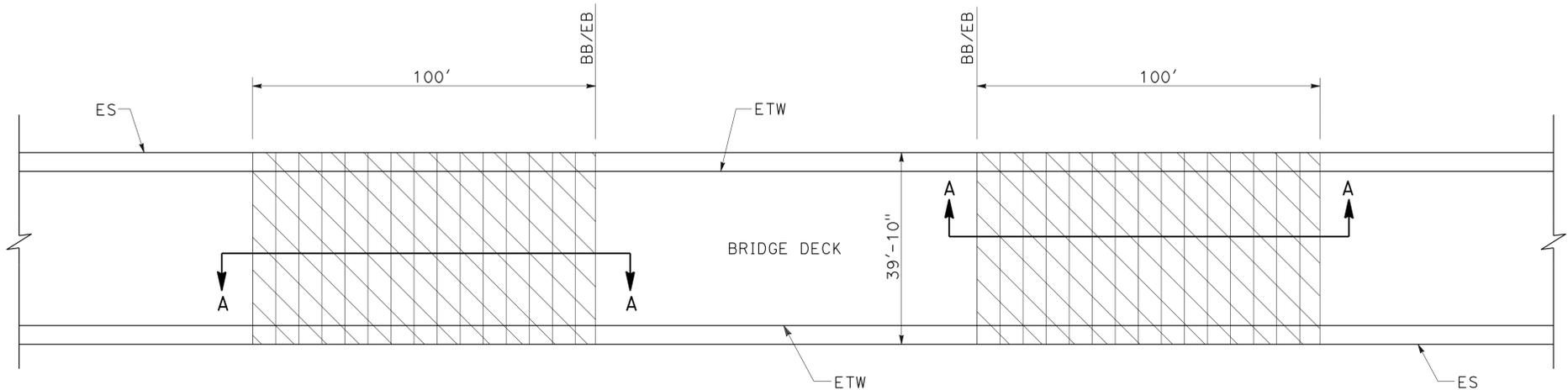
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE DESIGN
 FUNCTIONAL SUPERVISOR KEVIN CHEN
 CALCULATED/DESIGNED BY CHECKED BY
 WILLIAM AMBROSE KUAN H. CHEN
 REVISED BY DATE REVISED
 USERNAME => s109858
 DGN FILE => 0812000132ga001.dgn



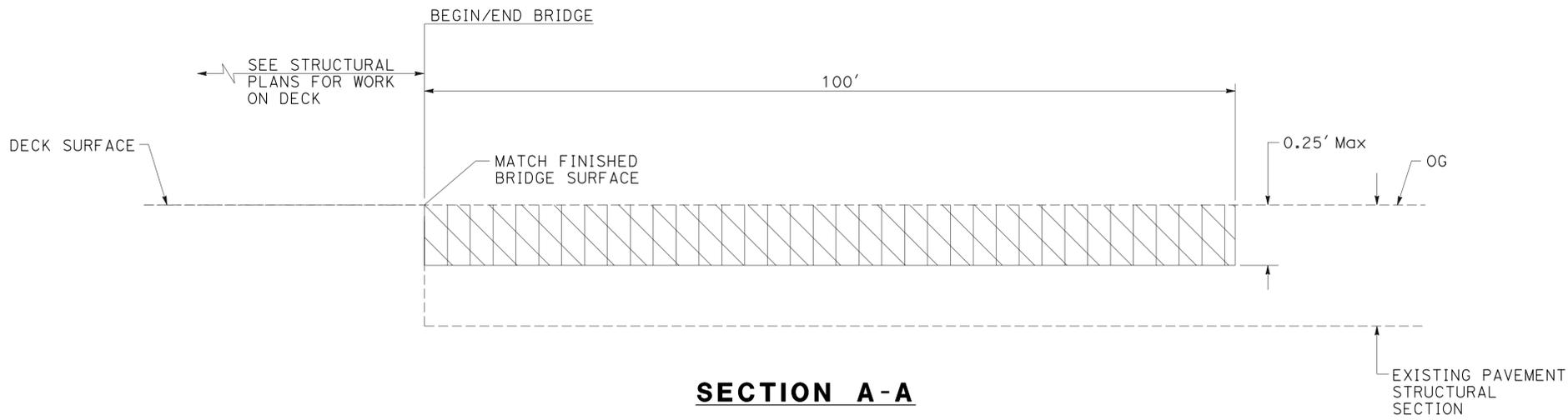
LAST REVISION DATE PLOTTED => 27-MAR-2013
 02-28-13 TIME PLOTTED => 09:30

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18, 58,138	Var	3	43
<i>William Ambrose</i> 2-28-13 REGISTERED CIVIL ENGINEER DATE					
3-25-13			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>					

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGNED BY	REVISOR
Caltrans MAINTENANCE DESIGN	KEVIN CHEN	WILLIAM AMBROSE KUAN H. CHEN	DATE REVISION
		CHECKED BY	



**TYPICAL COLD PLANE AND HMA-A
 AT BEGIN AND END OF BRIDGE DECK
 ROUTE 15 JOSHUA STREET OC Br No. 54-0666
 LOCATION 3**

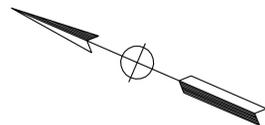


SECTION A-A

CONSTRUCTION DETAILS
 NO SCALE
C-2

LAST REVISION | DATE PLOTTED => 27-MAR-2013 02-28-13 | TIME PLOTTED => 09:30

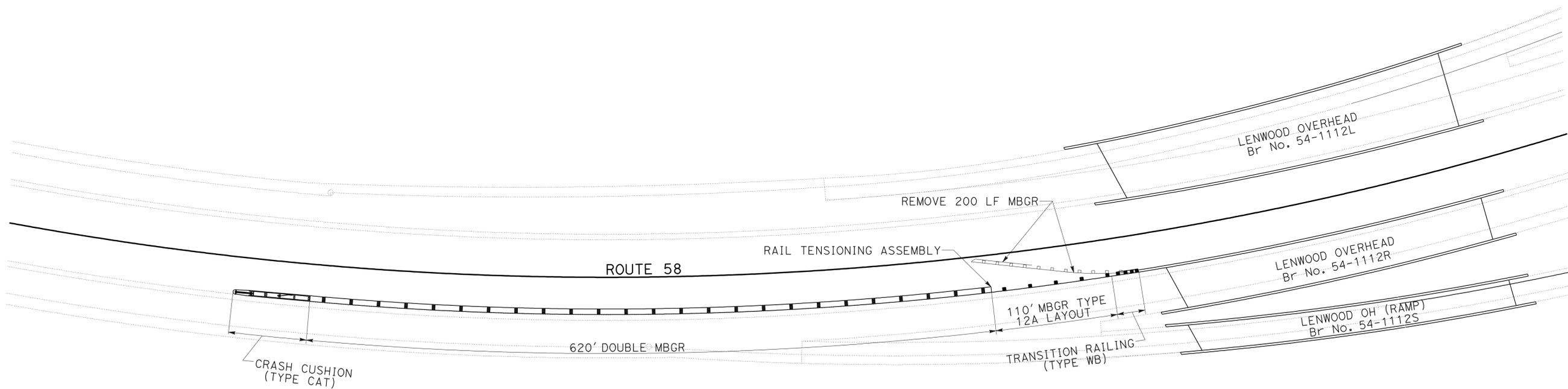
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08	SBd	15,18, 58,138	Var	4	43
<i>William Ambrose</i> 2-28-13 REGISTERED CIVIL ENGINEER DATE					
3-25-13			PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



NOTE:

1. SEE STRUCTURE PLANS FOR WORK ON CONCRETE BARRIER.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THIS PLAN.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans MAINTENANCE DESIGN	KEVIN CHEN	CHECKED BY	DATE REVISED
		WILLIAM AMBROSE	
		KUAN H. CHEN	



LOCATION 7

CONSTRUCTION DETAILS

NO SCALE

C-3



STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

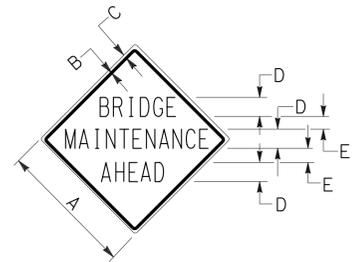
SIGN No. (X)	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	No. OF SIGNS
	FEDERAL	CALIFORNIA				
(A)	W20-1 (SPECIAL)		48" x 48"	BRIDGE MAINTENANCE AHEAD	1 - 6" x 6"	9
(B)	G20-2		48" x 24"	END ROAD WORK	1 - 4" x 6"	10
(C)	W20-1		36" x 36"	ROAD WORK AHEAD	1 - 4" x 6"	12
(D)	G20-2		36" x 18"	END ROAD WORK	1 - 4" x 4"	8
(E)		C40<CA>	108" x 42"	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	2 - 6" x 6"	8
(F)	G20-1		90" x 48"	ROAD WORK NEXT 3 MILES	2 - 6" x 6"	2

LEGEND:

- CONSTRUCTION AREA
- (X) CONSTRUCTION AREA SIGN LETTER
- ☐ PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

NOTES:

1. CONSTRUCTION AREA SIGN LOCATIONS SHOWN ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
2. REFER TO TCS PLANS FOR TRAFFIC CONTROL REQUIREMENTS.
3. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC ACCESS TO LOCAL BUSINESSES AT ALL TIMES.
4. SIGNS C AND D ARE TO BE INSTALLED AS SHOWN IN DETAIL A AND DETAIL B.

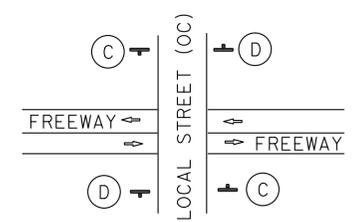
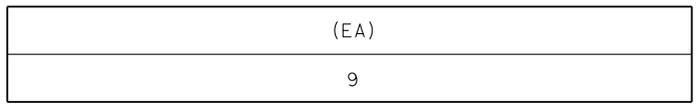


SIGN A

SIZE	DIMENSIONS (INCHES)				
	A	B	C	D	E
48" X 48"	48	3/4	1/4	6C	5

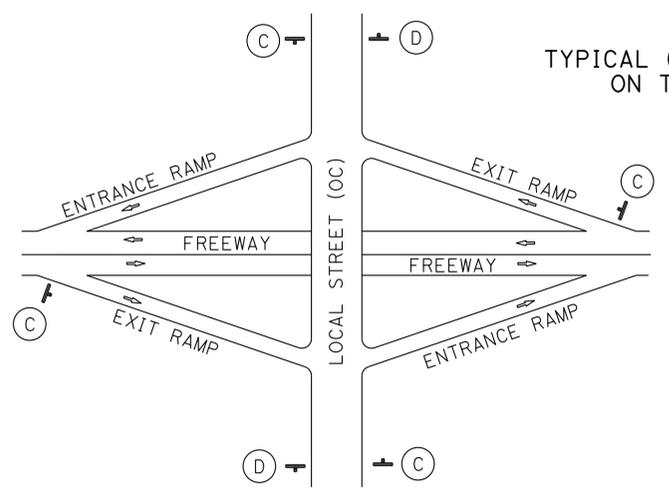
W20-1 (SPECIAL)
BLACK ON ORANGE

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)



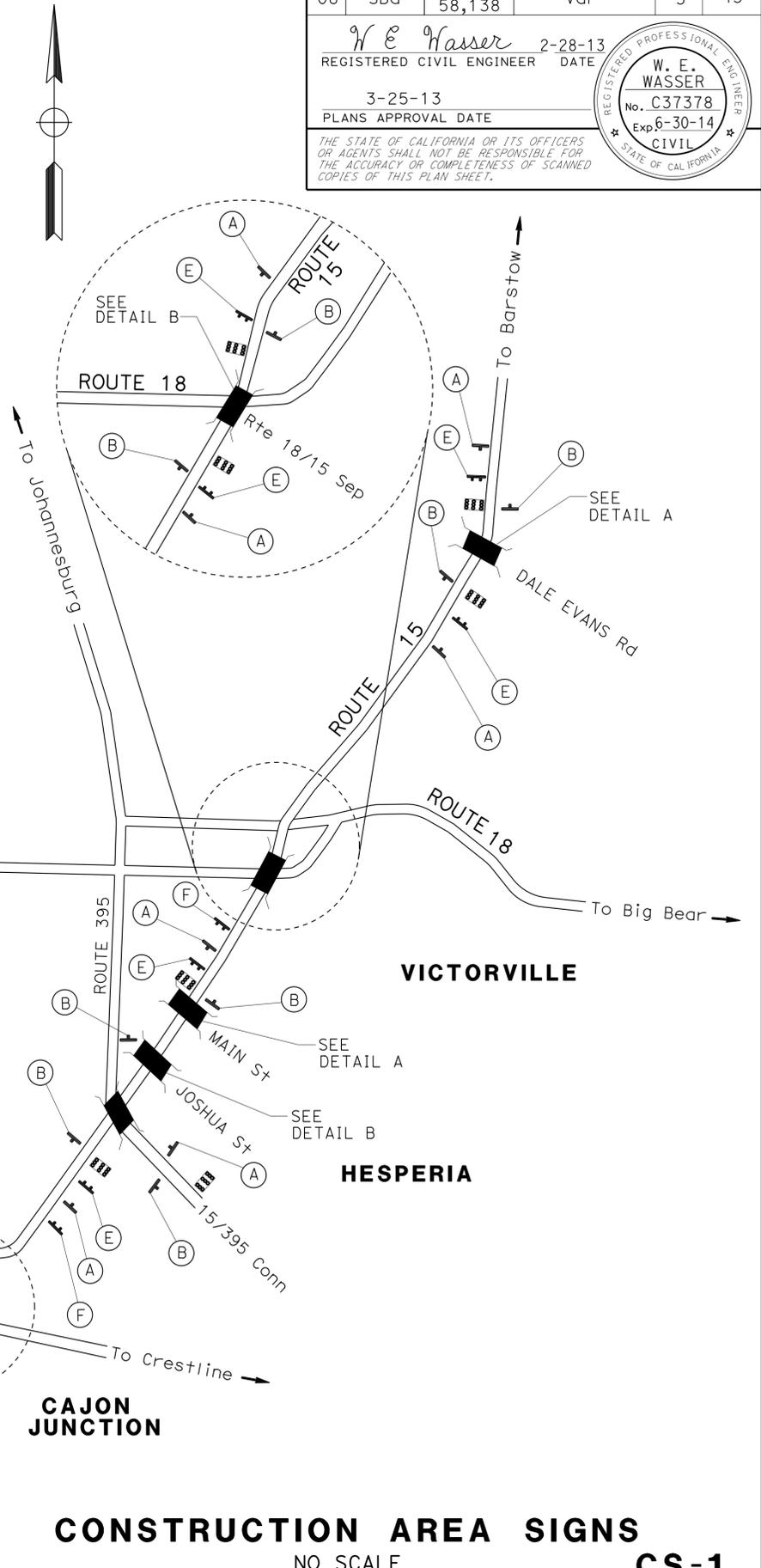
DETAIL B

TYPICAL CONSTRUCTION AREA SIGN PLACEMENT ON THE LOCAL STREET DURING WORK ON OVERCROSSINGS



DETAIL A

TYPICAL CONSTRUCTION AREA SIGN PLACEMENT ON THE LOCAL STREET AND FREEWAY RAMP DURING WORK ON OVERCROSSINGS



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

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: W. E. WASSER
 CALCULATED/DESIGNED BY: PATTI BARTOLI
 CHECKED BY: HORMUZD SETHNA
 REVISIONS: (None shown)
 REVISOR: (None shown)
 DATE: (None shown)

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No. (X)	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	No. OF SIGNS
	FEDERAL	CALIFORNIA				
(A)	W20-1 (SPECIAL)		48" x 48"	BRIDGE MAINTENANCE AHEAD	1 - 6" x 6"	6
(B)	G20-2		48" x 24"	END ROAD WORK	1 - 4" x 6"	6
(C)	W20-1		36" x 36"	ROAD WORK AHEAD	1 - 4" x 6"	6
(D)	G20-2		36" x 18"	END ROAD WORK	1 - 4" x 4"	4
(E)		C40<CA>	108" x 42"	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	2 - 6" x 6"	6
(F)	G20-1		90" x 48"	ROAD WORK NEXT 20 MILES	2 - 6" x 6"	2
(G)	G20-1		90" x 48"	ROAD WORK NEXT 18 MILES	2 - 6" x 6"	2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18, 58,138	Var	6	43

W. E. Wasser 2-28-13
 REGISTERED CIVIL ENGINEER DATE
 3-25-13
 PLANS APPROVAL DATE

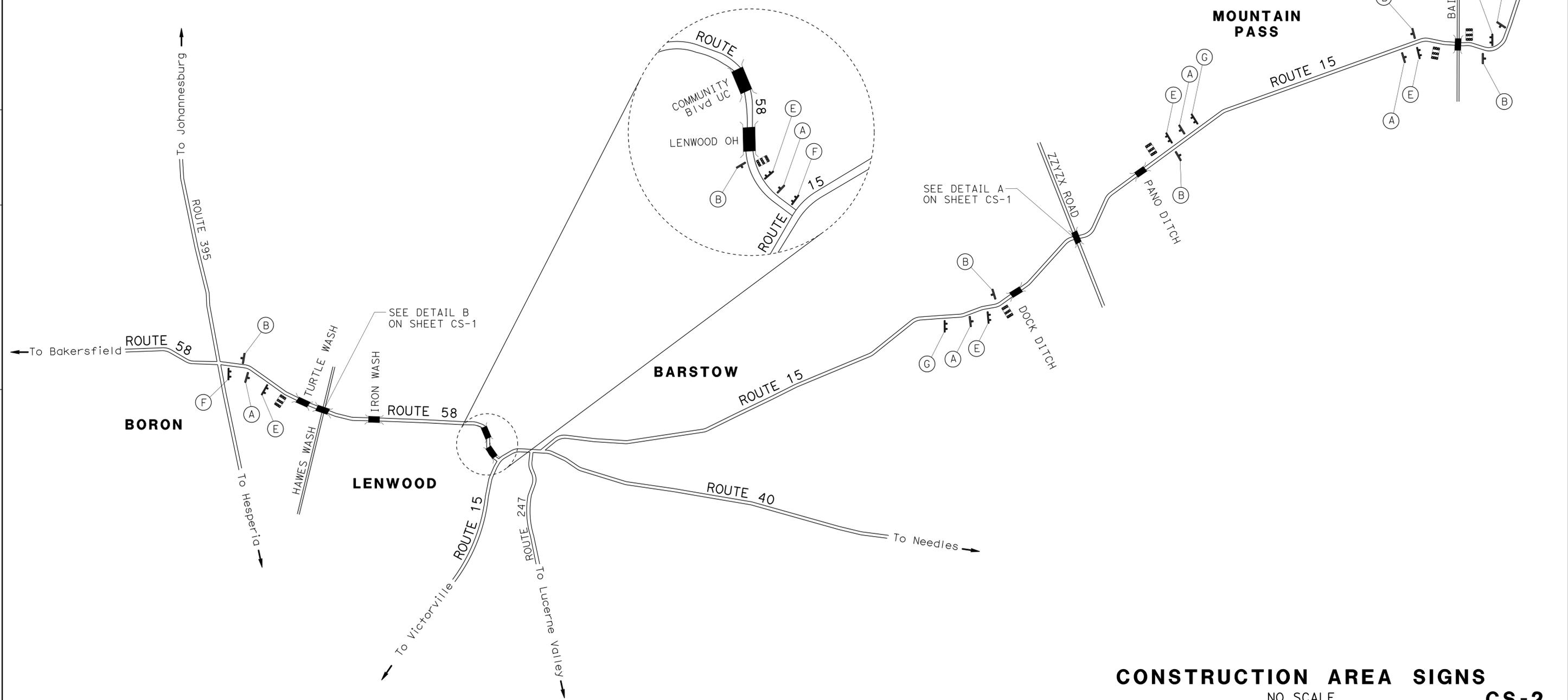
REGISTERED PROFESSIONAL ENGINEER
W. E. WASSER
 No. C37378
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA

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.



PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)

(EA)
6



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: W. E. WASSER
 CALCULATED/DESIGNED BY: PATTI BARTOLI
 CHECKED BY: HORMUZD SETHNA
 REVISED BY: DATE REVISOR

CONSTRUCTION AREA SIGNS
NO SCALE **CS-2**

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

LAST REVISION | DATE PLOTTED => 27-MAR-2013
 02-28-13 | TIME PLOTTED => 09:30

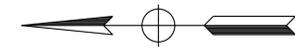
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18, 58,138	Var	7	43
<i>W. E. Wasser</i> 2-28-13 REGISTERED CIVIL ENGINEER DATE					
3-25-13				PLANS APPROVAL DATE	
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

LEGEND:

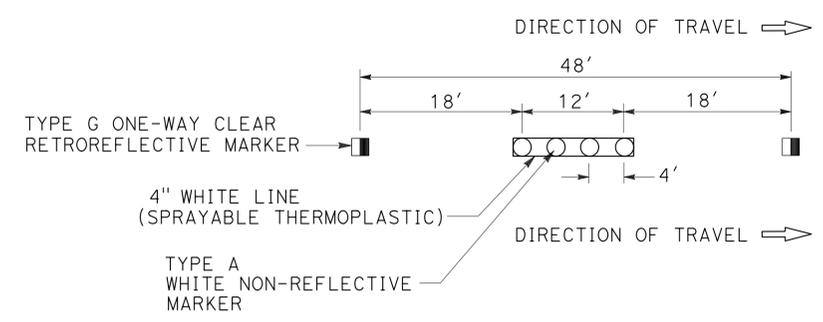
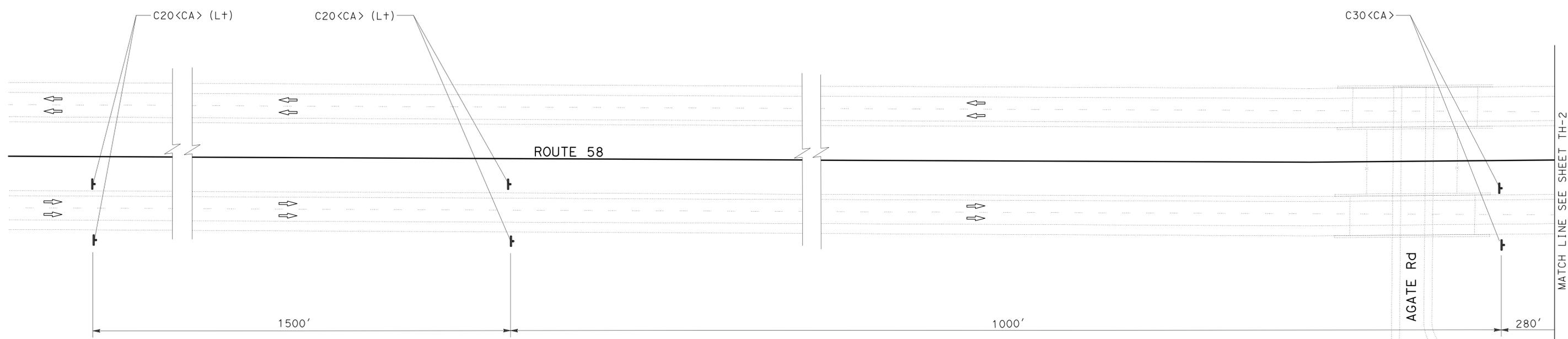
- WORK AREA
- TEMPORARY RAILING (TYPE K)
- CHANNELIZERS @ 50' C-C

NOTE:

1. FOR DETAILS NOT SHOWN SEE TCS PLANS.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: W. E. WASSER
 CALCULATED/DESIGNED BY: PATTI BARTOLI
 CHECKED BY: HORMUZD SETHNA
 REVISED BY: _____ DATE: _____
 REVISIONS: _____



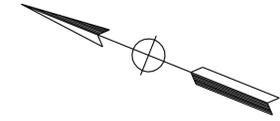
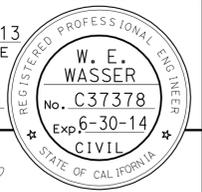
DETAIL 13 MODIFIED (13M)

INSTALL TYPE A NON-REFLECTIVE MARKER WITH STRIPING DETAIL 13M
 INSTALL TYPE A MARKER BEFORE STRIPING TO GET THE PROPER BONDING

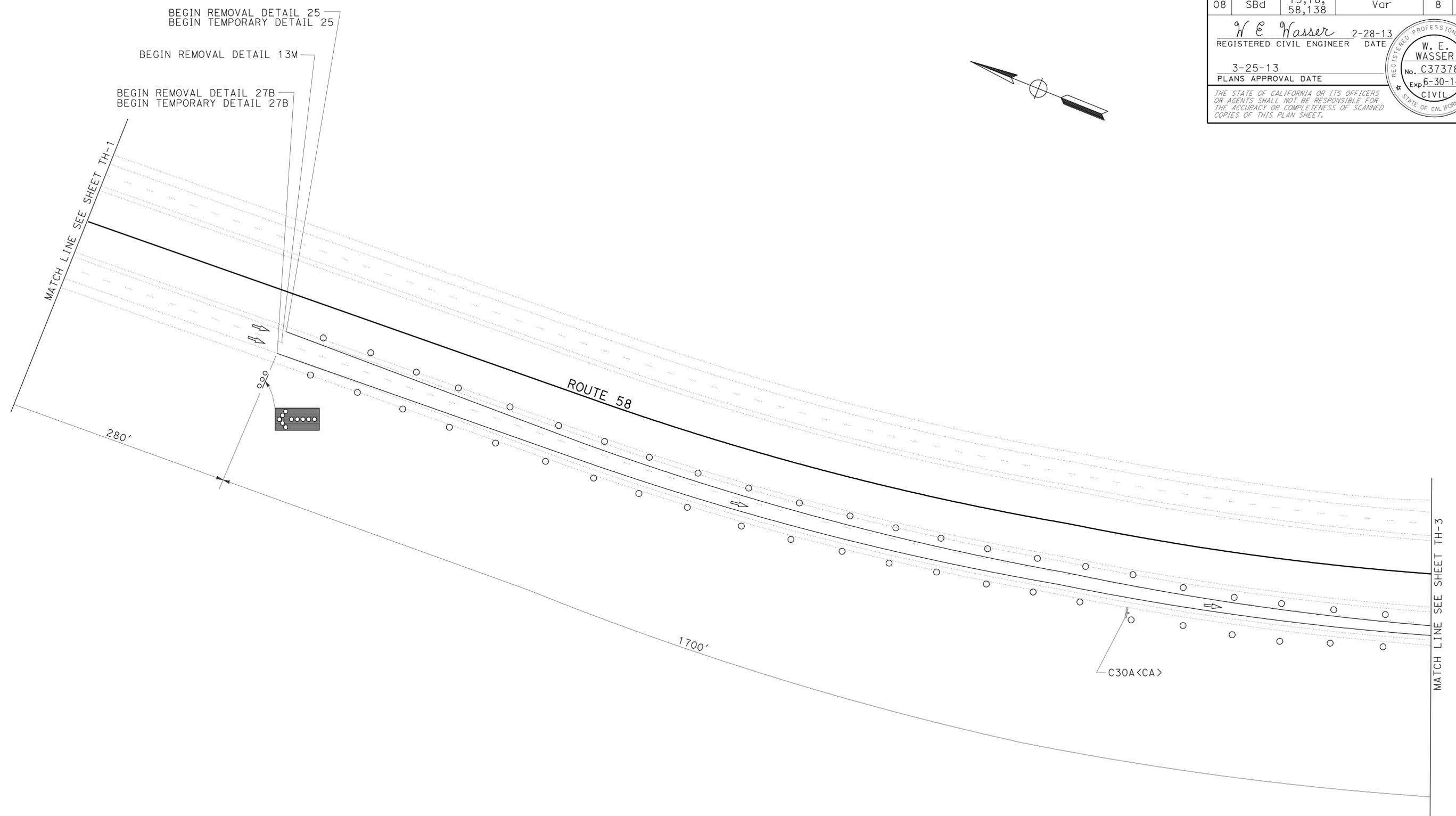
STAGE 1
TRAFFIC HANDLING PLAN
 NO SCALE
TH-1

APPROVED FOR TRAFFIC HANDLING WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18,58,138	Var	8	43
<i>W. E. Wasser</i> 2-28-13 REGISTERED CIVIL ENGINEER DATE					
3-25-13 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>					



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	PATTI BARTOLI	REVISOR BY	
Caltrans TRAFFIC DESIGN	W. E. WASSER	CHECKED BY	HORMUZD SETHNA	DATE REVISED	

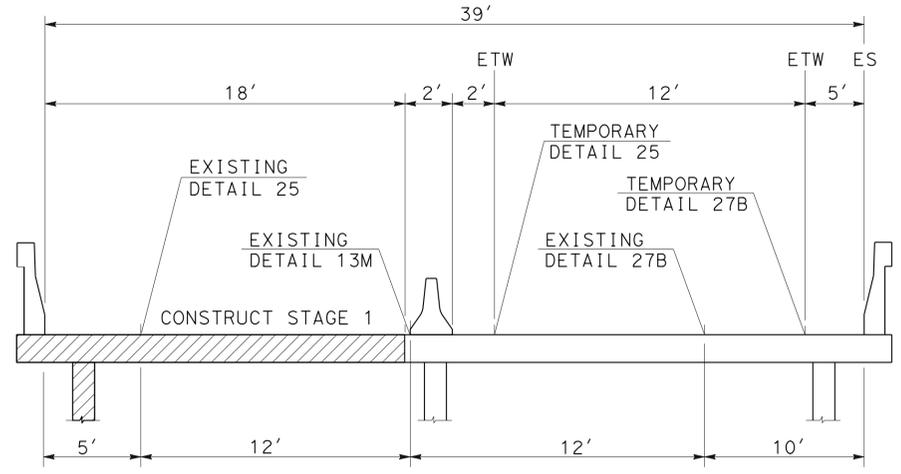
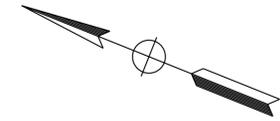


**STAGE 1
TRAFFIC HANDLING PLAN
NO SCALE
TH-2**

APPROVED FOR TRAFFIC HANDLING WORK ONLY

LAST REVISION | DATE PLOTTED => 28-MAR-2013
 02-28-13 | TIME PLOTTED => 07:33

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18, 58,138	Var	9	43
<i>W. E. Wasser</i> 2-28-13 REGISTERED CIVIL ENGINEER DATE					
3-25-13			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>					



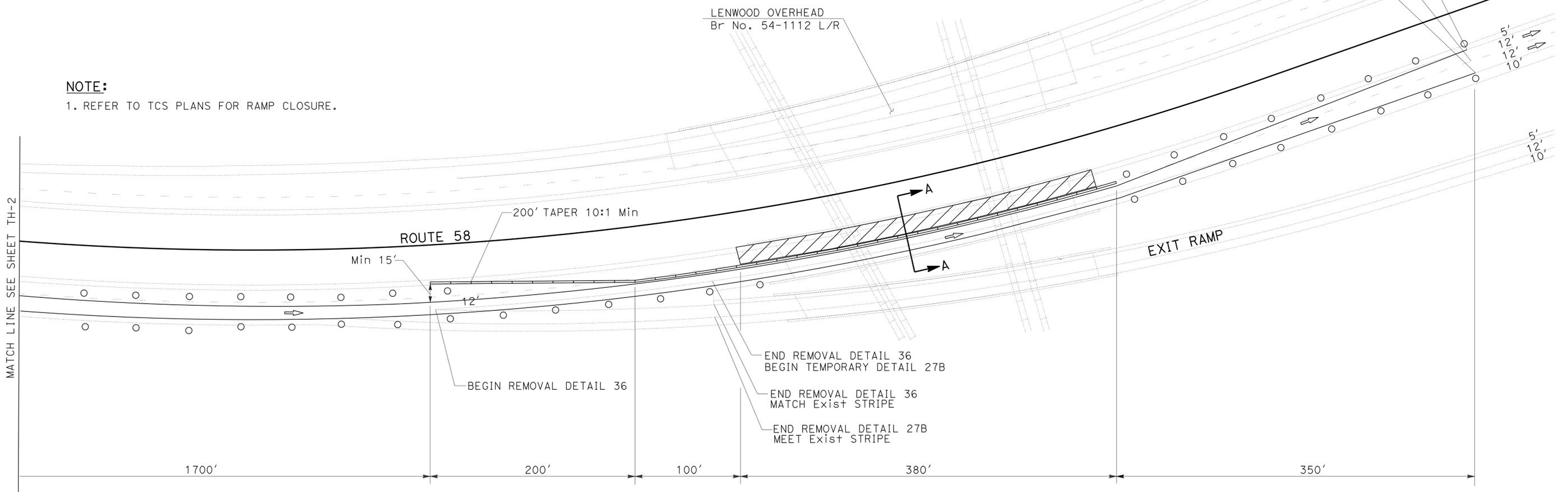
SECTION A-A

END REMOVAL DETAIL 25
 END TEMPORARY DETAIL 25
 MEET Exist STRIPE

END REMOVAL DETAIL 13M
 MEET Exist STRIPE

END REMOVAL DETAIL 27B
 END TEMPORARY DETAIL 27B
 MEET Exist STRIPE

NOTE:
 1. REFER TO TCS PLANS FOR RAMP CLOSURE.

