

DESIGN DATA

J-15-A	Abutment 1	Pier X	Abutment 4
◆ Joint opening "A"	1/2"	0"	1/2"
★ Predicted Horizontal Movement	.04"	0"	.04"

◆ Joint opening "A" for existing structure was determined from the existing plans and must be field verified before ordering or fabricating bridging plate.

★ The maximum predicted horizontal joint movement is based on a temperature drop of 60°F for concrete girders and 80°F for steel girders.

BRIDGING PLATE SIZES:

"A"	THICKNESS	WIDTH	MINIMUM LENGTH
0"-1"	1/4"	5"	4'-0"
1"-2"	3/8"	7"	4'-0"
2"-3"	3/8"	9"	4'-0"
3"-4"	1/2"	11"	4'-0"
4"-5"	1/2"	13"	4'-0"
5"-6"	5/8"	15"	4'-0"

NOTES:

The plug joint system shall include all labor and materials to install the expansion joint according to the Manufacturer's directions and according to these plans.

The blockout shall be formed or cut to full depth and ground to provide a uniform bearing surface for the bridging plate.

Bridging plates shall not rock on their supports prior to placing plug joint material.

The bridging plates shall be A36 steel as shown on the Table A or equivalent approved by the Engineer. It shall be installed in accordance with the Manufacturer's directions. All bridging plates shall have locator pins or bars for centralizers.

The backer rod shall be secured and sealed according to the Manufacturer's directions.

The joint bonding agent shall be the type recommended by the Manufacturer for the joint system being installed. It shall be applied according to the Manufacturer's recommendations.

All surfaces in joint opening shall be cleaned according to the Manufacturer's directions.

The joints shall be installed and compacted according to the Manufacturer's procedures. The finished joint, after compacting and sealing, shall be flush with the top of the adjacent wearing surface.

A representative of the Manufacturer shall be on site prior to and during installation of the plug joints and shall approve the methods and materials before work commences.

The Asphaltic Binder shall not be overheated, either by absolute temperature limits of the material, or by extended time at a lower high temperature. Material that is overheated shall be discarded.

For construction requirements see section 518.08 of Standard Specifications.

Seal top of curb as directed by the Engineer.

Sealing the face of the curb or barrier will not be paid for separately, but will be included in the work.

For information only: it is estimated that xxx cu. ft. of compacted joint material is required.

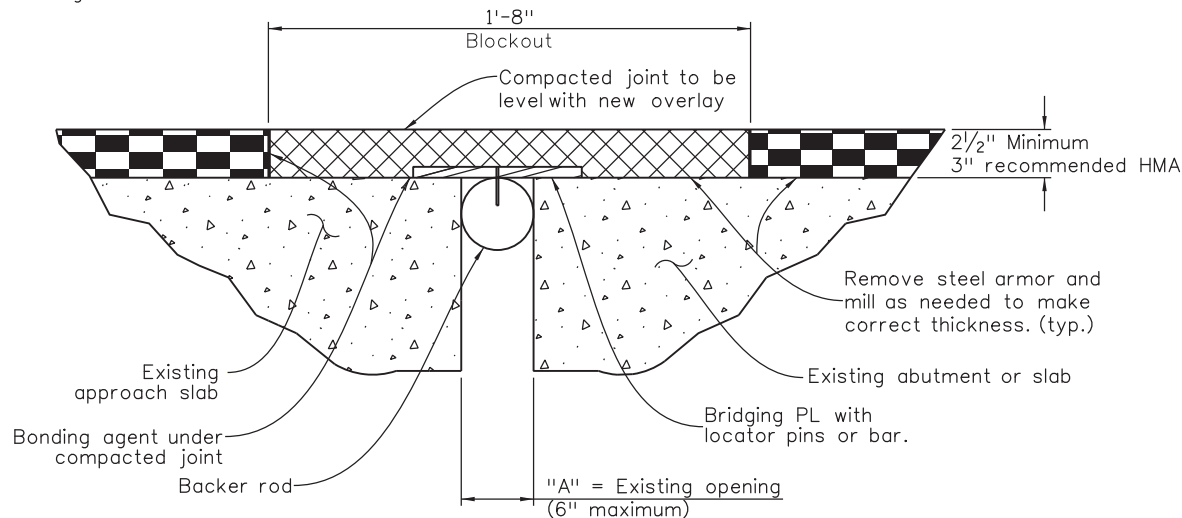
The Contractor shall be prepared to provide temporary cover plates in case the work must be suspended prior to opening the structure to traffic.

ACCEPTABLE EXPANSION DEVICE ALTERNATES

All Asphaltic Plug Joint materials need a Certified Test Report (CTR) from an independent laboratory showing passing test results on all referenced tests within the most recent ASTM D 6297 using granite blocks for each lot of material to be included on the APL.

