

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Ker	58	82.6,R139.8	1	16



STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON  
STATE HIGHWAY  
IN KERN COUNTY NEAR KEENE AT  
TEHACHAPI CREEK BRIDGE OVERHEAD  
AND NEAR BORON AT BORAX ROAD OVERCROSSING

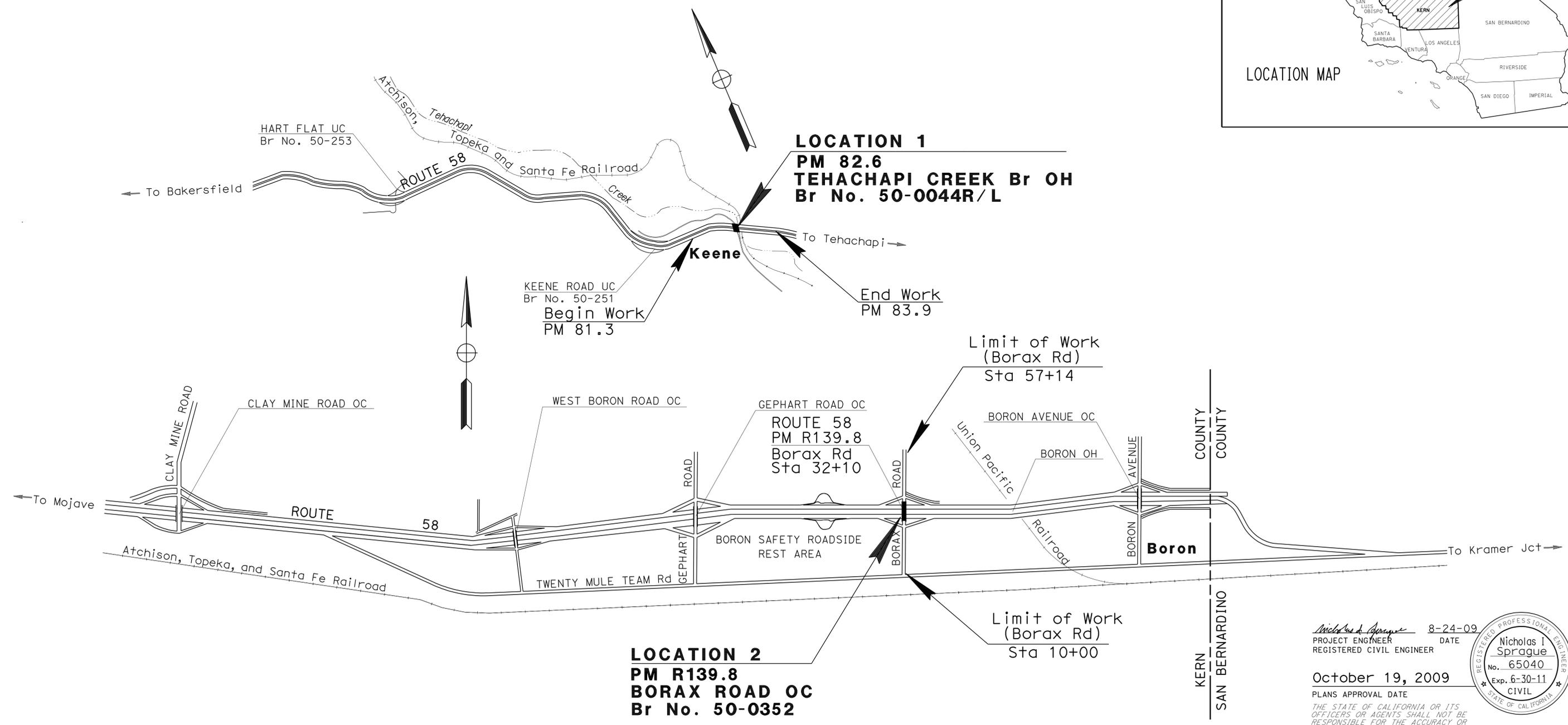
INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	CONSTRUCTION DETAILS
3	CONSTRUCTION AREA SIGNS
4	SUMMARY OF QUANTITIES
5-9	REVISED AND NEW STANDARD PLANS

STRUCTURE PLANS  
10-16 ROUTE 58 BRIDGES

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

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



**LOCATION 2**  
PM R139.8  
BORAX ROAD OC  
Br No. 50-0352

NO SCALE

*Nicholas I. Sprague* 8-24-09  
PROJECT ENGINEER DATE  
REGISTERED CIVIL ENGINEER



October 19, 2009  
PLANS APPROVAL DATE

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

CONTRACT No. **09-341904**

PROJECT MANAGER  
JOHN FOX  
DESIGN ENGINEER  
JOHN FOX

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Ker	58	82.6, R139.8	2	16

<i>Nicholas I. Sprague</i>	8-24-09
REGISTERED CIVIL ENGINEER	DATE
10-19-09	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER  
**Nicholas I. Sprague**  
 No. 65040  
 Exp. 6-30-11  
 CIVIL  
 STATE OF CALIFORNIA

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**LEGEND:**

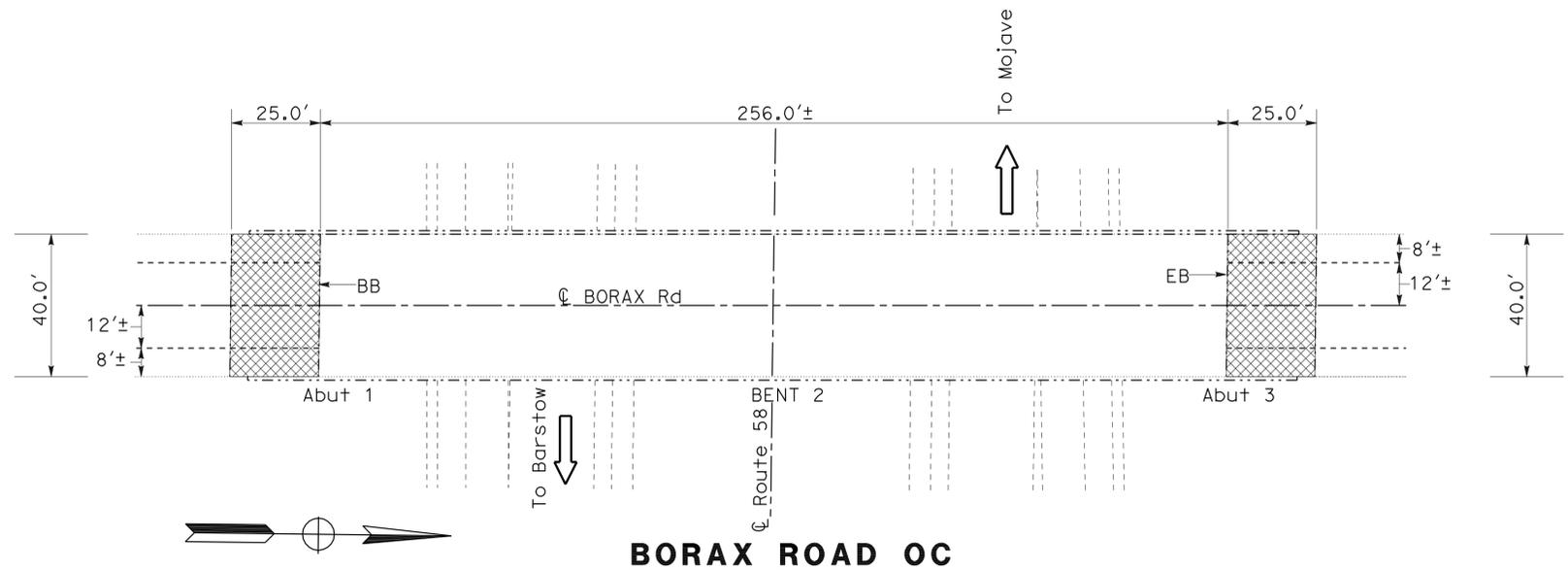
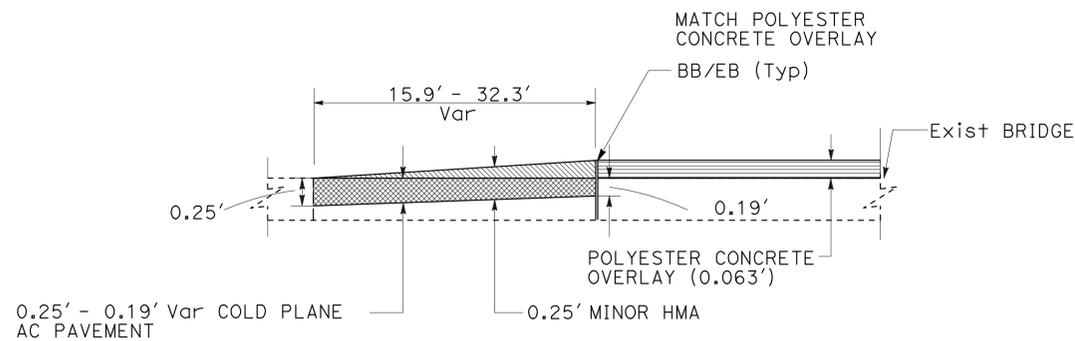
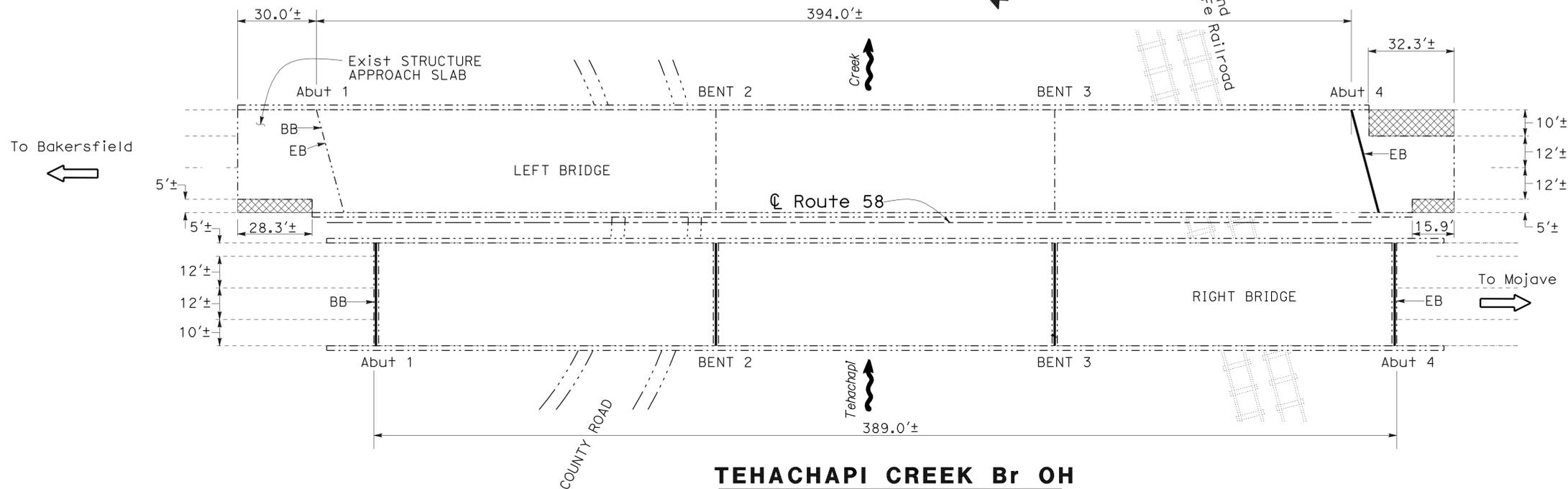
- LIMITS OF COLD PLANE ASPHALT CONCRETE PAVEMENT AND MINOR HMA
- LIMITS OF POLYESTER CONCRETE OVERLAY
- LIMITS OF MINOR HMA

**ABBREVIATIONS:**

BOH - BRIDGE OVERHEAD

**NOTES:**

- AVOID COLD PLANING ABUTMENT WINGWALL AT THE ENDS OF BORAX ROAD OC BRIDGE.
- MATCH POLYESTER CONCRETE OVERLAY DETAIL APPLIES TO AREAS SHOWN ON THIS SHEET ONLY.

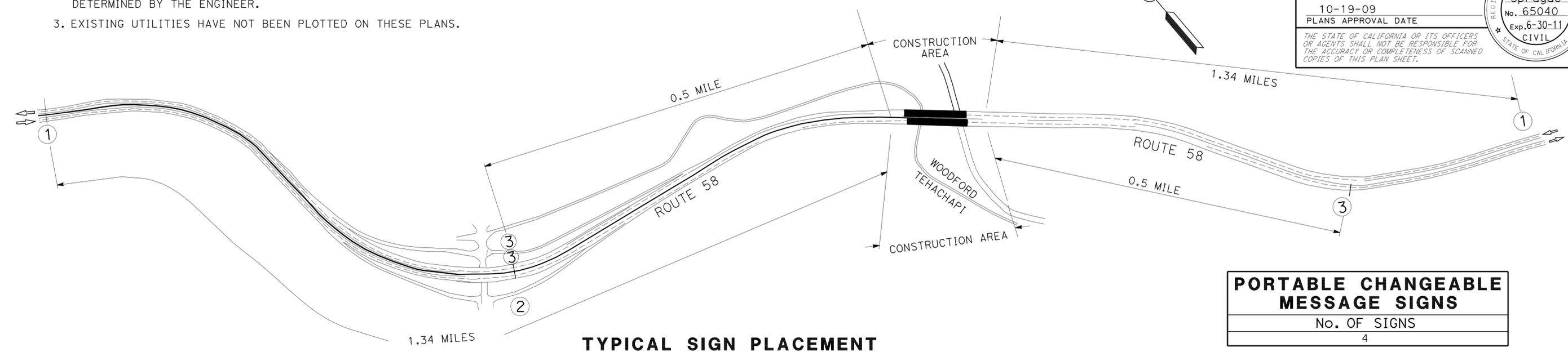


**COLD PLANE ASPHALT CONCRETE PAVEMENT**

EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS

**CONSTRUCTION DETAILS**  
NO SCALE  
**C-1**

- NOTES:**
- FOR SIGN INSTALLATION DETAILS AND DIMENSIONS NOT SHOWN SEE S+D PLANS.
  - EXACT LOCATION AND POSITION OF CONSTRUCTION AREA SIGNS TO BE DETERMINED BY THE ENGINEER.
  - EXISTING UTILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.