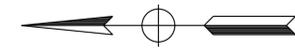
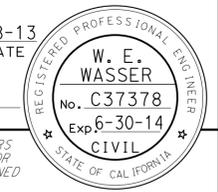


STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: W. E. WASSER
 CALCULATED/DESIGNED BY: [blank]
 CHECKED BY: [blank]
 PATTI BARTOLI
 HORMUZD SETHNA
 REVISED BY: [blank]
 DATE REVISED: [blank]

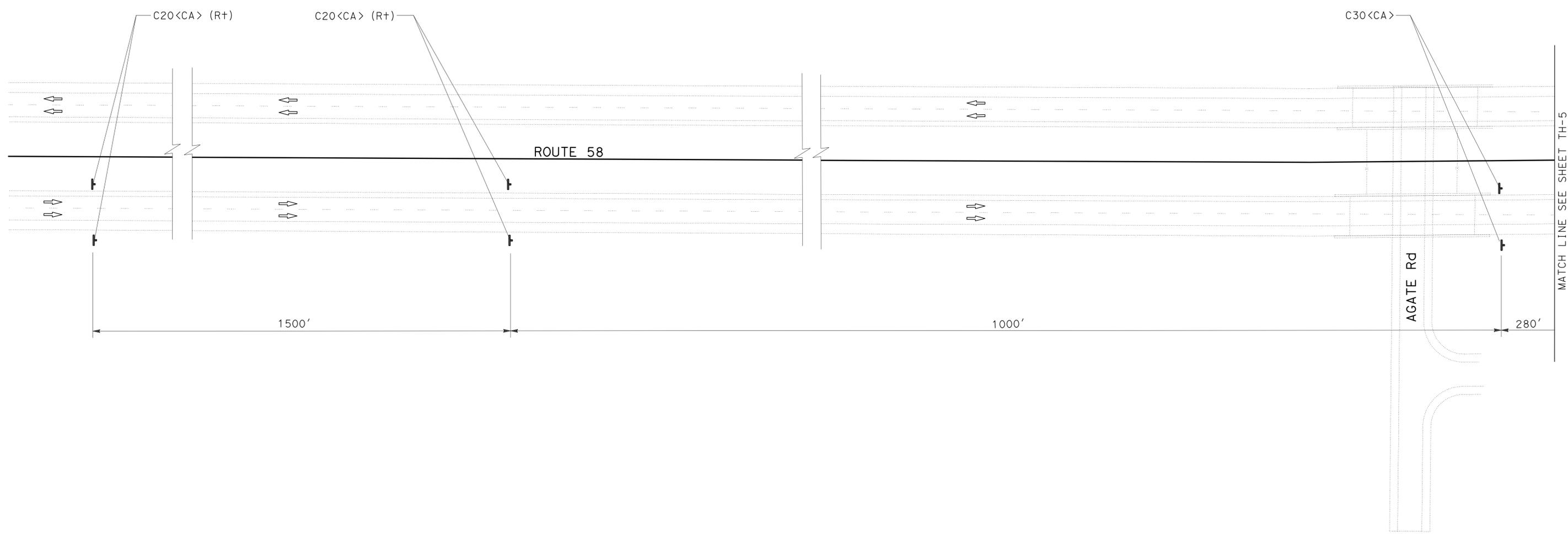
APPROVED FOR TRAFFIC HANDLING WORK ONLY

STAGE 1
TRAFFIC HANDLING PLAN
 NO SCALE
TH-3

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18, 58,138	Var	10	43
<i>W. E. Wasser</i> 2-28-13 REGISTERED CIVIL ENGINEER DATE					
3-25-13 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



NOTE:
 1. FOR DETAILS NOT SHOWN SEE TCS PLANS.



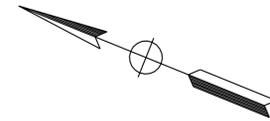
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	PATTI BARTOLI	REVISED BY
Caltrans TRAFFIC DESIGN	W. E. WASSER	CHECKED BY	HORMUZD SETHNA	DATE

STAGE 2
TRAFFIC HANDLING PLAN
 NO SCALE
TH-4

APPROVED FOR TRAFFIC HANDLING WORK ONLY

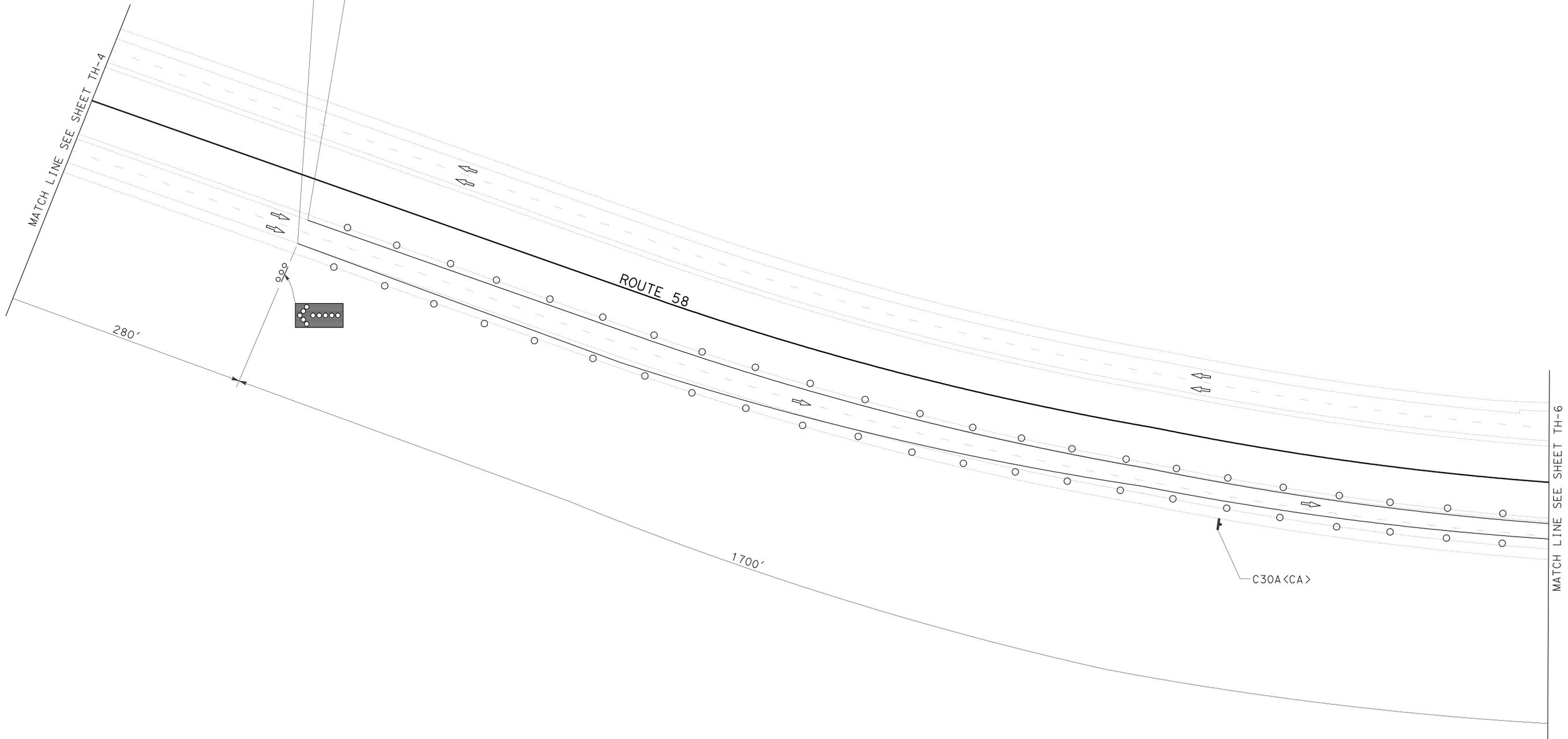
LAST REVISION | DATE PLOTTED => 27-MAR-2013
 02-28-13 | TIME PLOTTED => 09:05

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18,58,138	Var	11	43
<i>W. E. Wasser</i> 2-28-13 REGISTERED CIVIL ENGINEER DATE					
3-25-13			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>					



BEGIN REMOVAL TEMPORARY DETAIL 25
 BEGIN TEMPORARY DETAIL 25

BEGIN REMOVAL TEMPORARY DETAIL 27B
 BEGIN TEMPORARY DETAIL 27B

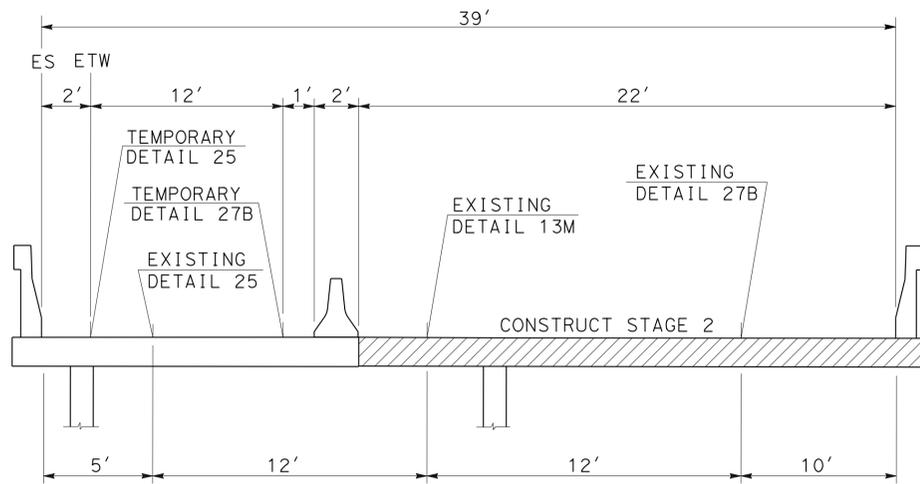
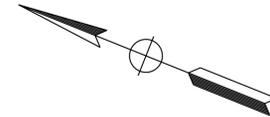


STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	PATTI BARTOLI	REVISED BY
Caltrans TRAFFIC DESIGN	W. E. WASSER	CHECKED BY	HORMUZD SETHNA	DATE REVISED

APPROVED FOR TRAFFIC HANDLING WORK ONLY

STAGE 2
TRAFFIC HANDLING PLAN
 NO SCALE
TH-5

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18,58,138	Var	12	43
<i>W. E. Wasser</i> 2-28-13 REGISTERED CIVIL ENGINEER DATE			3-25-13 PLANS APPROVAL DATE		
REGISTERED PROFESSIONAL ENGINEER W. E. WASSER No. C37378 Exp. 6-30-14 CIVIL STATE OF CALIFORNIA			<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>		

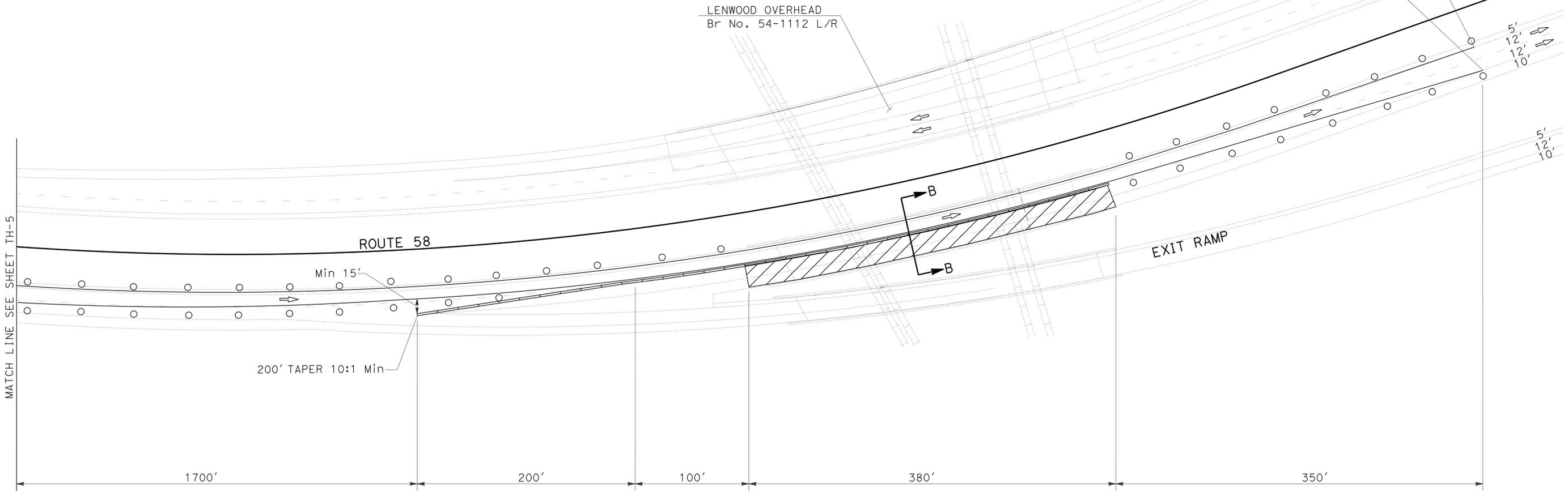


SECTION B-B

END REMOVAL TEMPORARY DETAIL 25
 END TEMPORARY DETAIL 25
 MEET EXIST STRIPE

END REMOVAL TEMPORARY DETAIL 27B
 END TEMPORARY DETAIL 27B
 MEET EXIST STRIPE

LENWOOD OVERHEAD
 Br No. 54-1112 L/R



**STAGE 2
 TRAFFIC HANDLING PLAN
 NO SCALE
 TH-6**

APPROVED FOR TRAFFIC HANDLING WORK ONLY

USERNAME => s123631
 DGN FILE => 0812000132md006.dgn



UNIT 2284

PROJECT NUMBER & PHASE

081200001321

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
Caltrans TRAFFIC DESIGN	W. E. WASSER	PATTI BARTOLI	
		HORMUZD SETHNA	

LAST REVISION DATE PLOTTED => 27-MAR-2013 09:05
 02-28-13 TIME PLOTTED => 09:05

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18, 58,138	Var	13	43

W E Wasser 2-28-13
 REGISTERED CIVIL ENGINEER DATE

3-25-13
 PLANS APPROVAL DATE

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

NOTE:

- FOR THE REMOVAL QUANTITIES OF THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE) AND PAVEMENT MARKER AT LENWOOD OVERHEAD, REFER TO THE PAVEMENT DELINEATION QUANTITY SHEET PDQ-1.

TEMPORARY PAVEMENT DELINEATION

LOCATION	DETAIL No.	TEMPORARY PAVEMENT MARKER	TEMPORARY TRAFFIC STRIPE (TAPE)	
		TYPE H	4" WHITE	4" YELLOW
		EA	LF	LF
LENWOOD OVERHEAD BRIDGE No. 54-1112R/L	25	115		5,460
	27B		5,460	
SUBTOTAL			5,460	5,460
TOTAL		115	10,920	

TEMPORARY TRAFFIC ITEMS

ITEMS	QUANTITY	
	FT	EA
CHANNELIZERS (SURFACE MOUNTED)		170
TEMPORARY RAILING (TYPE K)	1,360	
FLASHING ARROW SIGN		2

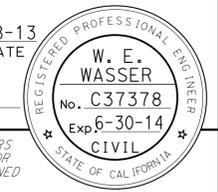
**CONSTRUCTION AREA SIGNS
STAGE 1 AND 2 TRAFFIC HANDLING**

SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	No. OF SIGNS
FEDERAL	CALIFORNIA				
	C20(L+)	36" x 36"	LEFT LANE CLOSED AHEAD	1 - 4" x 6"	4
	C20(R+)	36" x 36"	RIGHT LANE CLOSED AHEAD	1 - 4" x 6"	4
	C30A(CA)	36" x 36"	SHOULDER CLOSED	1 - 4" x 6"	2
	C30(CA)	30" x 30"	LANE CLOSED	1 - 4" x 4"	4

**TRAFFIC HANDLING QUANTITIES
THQ-1**

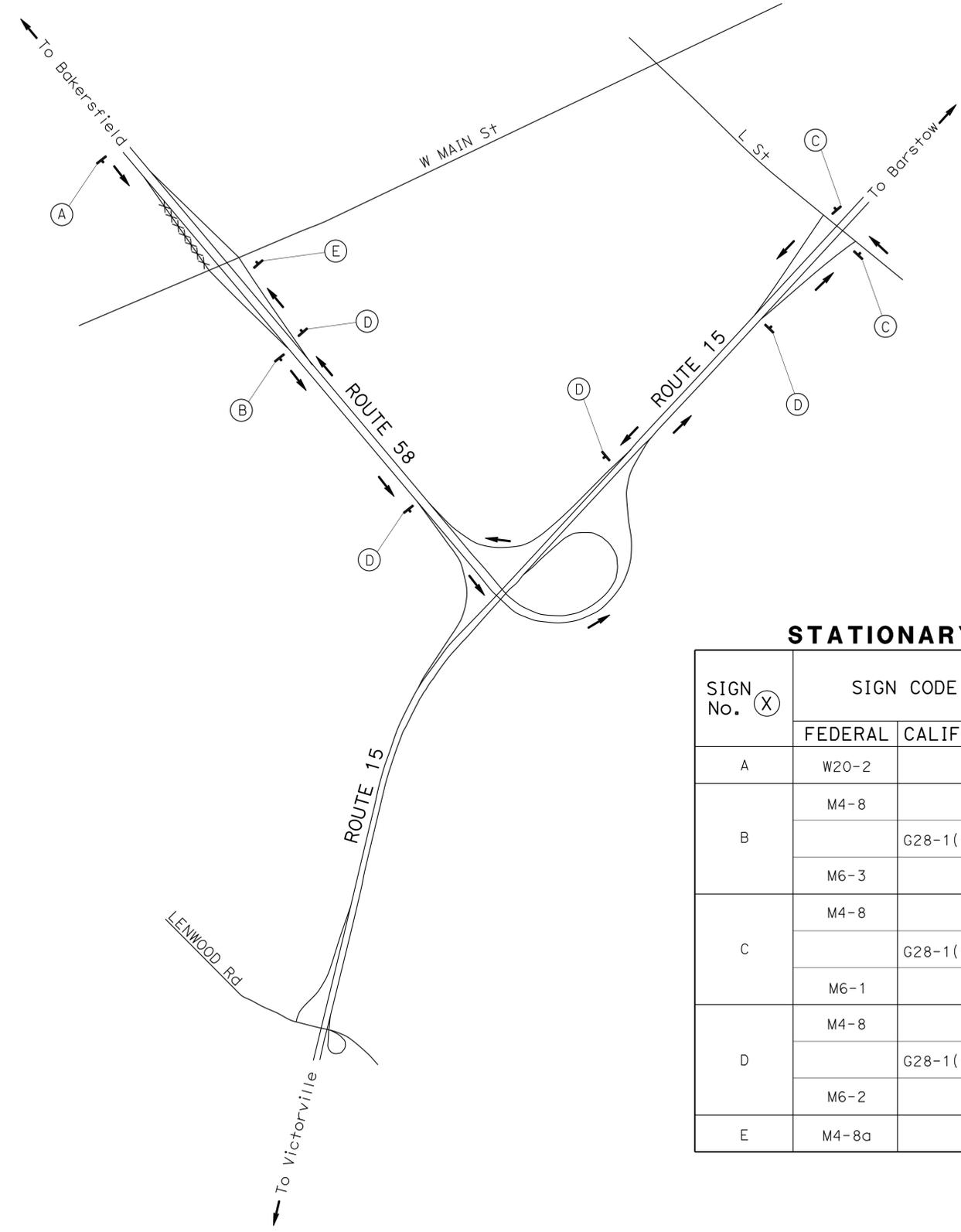
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR
 W. E. WASSER
 CALCULATED/DESIGNED BY
 CHECKED BY
 PATTI BARTOLI
 HORMUZD SETHNA
 REVISED BY
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18, 58,138	Var	14	43
<i>W. E. Wasser</i> 2-28-13 REGISTERED CIVIL ENGINEER DATE					
3-25-13 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>					



LEGEND:

xxxx RAMP CLOSURE



STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No. (X)	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	No. OF SIGNS EA
	FEDERAL	CALIFORNIA				
A	W20-2		48" x 48"	DETOUR AHEAD	1 - 4" x 6"	1
B	M4-8		30" x 15"	DETOUR	1 - 4" x 6"	1
		G28-1(58)(CA)	28" x 25"	ROUTE SHIELD 58		
C	M6-3		21" x 15"	UP ARROW	1 - 4" x 6"	2
	M4-8		30" x 15"	DETOUR		
		G28-1(58)(CA)	28" x 25"	ROUTE SHIELD 58		
D	M6-1		21" x 15"	LEFT ARROW	1 - 4" x 6"	4
	M4-8		30" x 15"	DETOUR		
		G28-1(58)(CA)	28" x 25"	ROUTE SHIELD 58		
E	M6-2		21" x 15"	UP RIGHT ARROW	1 - 4" x 6"	1
	M4-8a		24" x 18"	END DETOUR		

DETOUR DURING CLOSURE OF WEST MAIN STREET EASTBOUND EXIT RAMP CLOSURE

DETOUR PLAN NO SCALE DE-1

APPROVED FOR DETOUR CONSTRUCTION WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: W. E. WASSER
 CALCULATED/DESIGNED BY: PATTI BARTOLI
 CHECKED BY: HORMUZZ SETHNA
 REVISED BY: PATTI BARTOLI
 DATE REVISED: [blank]

LAST REVISION | DATE PLOTTED => 27-MAR-2013 02-28-13 | TIME PLOTTED => 09:33

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18, 58,138	Var	15	43

W. E. Wasser 2-28-13
 REGISTERED CIVIL ENGINEER DATE

3-25-13
 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:
 1. AT LOCATIONS JOSHUA ST OC AND DOCK DITCH, THE REMOVAL OF THERMOPLASTIC TRAFFIC STRIPE AND REMOVAL OF PAVEMENT MARKERS WILL BE REMOVED WITH COLD PLANE OF PAVEMENT AND WILL NOT BE A SEPARATE PAY ITEM.

PAVEMENT DELINEATION QUANTITIES

LOCATION	ROUTE	PM	LOCATION BRIDGE NAME / BRIDGE NUMBER	DETAIL No. OR PAVEMENT MARKING	REMOVE PAVEMENT MARKERS	REMOVE THERMOPLASTIC PAVEMENT MARKING	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	REMOVE THERMOPLASTIC TRAFFIC STRIPE	THERMOPLASTIC PAVEMENT MARKING	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)			PAVEMENT MARKER				PAVEMENT MARKER (RETRO- REFLECTIVE RECESSED)			
					EA	SQFT	LF	LF	SQFT	4" YELLOW	4" WHITE	4" WHITE	NON- REFLEC TIVE	RETRO-REFLECTIVE			TYPE G	TYPE H		
										EA	D	G	H	EA	EA			EA		
1	SBd 138	R14.94	CAJON CREEK BRIDGE No. 54-0561	TYPE VI (L+) (2)		198			84											
				TYPE IV (L+) (2)		96														
				DETAIL 11				62						248						
				DETAIL 21						546				273						
				DETAIL 27B							546			546						
				DETAIL 38A											90					
2	SBd 15	31.81	N15 / N395 CONNECTOR BRIDGE No. 54-0665G	DETAIL 12	10													10		
				DETAIL 25A	19			418			418								19	
				DETAIL 27B							418									
				TYPE VI (L+) (3)				297												
3	SBd 15	32.32	JOSHUA STREET OC / BRIDGE NO. 54-0666	DETAIL 21						458										
4	SBd 15	34.00	MAIN STREET OC BRIDGE No. 54-1273	DETAIL 11				363												
				DETAIL 27B				726					1,452							
				DETAIL 36A	4			136												
				TYPE I (24') (2)																
5	SBd 18	R96.60	ROUTE 15 / 18 SEPARATION BRIDGE No. 54-0470	SIGNAL (4)		168			128											
				AHEAD (4)		278														
				Xing (1)		256														
				Ped (1)		43														
				TYPE II (R)		38														
				TYPE I (24') (1)		168														
				DETAIL 12	13			84			141									
				DETAIL 22	26					564			282					26		13
				DETAIL 27B							564									
				4" WHITE STRIPE								282								
6	SBd 15	51.83	DALE EVANS ROAD OC BRIDGE No. 54-0564	DETAIL 22	23						242							23		
				DETAIL 27B						484										
7	SBd 58	R33.54	LENWOOD OVERHEAD BRIDGE No. 54-1112R/L	DETAIL 8																
				DETAIL 13M	286															
				DETAIL 25	16					716			716							16
				DETAIL 27B										716						
				DETAIL 36A	15															
				DETAIL 36	26															
8	SBd 58	R31.95	COMMUNITY Blvd UC BRIDGE No. 54-1109R/L	DETAIL 13M	40															
				DETAIL 25	9															
				DETAIL 27B																
9	SBd 58	R20.64	IRON WASH BRIDGE No. 54-1091R/L	DETAIL 13M	30															
				DETAIL 25	7															
				DETAIL 27B																
10	SBd 58	R15.83	HAWAS WASH BRIDGE No. 54-1090R/L	DETAIL 13M	50															
				DETAIL 25	11															
				DETAIL 27B																
SUBTOTAL					585	1,626	4,770	8,674	669	3,499	11,448	1086	321	49	143	43	10	19		

**PAVEMENT DELINEATION QUANTITIES
PDQ-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN

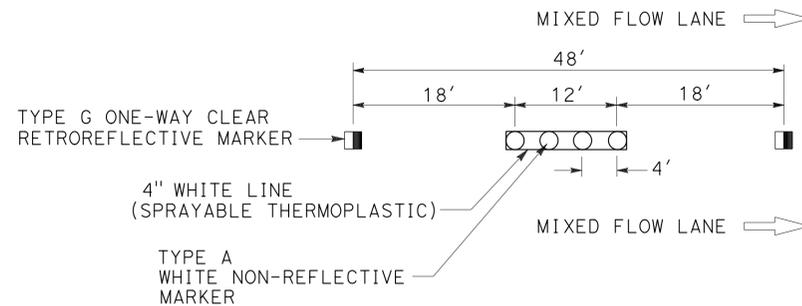
LAST REVISION DATE PLOTTED => 27-MAR-2013
 02-28-13 TIME PLOTTED => 09:33

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18, 58,138	Var	16	43

W. E. Wasser 2-28-13
 REGISTERED CIVIL ENGINEER DATE

3-25-13
 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.