A list of current Pre-Approved Lot numbers, Suppliers, and the Procedure to register new suppliers can be found on CDOT Approved Products List Web site at:
<http://apps.coloradodot.info/apl/AplSearch.cfm>

- ▼ Includes:
- J-15-A
- K-15-W
- K-15-H
- K-15-G



At these structures:

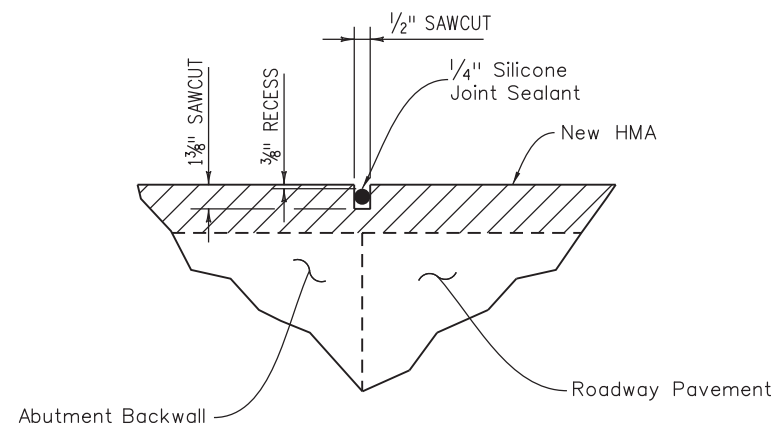
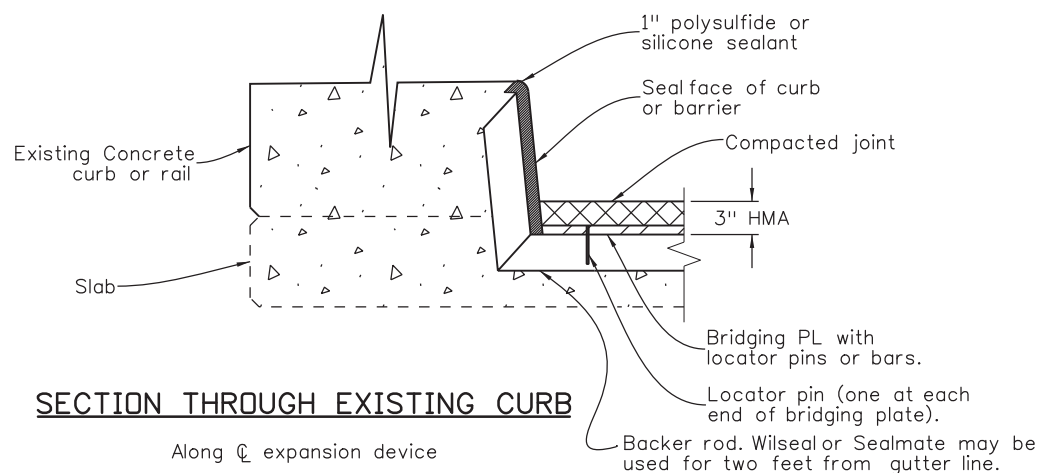
Temperature Extremes:
 Cold for mountains
 Hot for plains

Truck Traffic:
 ≥ 2500 ADTT For high truck traffic
 < 2500 ADTT For moderate truck traffic

Stop and Go Traffic:
 Common for controlled intersections
 Uncommon for everything else

JOINT REHABILITATION DETAIL WITH EXISTING END DAMS

Typical detail shown.



SAWCUT DETAIL

SAWCUT SHALL BE ALIGNED DIRECTLY ABOVE JOINT. ABUTMENT JOINT SHOWN. APPROACH SLAB JOINT SIMILAR. THE COST OF THE ABOVE SHALL BE INCLUDED IN THE COST OF ITEM 518 SAWING AND SEALING BRIDGE JOINT.

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Design		Detail		Quantities	
INITIAL	DATE	INITIAL	DATE	INITIAL	DATE
MS	11/16	RW	11/16	MS	11/16
GM	11/16	GMM	11/16	GMM	11/16
Designed By		Detailed By		Quantities By	
Checked By		Checked By		Checked By	

Print Date: 1/25/2017
 File Name: US50_SH9-S-B22_PLUG JT.dgn
 Horiz. Scale: 1:1 Vert. Scale:

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Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation

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 Region 2 DW

As Constructed
No Revisions:
Revised:
Void:

JOINT DETAILS		
Designer:	M. SUELAU	Structure
Detailer:	R. WHITCHER	Numbers
Subset:	Bridge	Subset Sheets: B15 of B15

Project No./Code
STA 0503-089
21255
Sheet Number 118