**TYPICAL SIGN PLACEMENT**

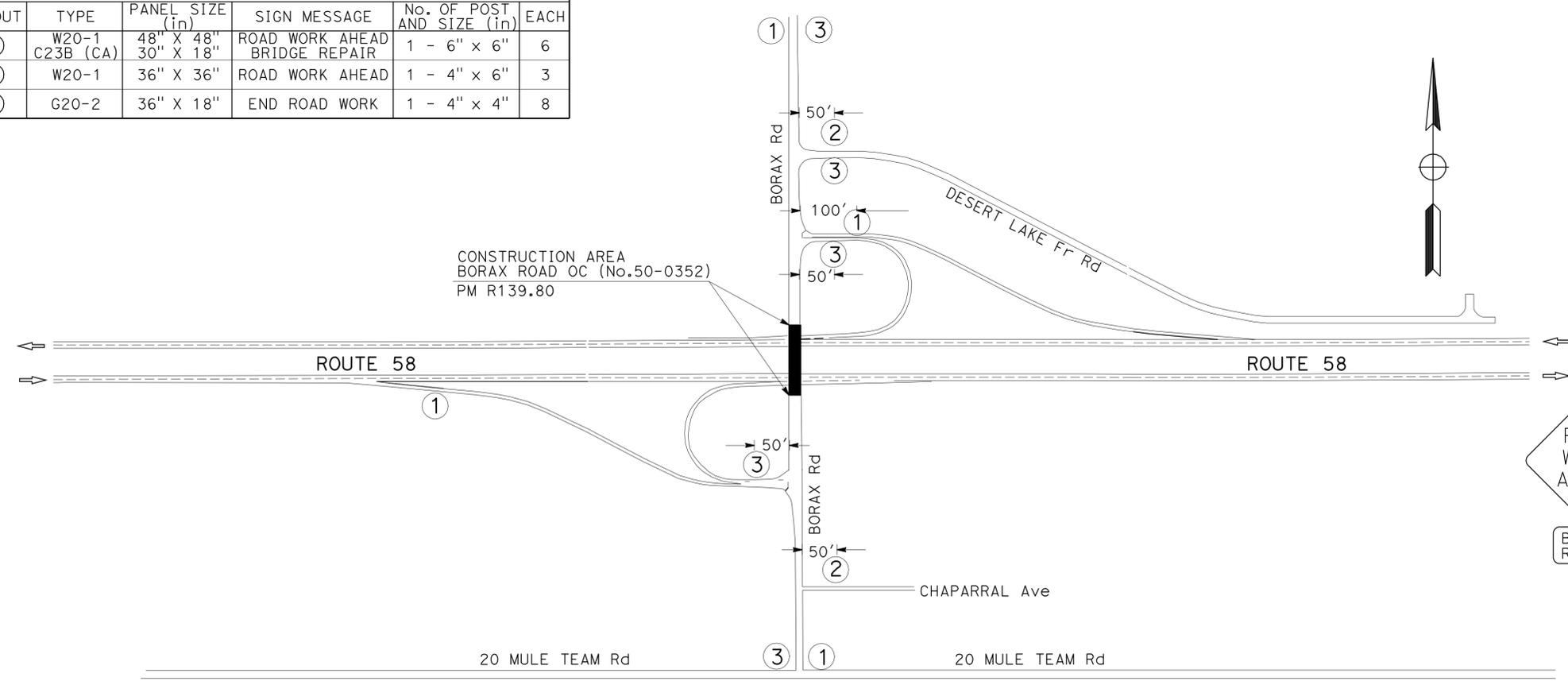
LOCATION 1

<b>PORTABLE CHANGEABLE MESSAGE SIGNS</b>
No. OF SIGNS
4

<b>PORTABLE CHANGEABLE MESSAGE SIGNS</b>
MESSAGE FOR UNDIVIDED HIGHWAY
USE CAUTION    PREPARE TO STOP    EXPECT 20 MINUTE DELAY
MESSAGE FOR DIVIDED HIGHWAY
USE CAUTION    LANE CLOSED AHEAD    BRIDGE REPAIR

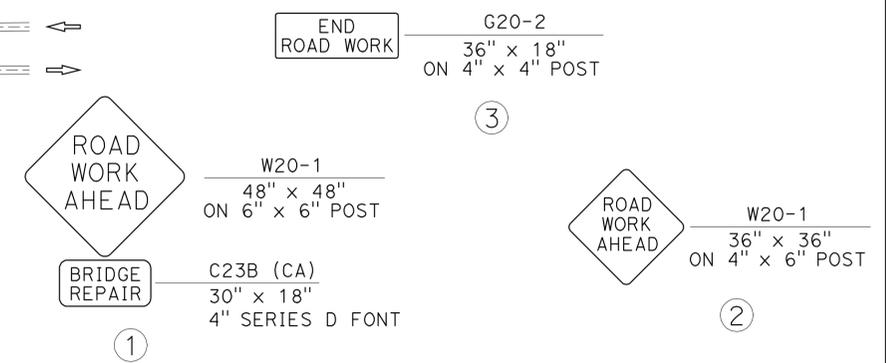
- PORTABLE CHANGEABLE MESSAGE SIGN LOCATIONS TO BE CONFIRMED BY THE ENGINEER BEFORE THE ACTUAL CLOSURE.
- ALTERNATE MESSAGES MUST BE APPROVED BY THE ENGINEER.
- MESSAGE MAY BE ALTERED BY THE ENGINEER.
- WHEN CONSTRUCTION OPERATIONS ARE NOT ACTIVELY IN PROGRESS, PORTABLE CHANGEABLE MESSAGE SIGNS SHALL NOT DISPLAY A MESSAGE UNLESS DIRECTED BY THE ENGINEER.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS					
LAYOUT	TYPE	PANEL SIZE (in)	SIGN MESSAGE	No. OF POST AND SIZE (in)	EACH
①	W20-1 C23B (CA)	48" X 48" 30" X 18"	ROAD WORK AHEAD BRIDGE REPAIR	1 - 6" x 6"	6
②	W20-1	36" X 36"	ROAD WORK AHEAD	1 - 4" x 6"	3
③	G20-2	36" X 18"	END ROAD WORK	1 - 4" x 4"	8



**TYPICAL SIGN PLACEMENT**

LOCATION 2



**TYPICAL SIGN LAYOUT**

**CONSTRUCTION AREA SIGNS CS-1**

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE ENGINEERING  
 FUNCTIONAL SUPERVISOR: JOHN FOX  
 CALCULATED/DESIGNED BY: MONTASHEEMA AFROZE  
 CHECKED BY: NICK SPRAGUE  
 REVISED BY: MONTASHEEMA AFROZE  
 DATE REVISED: NICK SPRAGUE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR  
**JOHN FOX**

CALCULATED-DESIGNED BY  
 CHECKED BY

REVISOR  
**NICK SPRAGUE**

DATE  
 06-01-09

MA

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Ker	58	82.6, R139.8	4	16

*Nicholas I. Sprague* 8-24-09  
 REGISTERED CIVIL ENGINEER DATE

10-19-09  
 PLANS APPROVAL DATE

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QUANTITY SUMMARY						
LOCATION	COUNTY	ROUTE	PM	COLD PLANE AC PAVEMENT	MINOR HMA	TACK COAT (N)
				SQYD	TON	TON
TEHACHAPI CREEK Br OH Rt/Lt	Ker	58	82.64			
TEHACHAPI CREEK Br OH Lt	Ker	58	82.64	60.6	9.9	0.03
BORAX ROAD OC	Ker	58	R139.80	222.2	36.3	0.09
TOTAL				282.8	46.2	

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

PAINT TRAFFIC STRIPE (2-COAT)						
LOCATION	BRIDGE No.	PM	DETAIL NUMBER			
			11	24	27B	21
1	50-0044 Rt	82.64	390	390	390	
2	50-0044 Lt	82.64	464	469	459	
3	50-0352	R139.80			612	306
SUBTOTAL			854	859	1461	306
TOTAL			3480			

REMOVE PAINTED TRAFFIC STRIPE	
LOCATION	LF
50-0044 Rt	1170
50-0044 Lt	1182
50-0352	768
TOTAL	3120

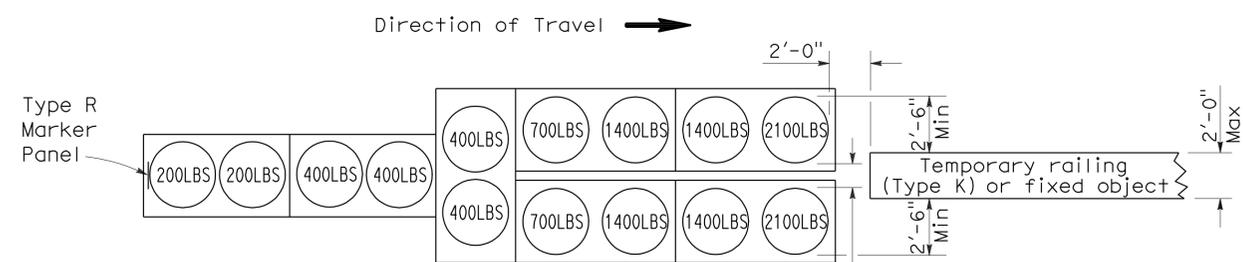
TEMPORARY DRAINAGE INLET PROTECTION		
LOCATION	Rt	Lt
	EA	EA
PM 82.7	1	
PM 82.7		1
TOTAL	2	

**SUMMARY OF QUANTITIES Q-1**



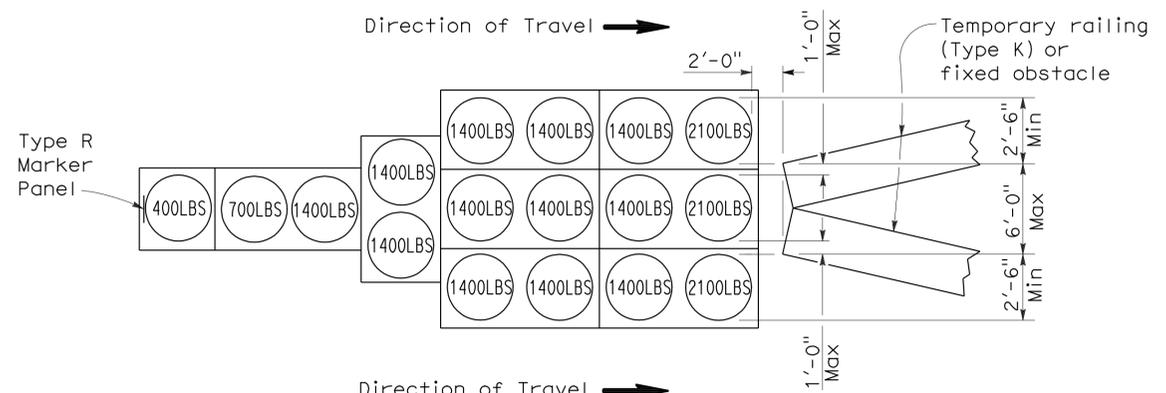
To accompany plans dated 10-19-09

2006 REVISED STANDARD PLAN RSP T1A



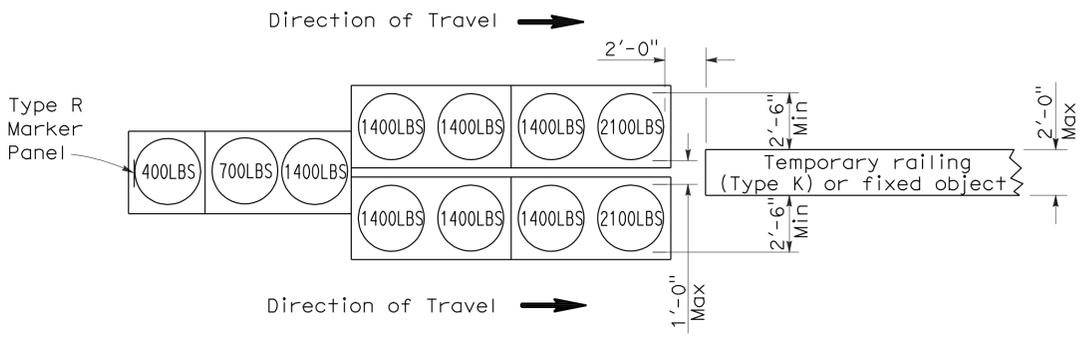
**ARRAY 'TU14'**

Approach speed 45 mph or more



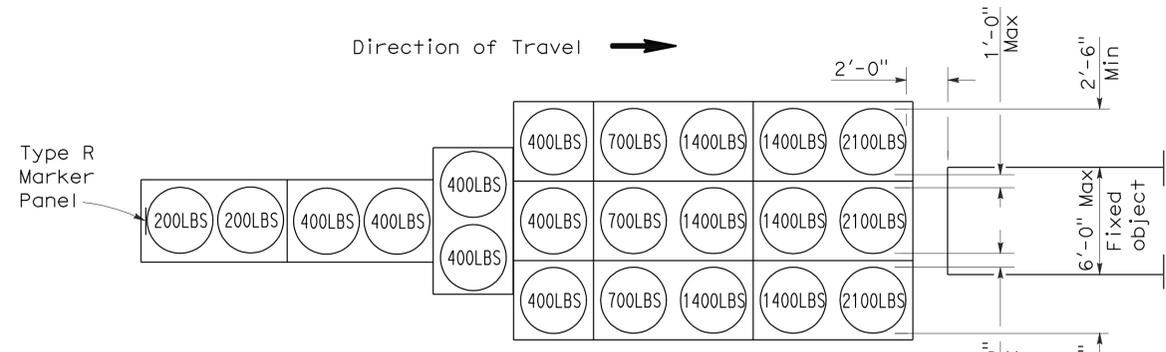
**ARRAY 'TU17'**

Approach speed less than 45 mph



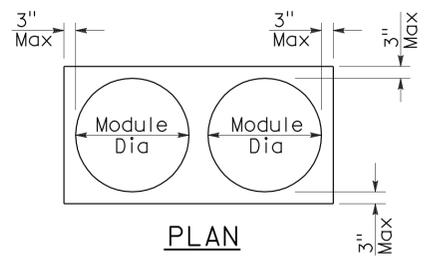
**ARRAY 'TU11'**

Approach speed less than 45 mph

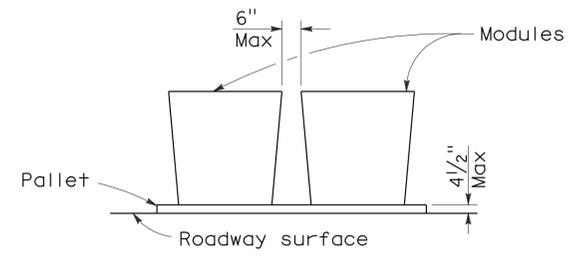


**ARRAY 'TU21'**

Approach speed 45 mph or more



**PLAN**



**ELEVATION**

**CRASH CUSHION PALLET DETAIL**

See Note 7

**NOTES:**

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the top of Type R marker panel 1" below the module lid.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of pallets is optional.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(UNIDIRECTIONAL)**