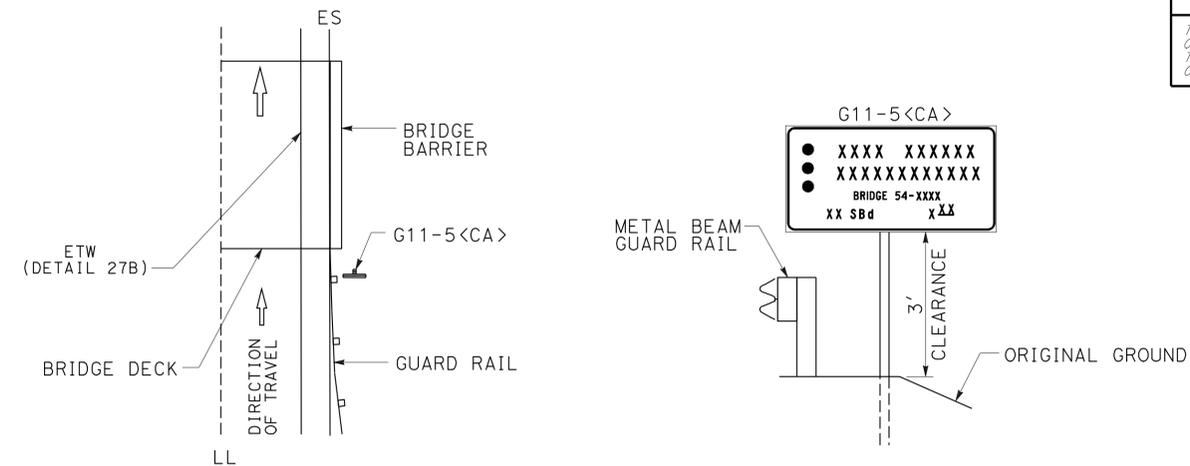
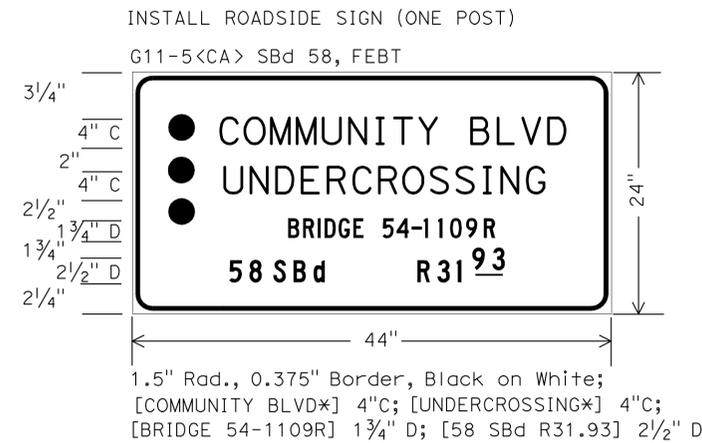
DETAIL 13M
 INSTALLED ON ROUTES 15 AND 58.

PAVEMENT DELINEATION QUANTITIES

LOCATION	ROUTE	PM	LOCATION BRIDGE NAME / BRIDGE NUMBER	DETAIL No. OR PAVEMENT MARKING	REMOVE PAVEMENT MARKERS	REMOVE THERMOPLASTIC PAVEMENT MARKING	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	REMOVE THERMOPLASTIC TRAFFIC STRIPE	THERMOPLASTIC PAVEMENT MARKING	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)			PAVEMENT MARKER				PAVEMENT MARKER (RETRO-REFLECTIVE RECESSED)					
					EA	SQFT	LF	LF	SQFT	4" YELLOW	4" WHITE	4" WHITE	TYPE A	TYPE D	TYPE G	TYPE H	TYPE G	TYPE H				
					EA	EA	EA	EA	EA	EA	EA	EA	EA									
11	SBd 58	R14.23	TURTLE WASH BRIDGE No. 54-1089R/L	DETAIL 13M	26			59				234	234		20		6					
				DETAIL 25	6		234			234												
				DETAIL 27B				234														
12	SBd 15	R121.43	DOCK DITCH BRIDGE No. 54-0246R/L	DETAIL 13M	20			45				380	380		32		9					
				DETAIL 25	5		180			380												
				DETAIL 27B				180														
13	SBd 15	R130.18	ZZYZX ROAD OC BRIDGE No. 54-0398	DETAIL 21			614				307											
				DETAIL 27B				614						614								
14	SBd 15	R138.70	PANO DITCH BRIDGE No. 54-0281R/L	DETAIL 13M	29			66				261	261		22		7					
				DETAIL 25	7		261			261												
				DETAIL 27B				261						261								
				DETAIL 36	11			444							518				23			
15	SBd 15	171.47	BAILEY ROAD OC BRIDGE No. 54-0613	DETAIL 38B	12			222									12					
				DETAIL 21			518			259												
SUBTOTAL					116		1,807	2,643			1,441	2,882	629	74		57	22					
TOTAL					701	1,626	6,577	11,317	669			20,985			395		314			29		

PAVEMENT DELINEATION QUANTITIES
PDQ-2

NOTE:
* CONDENSE COPY 2%



TYPICAL LOCATION AND INSTALLATION OF G11-5(CA) SIGN

ROADSIDE SIGN QUANTITIES

LOCATION	DIRECTION	SIGN CODE		PANEL SIZE L X D		POST SIZE AND LENGTH		ROADSIDE SIGN	REMARKS
				4" x 4"	4" x 6"	ONE POST			
				FEDERAL	CALIFORNIA	INCHES	LF	LF	
SBd 58, Br No. 54-1109R	FEBT		G11-5<CA>	44 X 24	7.5			1	COMMUNITY Blvd UC
TOTAL								1	

SIGN PANEL MATERIAL SUMMARY

LOCATION	DIRECTION	SIGN CODE		PANEL SIZE L x D	SINGLE FACED	SIGN FACING MATERIAL				FURNISH SINGLE SHEET ALUMINUM SIGN	REMARKS				
						BACKGROUND		LEGEND				PRO-TECTIVE FILM			
						SHEETING COLOR	RETROREFLECTIVE ASTM TYPE	SHEETING COLOR	RETROREFLECTIVE ASTM TYPE				PREMIUM		
SBd 58, Br No. 54-1109R	FEBT	FEDERAL	CALIFORNIA	INCHES	X	WHITE	II	BLACK		X	UNFRAMED	0.063"	SQFT	7.3	COMMUNITY Blvd UC
TOTAL											7.3				

SIGN DETAIL PLAN
NO SCALE **SD-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE DESIGN
 FUNCTIONAL SUPERVISOR
 KEVIN CHEN
 CALCULATED/DESIGNED BY
 CHECKED BY
 WILLIAM AMBROSE
 KUAN H. CHEN
 REVISED BY
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18,58,138	Var	18	43

William Ambrose 2-28-13
 REGISTERED CIVIL ENGINEER DATE

3-25-13
 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.

NOTES:

- SEE CONSTRUCTION DETAIL SHEETS FOR COLD PLANE AND HMA DESIGN.
- SEE C-3 SHEET FOR MBGR DESIGN.

COLD PLANE AND HMA-A

Loc No.	LOCATION BRIDGE	POST MILE	DIRECTION	RUMBLE STRIP	COLD PLANE	TACK COAT	HMA-A
				Sta	SQYD	TON	TON
12	DOCK DITCH (54-0246L)	R121.43	SB		443	0.33	164
12	DOCK DITCH (54-0246R)	R121.43	NB		443	0.33	164
3	JOSHUA STREET OC (54-0666)	32.32	EB/WB	2	622	0.13	91
TOTAL				2	1508	0.79	419

METAL BEAM GUARD RAIL

	QUANTITY	UNIT
METAL BEAM GUARD RAILING	110	LF
DOUBLE METAL BEAM GUARD RAILING (WOOD POST)	620	LF
TRANSITION RAILING (TYPE WB)	1	EA
RAIL TENSIONING ASSEMBLY	1	EA
CRASH CUSHION (TYPE CAT)	1	EA
REMOVE METAL BEAM GUARD RAILING	200	LF

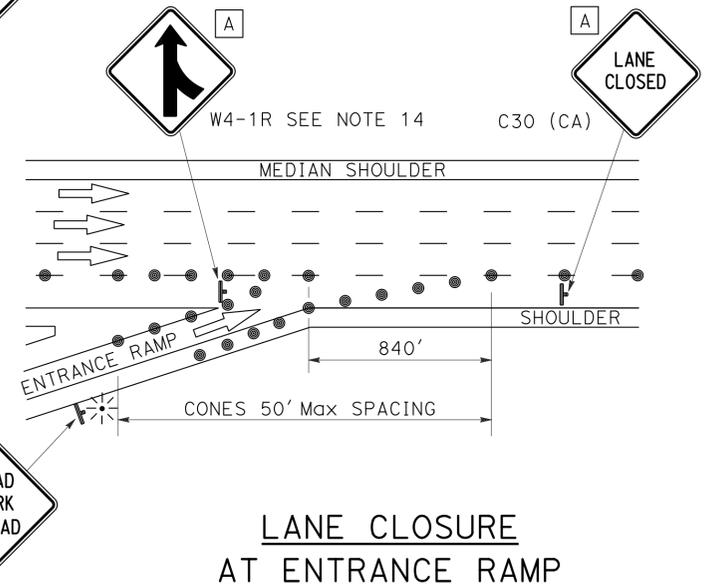
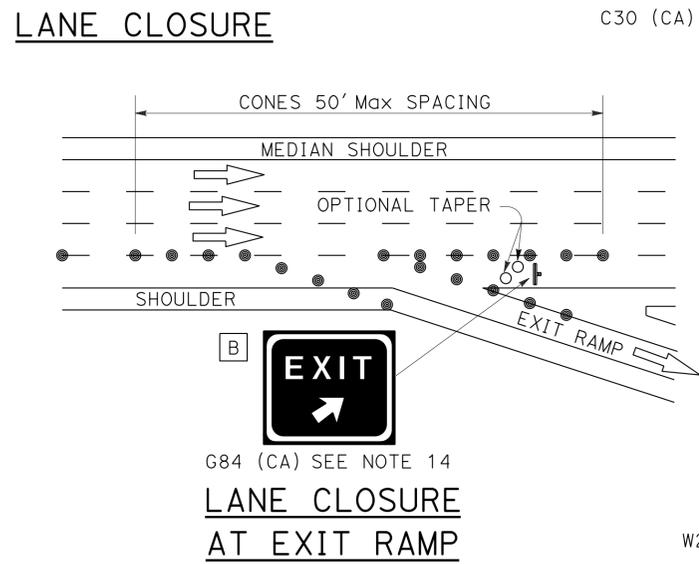
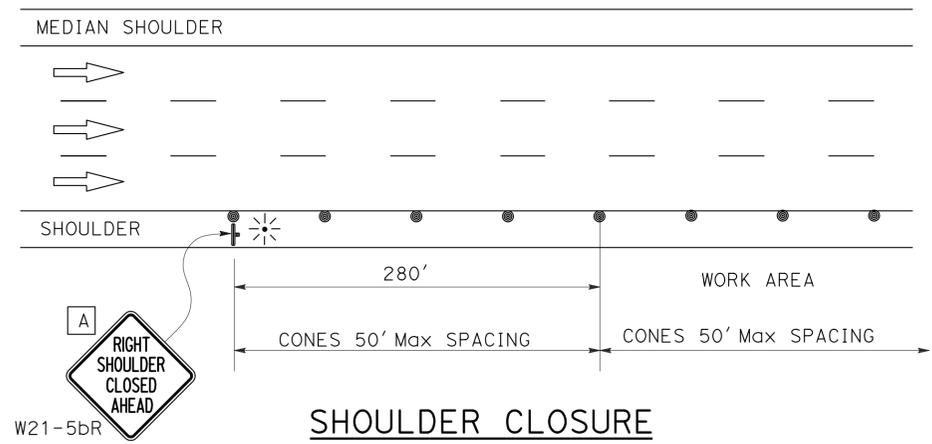
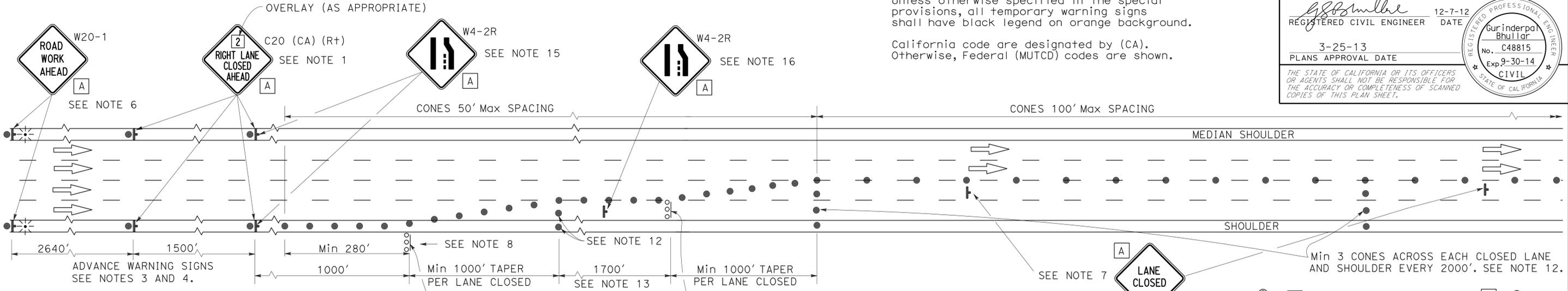
SUMMARY OF QUANTITIES
Q-1



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18, 58,138	Var	19	43

REGISTERED CIVIL ENGINEER	DATE 12-7-12
3-25-13 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:
 Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background.
 California code are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.



- NOTES:**
- Median lane closures shall conform to the details for outside lane closures except that C20 (CA) (Lt) signs shall be used.
 - At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
 - Duplicate sign installations are not required:
 - On opposite shoulder if at least one-half of the available lanes remain open to traffic.
 - In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
 - 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.
 - A C14 (CA) "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.
 - If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT _____ MILES", use a C20 (CA) sign for the first advance warning sign.
 - Place a C30 (CA) sign every 2000' throughout length of lane closure.
 - One flashing arrow sign for each lane closed. The first flashing arrow sign shall be Type I. All others may be either Type I or Type II.
 - 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.
 - 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.
 - 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.
 - Unless otherwise specified in the special provisions, the 1700' tangent shown along lane lines shall be used between the 1000' tapers required for each closed traffic lane.
 - Unless otherwise specified in the special provisions, the G84 (CA) and W4-1 signs shall be used as shown.
 - When specified in the special provisions, a W4-2 "LANE ENDS" symbol sign is to be used in place of the C20 (CA) "RIGHT LANE CLOSED AHEAD" sign.
 - The W4-2 "LANE ENDS" symbol sign shown at this location is to be used where the W4-2 sign is used as advance warning as described in Note 15.

SIGN PANEL SIZE (Min)

A	48" x 48"
B	54" x 48"

LEGEND

●	TRAFFIC CONE
○	TRAFFIC CONE (OPTIONAL TAPER)
↑	TEMPORARY SIGN
⬢	FLASHING ARROW SIGN (FAS)
⬢	FAS SUPPORT OR TRAILER
⚡	PORTABLE FLASHING BEACON

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 FOR LANE CLOSURE ON
 FREEWAYS AND EXPRESSWAYS**

NO SCALE

TCS-1

REVISOR: [] DATE: []
 CALCULATED/DESIGNED BY: [] CHECKED BY: []
 FUNCTIONAL SUPERVISOR: []
 DEPARTMENT OF TRANSPORTATION
 STATE OF CALIFORNIA -

USERNAME => s114926
 DGN FILE => tcs10.dgn



UNIT 2343

PROJECT NUMBER & PHASE

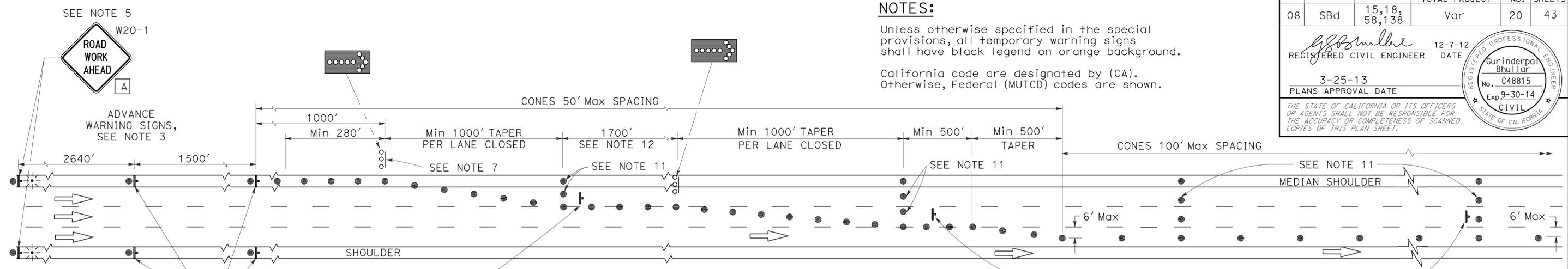
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LAST REVISION: DATE PLOTTED => 27-MAR-2013
 TIME PLOTTED => 13:36

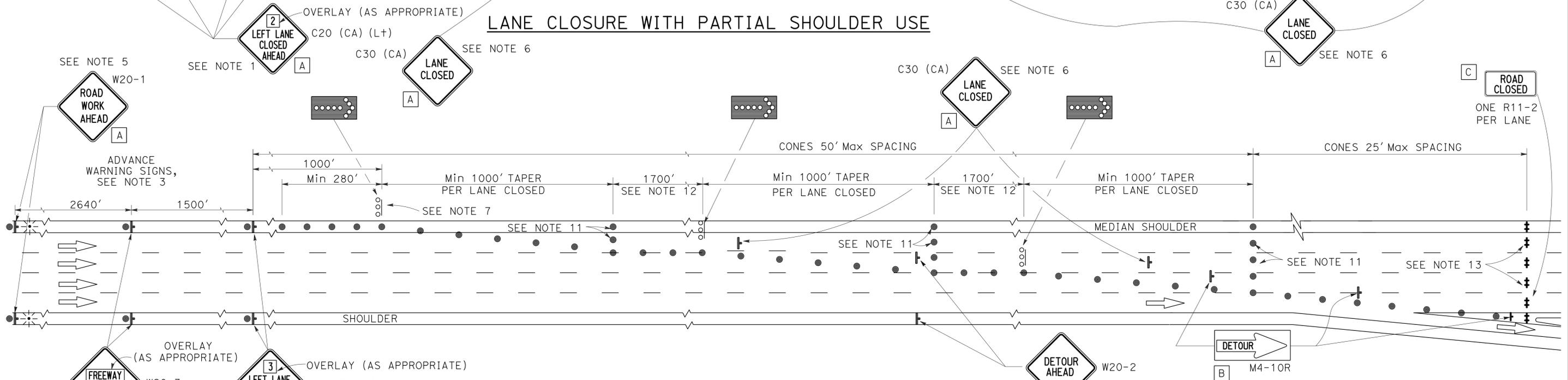
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Sbd	15,18, 58,138	Var	20	43

	
REGISTERED CIVIL ENGINEER	DATE 12-7-12
3-25-13	
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:
 Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background.
 California code are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.



LANE CLOSURE WITH PARTIAL SHOULDER USE



COMPLETE CLOSURE

NOTES:

- Lane closures on the right side using partial median shoulder as a traffic lane shall conform to the details for inside lane closure except that C20 (CA) (Rt) signs shall be used.
- At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
- 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.
- A C14 (CA) "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.
- If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT ___ MILES", use a C20 (CA) sign for the first advance warning sign.
- Place a C30 (CA) sign every 2000' throughout length of lane closure.
- One flashing arrow sign for each lane closed. The first flashing arrow sign shall be Type I. All others may be either Type I or Type II.
- 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.
- 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.
- 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 With Partial Shoulder Use" 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.
- Unless otherwise specified in the special provisions, the 1700' tangent shown along lane lines shall be used between the 1000' tapers required for each closed traffic lane.
- A minimum of Two Type II barricades shall be placed across each closed lane and shoulder at the location shown and every 2000' within the complete closure area. Within the complete closure area, the transverse alignment of the barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
- When specified in the special provisions, a W20-2 "DETOUR AHEAD" sign is to be used in place of the W20-3 "FREEWAY CLOSED AHEAD" sign.

LEGEND

- TRAFFIC CONE
- † TEMPORARY SIGN
- ‡ BARRICADE
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- ☼ PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 48" x 18"
- C 48" x 30"

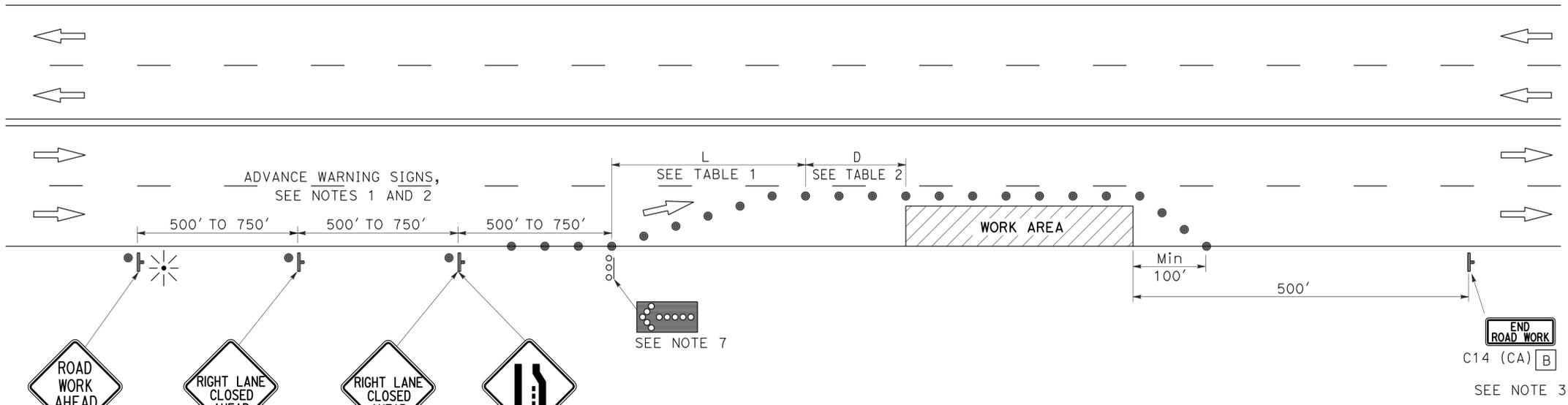
TRAFFIC CONTROL SYSTEM FOR LANE AND COMPLETE CLOSURES ON FREEWAYS AND EXPRESSWAYS

NO SCALE

TCS-2

REVISIONS: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

TYPICAL LANE CLOSURE



NOTES:

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

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

W20-1 [A] SEE NOTE 4
 C20 (CA) (R+) [A]
 C20 (CA) (R+) [A]
 W4-2R [A] SEE NOTE 10

TABLE 1

APPROACH SPEED	* MINIMUM L	** Max SPACING OF CONES ALONG TAPER
mph	ft	ft
20 AND BELOW	80	20
25	125	25
30	180	30
35	245	35
40	320	40
45	540	45
50	600	50
Over 50	SEE NOTE 9	
* USE L FOR LANE WIDTHS LESS THAN OR EQUAL TO 12'.		
** SEE NOTE 8.		

TABLE 2

APPROACH SPEED	MINIMUM D	DOWNGRADE MINIMUM D *		
		-3%	-6%	-9%
mph	ft	ft	ft	ft
25 AND BELOW	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
OVER 50	SEE NOTE 9			
* USE ON SUSTAINED DOWNGRADE STEEPER THAN -3 PERCENT AND LONGER THAN 1 MILE.				

LEGEND:

- TRAFFIC CONE
- ⊥ TEMPORARY SIGN
- ⋯ FLASHING ARROW SIGN (FAS)
- ⊖ FAS SUPPORT OR TRAILER
- ⊛ PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

- [A] 36" x 36"
- [B] 36" x 18"

- NOTES:**
- Where approach speeds are low, advance warning signs may be placed at 300' spacing and placed closer in urban areas.
 - Each advance warning sign 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 C14 (CA) "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.
 - If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT MILES", use a C20 (CA) 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.
 - Flashing arrow sign shall be either Type I or Type II.
 - The maximum spacing between cones along a tangent shall be 50' and along a taper shall be approximately as shown in Table 1.
 - For approach speeds over 50 mph, use the "Traffic Control System for Lane Closure On Freeways And Expressways" plan for lane closure details and requirements.
 - When specified in the special provisions, a W4-2 "LANE ENDS" symbol sign is to be used in place of the C20 (CA) "RIGHT LANE CLOSED AHEAD" sign.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON MULTILANE CONVENTIONAL HIGHWAYS

NO SCALE

TCS-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans

LEGEND:

- TRAFFIC CONE
- TEMPORARY SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- PORTABLE FLASHING BEACON

TABLE 1

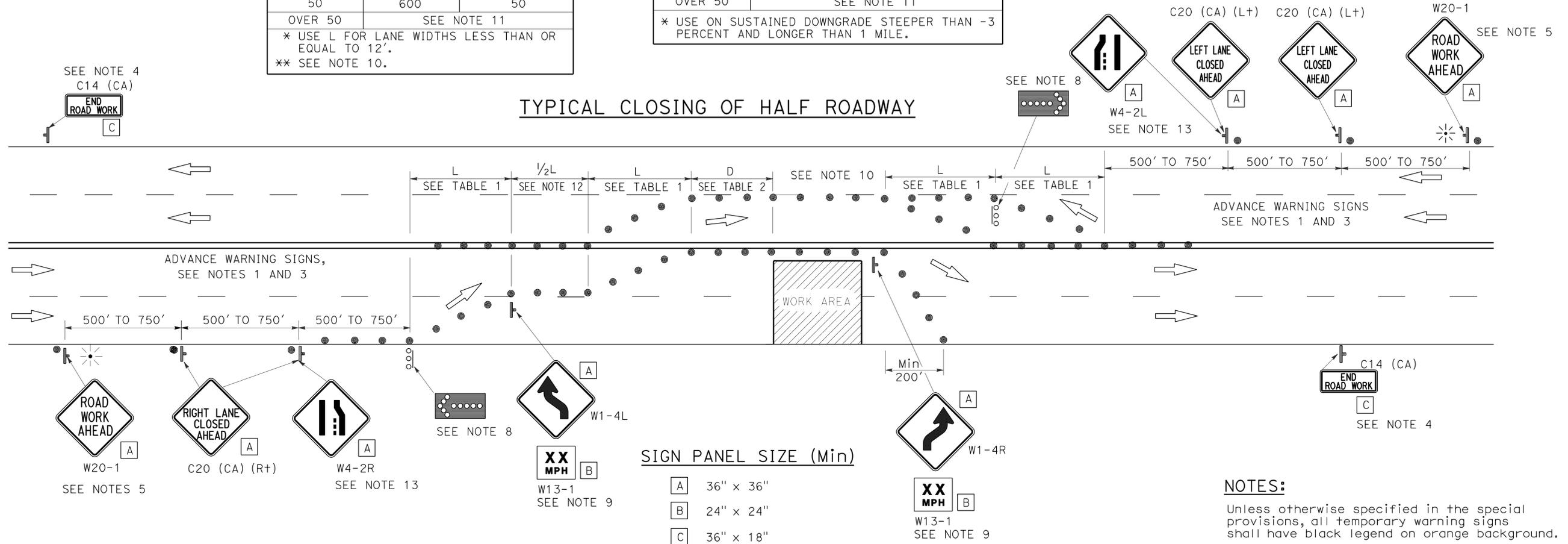
APPROACH SPEED	* MINIMUM L	** Max SPACING OF CONES ALONG TAPER
mph	ft	ft
20 and below	80	20
25	125	25
30	180	30
35	245	35
40	320	40
45	540	45
50	600	50
OVER 50	SEE NOTE 11	

* USE L FOR LANE WIDTHS LESS THAN OR EQUAL TO 12'.
 ** SEE NOTE 10.

TABLE 2

APPROACH SPEED	MINIMUM D	DOWNGRADE MINIMUM D *		
		-3%	-6%	-9%
mph	ft	ft	ft	ft
25 AND BELOW	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
OVER 50	SEE NOTE 11			

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



SIGN PANEL SIZE (Min)

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

- NOTES:**
- Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background.
 - California code are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

NOTES:

1. Where Approach speeds are low, advance warning signs may be placed at 300' spacing and placed closer in urban areas.
2. 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.
3. 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.
4. A C14 (CA) "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.
5. If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT _____ MILES", use a C20 (CA) sign for the first advance warning sign.
6. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
7. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
8. Flashing arrow signs shall be either Type I or Type II.
9. Advisory speed will be determined by the Engineer. The W13-1 Sign will not be required when advisory speed is more than the posted or maximum speed limit.
10. The maximum spacing between cones along a tangent shall be 50' and along a taper shall be approximately as shown in Table 1.
11. For approach speeds over 50 mph, use the "Traffic Control System For Lane Closure On Freeways And Expressways" plan for lane closure details and requirements.
12. Unless otherwise specified in the special provisions, the (1/2 L) shown between the two (L) lane closure tapers shall be used.
13. When specified in the special provisions, a W4-2 "Lane Ends" symbol sign is to be used in place of the C20 (CA) "RIGHT (LEFT) LANE CLOSED AHEAD" sign.