NO SCALE

RSP T1A DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1A  
DATED MAY 1, 2006 - PAGE 211 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T1A**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Ker	58	82.6,R139.8	6	16

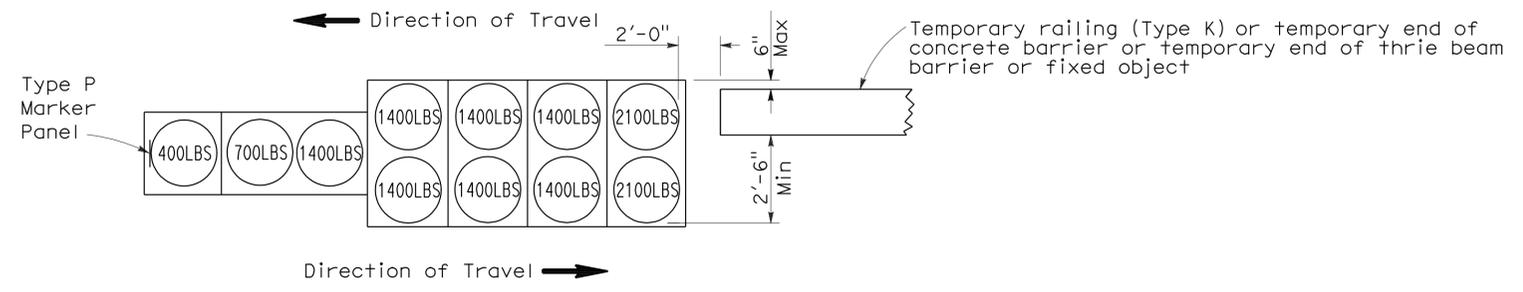
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
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.*

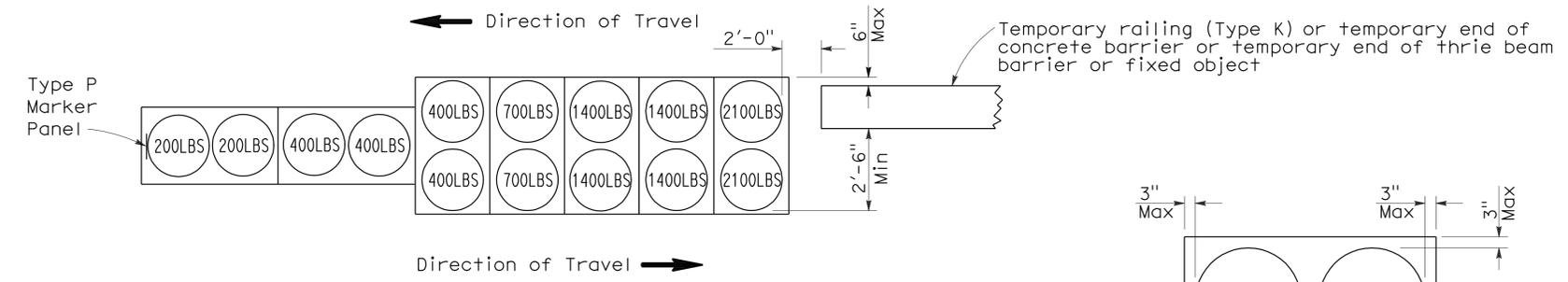
REGISTERED PROFESSIONAL ENGINEER  
No. C50200  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA

To accompany plans dated 10-19-09



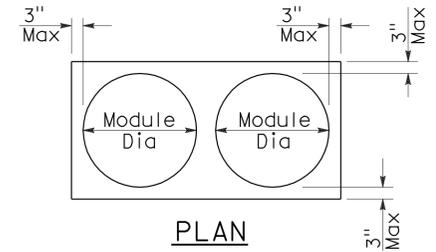
**ARRAY 'TB11'**

Approach speed less than 45 mph

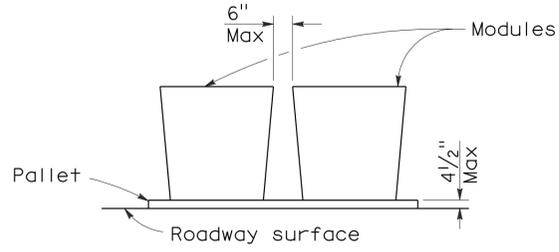


**ARRAY 'TB14'**

Approach speed 45 mph or more



PLAN



ELEVATION

**CRASH CUSHION PALLET DETAIL**

See Note 7

**NOTES:**

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the Type P marker panel so that the bottom of the panel rests upon the pallet.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of pallets is optional.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(BIDIRECTIONAL)**

NO SCALE

RSP T1B DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1B  
DATED MAY 1, 2006 - PAGE 212 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T1B**

2006 REVISED STANDARD PLAN RSP T1B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Ker	58	82.6,R139.8	7	16

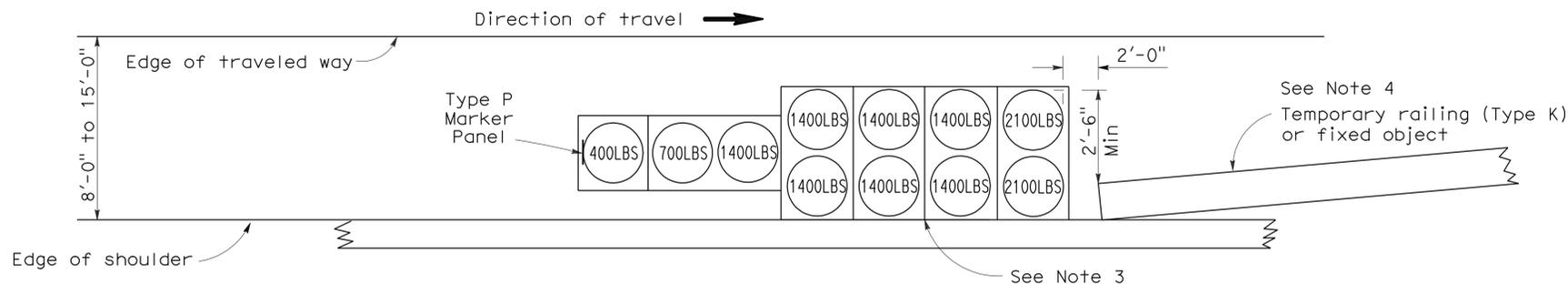
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

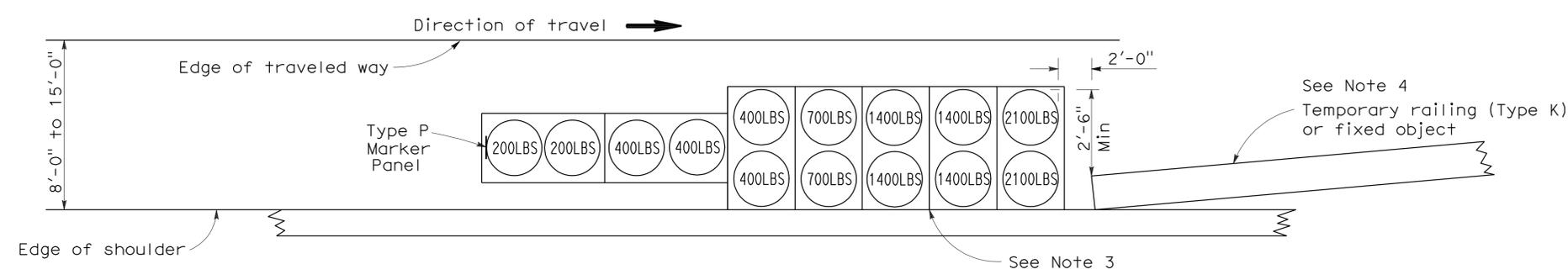
*Randell D. Hiatt*  
REGISTERED PROFESSIONAL ENGINEER  
No. C50200  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA

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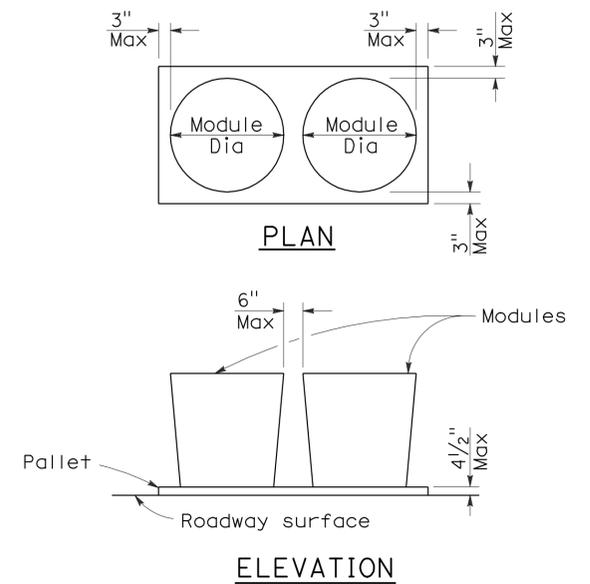
To accompany plans dated 10-19-09



**ARRAY 'TS11'**  
Approach speed less than 45 mph  
See Note 9



**ARRAY 'TS14'**  
Approach speed 45 mph or more  
See Note 9



**CRASH CUSHION PALLET DETAIL**  
See Note 11

**NOTES:**

- (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
- All sand weights are nominal.
- The temporary crash cushion arrays shown on this plan shall be used only in locations where there will be traffic on one side of the temporary crash cushion array.
- If the fixed object or approach end of the temporary railing is less than 15'-0" from the edge of traveled way, a temporary crash cushion is required in a construction or work zone.
- Temporary crash cushion arrays shall not encroach on the traveled way.
- Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
- Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
- Refer to Standard Plan A73B for marker details.
- For shoulder widths less than 8'-0", appropriate approved crash cushion protection, other than sand filled modules, shall be provided at fixed objects and at approach ends of temporary railing. The specific type of crash cushion shall be as shown on the project plans or as specified in the Special Provisions, or if not shown on the project plans or specified in the Special Provisions, shall be as approved by the Engineer.
- Approach speeds indicated conform to NCHRP 350 Report criteria.
- Use of pallets is optional.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(SHOULDER INSTALLATIONS)**

NO SCALE  
RSP T2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T2  
DATED MAY 1, 2006 - PAGE 213 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T2**

2006 REVISED STANDARD PLAN RSP T2

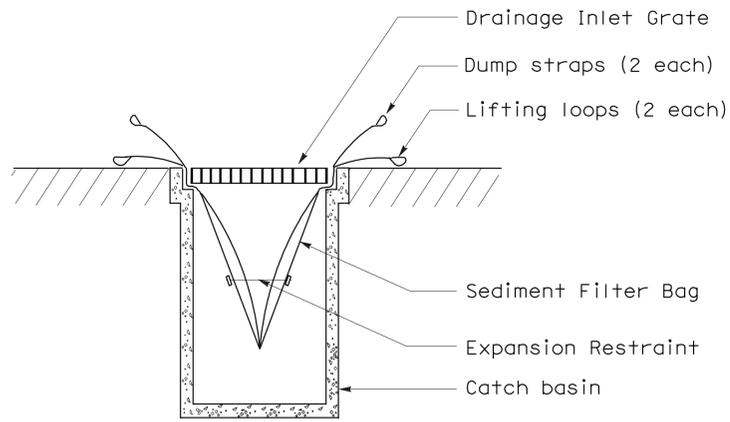
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Ker	58	82.6,R139.8	8	16

*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT

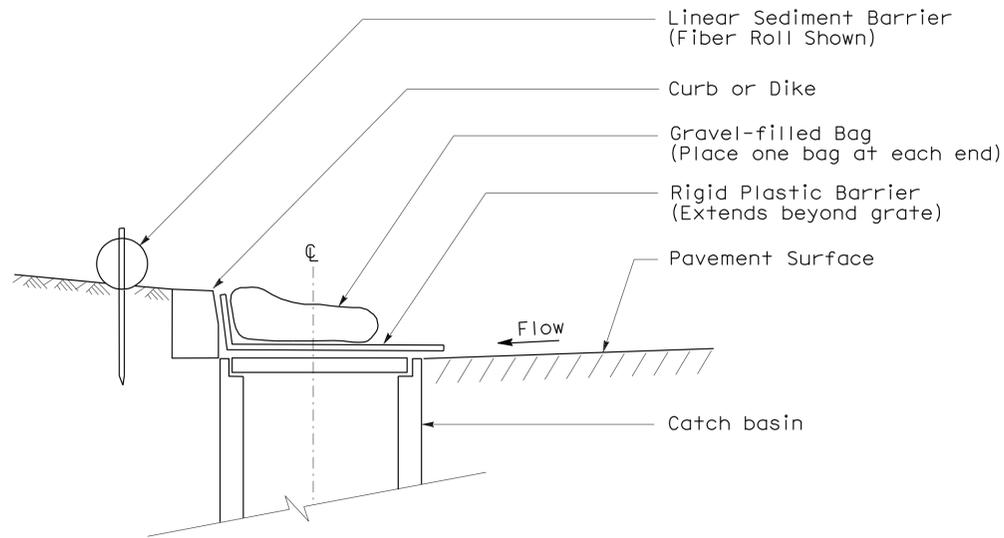
August 15, 2008  
 PLANS APPROVAL DATE

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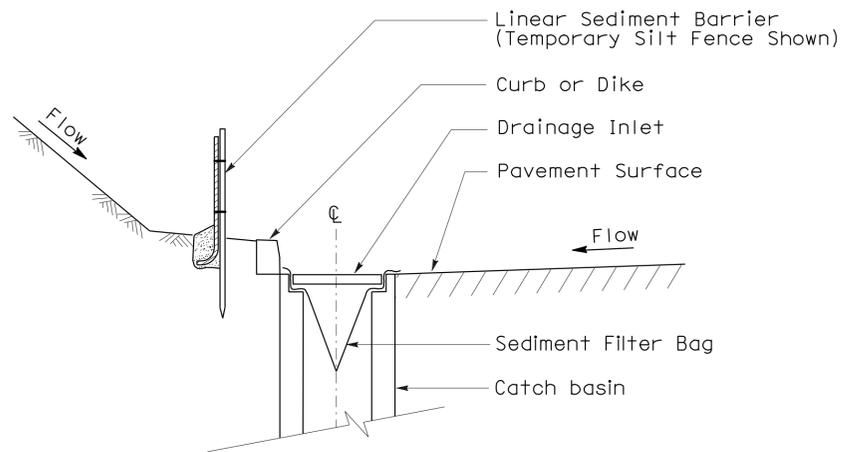
To accompany plans dated 10-19-09



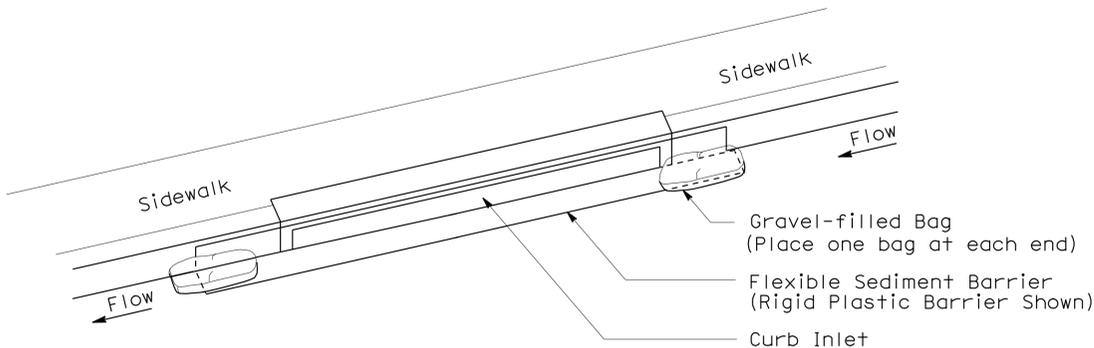
SECTION B-B  
SEDIMENT FILTER BAG DETAIL



SECTION  
TEMPORARY DRAINAGE  
INLET PROTECTION (TYPE 6A)  
(CATCH BASIN WITH GRATE)

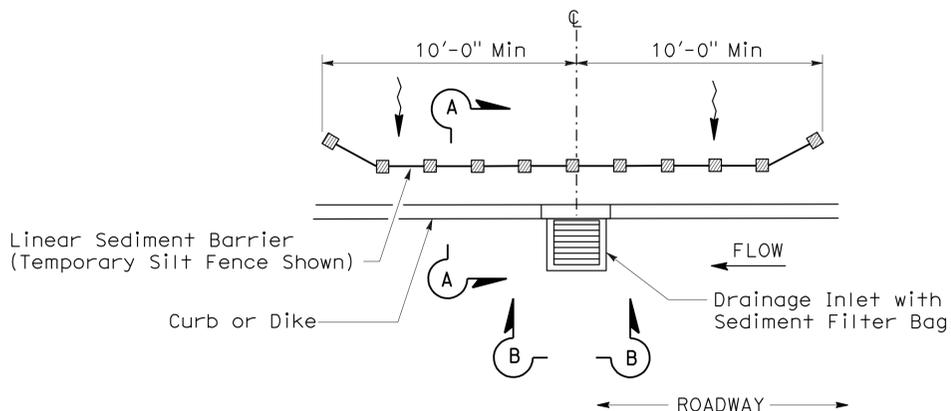


SECTION A-A



PERSPECTIVE

TEMPORARY DRAINAGE  
INLET PROTECTION (TYPE 6B)  
(CURB INLET WITHOUT GRATE)



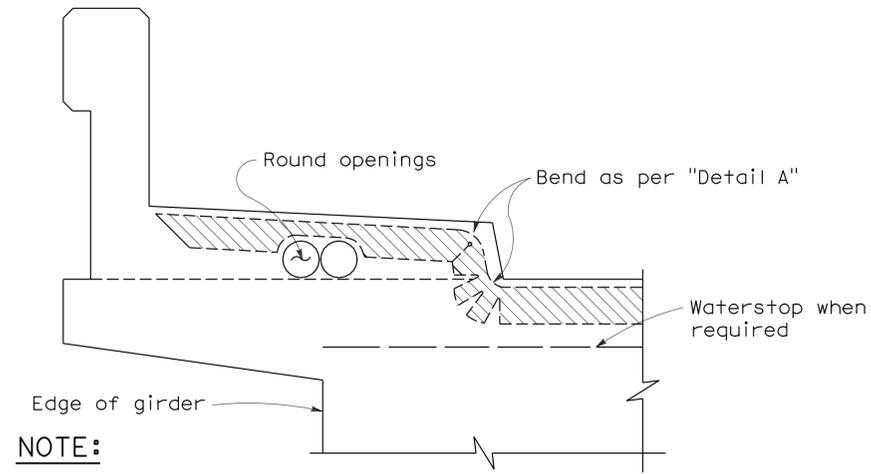
PLAN  
TEMPORARY DRAINAGE  
INLET PROTECTION (TYPE 5)  
(SEDIMENT FILTER BAG)

NOTES:

1. See Standard Plan T51 for Temporary Silt Fence.
2. Dimensions may vary to fit field conditions.

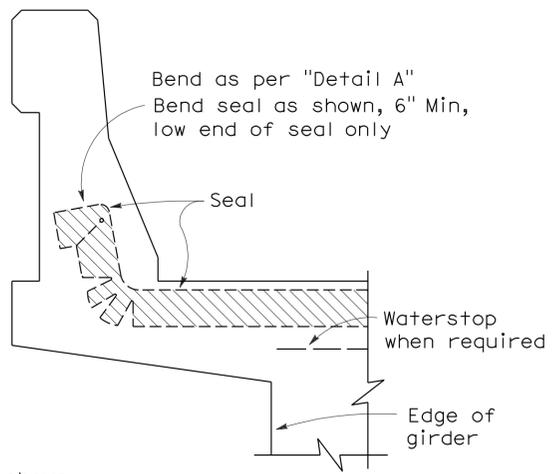
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION  
CONTROL DETAILS  
(TEMPORARY DRAINAGE  
INLET PROTECTION)**

NO SCALE  
NSP T64 DATED AUGUST 15, 2008 SUPPLEMENTS  
THE STANDARD PLANS BOOK DATED MAY 2006.

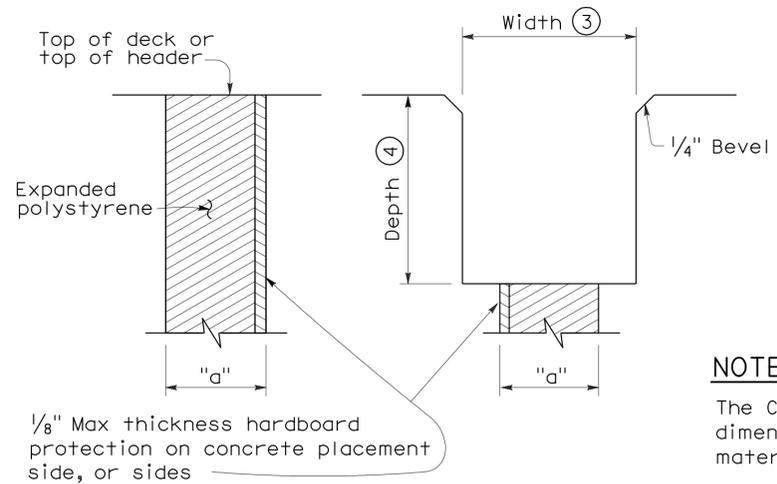


**NOTE:**  
 Type "B" seal shown. Type "A" seals to conform to the general path of seal shown, cuts for bending not required. Bend Type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

**CONCRETE BARRIER AND SIDEWALK**



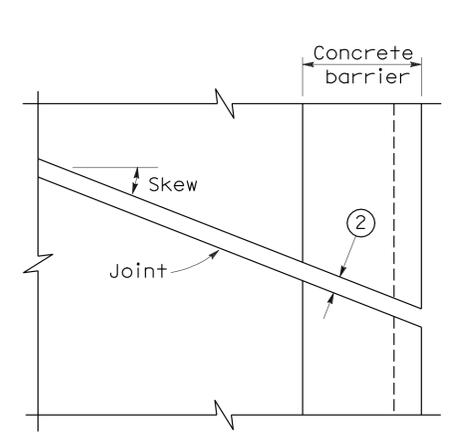
**CONCRETE BARRIER**



**FORMING DETAIL SAWCUT DETAIL**

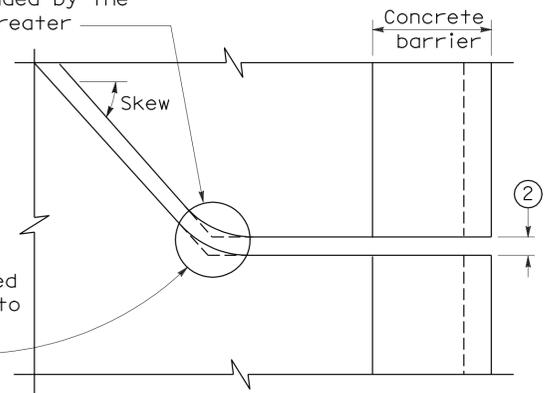
**NOTE:**  
 The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

**JOINT SEALS DETAILS**



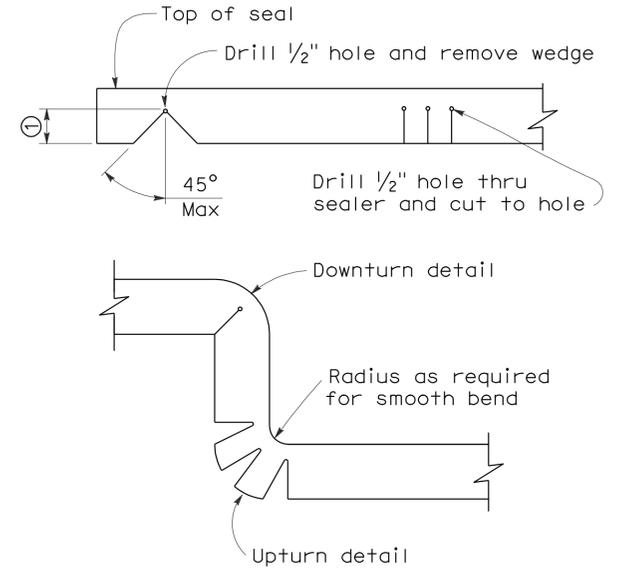
**PLAN OF JOINT (SKEW ≤ 20°)**

Min  $\phi$  radius to be 4 times uncompressed width of seal or as recommended by the manufacturer, whichever is greater



**PLAN OF JOINT (SKEW > 20°)**

In lieu of saw cutting, this area may be blocked out and reconstructed to match saw cutting on both sides.



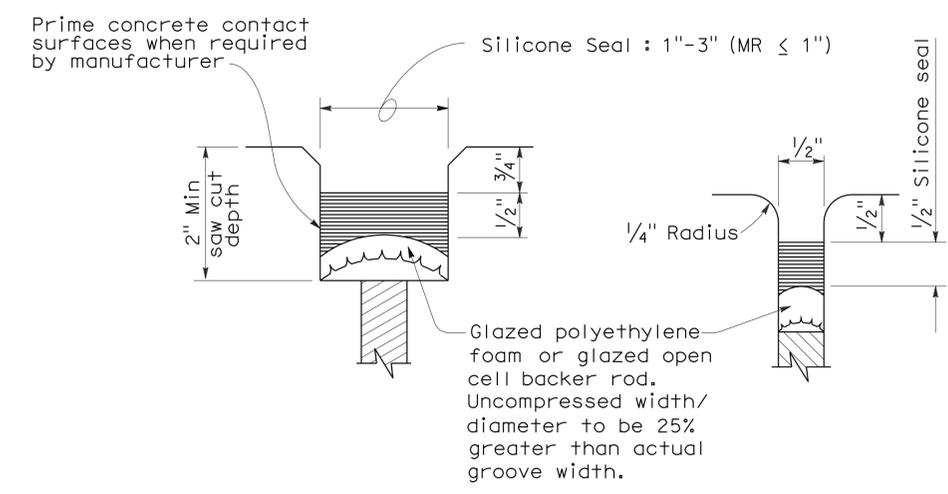
**DETAIL A**

- NOTES:**
- Make smooth cuts from the bottom of seal to 1/2" clear of top leaving at least one complete cell between the top of the cut and top of the seal. When necessary cut back of seal to clear conduit and round openings.
  - Opening in barrier to match width of sawn deck joint.
  - Sawcut groove widths shall be as ordered by the Engineer.
  - Depth of sawcut: Type A - Depth to be 2" minimum.  
 Type B - Depth to be equal to or greater than the depth of seal measured along the contact surface, when compressed to minimum width position (W<sub>2</sub>) plus dimensions shown.
  - MR (movement rating) as shown on other plan sheets.
  - Other depths must be approved by the Engineer.