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON MULTILANE CONVENTIONAL HIGHWAYS

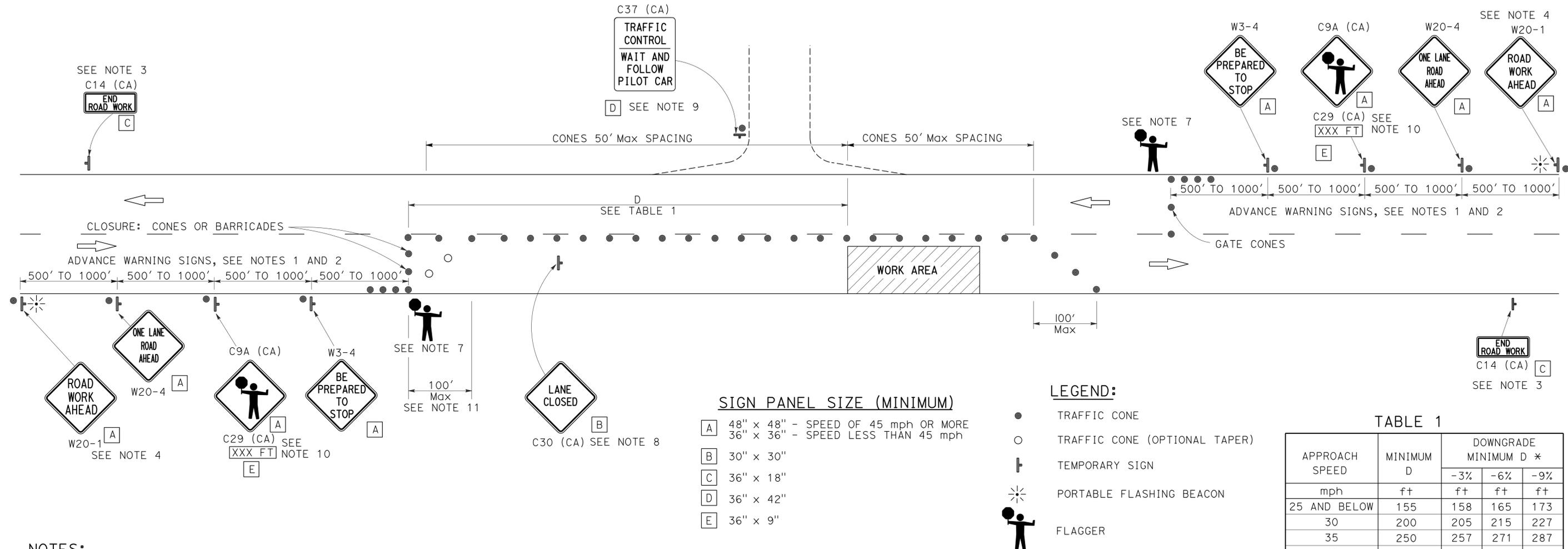
NO SCALE

TCS-4

NOTES:

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background. California code are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL



SIGN PANEL SIZE (MINIMUM)

- A 48" x 48" - SPEED OF 45 mph OR MORE
36" x 36" - SPEED LESS THAN 45 mph
- B 30" x 30"
- C 36" x 18"
- D 36" x 42"
- E 36" x 9"

LEGEND:

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- ⊢ TEMPORARY SIGN
- ☁ PORTABLE FLASHING BEACON
- 🚧 FLAGGER

TABLE 1

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

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

NOTES:

- Where approach speeds are low, advance warning signs may be placed at 300' spacing, and closer in urban areas.
- 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 C14 (CA) "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 C11 (CA) "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 at all intersections within traffic control area. Signs shall be clean and visible at all times.
- An optional C29 (CA) sign may be placed below the C9A (CA) sign.
- Traffic cones or barricades may be placed on the optional taper as shown, barricades shall be Type I, II, or III.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

TCS-5

TYPICAL RAMP CLOSURES

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 48" x 30"
- C 30" x 30"
- D 48" x 48" - SPEED OF 50 mph OR MORE
36" x 36" - SPEED LESS THAN 50 mph
- E 48" x 36"

LEGEND

- TRAFFIC CONE
- † TEMPORARY SIGN
- ‡ BARRICADES

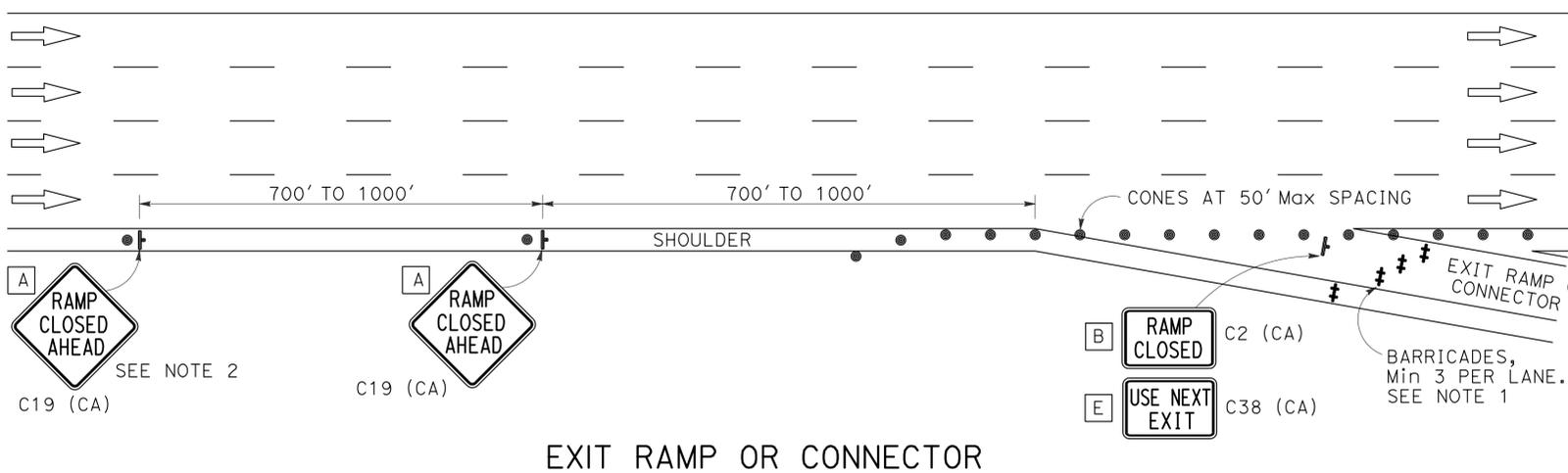
NOTES:

- Barricades shall be Type I, II, or III for closures lasting one week or less and Type III for closures lasting longer than one week.
- In addition to placing the C19 (CA) "RAMP CLOSED AHEAD" and C30 (CA) "RAMP CLOSED" signs, black on orange overlay plates with the word "CLOSED" may be mounted, as directed by the Engineer, on all guide signs that refer to the closed ramp. The letter size on the overlay shall be the same as the guide sign.
- Each advance C19 (CA) "RAMP CLOSED AHEAD" sign 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.
- All cones used for ramp 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 ramp closures only.
- At least one person shall be assigned to provide full time maintenance of traffic control devices, unless otherwise directed by the Engineer.
- The existing "EXIT" sign in the gore area shall be covered during ramp closures.

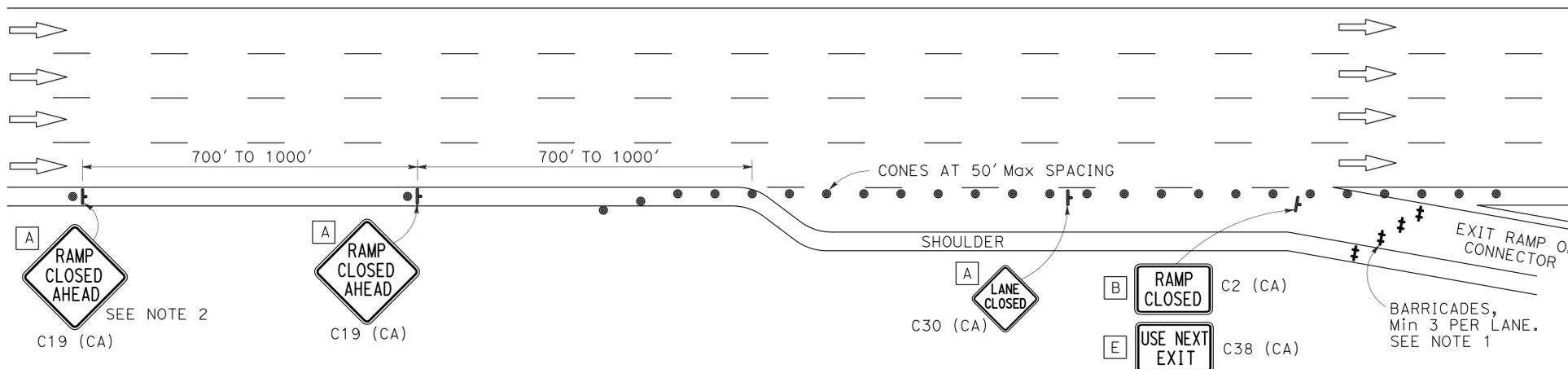
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18, 58,138	Var	24	43

12-7-12 DATE
 3-25-13 PLANS APPROVAL DATE
 REGISTERED CIVIL ENGINEER
 No. C48815
 Exp. 9-30-14
 CIVIL

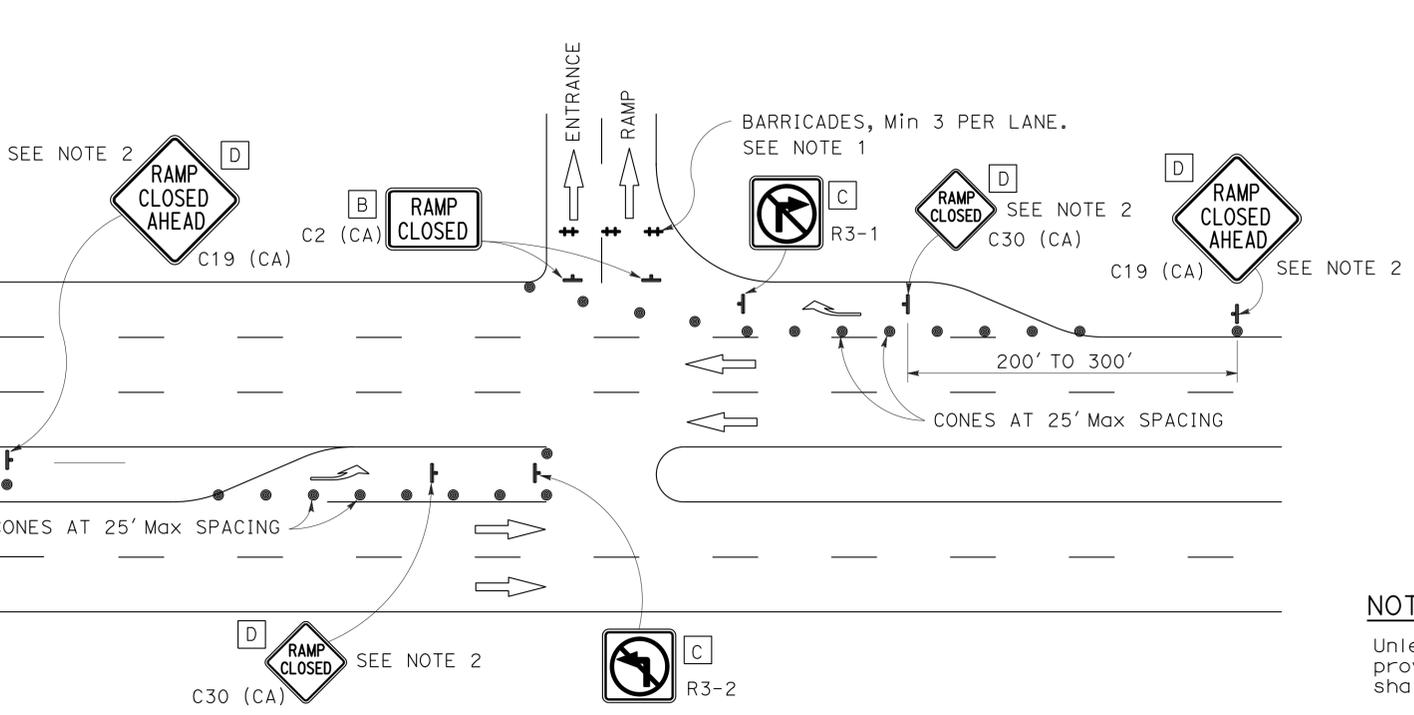
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



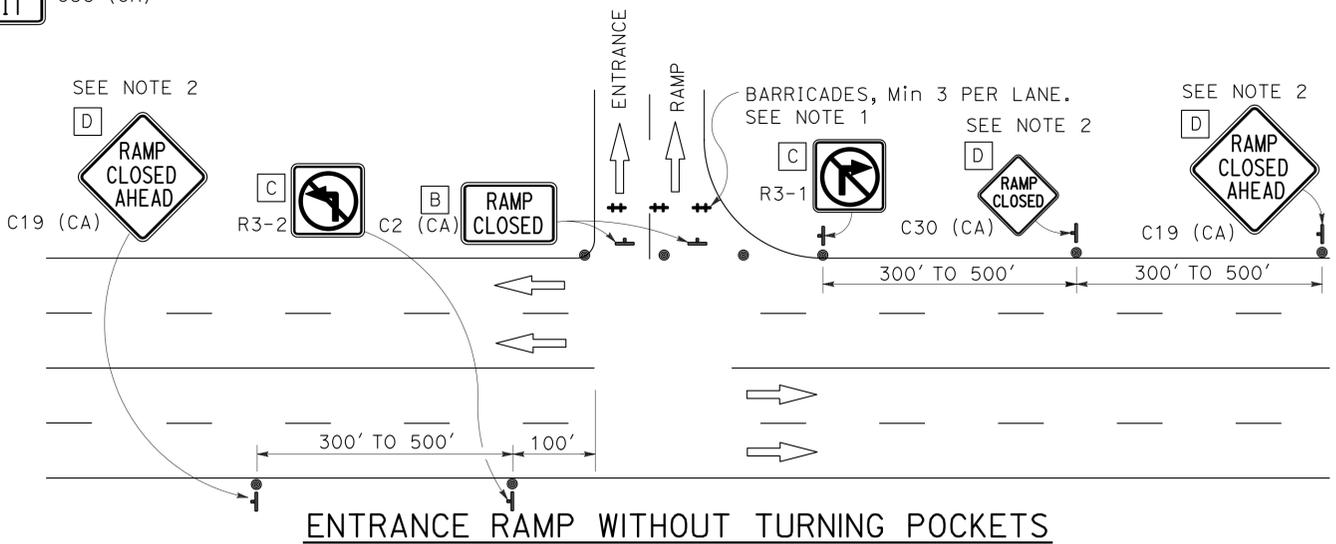
EXIT RAMP OR CONNECTOR



EXIT RAMP OR CONNECTOR WITH ADDITIONAL LANE



ENTRANCE RAMP WITH TURNING POCKETS



ENTRANCE RAMP WITHOUT TURNING POCKETS

NOTES:

- Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background.
- California code are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURE

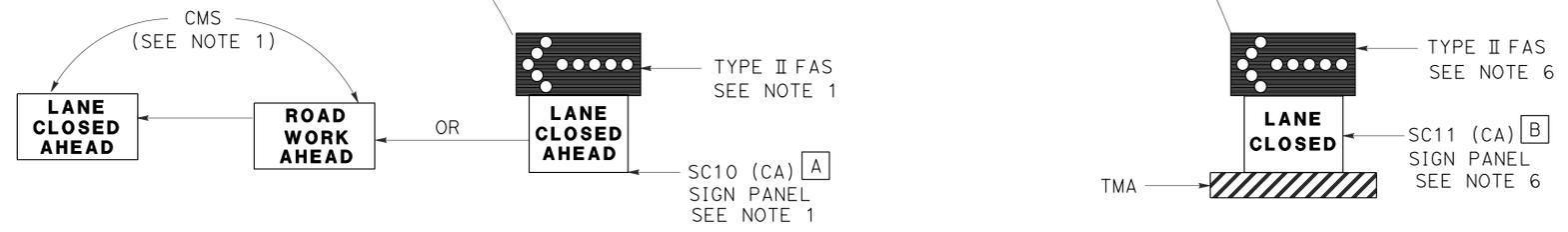
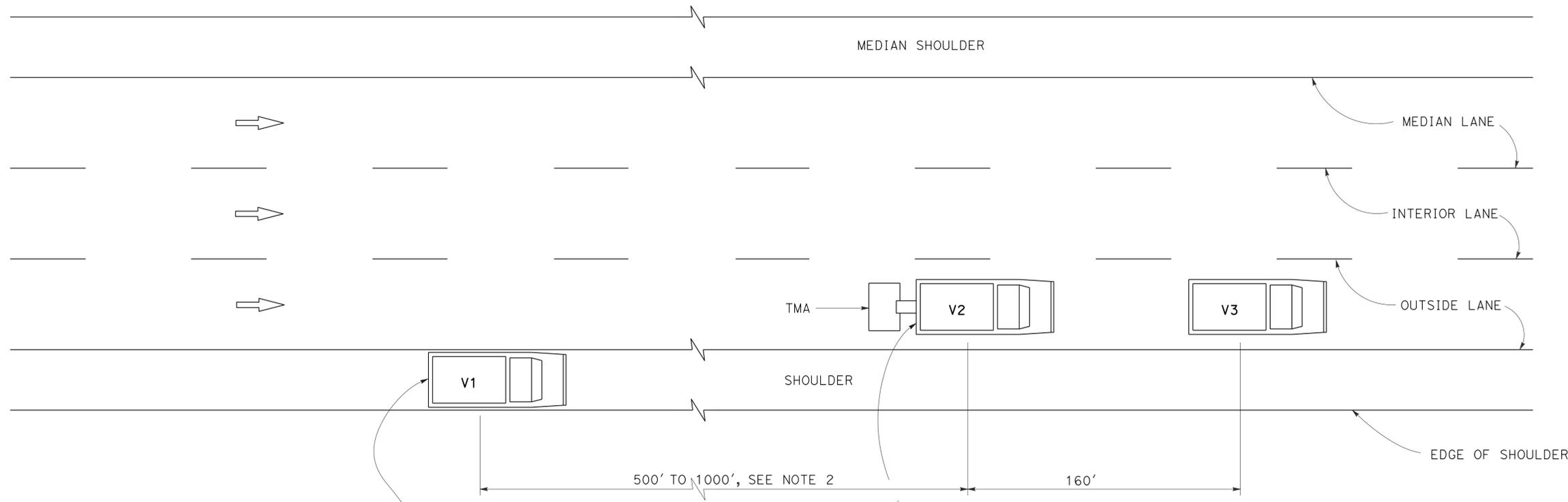
NO SCALE

TCS-6

REVISIONS: REVISED BY, DATE, CALCULATED/DESIGNED BY, CHECKED BY, FUNCTIONAL SUPERVISOR, DEPARTMENT OF TRANSPORTATION, STATE OF CALIFORNIA, Caltrans

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18, 58,138	Var	25	43

REGISTERED CIVIL ENGINEER: *Gurinderpal Bhullar* 12-7-12 DATE
 3-25-13 PLANS APPROVAL DATE
 No. C48815 Exp. 9-30-14 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.



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:

- 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. A Type II flashing arrow sign shall be mounted on the rear of sign vehicle V1 and used with the SC10 (CA) sign panel. A Type II flashing arrow sign will not be required with the changeable message sign provided the flashing arrow sign symbol is displayed on the changeable message sign board. The changeable message sign shall be sequenced to show the "ROAD WORK AHEAD" message first, followed by the "LANE CLOSED AHEAD" message and then the flashing arrow sign symbol. For median lane closure, the flashing arrow symbol shall be reversed with the arrowhead on the right.
- 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.
- A minimum sight distance of 1500' should be provided in advance of sign vehicle V1.
- 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'.
- Vehicle-mounted sign panels shall be Type III, IV, VII, VIII or IX retroreflective sheeting, black on white, black on orange, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
- Gross Vehicle Weight of shadow vehicle V2 shall be a minimum of 20,000 pounds and 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.
- 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.
- Where sufficient shoulder width is not available, sign vehicle V1 may encroach into the traffic lane staying as close to the edge of shoulder as practicable. Both V1 and V2 shall be equipped with a truck-mounted attenuator. The Gross Vehicle Weight of V1 and V2 shall be at least 20,000 pounds, respectively.
- When multiple work vehicles are used in close proximity to each other, only one shadow vehicle is required, and spacing between work vehicles shall be minimized in order to deter traffic from entering the closed lane.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
FOR MOVING LANE CLOSURE
ON MULTILANE HIGHWAYS
(OUTSIDE AND MEDIAN LANES)**

NO SCALE

TCS-7

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans®
 FUNCTIONAL SUPERVISOR
 CALCULATED/DESIGNED BY
 CHECKED BY
 REVISED BY
 DATE REVISED

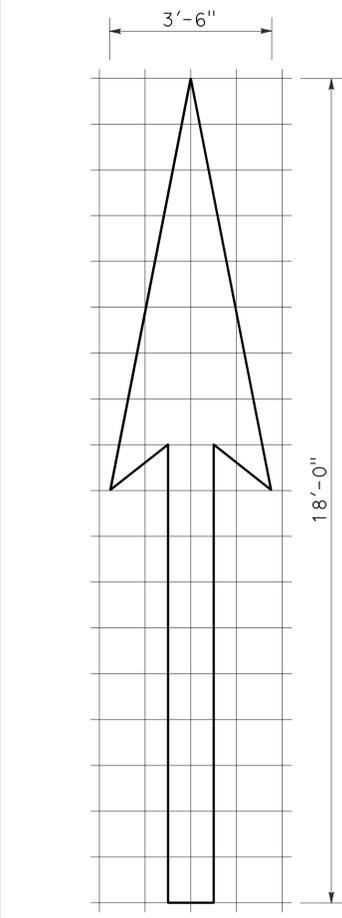
LAST REVISION | DATE PLOTTED => 27-MAR-2013
 00-00-00 | TIME PLOTTED => 1:31:36

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18, 58,138	Var	27	43

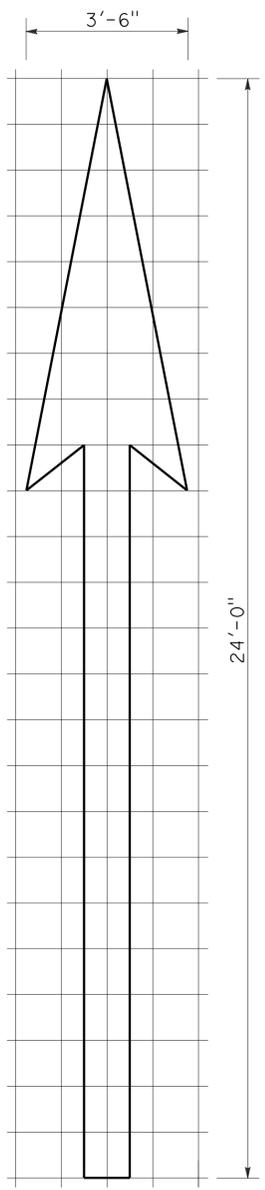
Roberto L. McLaughlin
 REGISTERED CIVIL ENGINEER
 April 20, 2012
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 Roberto L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

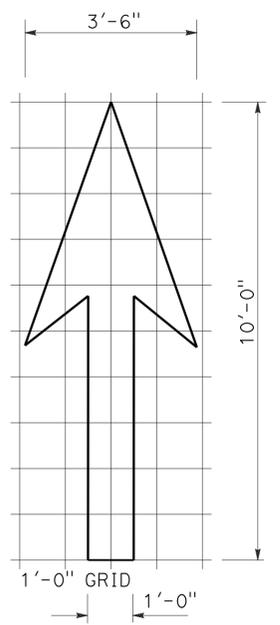
TO ACCOMPANY PLANS DATED 3-25-13



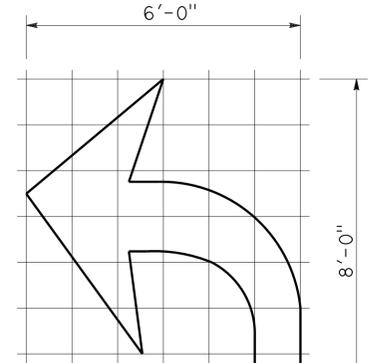
TYPE I 18'-0" ARROW
A=25 ft²



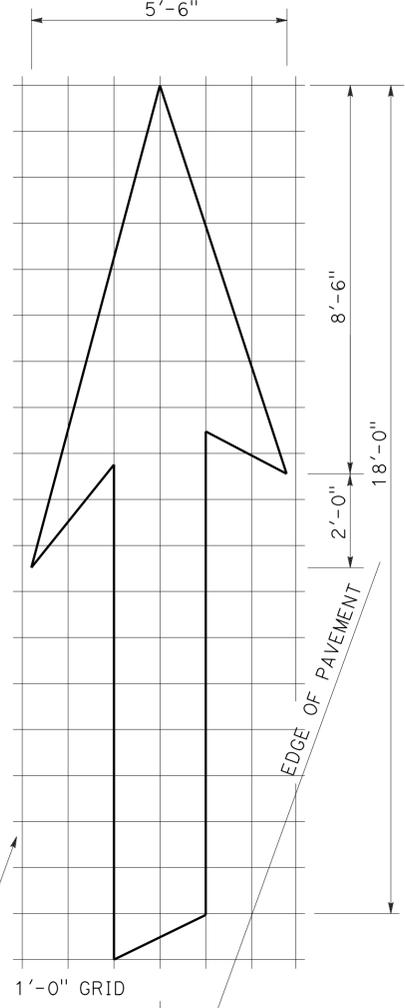
TYPE I 24'-0" ARROW
A=31 ft²



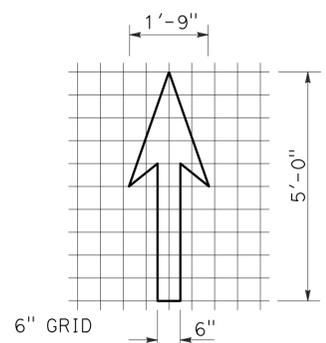
TYPE I 10'-0" ARROW
A=14 ft²



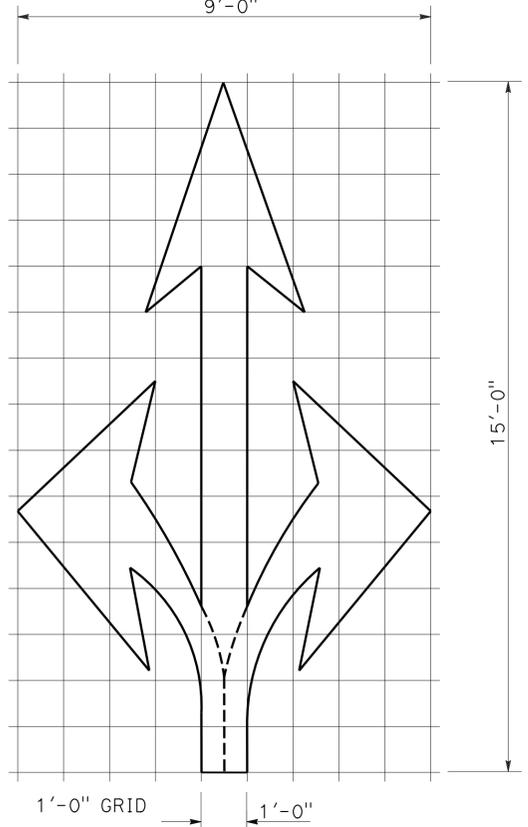
TYPE IV (L) ARROW
A=15 ft²
(For Type IV (R) arrow, use mirror image)



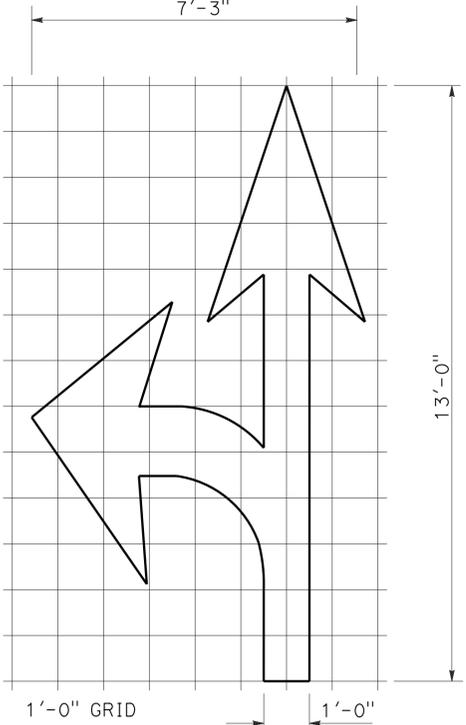
TYPE VI ARROW
A=42 ft²
Right lane drop arrow
(For left lane, use mirror image)



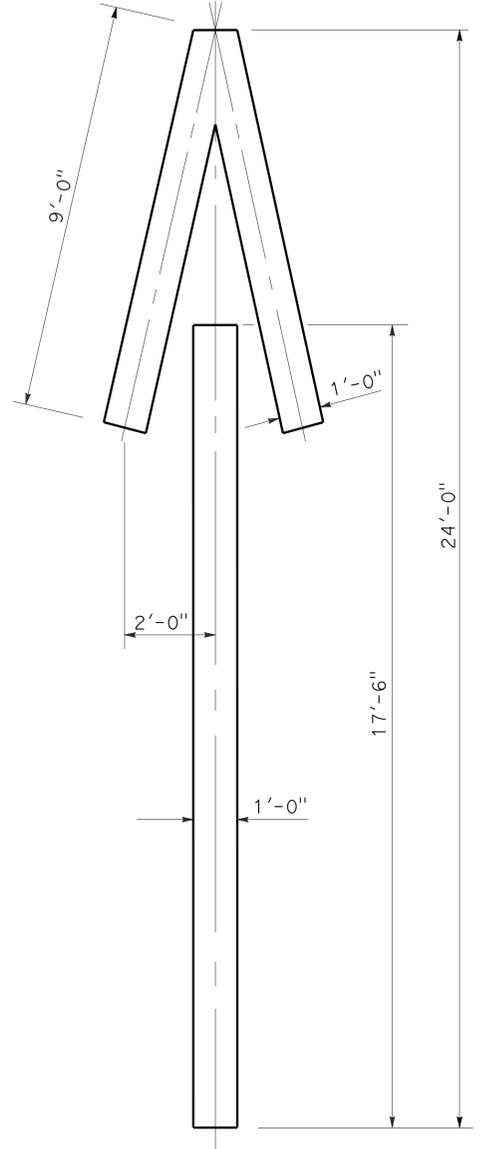
BIKE LANE ARROW
A=3.5 ft²



TYPE VIII ARROW
A=36 ft²



TYPE VII (L) ARROW
A=27 ft²
(For Type VII (R) arrow, use mirror image)



TYPE V ARROW
A=33 ft²

NOTE:
Minor variations in dimensions may be accepted by the Engineer.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
ARROWS**
NO SCALE

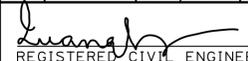
RSP A24A DATED APRIL 20, 2012 SUPERSEDES STANDARD PLAN A24A DATED MAY 20, 2011 - PAGE 13 OF THE STANDARD PLANS BOOK DATED 2010.