**DIMENSIONS "a" OF JOINT REQUIRED**

Movement Rating (MR) ⑤	Bridge Type	"a" Dimension		
		Deck Concrete Placed		
		Winter	Fall-Spring	Summer
2"	All except CIP/PS	1 1/2"	1 1/4"	3/4"
	CIP/PS	1 1/4"	1"	1/2"
1 1/2"	All except CIP/PS	1 1/4"	1"	1/2"
	CIP/PS	1"	3/4"	1/2"
1"	All except CIP/PS	1"	3/4"	1/2"
	CIP/PS	3/4"	1/2"	1/2"
1/2"	All except CIP/PS	3/4"	3/4"	1/2"
	CIP/PS	1/2"	1/2"	1/2"

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**JOINT SEALS**  
**(MAXIMUM MOVEMENT RATING = 2")**  
 NO SCALE

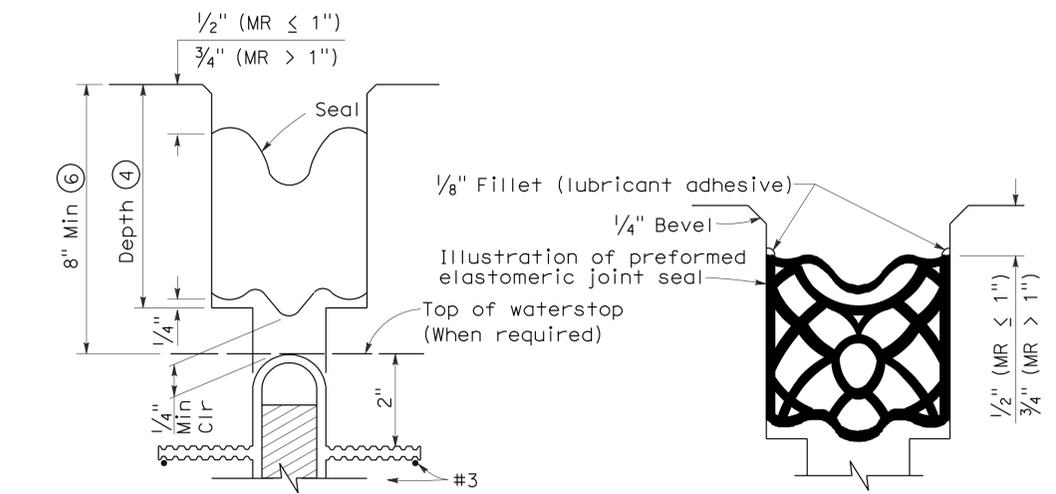


**TYPE A SEAL**

Movement rating : Silicone = 1" Max

**TYPE AL SEAL**

Longitudinal joints only



**TYPE B JOINT SEAL IN MINIMUM WIDTH POSITION (W<sub>2</sub>)**

**TYPE B SEAL**

Movement Rating ≤ 2"

RSP B6-21 DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN B6-21 DATED MAY 1, 2006 - PAGE 258 OF THE STANDARD PLANS BOOK DATED MAY 2006.

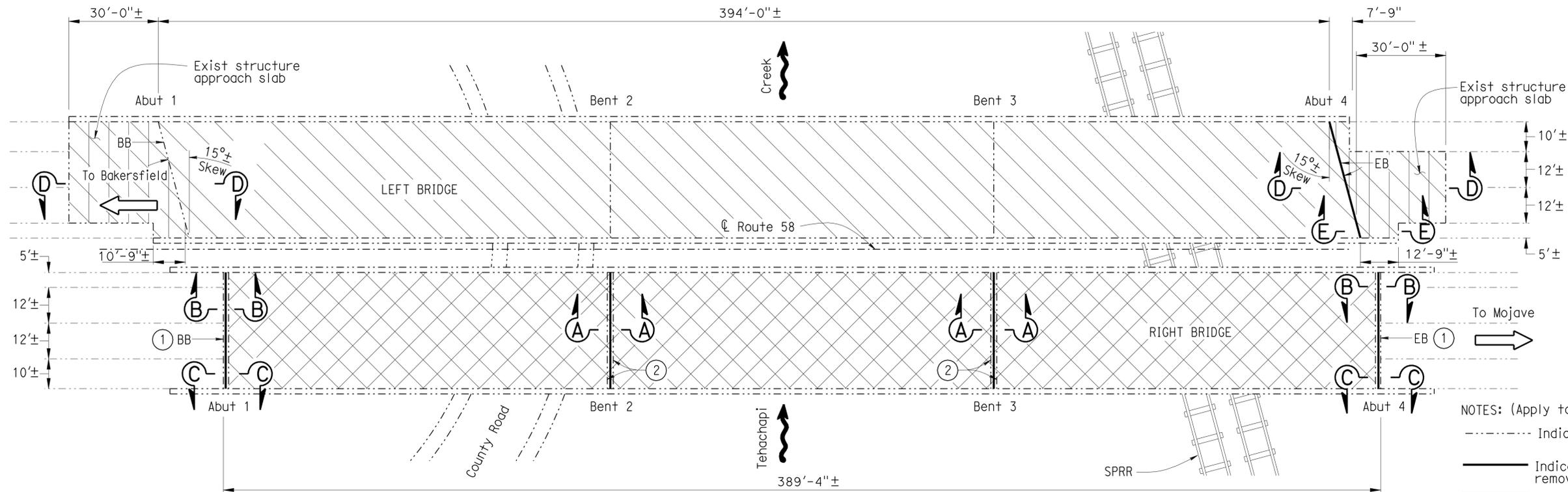
**REVISED STANDARD PLAN RSP B6-21**

2006 REVISED STANDARD PLAN RSP B6-21

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Ker	58	82.6, R139.8	10	16

7-15-09  
 REGISTERED CIVIL ENGINEER DATE  
 1-19-09  
 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  
 MARTIN B. FURLONG  
 No. C70764  
 Exp. 06-30-11  
 CIVIL



**GENERAL NOTES  
LOAD FACTOR DESIGN**

DESIGN: BRIDGE DESIGN SPECIFICATIONS (1996 AASHTO with Interims and Revisions by CALTRANS)  
 REINFORCED CONCRETE: fy = 60,000 PSI  
 f'c = 3,600 PSI

NOTES: (Apply to this sheet only)

- Indicates existing.
- Indicates location of existing joint seal removal and placement of new joint seal.
- Indicates limits of prepare concrete bridge deck 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 OVERLAY DETAILS".
- Indicates limits of remove existing 3"± thick AC and membrane seal.
- Indicates limits of grind concrete approach slab.
- ① See "ROAD PLANS" for modification of existing AC or PCC surface to conform to new deck grade.
- ② Indicates existing concrete expansion dam to be removed.

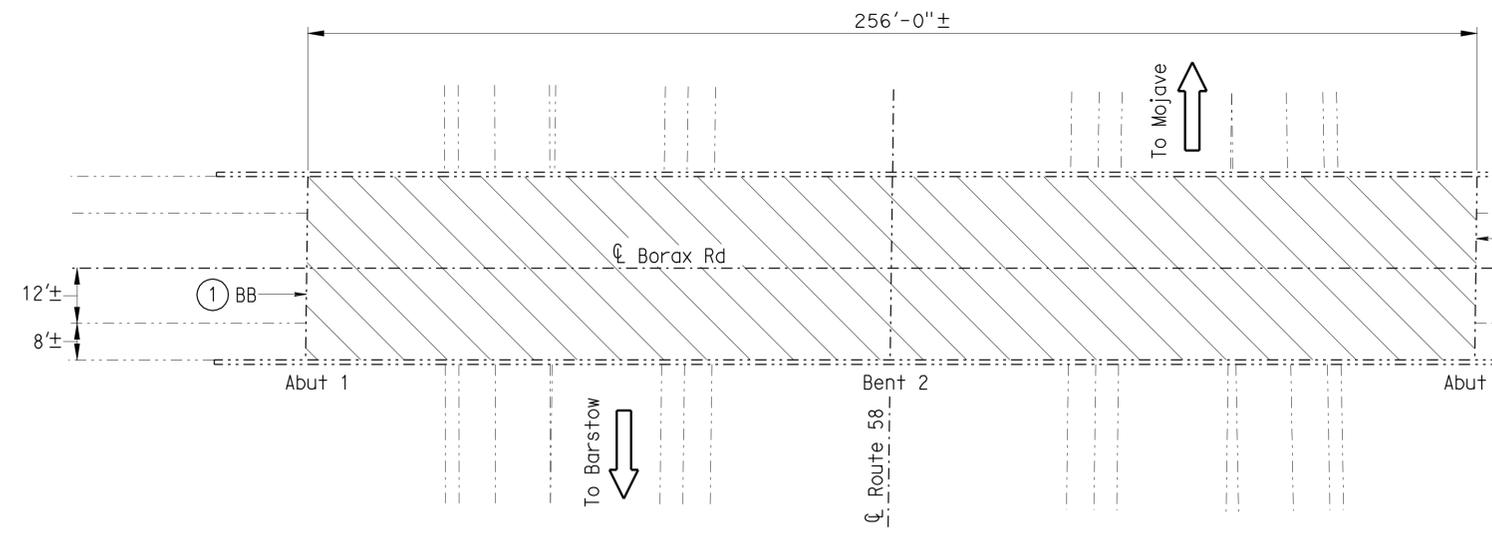
NOTE:  
For SECTION A-A, B-B, C-C, D-D, E-E see DECK REPAIR DETAILS sheet.

**TEHACHAPI CREEK BOH**

Br No. 50-0044 L/R, Ker, Route 58, PM 82.64  
SCALE: 1"=20'

QUANTITIES:

TEHACHAPI CREEK BOH	Br No. 50-0044	L/R
REMOVE ASPHALT CONCRETE SURFACING	15,185	SQFT
REMOVE UNSOUND CONCRETE	82	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	32,760	SQFT
BRIDGE REMOVAL (PORTION)	LUMP	SUM
STRUCTURAL CONCRETE, BRIDGE	4	CY
CLEAN EXPANSION JOINT	201	LF
RAPID SETTING CONCRETE (PATCH)	82	CF
FURNISH POLYESTER CONCRETE OVERLAY	3,115	CF
PLACE POLYESTER CONCRETE OVERLAY	32,760	SQFT
GRIND CONCRETE APPROACH SLAB	2,210	SQFT
JOINT SEAL (MR 1 1/2")	80	LF
JOINT SEAL (MR 2")	121	LF
BAR REINFORCING STEEL (EPOXY COATED)	350	LB



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

**BORAX ROAD OC**

Br No. 50-0352, Ker, Route 58, PM R139.80  
SCALE: 1"=20'

QUANTITIES:

BORAX ROAD OC	Br No. 50-0352
REMOVE UNSOUND CONCRETE	51 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	10,240 SQFT
RAPID SETTING CONCRETE (PATCH)	51 CF
FURNISH POLYESTER CONCRETE OVERLAY	768 CF
PLACE POLYESTER CONCRETE OVERLAY	10,240 SQFT

**INDEX TO PLANS**

SHEET No.	TITLE
1	GENERAL PLAN
2	JOINT SEAL DETAILS
3	LONGITUDINAL DECK SECTION
4	DECK REPAIR DETAILS No. 1
5	DECK REPAIR DETAILS No. 2
6	DECK REPAIR DETAILS No. 3
7	DECK REPAIR DETAILS No. 4

**STANDARD PLANS DATED MAY 2006**

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

STANDARD PLAN SHEET No.   
 DETAIL No.

DESIGN ENGINEER 7-15-09

DESIGN	BY M. Furlong	CHECKED M. Hashimoto	LAYOUT	BY N. Kelley	CHECKED M. Furlong
DETAILS	BY N. Kelley	CHECKED M. Hashimoto	SPECIFICATIONS	BY T. Geerts	PLANS AND SPECIFICATIONS COMPARED M. Furlong
QUANTITIES	BY M. Furlong	CHECKED M. Hashimoto			

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF MAINTENANCE  
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Varies  
 POST MILE Varies  
**ROUTE 58 BRIDGES**  
**GENERAL PLAN**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Ker	58	82.6, R139.8	11	16

REGISTERED CIVIL ENGINEER DATE 7-15-09  
 1-19-09 PLANS APPROVAL DATE  
 MARTIN B. FURLONG No. C70764 Exp. 06-30-11 CIVIL  
 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.

### JOINT SEAL TABLE

BRIDGE NUMBER	BRIDGE NAME	LOCATION	MINIMUM "MR" (in)	APPROXIMATE LENGTH (ft)	EXISTING WATERSTOP	APPROX DEPTH TO CLEAN EXP JOINT (in)
50-0044L	TEHACHAPI CREEK BOH	Abut 4 BW	2	41	YES	12
50-0044R	TEHACHAPI CREEK BOH	Abut 1 EDBW	2	40	NO	14
		Bent 2 B	1 1/2	40	YES	8
		Bent 3 B	1 1/2	40	YES	8
		Abut 4 EDBW	2	40	NO	14

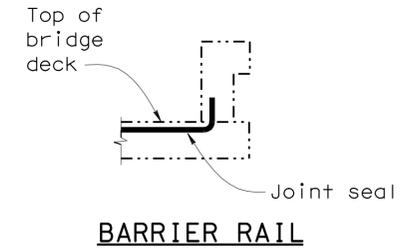
**LEGEND:**  
 BW - Back Wall Joint at beginning or end of bridge  
 EDBW - Expansion dam at backwall at beginning or end of bridge  
 B - Bent

TEMPORARY DECKING DESIGN LOADING		
MOMENT DEMAND/FOOT (kip-ft/ft)	BOLT SHEAR/FOOT (kip/ft)	BOLT TENSION (kip)
4.5	13.4	1.4

Plate deflection shall not exceed  $s/300$  ( $s$  = span of plate).  
 Maximum anchor bolt spacing = 1'-0".

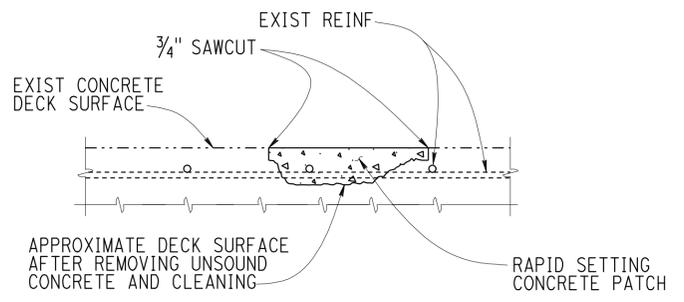
DECK REPAIR TABLE			
REMOVE UNSOUND CONCRETE AND RAPID SETTING CONCRETE (PATCH)			
BRIDGE NUMBER	BRIDGE NAME	APPROXIMATE AREA DAMAGED (PERCENT)	APPROXIMATE DEPTH (INCHES)
50-0044L	TEHACHAPI CREEK BOH	1	3
50-0044R	TEHACHAPI CREEK BOH	1	3
50-0352	BORAX ROAD OC	2	3

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



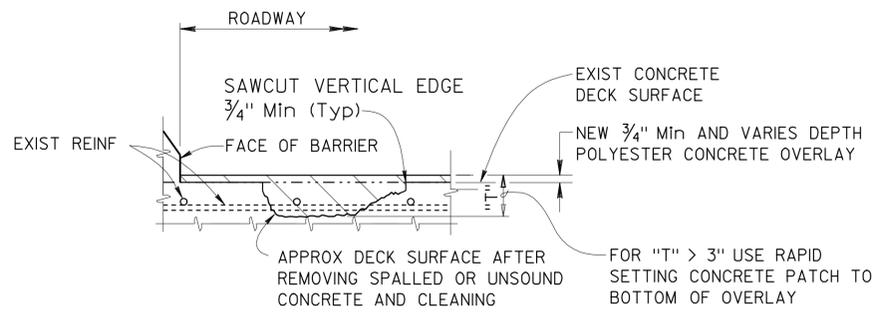
### JOINT SEAL AT LOW SIDE OF DECK

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



### DECK REPAIR DETAIL

Locations to be determined by the Engineer.  
 Reinforcement may be encountered during deck concrete removal.

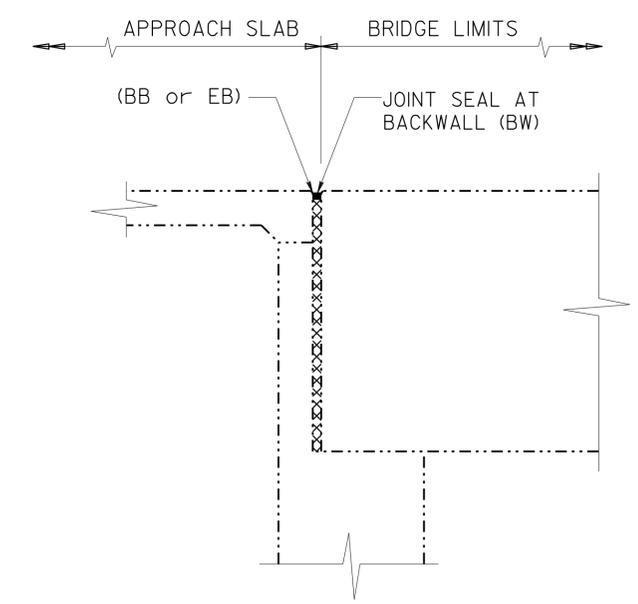


### DECK OVERLAY DETAIL

NOTE: Reinforcement may be encountered during deck concrete removal.

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.
- Bend Type B joint seal 6" up into curb or rail on the low side of the deck where deck joint matches curb or rail joint.
- For details not shown, see RSP B6-21



### ABUTMENT WITH BACKWALL JOINT SEAL LOCATION

NO SCALE

DESIGN	BY	M. Furlong	CHECKED	M. Hashimoto	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	Varies	ROUTE 58 BRIDGES			
	DETAILS	BY	N. Kelley	CHECKED			M. Hashimoto			POST MILE	Varies	JOINT SEAL DETAILS
	QUANTITIES	BY	M. Furlong	CHECKED			M. Hashimoto			REVISION DATES		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					0 1 2 3	CU 09603 EA 341901	DISREGARD PRINTS BEARING EARLIER REVISION DATES	11-2-08 11-17-08 2-28-09 2-24-09 3-11-09 5-22-09	2	7		

STRUCTURES MAINTENANCE GENERAL PLAN & DETAIL SHEET (ENGLISH) (REV. 10/17/07) FILE => 09\_341901\_bjs\_det.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Ker	58	82.6,R139.8	12	16

<i>Martin B. Furlong</i>	7-15-09
REGISTERED CIVIL ENGINEER	DATE

1-19-09
PLANS APPROVAL DATE

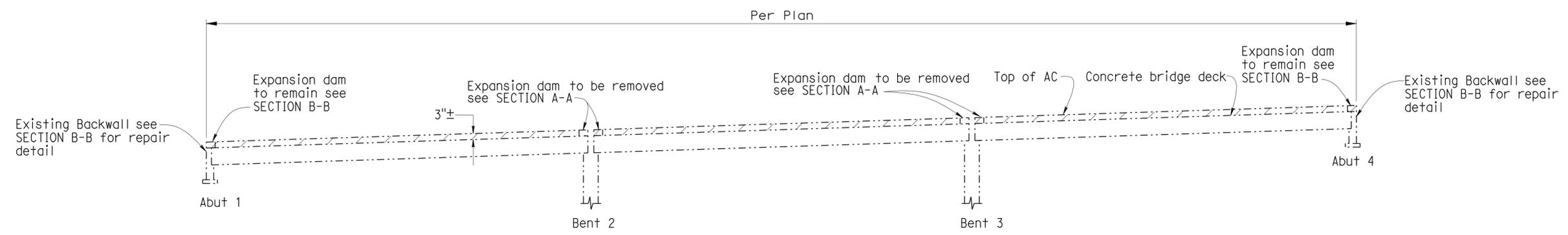
  

MARTIN B. FURLONG
No. C70764
Exp. 06-30-11
CIVIL

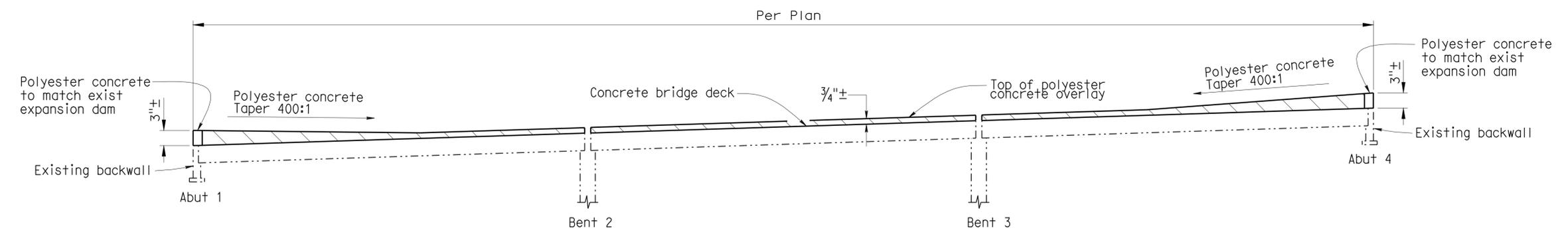
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

NOTES: (Apply to this sheet only)

- Indicates existing.
-  Indicates limits of prepare concrete bridge deck 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 OVERLAY DETAILS".
-  Indicates limits of remove existing 3"± thick AC and membrane seal.



**EXISTING**



**RECONSTRUCTION**

**TEHACHAPI CREEK BOH RIGHT BRIDGE**

No Scale

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

DESIGN	BY M. Furlong	CHECKED M. Hashimoto
DETAILS	BY N. Kelley	CHECKED M. Hashimoto
QUANTITIES	BY M. Furlong	CHECKED M. Hashimoto

**STATE OF CALIFORNIA**  
DEPARTMENT OF TRANSPORTATION

**DIVISION OF MAINTENANCE**  
STRUCTURE MAINTENANCE DESIGN

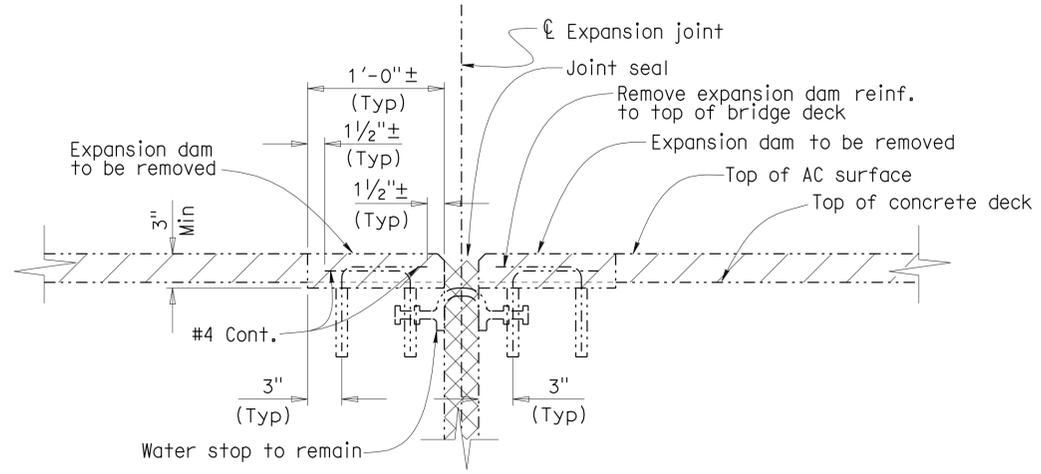
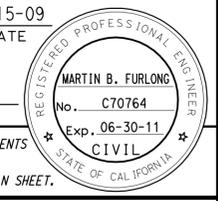
BRIDGE NO. Varies  
POST MILE Varies

**ROUTE 58 BRIDGES**

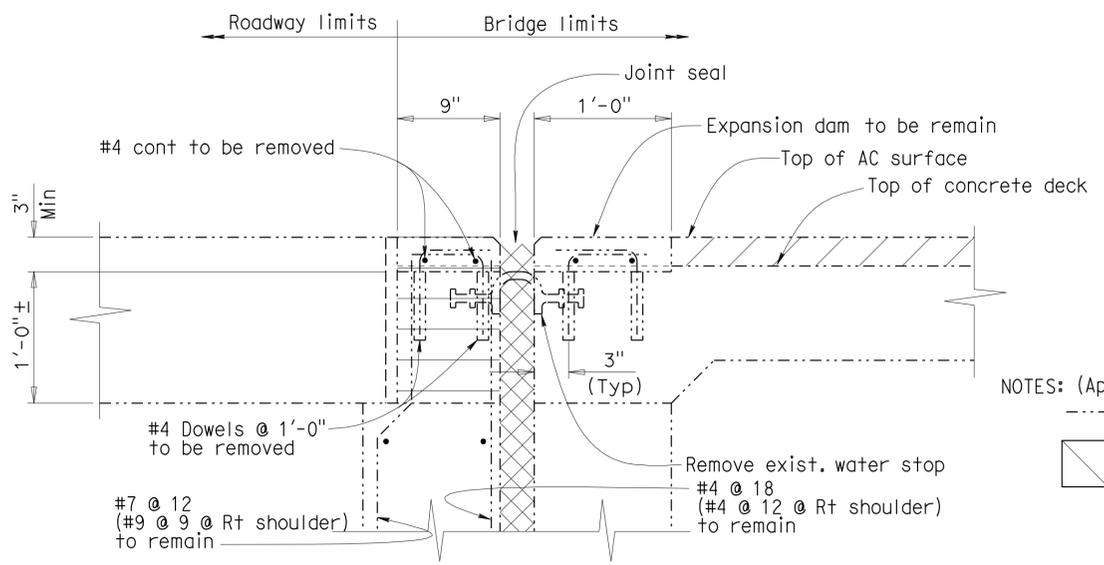
**LONGITUDINAL DECK SECTION**

USERNAME => fmkikes DATE PLOTTED => 21-OCT-2009 TIME PLOTTED => 11:24

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Ker	58	82.6,R139.8	13	16
 REGISTERED CIVIL ENGINEER			7-15-09	DATE	
10-19-09			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.					