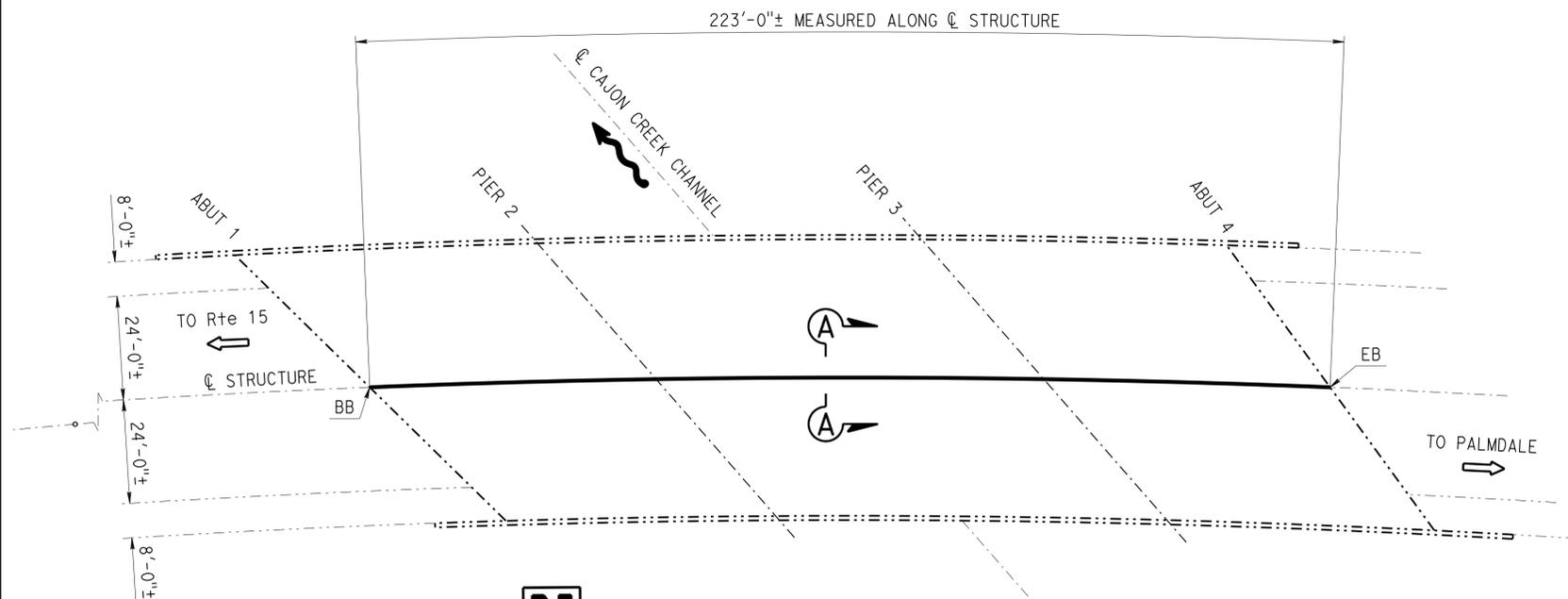
REVISED STANDARD PLAN RSP A24A

2010 REVISED STANDARD PLAN RSP A24A

NOTE: (APPLY TO ALL SHEETS)

----- Indicates existing.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15, 18, 58, 138	Var	28	43
			11-15-12		
REGISTERED CIVIL ENGINEER			DATE		
3-25-13			PLANS APPROVAL DATE		
					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					



CAJON CREEK
 Br No. 54-0561, ROUTE 138, SBd, PM R14.94
 1" = 20'

NOTE: (APPLY TO THIS SHEET ONLY)

 Indicates location of existing joint seal removal and placement of new joint seal.

- For "Section A-A", see "DETAILS No. 3" 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	GENERAL PLAN No. 6
7	GENERAL PLAN No. 7
8	GENERAL PLAN No. 8
9	GENERAL PLAN No. 9
10	GENERAL PLAN No. 10
11	DETAILS No. 1
12	DETAILS No. 2
13	DETAILS No. 3
14	JOINT SEAL DETAILS
15	STRUCTURE APPROACH TYPE R(30S) MODIFIED
16	CONCRETE BARRIER TYPE 25

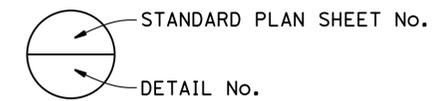
CAJON CREEK BRIDGE No. 54-0561

QUANTITIES

CLEAN EXPANSION JOINT	223	LF
EXPANSION DAM	56	CF
JOINT SEAL (MR 1/2")	223	LF

STANDARD PLANS 2010

SHEET No.	TITLE
A10A	ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
A10B	ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
A85	CHAIN LINK FENCE
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")



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


 DESIGN ENGINEER 10-10-12

DESIGN	BY M. Hashimoto	CHECKED Quang Vo	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Dale Kubochi	CHECKED Quang Vo	LAYOUT	BY Dale Kubochi
QUANTITIES	BY M. Hashimoto	CHECKED Quang Vo	SPECIFICATIONS	BY Steven Seifert
				CHECKED M. Hashimoto
				PLANS AND SPECS COMPARED Steven Seifert

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	VARIOUS
POST MILE	VARIES

ROUTES 15, 18, 58, 138 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: 0812000132

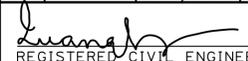
CONTRACT NO.: 08-0R6501

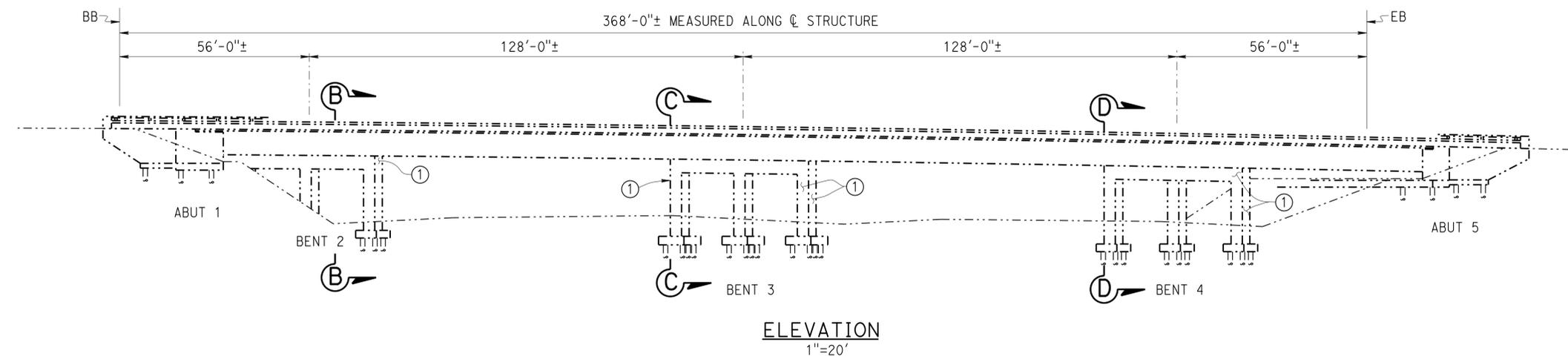
DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
1-12-12 3-12-12 11-13-12	1	16

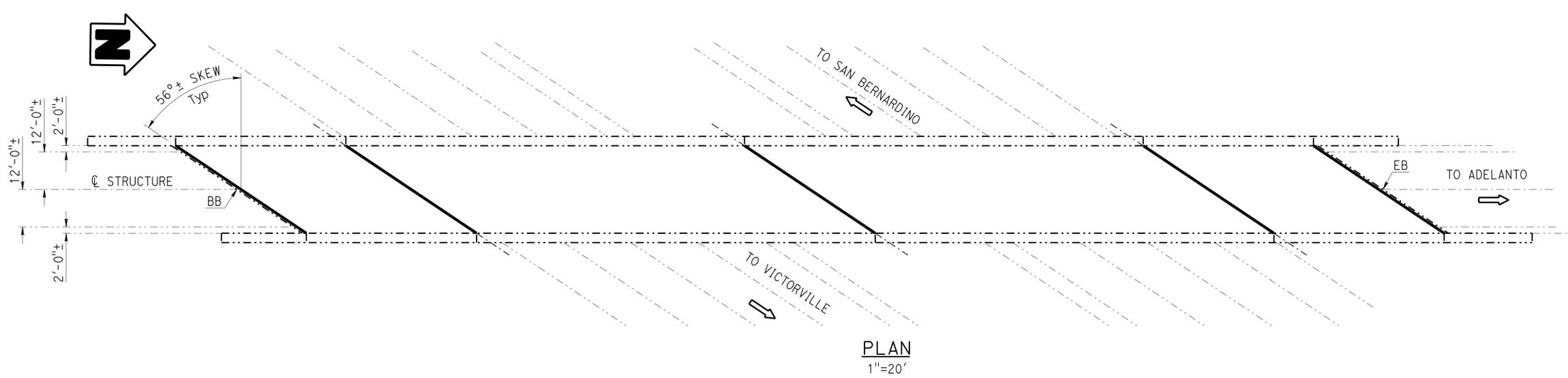
FILE => 08-0r6501-a-gp01.dgn

USERNAME => s109958 DATE PLOTTED => 28-MAR-2013 TIME PLOTTED => 09:03

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15, 18, 58, 138	Var	29	43
 REGISTERED CIVIL ENGINEER			11-15-12	DATE	
3-25-13 PLANS APPROVAL DATE					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					



- NOTES: (APPLY TO THIS SHEET ONLY)
- ① Bridge Removal (Portion) and replacement (All existing reinforcement to remain).
 - Indicates location of existing joint seal removal and placement of new joint seal.
 - For "Elevation B-B", "Elevation C-C", "Elevation D-D" and additional details for Bridge Removal (Portion) and replacement, see "DETAILS No. 1" sheet.
 - Temporary Support Exterior Girders 1 & 3; 250 kips/girder and 25 kips/girder lateral 6' from \mathcal{C} Bent 3.
 - Temporary Support Exterior Girder 3; 250 kips/girder and 25 kips/girder lateral 6' from \mathcal{C} Bent 4.



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

N15-N395 CONNECTOR
Br No. 54-0665G, ROUTE 15, SBd, PM 31.81

N15-N395 Conn	BRIDGE No. 54-0665G
QUANTITIES	
TEMPORARY SUPPORT BRIDGE REMOVAL (PORTION), LOCATION A	LUMP SUM
STRUCTURAL CONCRETE, BRIDGE	LUMP SUM
CLEAN EXPANSION JOINT	3 CY
JOINT SEAL (MR 1/2")	260 LF
JOINT SEAL (MR 1")	104 LF
	156 LF


DESIGN ENGINEER 10-10-12

DESIGN	BY M. Hashimoto	CHECKED Quang Vo	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Dale Kubochi	CHECKED Quang Vo	LAYOUT	BY Dale Kubochi
QUANTITIES	BY M. Hashimoto	CHECKED Quang Vo	SPECIFICATIONS	BY Steven Seifert
				CHECKED M. Hashimoto
				PLANS AND SPECS COMPARED Steven Seifert

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

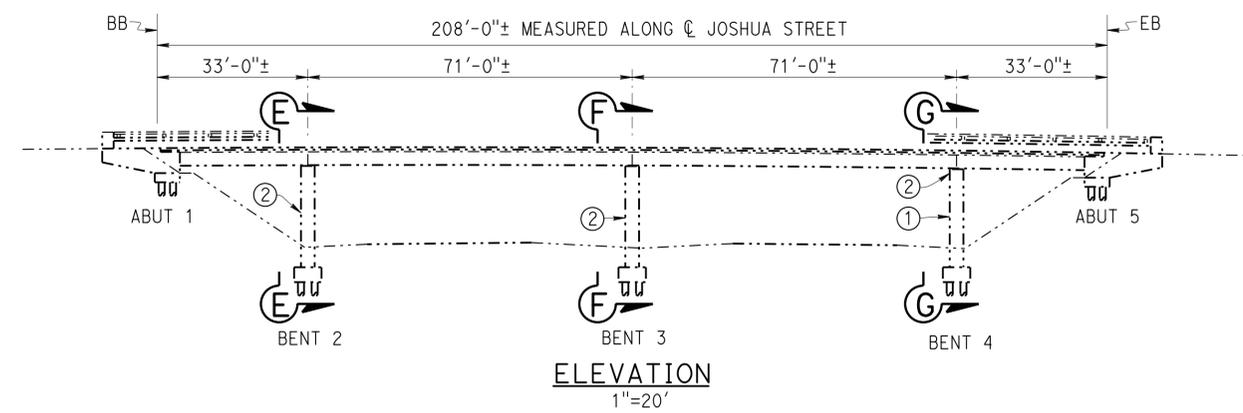
DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. VARIOUS
POST MILE VARIES
ROUTES 15, 18, 58, 138 BRIDGES
GENERAL PLAN No. 2

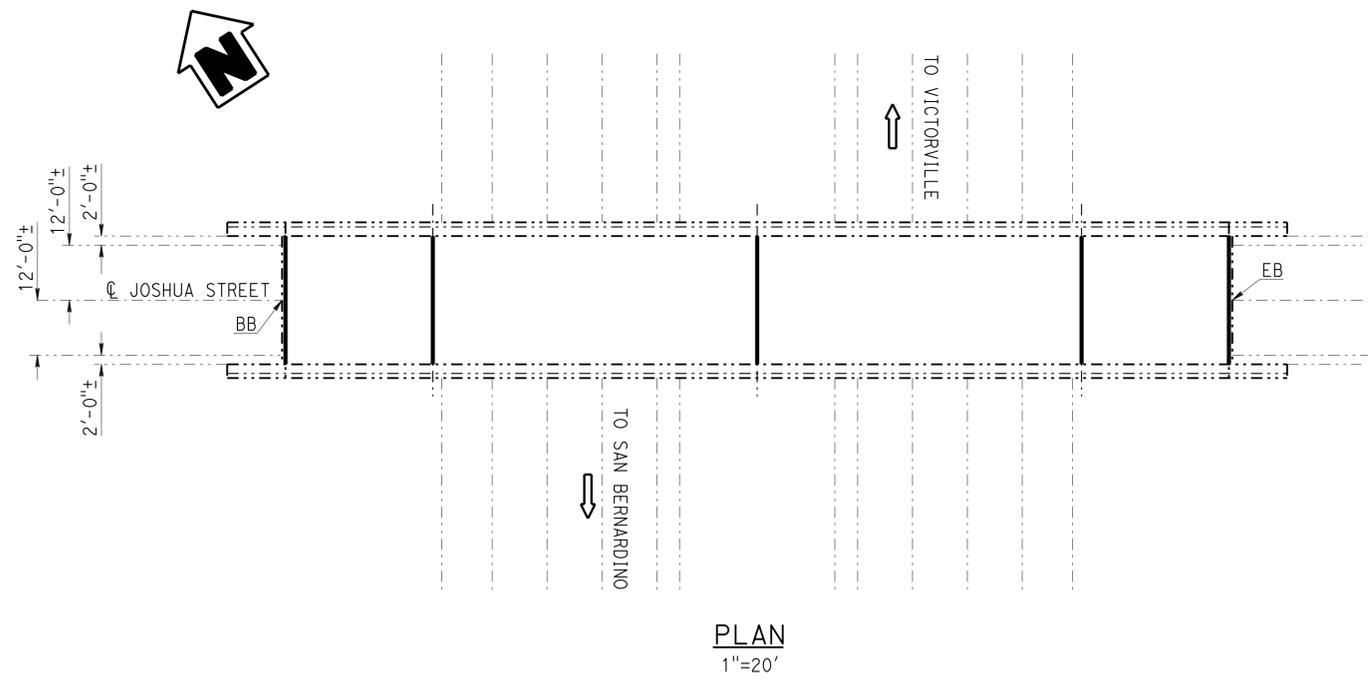
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15, 18, 58, 138	Var	30	43

11-15-12
 REGISTERED CIVIL ENGINEER DATE
 3-25-13
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER
 QUANG M. VO
 No. C 055211
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA



- NOTES: (APPLY TO THIS SHEET ONLY)
- Indicates location of existing joint seal removal and placement of new joint seal.
 - ① Inject epoxy in the numerous cracks located on Bent #4 Column and the Soffit surrounding the Bent.
 - ② Bridge Removal (Portion) and replacement (All existing reinforcement to remain).
- For "Elevation E-E", "Elevation F-F" and additional details for Bridge Removal (Portion) and replacement, see "DETAILS No. 2" sheet.
 - For "Elevation G-G" and additional details for inject epoxy locations see "DETAILS No. 2" sheet.
 - Temporary Support Exterior Girder 1; 250 kips/girder and 25 kips/girder lateral 6' from CL Bents 2 & 3.



JOSHUA STREET OC BRIDGE No. 54-0666

QUANTITIES

TEMPORARY SUPPORT	LUMP SUM
BRIDGE REMOVAL (PORTION), LOCATION B	LUMP SUM
STRUCTURAL CONCRETE, BRIDGE	1 CY
CLEAN EXPANSION JOINT	140 LF
INJECT CRACK (EPOXY)	48 LF
JOINT SEAL (MR 1/2")	112 LF
JOINT SEAL (MR 1")	28 LF

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

JOSHUA STREET OVERCROSSING
Br No. 54-0666, ROUTE 15, SBd, PM 32.32

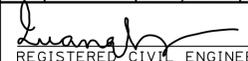
 DESIGN ENGINEER 10-10-12	DESIGN	BY M. Hashimoto	CHECKED Quang Vo	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	ROUTES 15, 18, 58, 138 BRIDGES GENERAL PLAN No. 3
	DETAILS	BY Dale Kubochi	CHECKED Quang Vo	LAYOUT	BY Dale Kubochi		VARIOUS	
QUANTITIES	BY M. Hashimoto	CHECKED Quang Vo	SPECIFICATIONS	BY Steven Seifert	PLANS AND SPECS COMPARED Steven Seifert	POST MILE	VARIES	

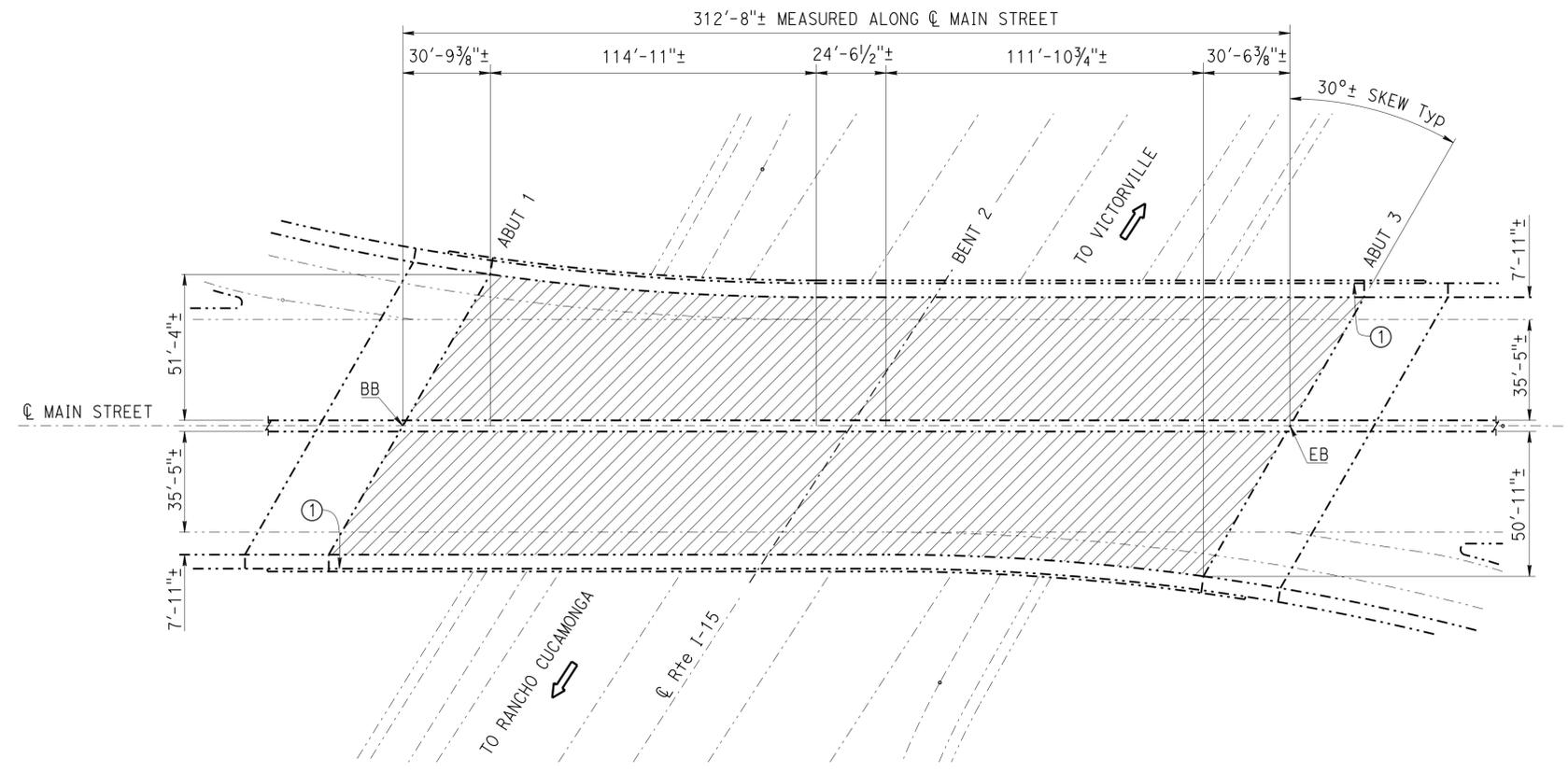
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: 3488	PROJECT NUMBER & PHASE: 0812000132	CONTRACT NO.: 08-0R6501	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 8-12 9-12 9-12 9-21-12	SHEET 3 OF 16
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USERNAME => s109658 DATE PLOTTED => 28-MAR-2013 TIME PLOTTED => 09:03

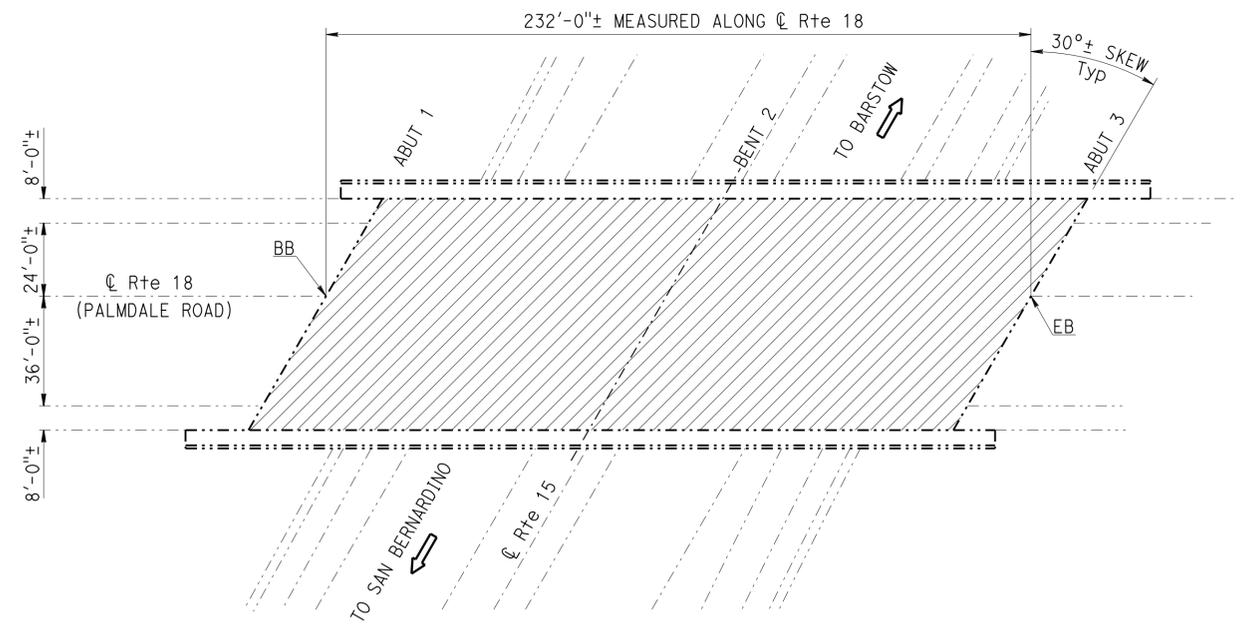
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15, 18, 58, 138	Var	31	43
 REGISTERED CIVIL ENGINEER			DATE	11-15-12	
PLANS APPROVAL DATE 3-25-13					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					



MAIN STREET OVERCROSSING
 Br No. 54-1273, ROUTE 15, SBd, PM 34.00
 1" = 30'

MAIN STREET OC	BRIDGE No. 54-1273
QUANTITIES	
PREPARE CONCRETE BRIDGE DECK SURFACE	27,588 SQFT
PAINT BRIDGE NAME AND NUMBER	LUMP SUM
TREAT BRIDGE DECK	27,588 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	306 GAL

- NOTES: (APPLY TO THIS SHEET ONLY)
-  Indicates limits of prepare and treat bridge deck with high molecular weight methacrylate.
 - ① Paint "Bridge No. 54-1273" and paint "Main Street Overcrossing"



ROUTE 18/15 SEPARATION
 Br No. 54-0470, ROUTE 18, SBd, PM R96.60
 1" = 30'

ROUTE 18/15 Sep	BRIDGE No. 54-0470
QUANTITIES	
PREPARE CONCRETE BRIDGE DECK SURFACE	17,632 SQFT
TREAT BRIDGE DECK	17,632 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	196 GAL

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


 DESIGN ENGINEER 10-10-12

DESIGN	BY M. Hashimoto	CHECKED Quang Vo	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Dale Kubochi	CHECKED Quang Vo	LAYOUT	BY Dale Kubochi
QUANTITIES	BY M. Hashimoto	CHECKED Quang Vo	SPECIFICATIONS	BY Steven Seifert

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. VARIOUS
 POST MILE VARIES
ROUTES 15, 18, 58, 138 BRIDGES
GENERAL PLAN No. 4

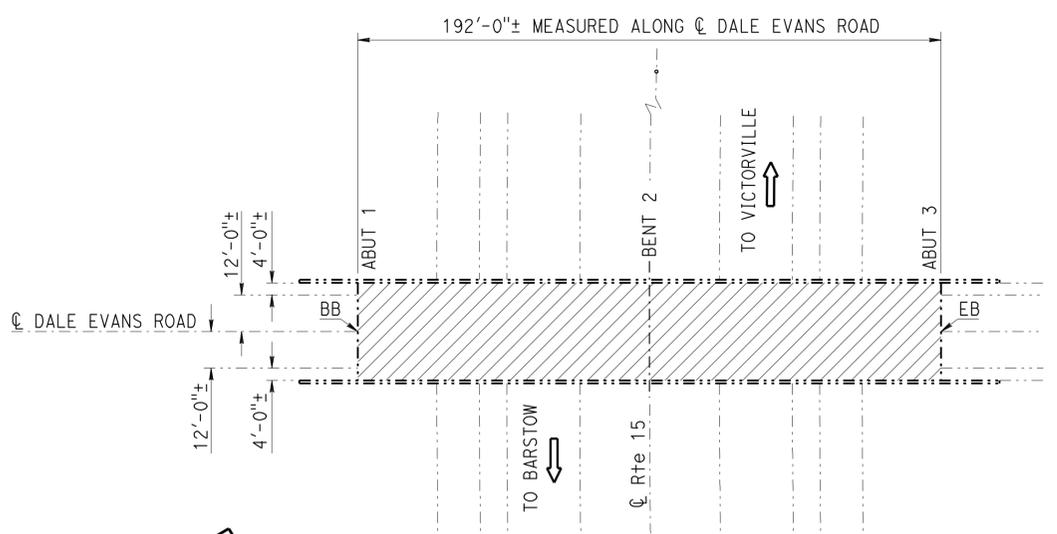
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15, 18, 58, 138	Var	32	43
REGISTERED CIVIL ENGINEER			DATE	11-15-12	
PLANS APPROVAL DATE			3-25-13		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



NOTES: (APPLY TO THIS SHEET ONLY)

- Indicates limits of prepare and treat bridge deck with high molecular weight methacrylate.
- Indicates limits of remove and replace structure approach slab with Type R(30S) Modified.
- Indicates location of existing joint seal removal and placement of new joint seal.
- * Limits for remove and replace concrete barrier Type 25.
- ① Indicates limits of backfill with slurry mix (2.5±D x 12.0±L x 2.0±W)
- ② Indicates limits of backfill with slurry mix (5.0±D x 14.0±L x 2.0±W)