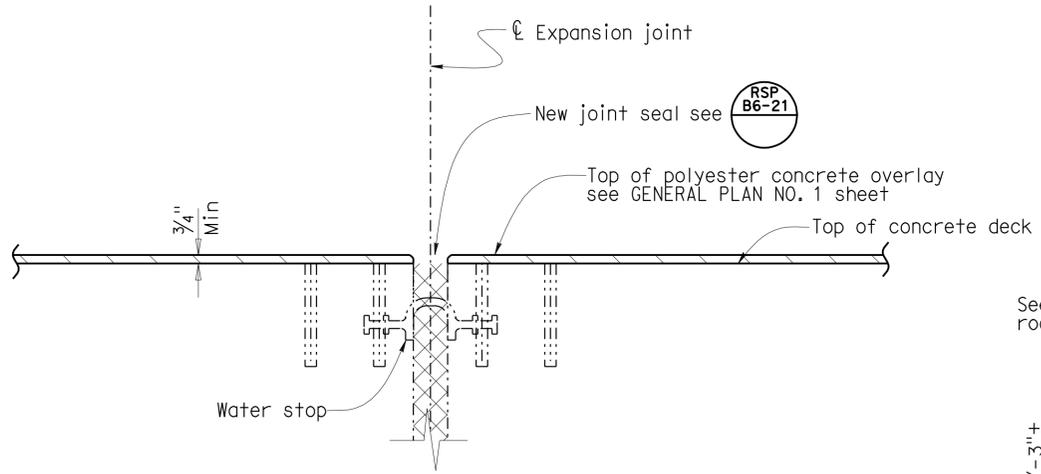


**EXISTING**



**EXISTING**

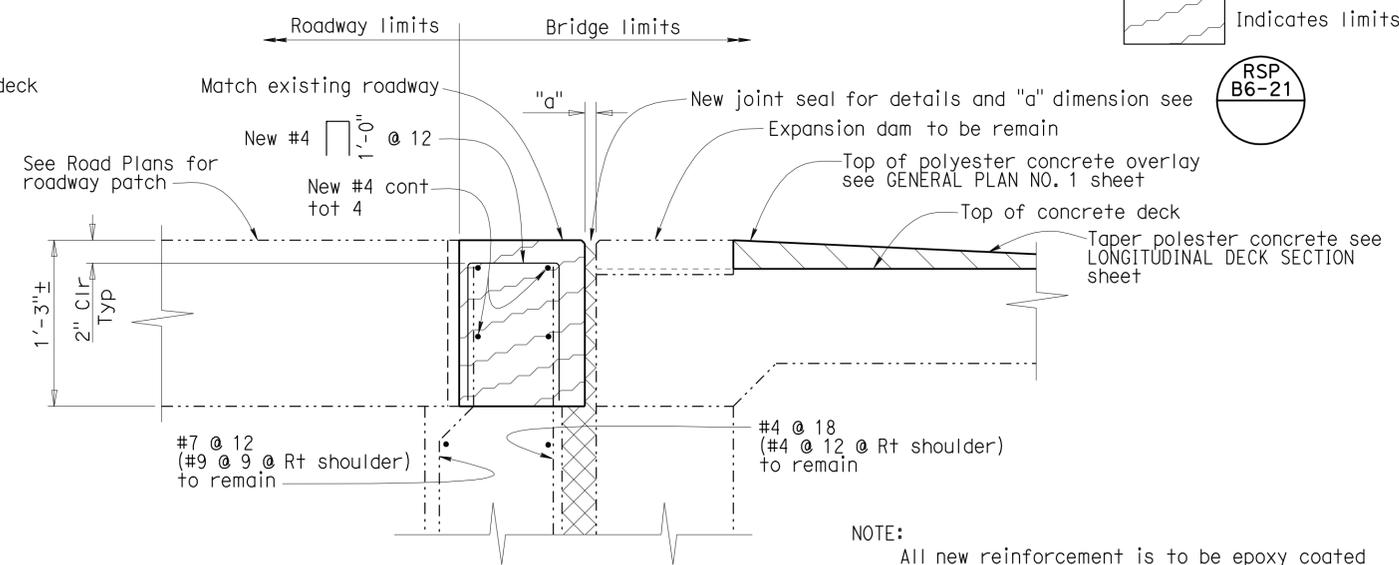
- NOTES: (Apply to this sheet only)
- Indicates existing.
  -  Indicates limits of prepare concrete bridge deck surface, furnish and place new 3/4" minimum depth polyester concrete overlay. Prior to placing new polyester concrete overlay remove unsound concrete and patch with rapid setting concrete as shown on the "DECK OVERLAY DETAILS".
  -  Indicates limits of remove existing 3"± thick AC and membrane seal.
  -  Indicates limits of remove existing bridge portion.
  -  Indicates limits of new structure concrete bridge.



**RECONSTRUCTION**

**SECTION A-A**

SCALE: 1 1/2" = 1'



**RECONSTRUCTION**

**SECTION B-B**

SCALE: 1 1/2" = 1'

NOTE: All new reinforcement is to be epoxy coated

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

DESIGN	BY M. Furlong	CHECKED M. Hashimoto
DETAILS	BY N. Kelley	CHECKED M. Hashimoto
QUANTITIES	BY M. Furlong	CHECKED M. Hashimoto

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
STRUCTURE MAINTENANCE DESIGN

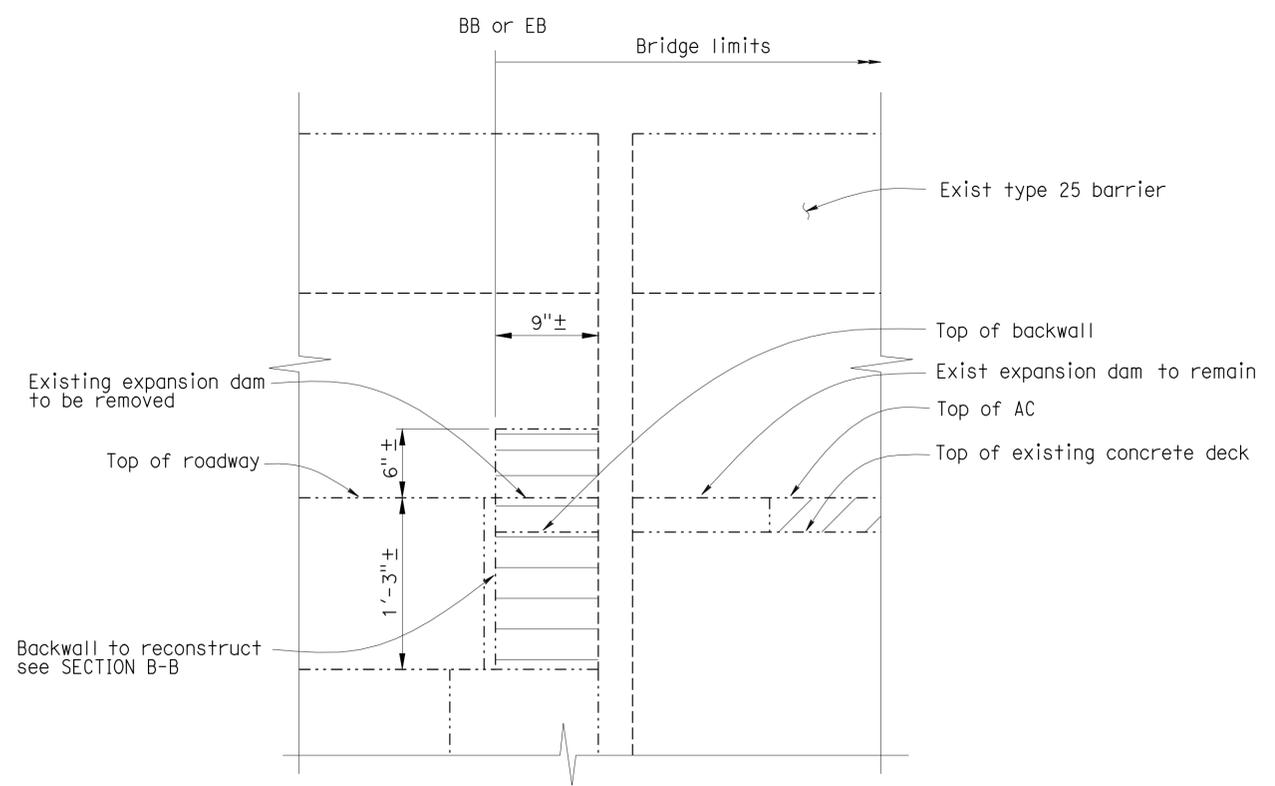
BRIDGE NO. Varies  
POST MILE Varies

**ROUTE 58 BRIDGES**  
**DECK REPAIR DETAILS NO. 1**

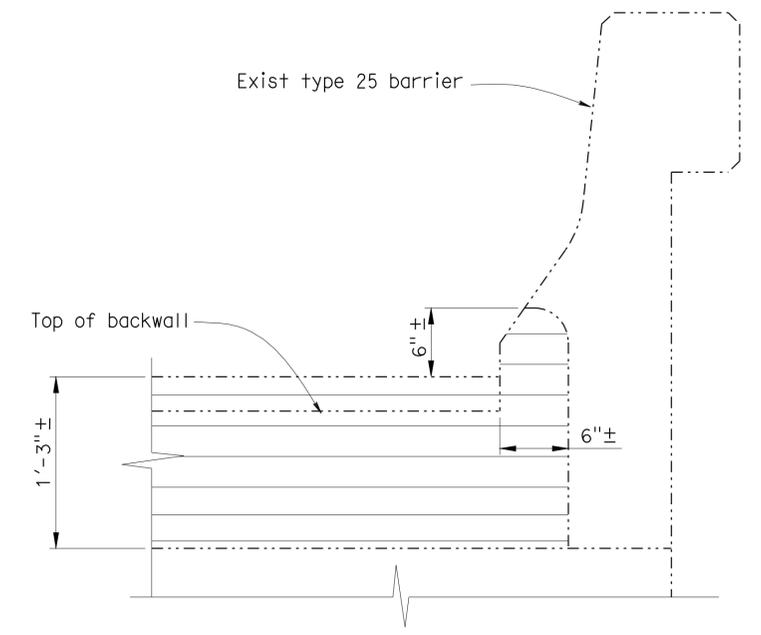
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Ker	58	82.6,R139.8	14	16

REGISTERED CIVIL ENGINEER DATE 7-15-09  
 REGISTERED PROFESSIONAL ENGINEER  
 MARTIN B. FURLONG  
 No. C70764  
 Exp. 06-30-11  
 CIVIL  
 STATE OF CALIFORNIA  
 PLANS APPROVAL DATE 10-19-09  
 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.

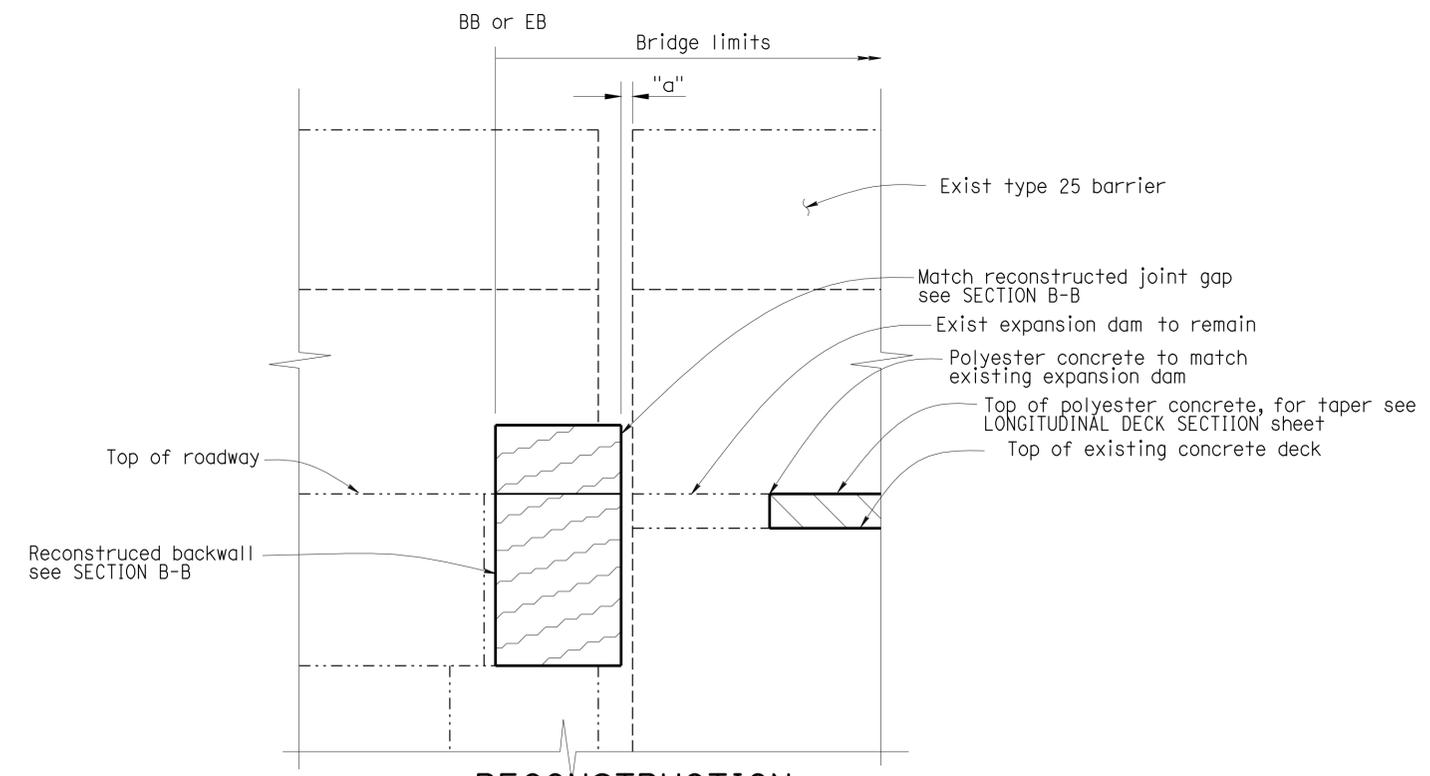


**EXISTING**



**PARTIAL TYPICAL (CONCRETE REMOVAL)**

SCALE: 1 1/2" = 1'



**RECONSTRUCTION SECTION C-C**

SCALE: 1 1/2" = 1'

NOTE: Detail shown is for Abut 4 Abut 1 similar

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

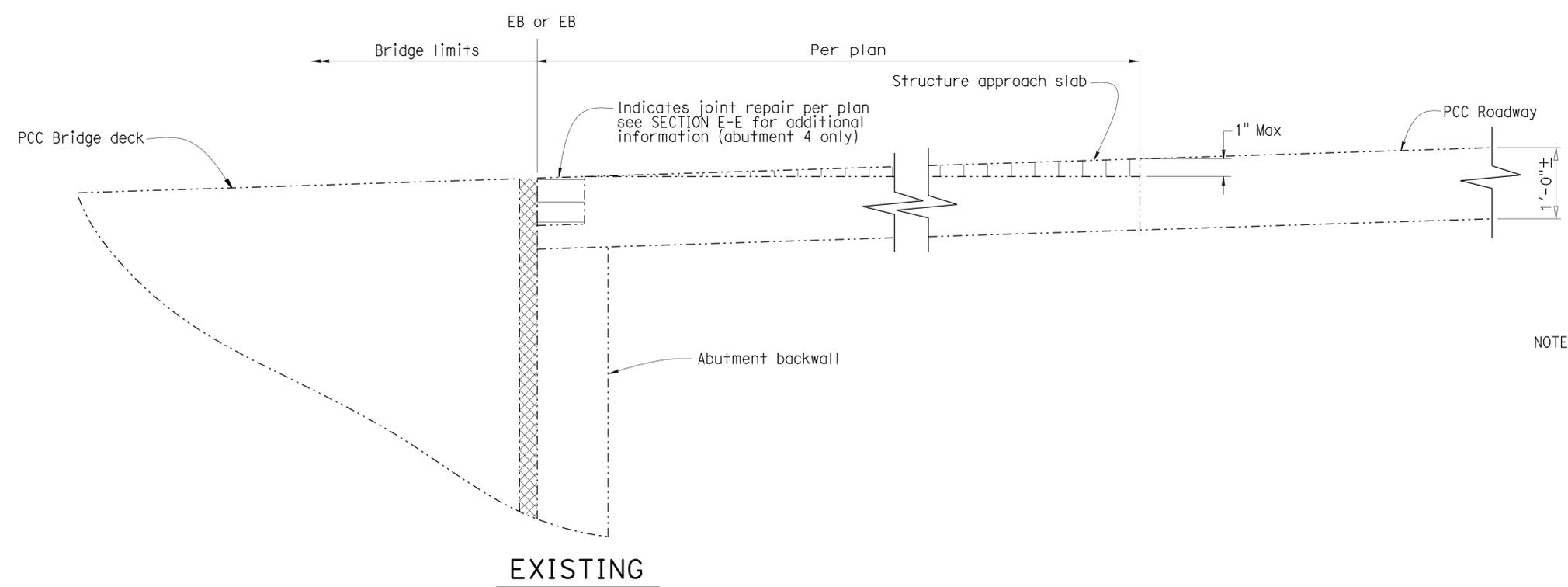
NOTES: (Apply to this sheet only)  
 - - - - - Indicates existing.