DALE EVANS ROAD OVERCROSSING

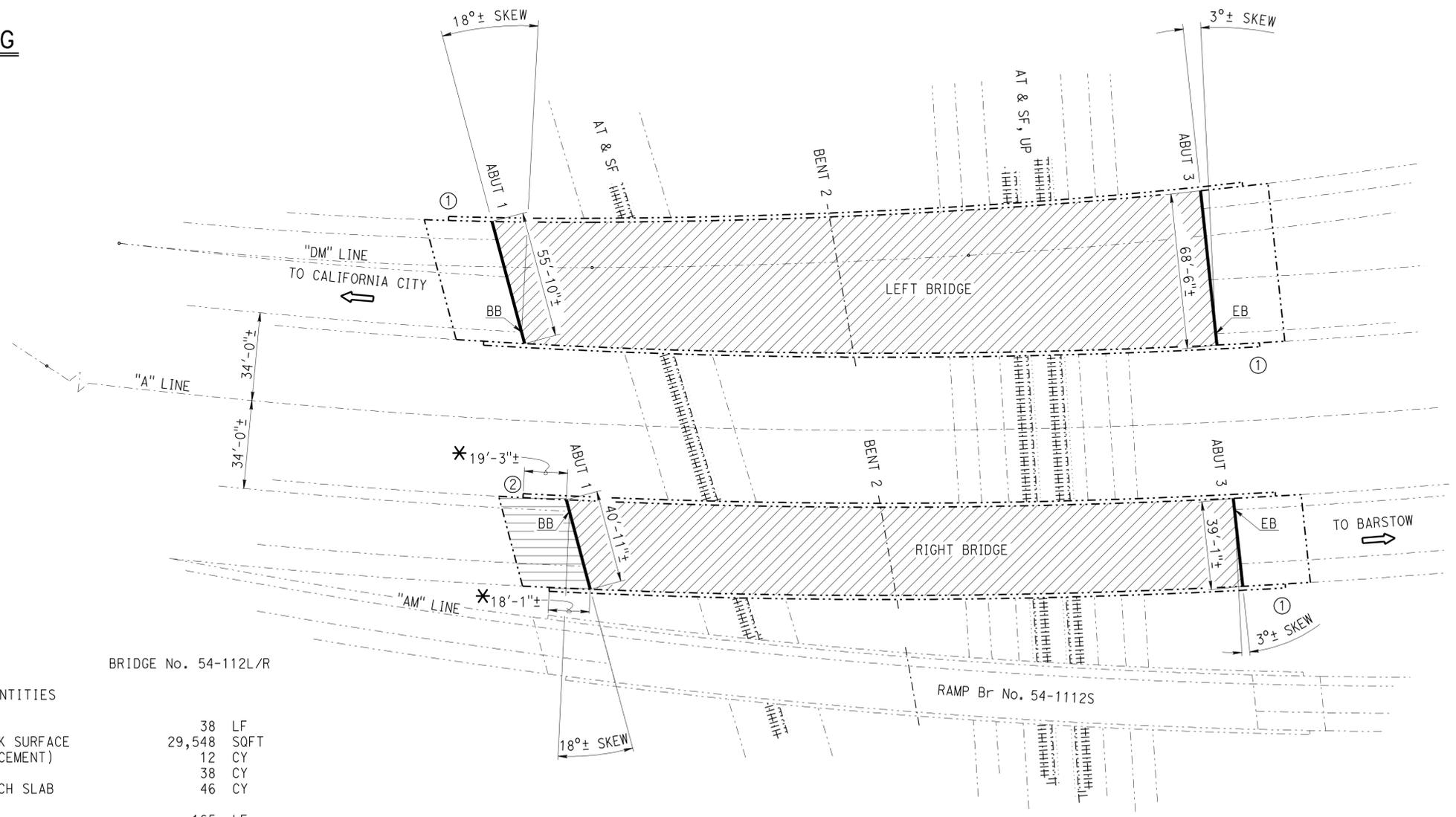
Br No. 54-0564, ROUTE 15, SBd, PM 51.83
1" = 30'

DALE EVANS ROAD OC

BRIDGE No. 54-0564

QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	6,144	SQFT
TREAT BRIDGE DECK	6,144	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	68	GAL



LENWOOD OH

BRIDGE No. 54-112L/R

QUANTITIES

REMOVE CONCRETE BARRIER	38	LF
PREPARE CONCRETE BRIDGE DECK SURFACE	29,548	SQFT
STRUCTURE BACKFILL (SLURRY CEMENT)	12	CY
STRUCTURAL CONCRETE, BRIDGE	38	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	46	CY
CLEAN EXPANSION JOINT	165	LF
JOINT SEAL (MR 1")	41	LF
JOINT SEAL (MR 1 1/2")	165	LF
TREAT BRIDGE DECK	29,548	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	328	GAL
CONCRETE BARRIER (TYPE 25)	38	LF

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

LENWOOD OVERHEAD

Br No. 54-1112L/R, ROUTE 58, SBd, PM R33.54
1" = 30'

Matthew Collee
DESIGN ENGINEER 10-10-12

DESIGN	BY M. Hashimoto	CHECKED Quang Vo	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Dale Kubochi	CHECKED Quang Vo	LAYOUT	BY Dale Kubochi
QUANTITIES	BY M. Hashimoto	CHECKED Quang Vo	SPECIFICATIONS	BY Steven Seifert

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. VARIOUS
POST MILE VARIOUS
ROUTES 15, 18, 58, 138 BRIDGES
GENERAL PLAN No. 5

USERNAME => s121614 DATE PLOTTED => 28-MAR-2013 TIME PLOTTED => 09:52

NOTES: (APPLY TO THIS SHEET ONLY)

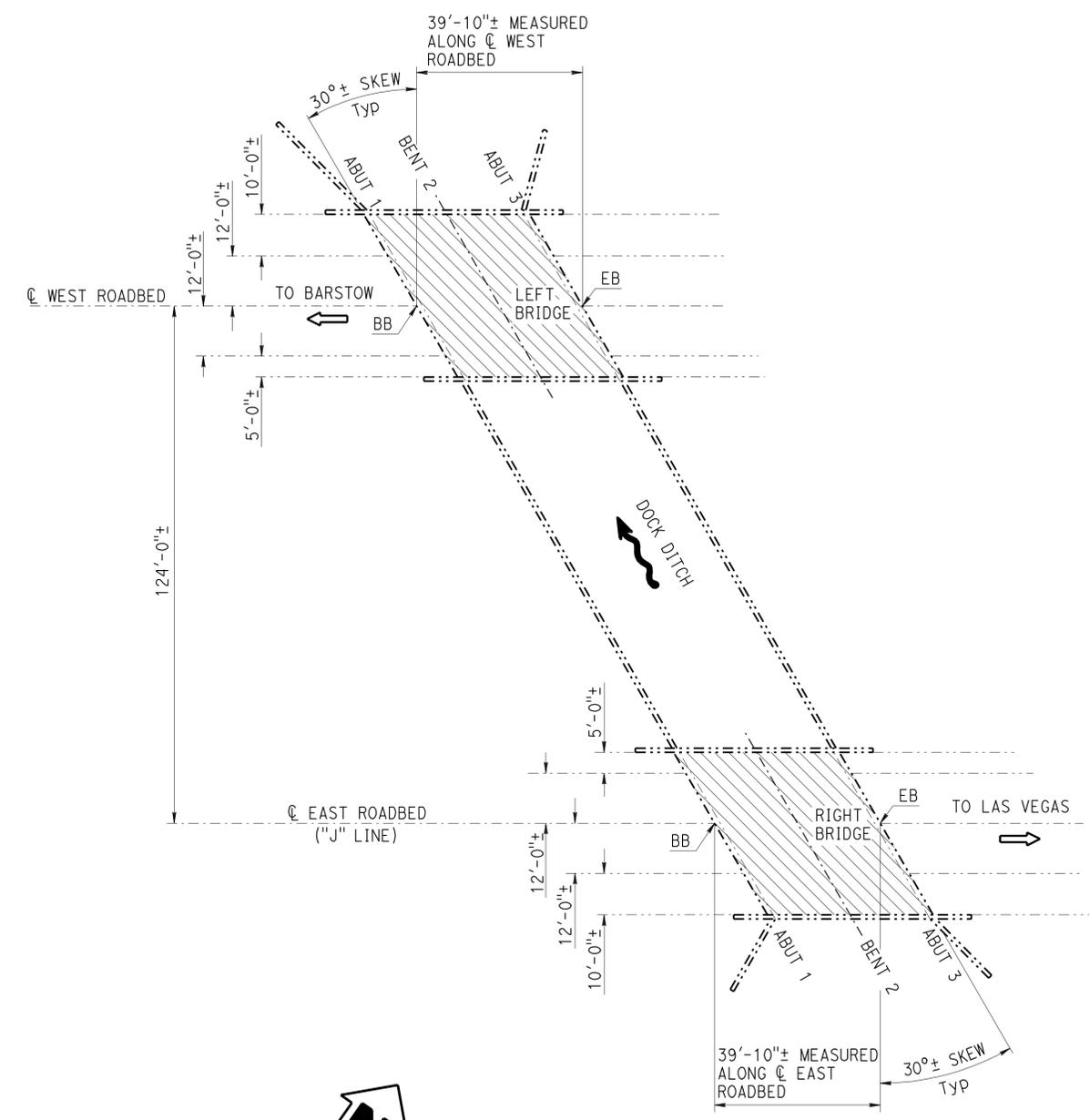


Indicates limits of prepare concrete bridge deck and approach slab surface, furnish and place new 3/4" minimum depth polyester concrete overlay. Prior to placing new polyester concrete overlay, remove unsound concrete and patch with rapid setting concrete as shown on the "Deck Repair Detail - Overlay" on "JOINT SEAL DETAILS" sheet.



Indicates location of existing joint seal removal and placement of new joint seal.

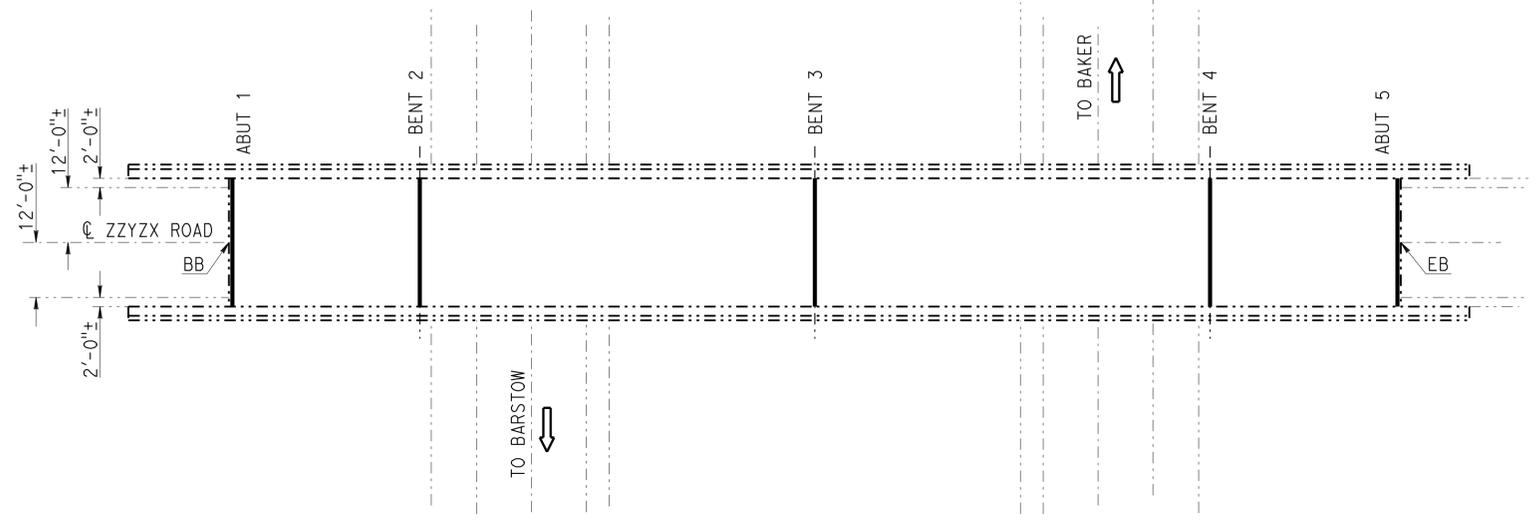
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18,58,138	Var	33	43
REGISTERED CIVIL ENGINEER			DATE	11-15-12	
PLANS APPROVAL DATE			3-25-13		
REGISTERED PROFESSIONAL ENGINEER QUANG M. VO No. C 055211 Exp. 6-30-14 CIVIL STATE OF CALIFORNIA					
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



DOCK DITCH
 Br No. 54-0246L/R, ROUTE 15, SBd, PM R121.43
 1" = 20'

DOCK DITCH	BRIDGE No. 54-0246R
QUANTITIES	
REMOVE UNSOUND CONCRETE	8 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	3,160 SQFT
RAPID SETTING CONCRETE PATCH	8 CF
FURNISH POLYESTER CONCRETE OVERLAY	237 CF
PLACE POLYESTER CONCRETE OVERLAY	3,160 SQFT

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



ZZYX ROAD OVERCROSSING
 Br No. 54-0398, ROUTE 15, SBd, PM R130.18
 1" = 20'

ZZYX ROAD OC	BRIDGE No. 54-0398
QUANTITIES	
CLEAN EXPANSION JOINT	140 LF
JOINT SEAL (MR 1/2")	56 LF
JOINT SEAL (MR 1")	84 LF

Matthew Lee
 DESIGN ENGINEER 10-10-12

DESIGN	BY M. Hashimoto	CHECKED Quang Vo	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Dale Kubochi	CHECKED Quang Vo	LAYOUT	BY Dale Kubochi
QUANTITIES	BY M. Hashimoto	CHECKED Quang Vo	SPECIFICATIONS	BY Steven Seifert
				CHECKED M. Hashimoto
				PLANS AND SPECS COMPARED Steven Seifert

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	VARIOUS
POST MILE	VARIES

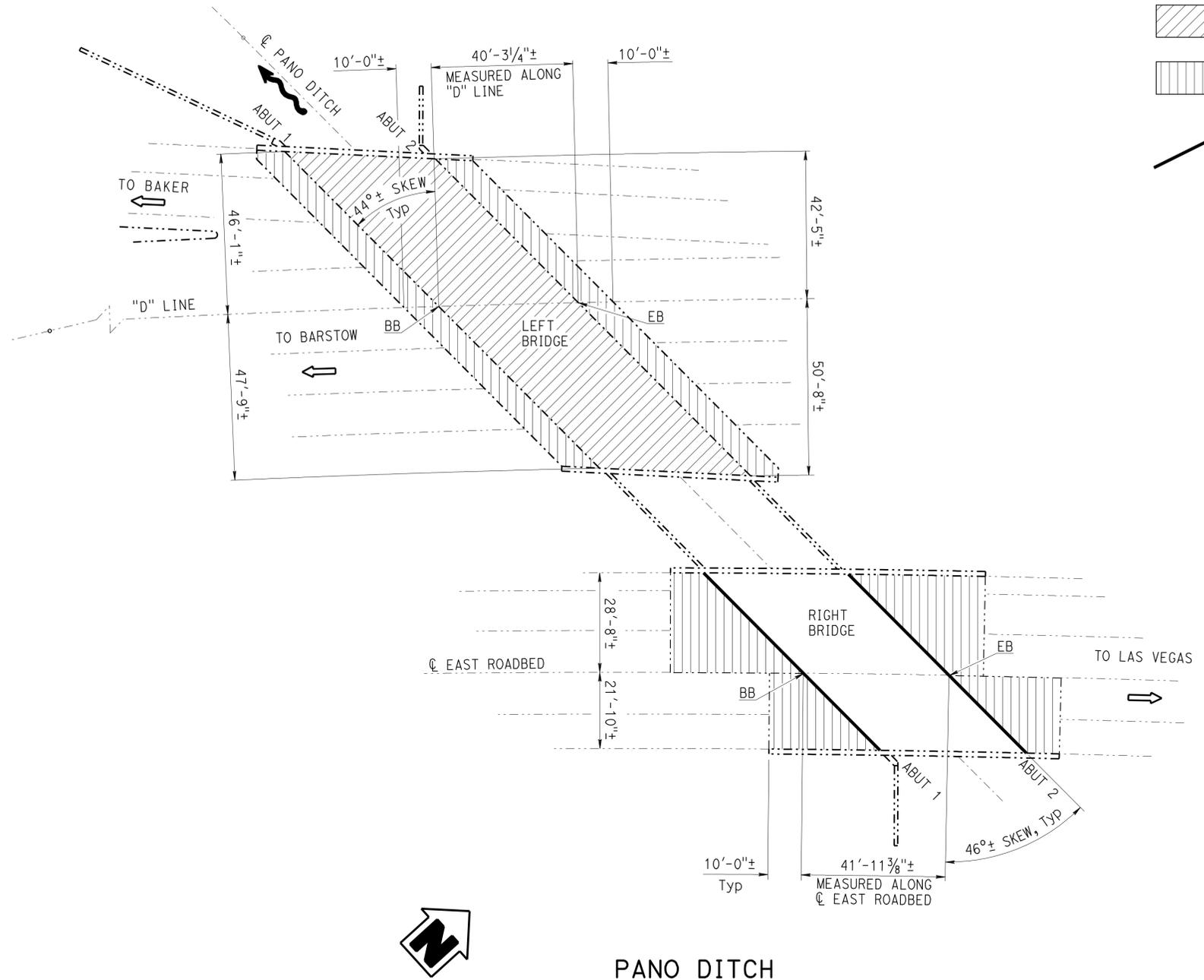
ROUTES 15, 18, 58, 138 BRIDGES
GENERAL PLAN No. 6

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15, 18, 58, 138	Var	34	43

REGISTERED CIVIL ENGINEER **Quang M. Vo** 11-15-12
 No. C 055211
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA
 PLANS APPROVAL DATE 3-25-13
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

NOTES: (APPLY TO THIS SHEET ONLY)

-  Indicates limits of prepare and treat bridge deck with high molecular weight methacrylate.
-  Indicates limits of prepare and treat bridge structure approach with high molecular weight methacrylate.
-  Indicates location of existing joint seal removal and placement of new joint seal.



PANO DITCH
 Br No. 54-0281L/R, ROUTE 15, SBd, PM R138.70
 1" = 20'

PANO DITCH	BRIDGE No. 54-0281L/R
QUANTITIES	
PREPARE CONCRETE BRIDGE DECK SURFACE	7,896 SQFT
CLEAN EXPANSION JOINT	145 LF
JOINT SEAL (MR 1/2")	145 LF
TREAT BRIDGE DECK	7,896 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	88 GAL

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


 DESIGN ENGINEER 10-10-12

DESIGN	BY M. Hashimoto	CHECKED Quang Vo	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Dale Kubochi	CHECKED Quang Vo	LAYOUT	BY Dale Kubochi
QUANTITIES	BY M. Hashimoto	CHECKED Quang Vo	SPECIFICATIONS	BY Steven Seifert

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

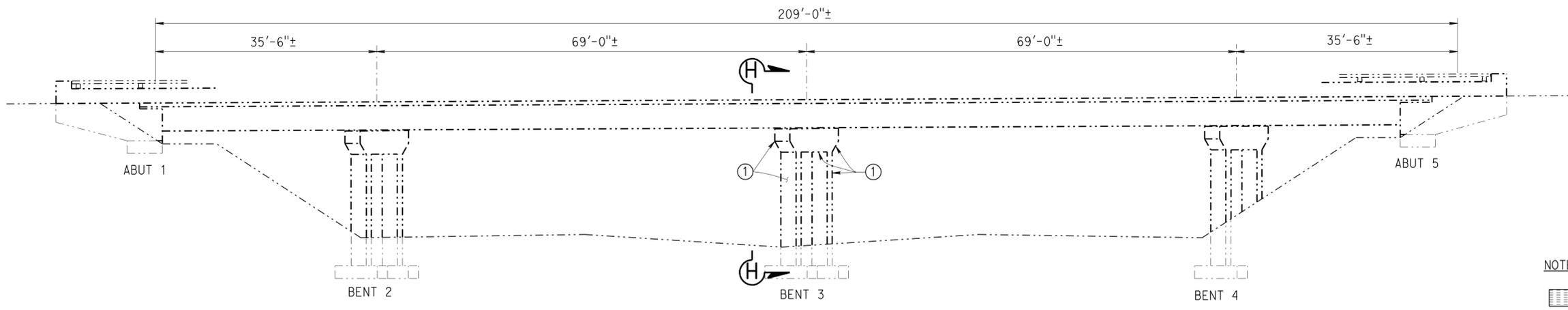
DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	VARIOUS
POST MILE	VARIES

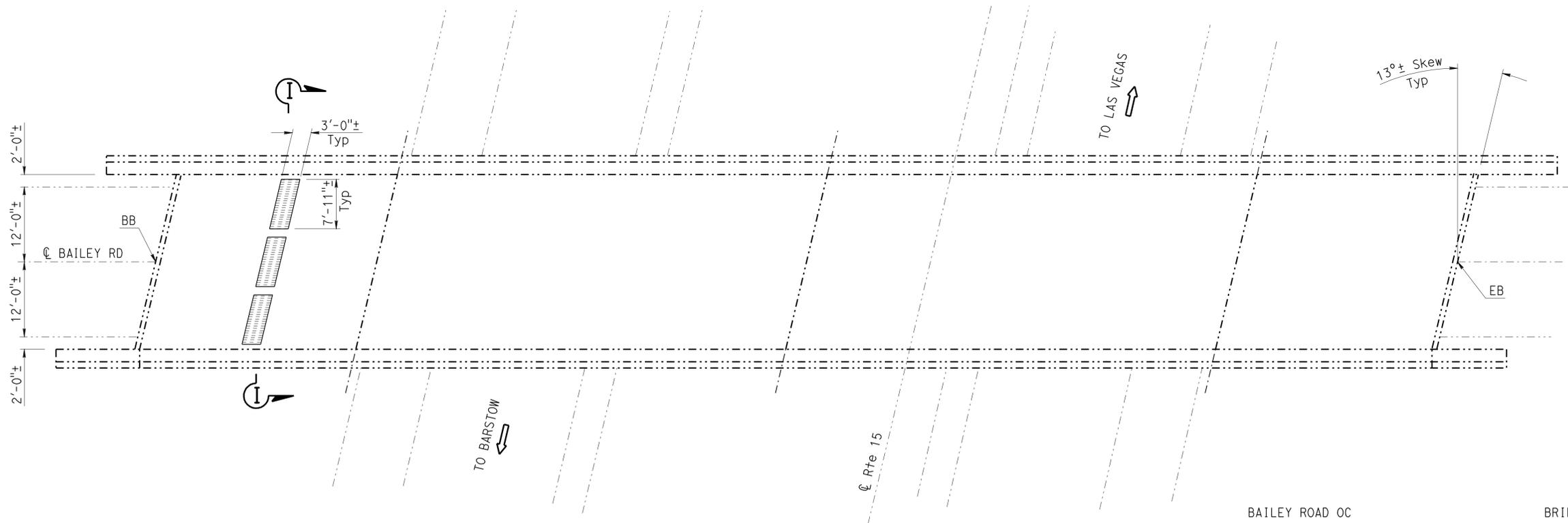
ROUTES 15, 18, 58, 138 BRIDGES
GENERAL PLAN No. 7

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15, 18, 58, 138	Var	35	43

REGISTERED CIVIL ENGINEER: Quang M. VO
 DATE: 11-15-12
 PLANS APPROVAL DATE: 3-25-13
 No. C 055211
 Exp. 6-30-14
 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.



- NOTES: (APPLY TO THIS SHEET ONLY)
- ▨ Indicates limits of repair spalled concrete surface (All existing reinforcement to remain).
 - ① Bridge Removal (Portion) and replacement (All existing reinforcement to remain).
 - For "Elevation H-H" and "Section I-I", see "DETAILS NO. 3" sheet.
 - Temporary Support All Girders; 500 kips/girder and 50 kips/girder lateral 6' from C Bent 3 (Support locations: Span 2 and Span 3).



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

BAILEY ROAD OVERCROSSING
 Br No. 54-0613, ROUTE 15, SBd, PM 171.47

QUANTITIES

TEMPORARY SUPPORT	LUMP SUM
BRIDGE REMOVAL (PORTION), LOCATION C	LUMP SUM
STRUCTURAL CONCRETE, BRIDGE	2 CY
REPAIR SPALLED SURFACE AREA	71 SQFT

DESIGN ENGINEER: Matthew Collee
 DATE: 10-10-12

DESIGN	BY: M. Hashimoto	CHECKED: Quang Vo	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY: Dale Kubochi	CHECKED: Quang Vo	LAYOUT	BY: Dale Kubochi
QUANTITIES	BY: M. Hashimoto	CHECKED: Quang Vo	SPECIFICATIONS	BY: Steven Seifert

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

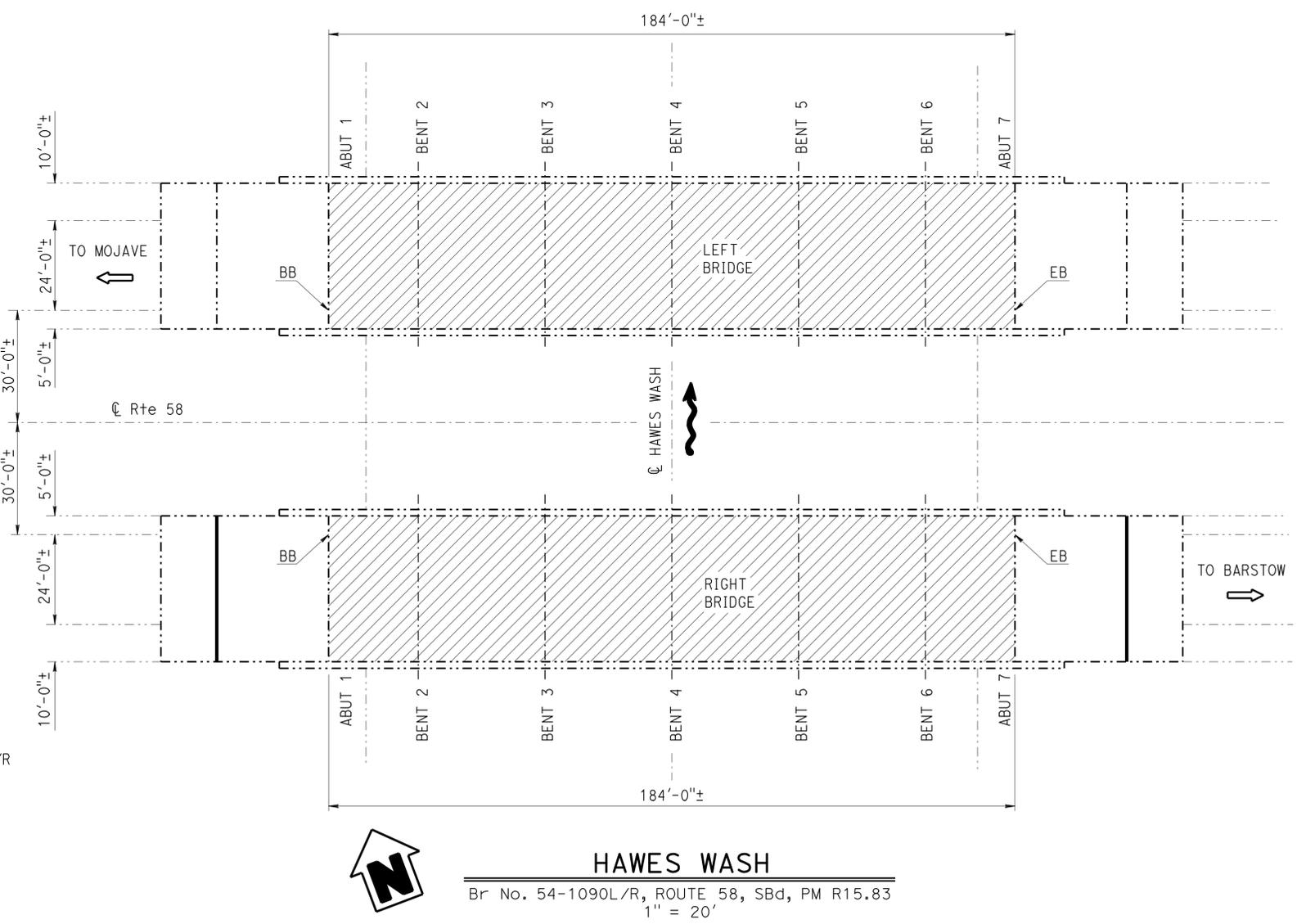
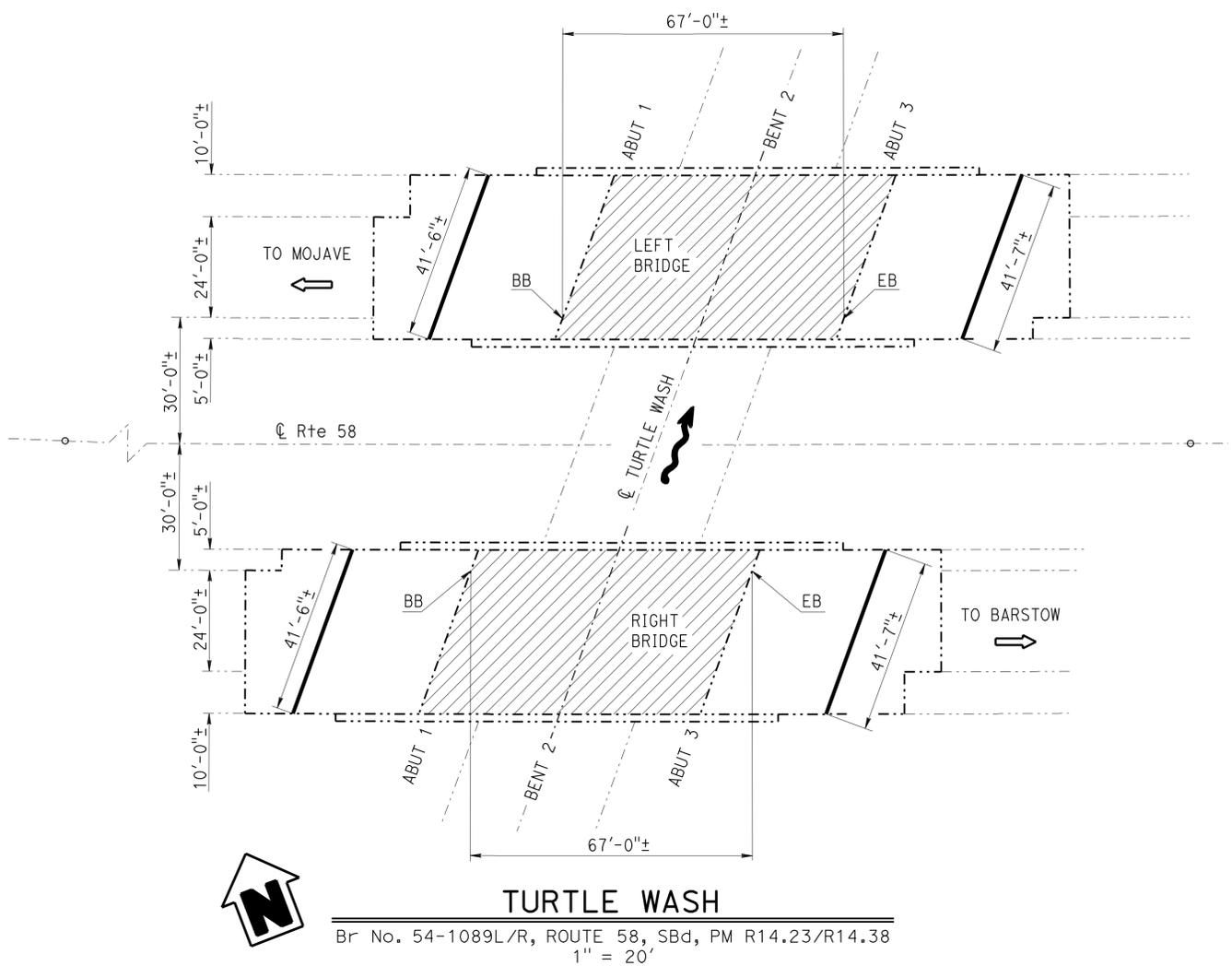
BRIDGE NO. VARIOUS
 POST MILE VARIES
ROUTES 15, 18, 58, 138 BRIDGES
GENERAL PLAN No. 8

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15,18, 58,138	Var	36	43

REGISTERED CIVIL ENGINEER DATE 11-15-12
 QUANG M. VO
 No. C 055211
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA
 PLANS APPROVAL DATE 3-25-13
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

NOTES: (APPLY TO THIS SHEET ONLY)

-  Indicates limits of prepare and treat bridge deck with high molecular weight methacrylate.
-  Indicates location of existing joint seal removal and placement of new joint seal.