- Indicates limits of prepare concrete bridge deck 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 OVERLAY DETAILS".
- Indicates limits of remove existing 3"± thick AC and membrane seal.
- Indicates limits of remove existing bridge portion.
- Indicates limits of new structure concrete bridge.

STRUCTURES MAINTENANCE GENERAL PLAN & DETAIL SHEET (ENGLISH) (REV. 10/17/07)	DESIGN	BY M. Furlong	CHECKED M. Hashimoto	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	Varies	ROUTE 58 BRIDGES
	DETAILS	BY N. Kelley	CHECKED M. Hashimoto			POST MILE		
	QUANTITIES	BY M. Furlong	CHECKED M. Hashimoto	CU 09603 EA 341901	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES		SHEET 5 OF 7
		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		11-2-08 11-17-08 2-28-09 2-28-09 3-12-09 5-26-09		

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Ker	58	82.6,R139.8	15	16

REGISTERED CIVIL ENGINEER DATE 7-15-09  
 REGISTERED PROFESSIONAL ENGINEER  
 MARTIN B. FURLONG  
 No. C70764  
 Exp. 06-30-11  
 CIVIL  
 STATE OF CALIFORNIA  
 PLANS APPROVAL DATE 10-19-09  
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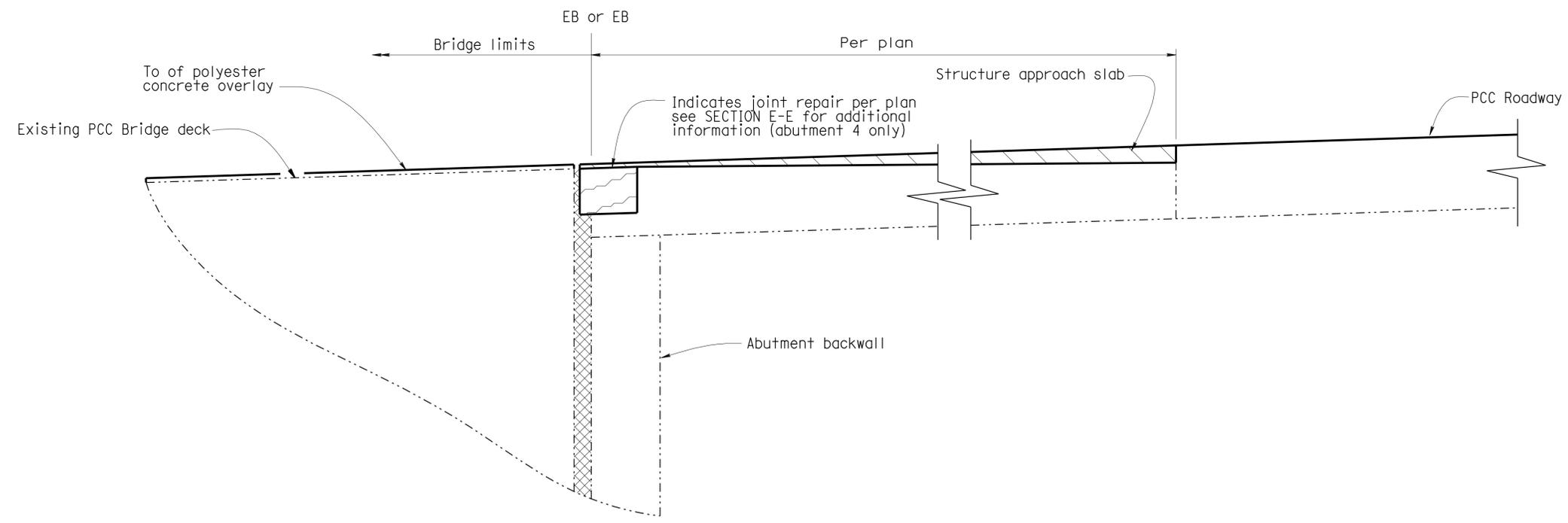


**EXISTING**

NOTE:  
Abut 4 shown Abut 1 similar

NOTES: (Apply to this sheet only)

- Indicates existing.
-  Indicates limits of prepare concrete bridge deck 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 OVERLAY DETAILS".
-  Indicates limits of grind concrete approach slab.
-  Indicates limits of remove existing bridge portion.
-  Indicates limits of new structure concrete bridge.



**RECONSTRUCTION**

**SECTION D-D**

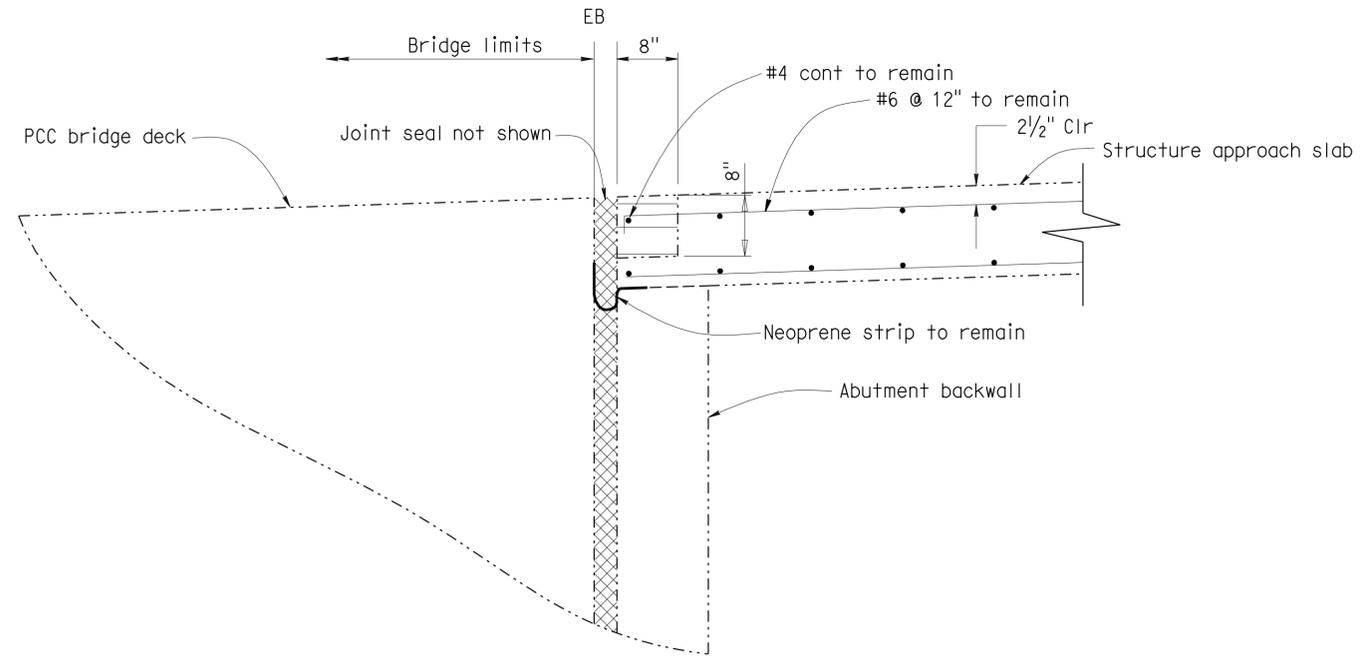
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NOTE:  
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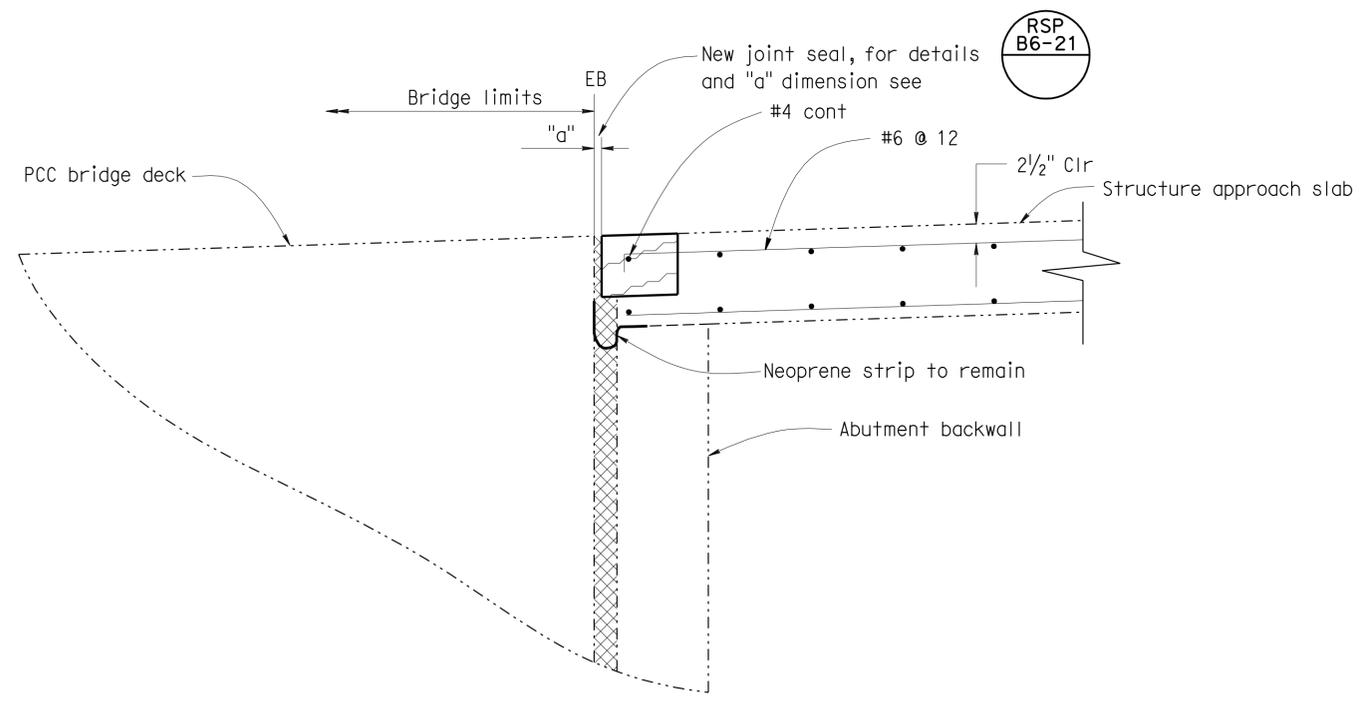
STRUCTURES MAINTENANCE GENERAL PLAN & DETAIL SHEET (ENGLISH) (REV. 10/17/07)	DESIGN	BY M. Furlong	CHECKED M. Hasimoto	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	Varies	ROUTE 58 BRIDGES DECK REPAIR DETAILS NO. 3	
	DETAILS	BY N. Kelley	CHECKED M. Hasimoto			POST MILE	Various		
	QUANTITIES	BY M. Furlong	CHECKED M. Hasimoto						
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0 1 2 3	CU 09603 EA 341901	DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES	SHEET 6 OF 7
							11-2-08 11-17-08 2-23-09 2-27-09 3-12-09 5-26-09		

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Ker	58	82.6,R139.8	16	16

*Martin B. Furlong*  
 REGISTERED CIVIL ENGINEER DATE 7-15-09  
 PLANS APPROVAL DATE 10-19-09  
 No. C70764  
 Exp. 06-30-11  
 CIVIL  
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**EXISTING**



**RECONSTRUCTION**

**SECTION E-E**

SCALE: 1"=1'

NOTES: (Apply to this sheet only)

- Indicates existing.
- Indicates limits of remove existing bridge portion.
- Indicates limits of new structure concrete bridge.

NOTE:  
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STRUCTURES MAINTENANCE GENERAL PLAN & DETAIL SHEET (ENGLISH) (REV. 10/17/07)	DESIGN	BY M. Furlong	CHECKED M. Hasimoto	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	Varies	ROUTE 58 BRIDGES	
	DETAILS	BY N. Kelley	CHECKED M. Hasimoto			POST MILE			DECK REPAIR DETAILS NO. 4
	QUANTITIES	BY M. Furlong	CHECKED M. Hasimoto			Various			
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0 1 2 3	CU 09603 EA 341901	REVISION DATES		SHEET 7 OF 7	

DISREGARD PRINTS BEARING EARLIER REVISION DATES

11-2-08	11-17-08	2-28-09	2-28-09	3-12-09	5-28-09	5-28-09
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USERNAME => fmkhes DATE PLOTTED => 21-OCT-2009 TIME PLOTTED => 11:25