TURTLE WASH BRIDGE No. 54-1089L/R

QUANTITIES	
PREPARE CONCRETE BRIDGE DECK SURFACE	5,226 SQFT
CLEAN EXPANSION JOINT	168 LF
JOINT SEAL (MR 1/2")	168 LF
TREAT BRIDGE DECK	5,226 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	58 GAL

HAWES WASH BRIDGE No. 54-1090L/R

QUANTITIES	
PREPARE CONCRETE BRIDGE DECK SURFACE	14,352 SQFT
CLEAN EXPANSION JOINT	78 LF
JOINT SEAL (MR 1")	78 LF
TREAT BRIDGE DECK	14,352 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	160 GAL

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

Matthew Collee 10-10-12
 DESIGN ENGINEER

DESIGN	BY M. Hashimoto	CHECKED Quang Vo	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Dale Kubochi	CHECKED Quang Vo	LAYOUT	BY Dale Kubochi
QUANTITIES	BY M. Hashimoto	CHECKED Quang Vo	SPECIFICATIONS	BY Steven Seifert

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. VARIOUS
 POST MILE VARIES
ROUTES 15, 18, 58, 138 BRIDGES
GENERAL PLAN No. 9

USERNAME => s114640 DATE PLOTTED => 28-MAR-2013 TIME PLOTTED => 09:32

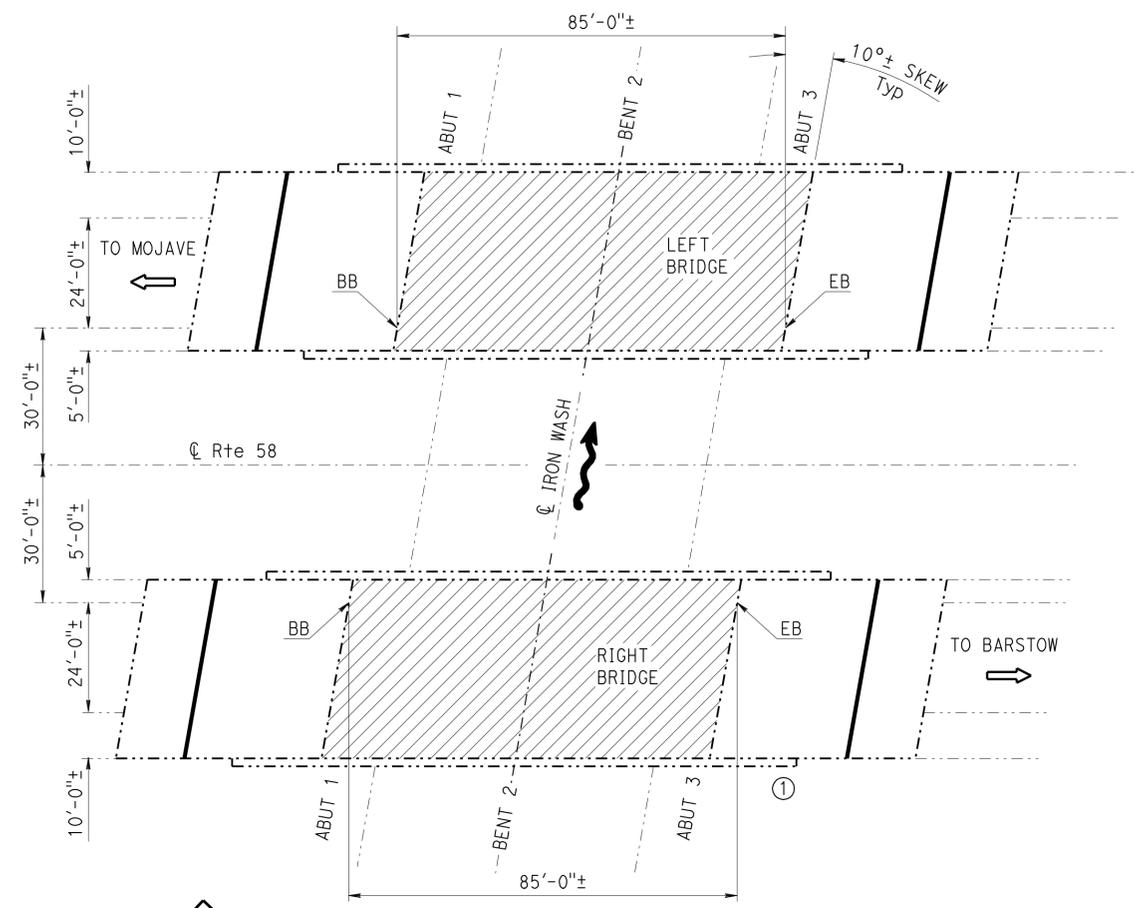
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15, 18, 58, 138	Var	37	43

11-15-12
 REGISTERED CIVIL ENGINEER DATE
 3-25-13
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER
 QUANG M. VO
 No. C 055211
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA

NOTES: (APPLY TO THIS SHEET ONLY)

-  Indicates limits of prepare and treat bridge deck with high molecular weight methacrylate.
-  Indicates location of existing joint seal removal and placement of new joint seal.
- ① Indicates limits of backfill with slurry mix (2.5'±D x 12.0'±L x 2.0'±W)



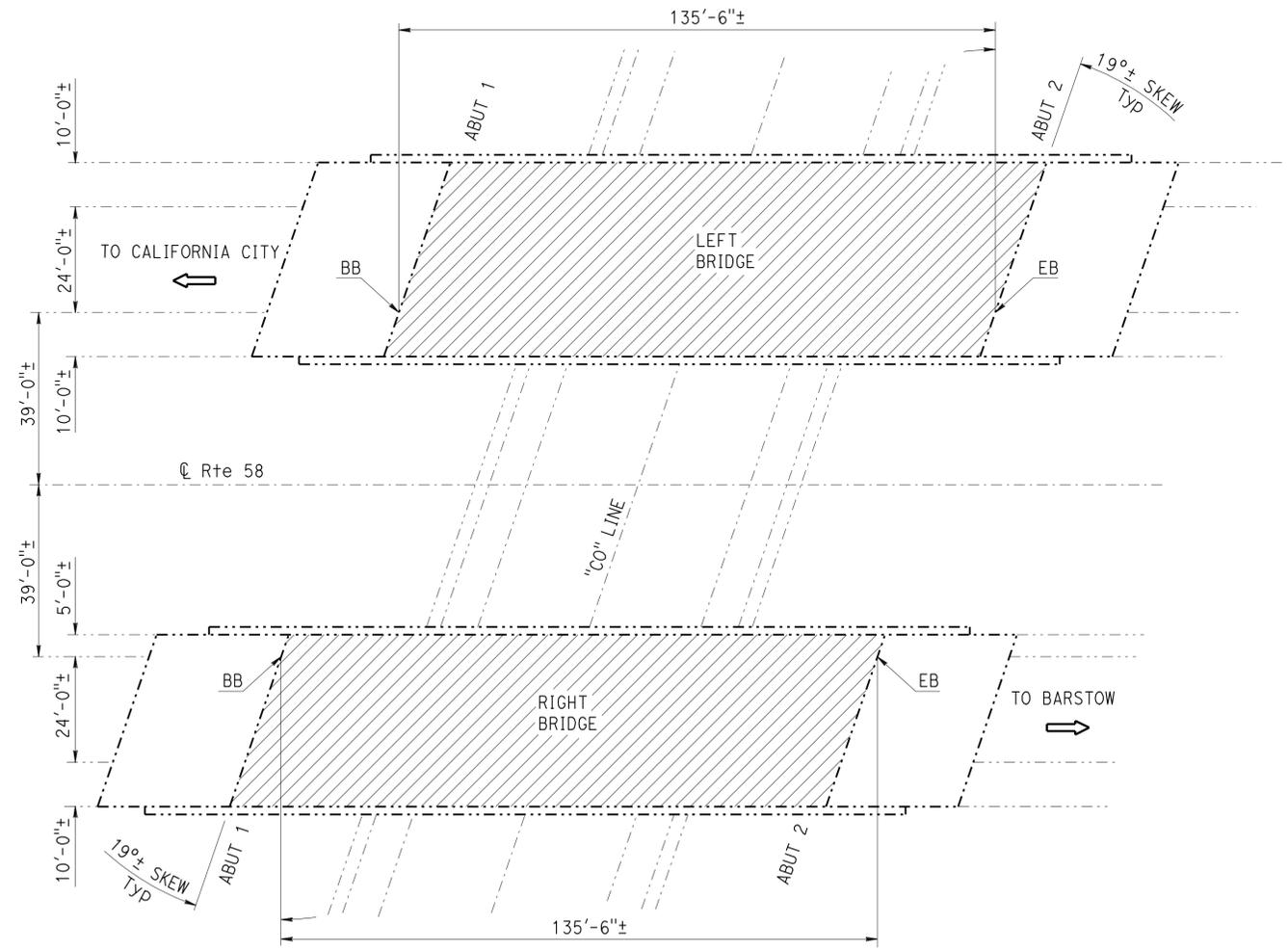
IRON WASH

Br No. 54-1091L/R, ROUTE 58, SBd, PM R20.64
 1" = 20'

IRON WASH BRIDGE No. 54-1091L/R

QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	6,630	SOFT
STRUCTURE BACKFILL (SLURRY CEMENT)	2	CY
CLEAN EXPANSION JOINT	160	LF
JOINT SEAL (MR 1/2")	160	LF
TREAT BRIDGE DECK	6,630	SOFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	74	GAL



COMMUNITY BOULEVARD UNDERCROSSING

Br No. 54-1109L/R, ROUTE 58, SBd, PM R31.95
 1" = 20'

COMMUNITY Blvd UC BRIDGE No. 54-1109L/R

QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	11,246	SOFT
TREAT BRIDGE DECK	11,246	SOFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	125	GAL

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

Matthew Collee 10-10-12
 DESIGN ENGINEER

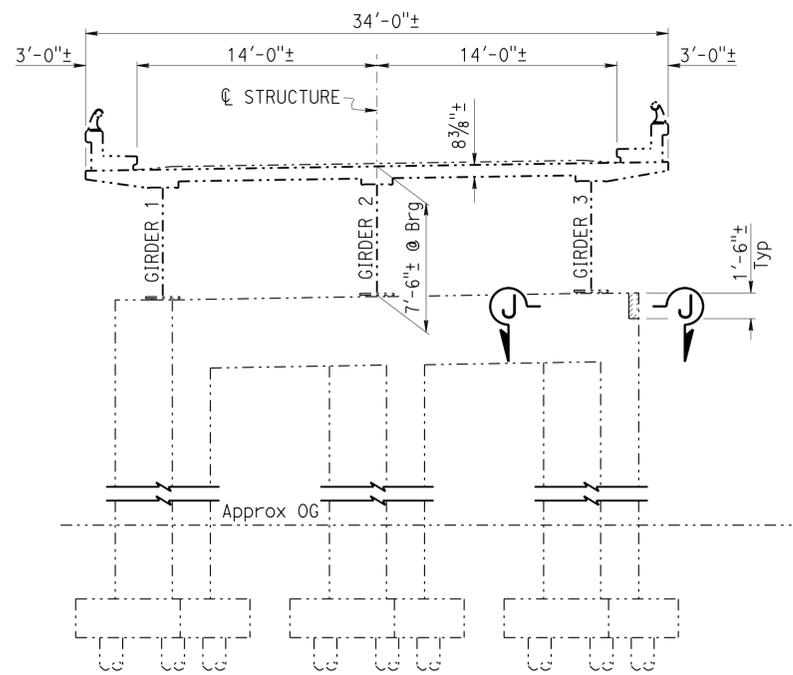
DESIGN	BY M. Hashimoto	CHECKED Quang Vo	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Dale Kubochi	CHECKED Quang Vo	LAYOUT	BY Dale Kubochi
QUANTITIES	BY M. Hashimoto	CHECKED Quang Vo	SPECIFICATIONS	BY Steven Seifert

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

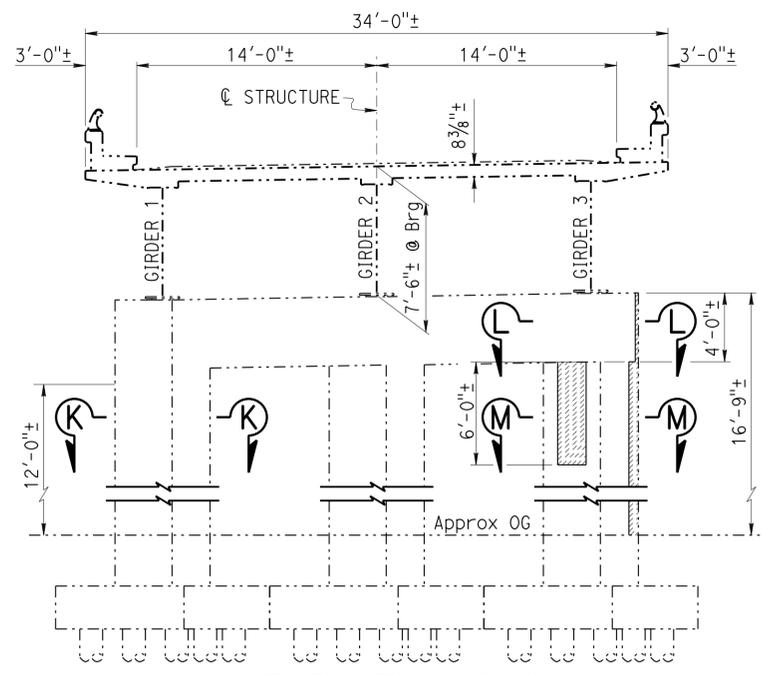
BRIDGE NO. VARIOUS
 POST MILE VARIES

**ROUTES 15, 18, 58, 138 BRIDGES
 GENERAL PLAN No. 10**



ELEVATION B-B

3/16" = 1'-0"



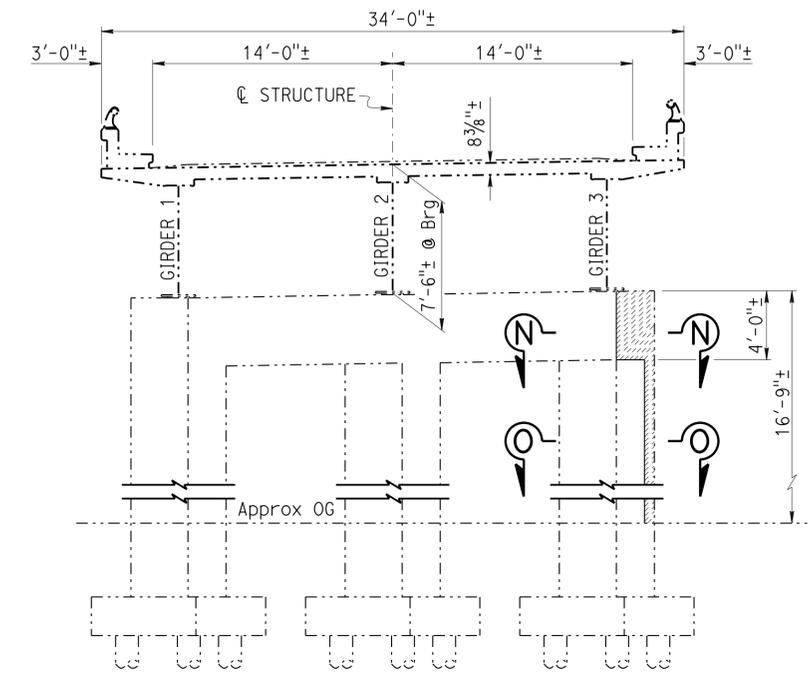
ELEVATION C-C

3/16" = 1'-0"

NOTES: (APPLY TO THIS SHEET ONLY)

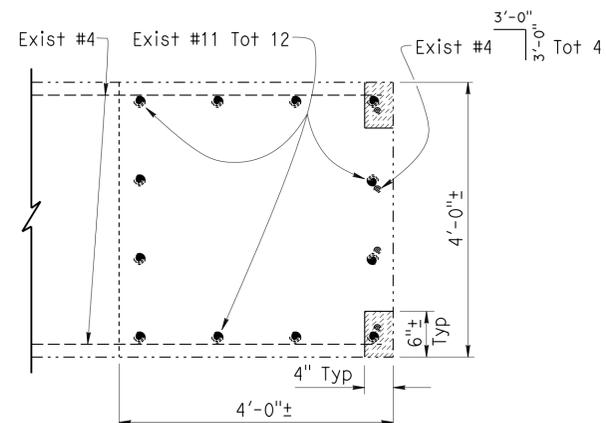
Indicates limits of Bridge Removal (Portion) and replacement (All existing reinforcement to remain).

- For "General Notes Load Factor Design", see "DETAILS NO. 3" sheet.



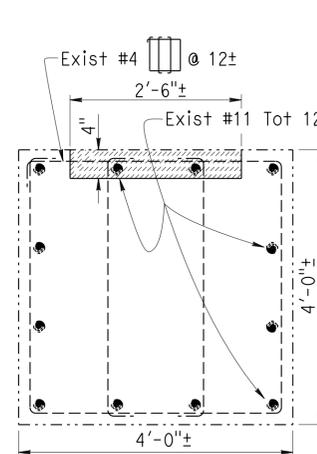
ELEVATION D-D

3/16" = 1'-0"



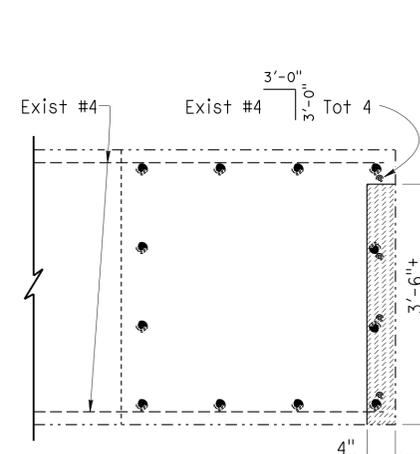
SECTION J-J

3/4" = 1'-0"



SECTION K-K

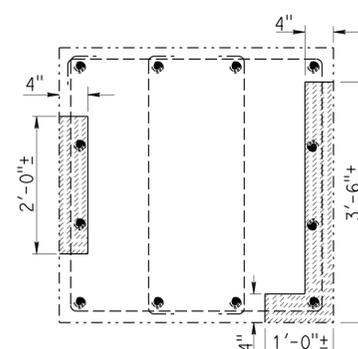
3/4" = 1'-0"



SECTION L-L

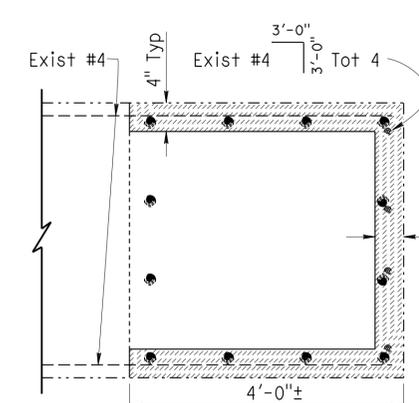
3/4" = 1'-0"

Note:
For details not noted in "Section L-L" or "Section M-M", see "Section K-K"



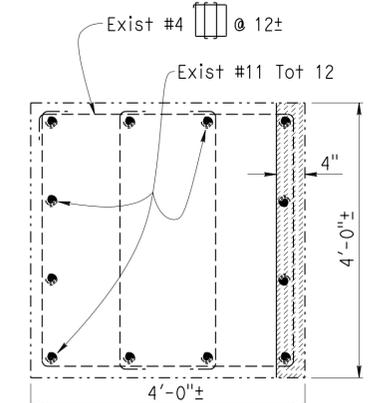
SECTION M-M

3/4" = 1'-0"



SECTION N-N

3/4" = 1'-0"



SECTION O-O

3/4" = 1'-0"

Note:
For details not noted in "Section N-N", see "Section O-O"

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15, 18, 58, 138	Var	38	43

REGISTERED CIVIL ENGINEER DATE 11-15-12

3-25-13 PLANS APPROVAL DATE

QUANG M. VO No. C 055211 Exp. 6-30-14 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.

DESIGN	BY M. Hashimoto	CHECKED Quang Vo
DETAILS	BY Dale Kubochi	CHECKED Quang Vo
QUANTITIES	BY M. Hashimoto	CHECKED Quang Vo

STATE OF CALIFORNIA	
DEPARTMENT OF TRANSPORTATION	

DIVISION OF MAINTENANCE	BRIDGE NO. VARIOUS
STRUCTURE MAINTENANCE DESIGN	POST MILE VARIES

ROUTES 15, 18, 58, 138 BRIDGES	
DETAILS No. 1	

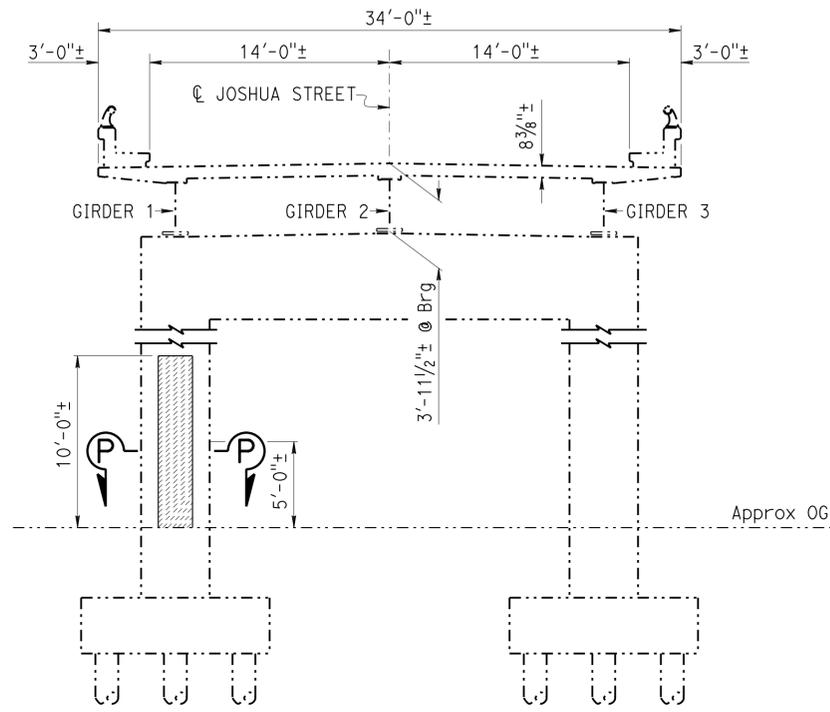
NOTES: (APPLY TO THIS SHEET ONLY)

 Indicates limits of Bridge Removal (Portion) and replacement (All existing reinforcement to remain).

① Inject epoxy in the numerous cracks located on Bent #4 Column and the Soffit surrounding the Bent.

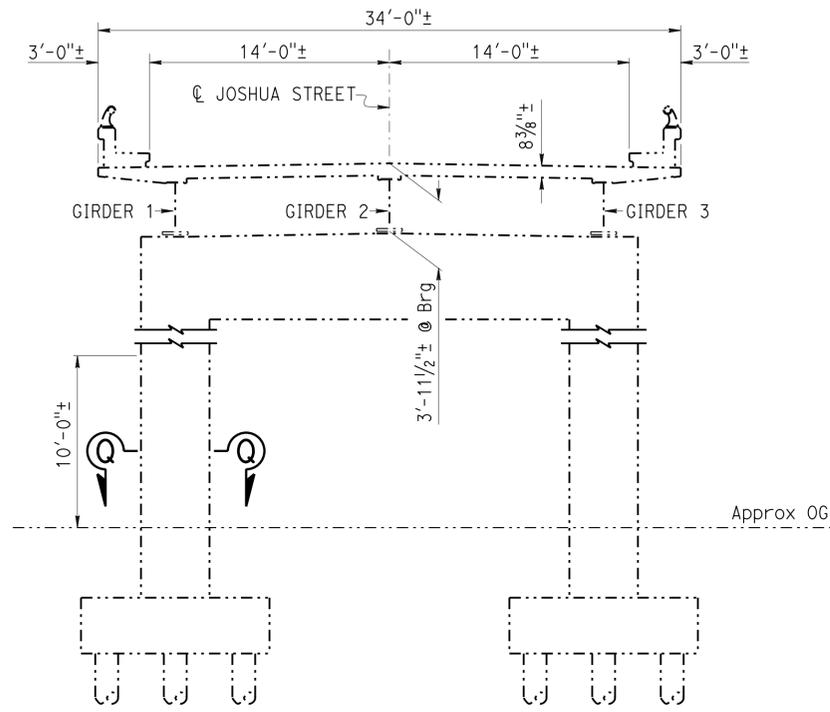
- For "General Notes Load Factor Design", see "DETAILS NO. 3" sheet.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15, 18, 58, 138	Var	39	43
 REGISTERED CIVIL ENGINEER			11-15-12 DATE		
3-25-13 PLANS APPROVAL DATE					
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



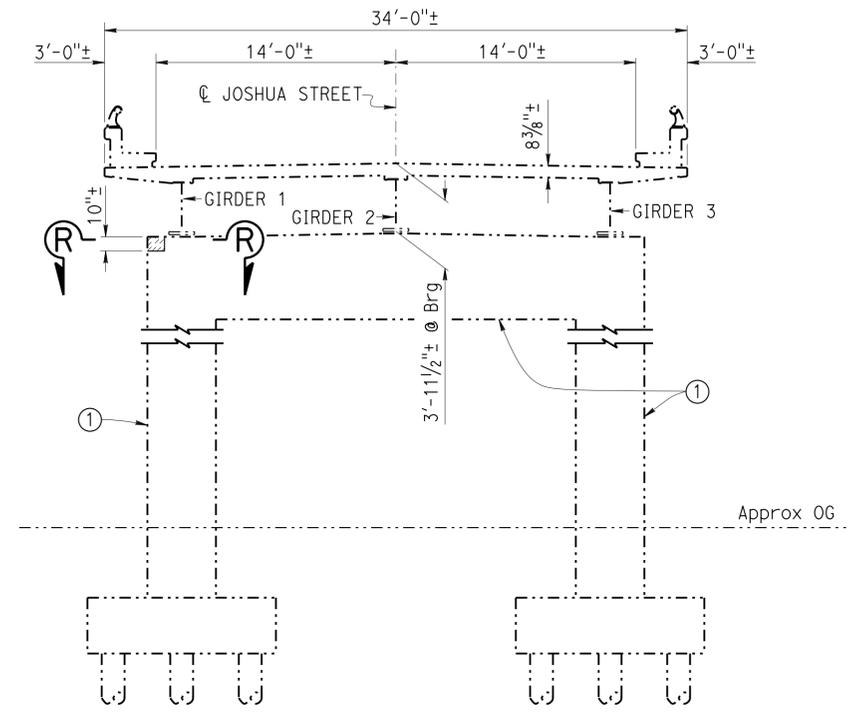
ELEVATION E-E

3/16" = 1'-0"



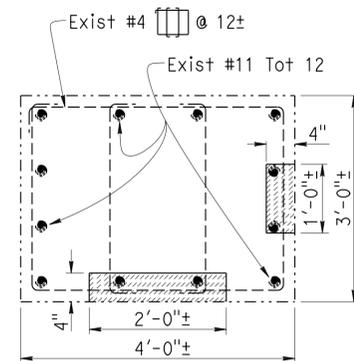
ELEVATION F-F

3/16" = 1'-0"



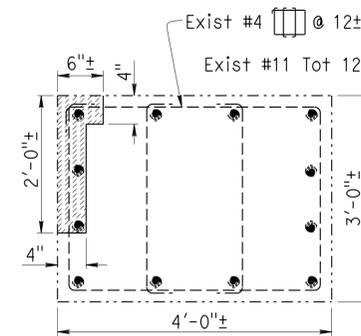
ELEVATION G-G

3/16" = 1'-0"



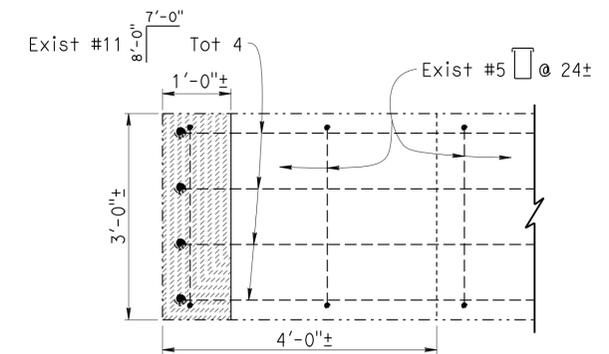
SECTION P-P

3/4" = 1'-0"



SECTION Q-Q

3/4" = 1'-0"



SECTION R-R

3/4" = 1'-0"

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

DESIGN	BY M. Hashimoto	CHECKED Quang Vo
DETAILS	BY Dale Kubochi	CHECKED Quang Vo
QUANTITIES	BY M. Hashimoto	CHECKED Quang Vo

STATE OF CALIFORNIA	
DEPARTMENT OF TRANSPORTATION	

DIVISION OF MAINTENANCE	BRIDGE NO. VARIOUS
STRUCTURE MAINTENANCE DESIGN	POST MILE VARIES

ROUTES 15, 18, 58, 138 BRIDGES	
DETAILS No. 2	

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



UNIT: 3488

PROJECT NUMBER & PHASE: 0812000132

CONTRACT NO.: 08-0R6501

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
6-24-12 9-12-12 3-14-12 9-21-12	12	16

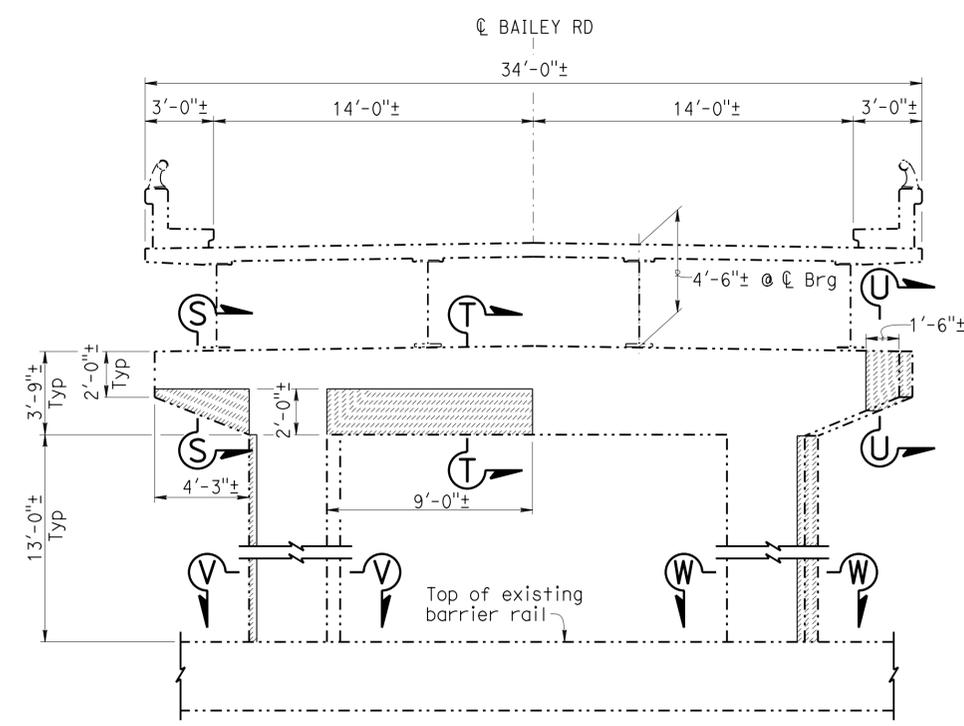
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USERNAME => 8123631 DATE PLOTTED => 28-MAR-2013 TIME PLOTTED => 08:35

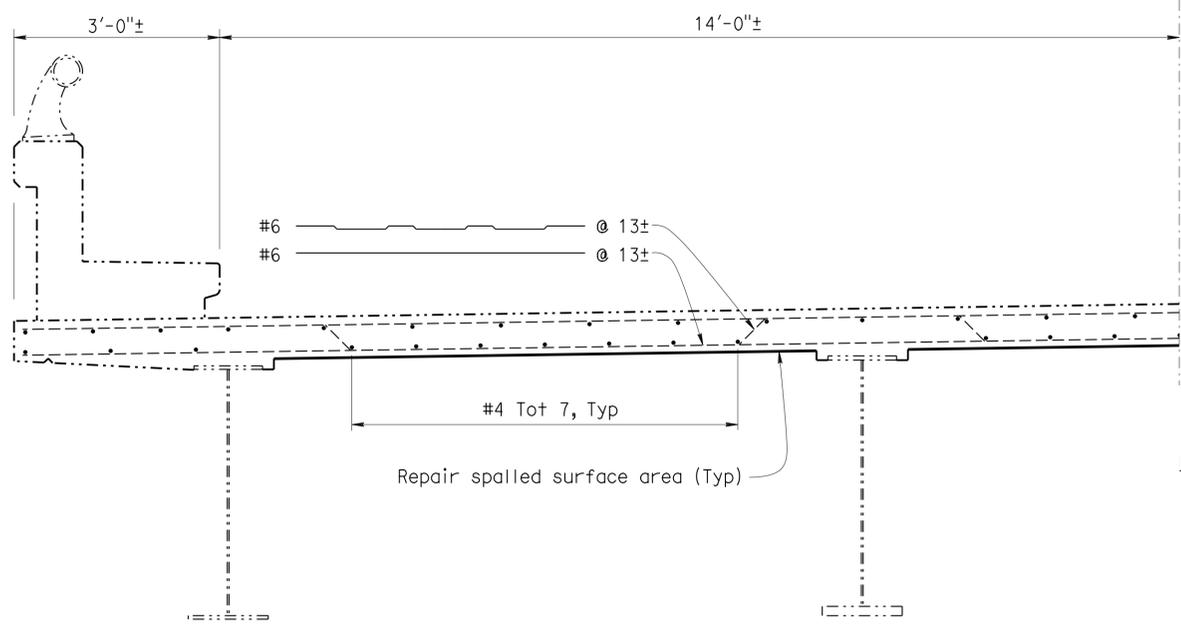
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15, 18, 58, 138	Var	40	43

11-15-12
 REGISTERED CIVIL ENGINEER DATE
 3-25-13
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 QUANG M. VO
 No. C 055211
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA



ELEVATION H-H
 $\frac{1}{4}'' = 1'-0''$



**SECTION I-I
 (PART TYPICAL)**
 $\frac{3}{4}'' = 1'-0''$

- NOTES: (APPLY TO THIS SHEET ONLY)**
- Indicates limits of Bridge Removal (Portion and replacement (All existing reinforcement to remain)).
 - Indicates limits of existing AC removal.

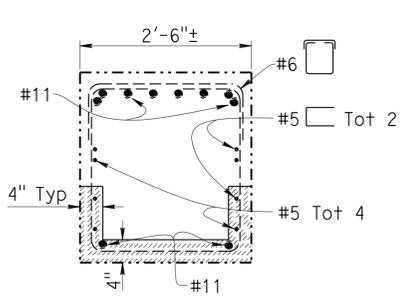
**GENERAL NOTES
 LOAD FACTOR DESIGN**

DESIGN:
 Bridge Design Specifications ('96 AASHTO w/Revisions by Caltrans)

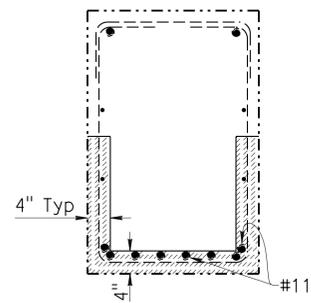
DEAD LOAD:
 Includes 35 psf for future wearing surface.

LIVE LOADING:
 HL93 and permit design load.

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

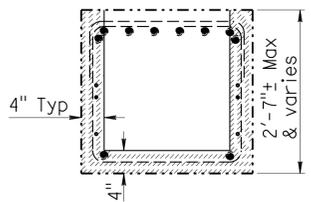


SECTION S-S
 $\frac{3}{4}'' = 1'-0''$



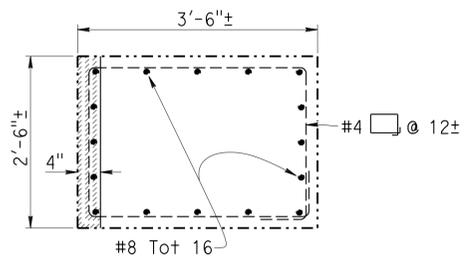
SECTION T-T
 $\frac{3}{4}'' = 1'-0''$

Note: For details not noted, see "Section S-S"



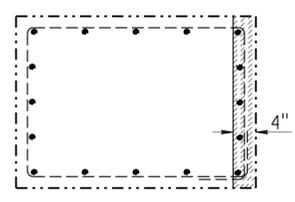
SECTION U-U
 $\frac{3}{4}'' = 1'-0''$

Note: For details not noted, see "Section S-S"



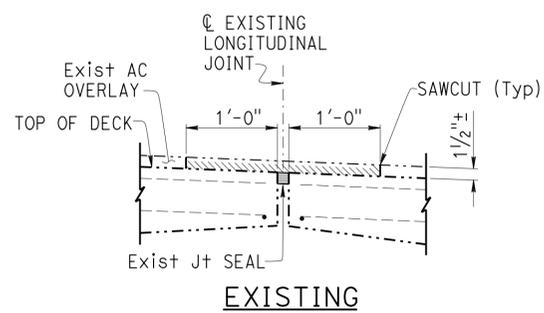
SECTION V-V
 $\frac{3}{4}'' = 1'-0''$

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

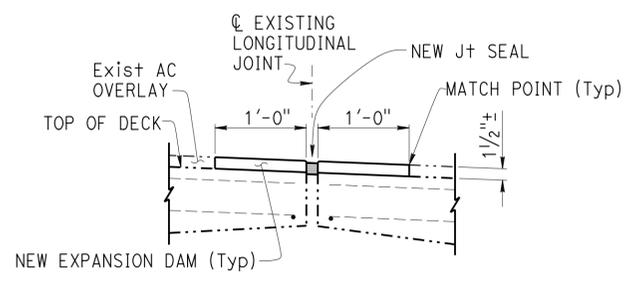


SECTION W-W
 $\frac{3}{4}'' = 1'-0''$

Note: For details not noted, see "Section V-V"



EXISTING



RECONSTRUCTION

SECTION A-A
 $1'' = 1'-0''$

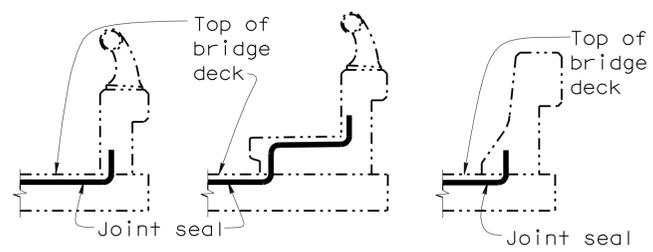
STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	DESIGN	BY M. Hashimoto	CHECKED Quang Vo	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	VARIOUS	ROUTES 15, 18, 58, 138 BRIDGES DETAILS No. 3	
	DETAILS	BY Dale Kubochi	CHECKED Quang Vo			POST MILE	VARIES		
	QUANTITIES	BY M. Hashimoto	CHECKED Quang Vo			VARIES			
UNIT: 3488 PROJECT NUMBER & PHASE: 0812000132					CONTRACT NO.: 08-0R6501		DISREGARD PRINTS BEARING EARLIER REVISION DATES		
							REVISION DATES 7-17-12 9-12-12 3-14-12 9-21-12	SHEET 13	OF 16

JOINT SEAL TABLE

BRIDGE NAME	BRIDGE NUMBER	LOCATION	MINIMUM "MR" (INCHES)	APPROXIMATE LENGTH (FEET)	EXISTING WATERSTOP	APPROX DEPTH TO CLEAN EXP JOINT (INCHES)	
CAJON CREEK	54-0561	☉ Structure	LJ	1/2	223	NO	1.5
N15-N395 CONNECTOR	54-0665G	Abut 1	BW	1/2	52	NO	12
		Bent 2	JT	1	52	NO	12
		Bent 3	JT	1	52	NO	12
		Bent 4	JT	1	52	NO	12
		Abut 5	BW	1/2	52	NO	12
JOSHUA STREET OVERCROSSING	54-0666	Abut 1	BW	1/2	28	NO	12
		Bent 2	JT	1/2	28	NO	12
		Bent 3	JT	1	28	NO	12
		Bent 4	JT	1/2	28	NO	12
		Abut 5	BW	1/2	28	NO	12
LENWOOD OVERHEAD	54-1112L	Abut 1	BB	1 1/2	56	NO	
	54-1112R	Abut 1	BB	1	41	NO	
ZZYZX ROAD OVERCROSSING	54-0398	Abut 1	BW	1/2	28	NO	14
		Bent 2	JT	1	28	NO	14
		Bent 3	JT	1	28	NO	14
		Bent 4	JT	1	28	NO	14
PANO DITCH	54-0281R	Abut 1	BB	1/2	72	NO	12
		Abut 2	EB	1/2	73	NO	12
TURTLE WASH	54-1089L	West Approach Slab	JT	1/2	42	YES	7
		East Approach Slab	JT	1/2	42	YES	7
	54-1089R	West Approach Slab	JT	1/2	42	YES	7
		East Approach Slab	JT	1/2	42	YES	7
HAWES WASH	54-1090R	West Approach Slab	JT	1	39	YES	7
		East Approach Slab	JT	1	39	YES	7
IRON WASH	54-1091L	Abut 1	BB	1/2	40	NO	14
		Abut 3	EB	1/2	40	NO	14
	54-1091R	Abut 1	BB	1/2	40	NO	14
		Abut 3	EB	1/2	40	NO	14

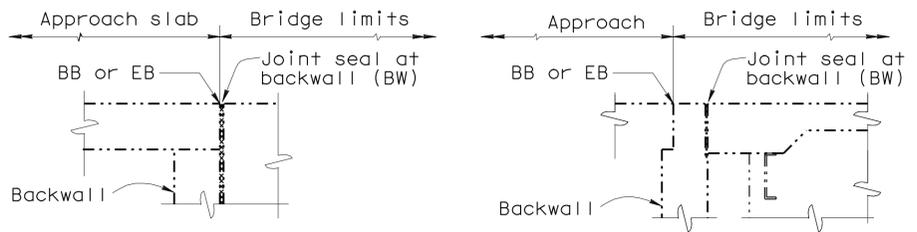
LEGEND:
 BW - Abutment backwall joint
 BB - Paving Notch at beginning of bridge
 EB - Paving Notch at end of bridge
 JT - Expansion Joint
 LJ - Longitudinal Joint

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

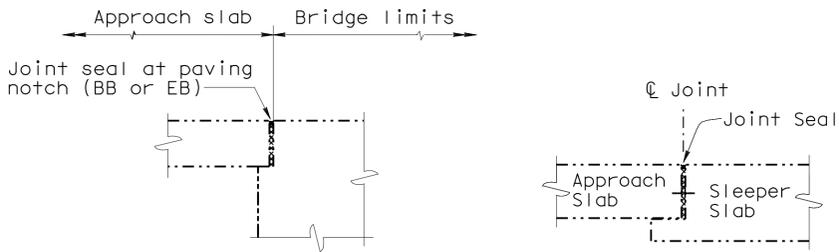


BARRIER RAIL JOINT SEAL AT LOW SIDE OF DECK

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

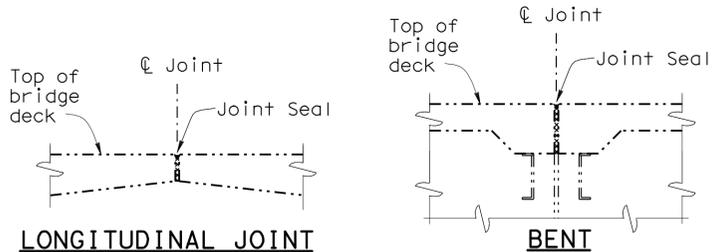


ABUTMENT WITH BACKWALL



DIAPHRAGM ABUTMENT

APPROACH SLAB JOINT



LONGITUDINAL JOINT

BENT

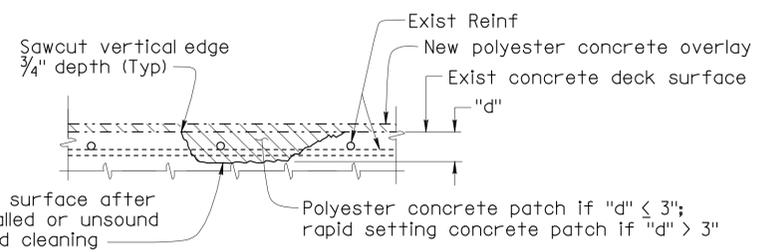
JOINT SEAL LOCATION

- 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 shall 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.
 - Bent 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

- The following notes apply to JOINT SEAL TYPE A:
- Install Type A joint seal 3" up into rail on the low side of deck where joint matches curb or rail joint.
 - For details not shown, see B6-21

DECK REPAIR TABLE REMOVE UNSOUND CONCRETE AND RAPID SETTING CONCRETE (PATCH)			
BRIDGE NAME	BRIDGE NUMBER	APPROXIMATE AREA DAMAGED (PERCENT)	APPROXIMATE DEPTH (INCHES)
DOCK DITCH	54-0246L/R	10	3

Locations to be determined by the Engineer. For details see "Deck Repair Detail - 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 M. Hashimoto	CHECKED Quang Vo
DETAILS	BY Dale Kubochi	CHECKED Quang Vo
QUANTITIES	BY M. Hashimoto	CHECKED Quang Vo

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	VARIOUS
POST MILE	VARIES

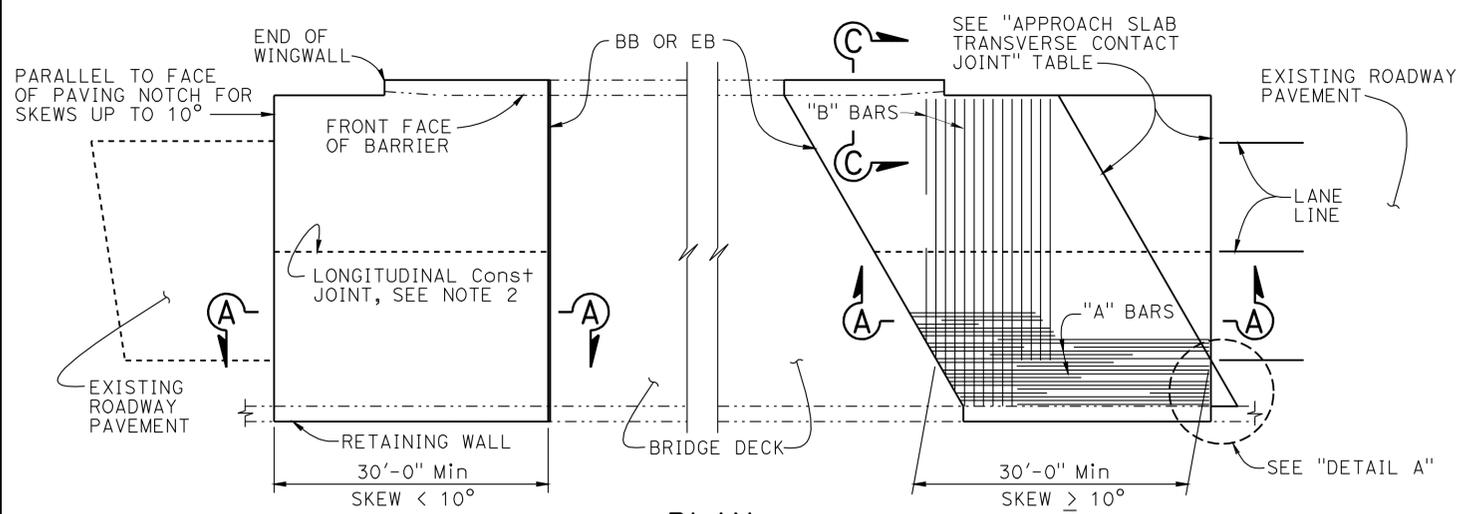
ROUTES 15, 18, 58, 138 BRIDGES
JOINT SEAL DETAILS

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Sbd	15, 18, 58, 138	Var	42	43

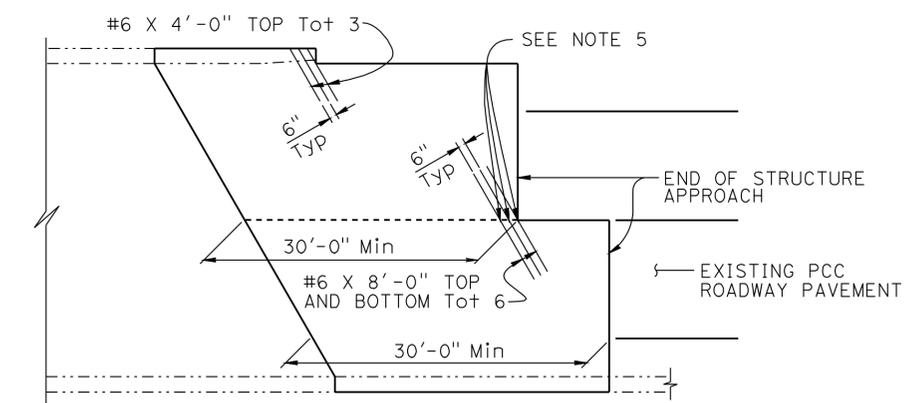
REGISTERED CIVIL ENGINEER
 QUANG M. VO
 No. C 055211
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA

11-15-12
 DATE
 3-25-13
 PLANS APPROVAL DATE

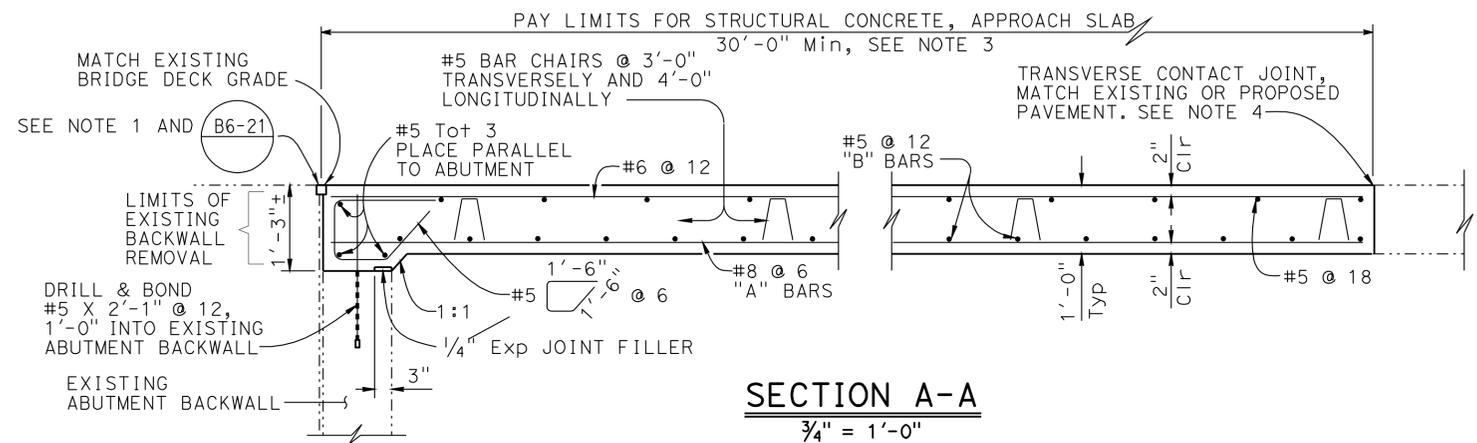
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



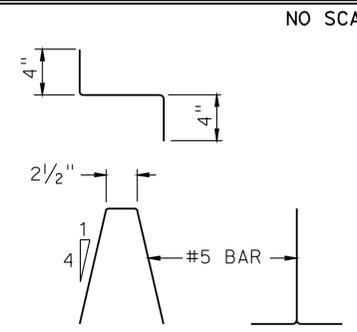
PLAN
1" = 10'



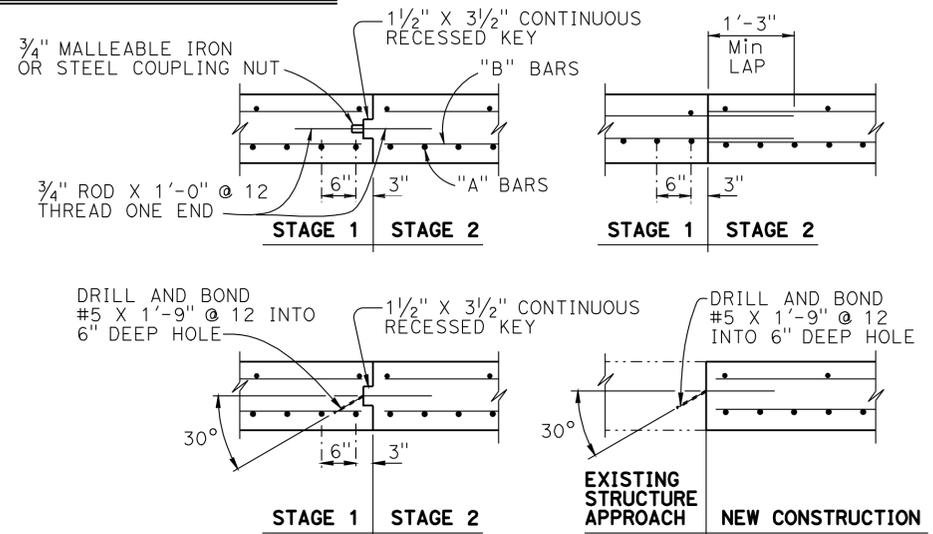
STRUCTURE APPROACH - END STAGGER DETAIL
NO SCALE



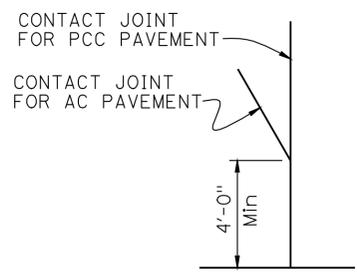
SECTION A-A
3/4" = 1'-0"



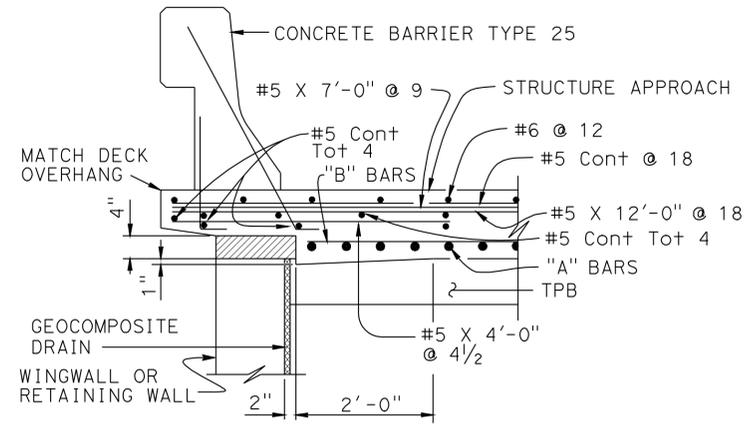
BAR CHAIR DETAIL
1 1/2" = 1'-0"



LONGITUDINAL CONSTRUCTION JOINT ALTERNATIVES
3/4" = 1'-0"



DETAIL A
No Scale



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

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

Remove all polystyrene

APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	PARALLEL TO FACE OF PN	PARALLEL TO FACE OF PN
10° - 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER LINES 24' TO 36' APART
> 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER AT EACH LANE LINE

- NOTES:
- Sealed joint, for MR see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint, when required
 - Longitudinal construction joints, when permitted by Engineer, shall be located on lane lines
 - Transverse contact joint shall be a minimum of 5'-0" from an existing or constructed weakened plane joint
 - For transverse contact joint with new PCC paving, refer to Standard Plan P10
 - Couplers are required for stage construction
 - End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable

DESIGN	BY M. Hashimoto	CHECKED Quang Vo	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	RTE 15, 18, 58 & 138 BRIDGES STRUCTURE APPROACH TYPE R(30S) MODIFIED
DETAILS	BY Dale Kubochi	CHECKED Quang Vo			VARIOUS	
QUANTITIES	BY M. Hashimoto	CHECKED Quang Vo			POST MILE VARIES	

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 UNIT: 3488 PROJECT NUMBER & PHASE: 0812000132 CONTRACT NO.: 08-0R6501
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 6-29-12 SHEET 15 OF 16

