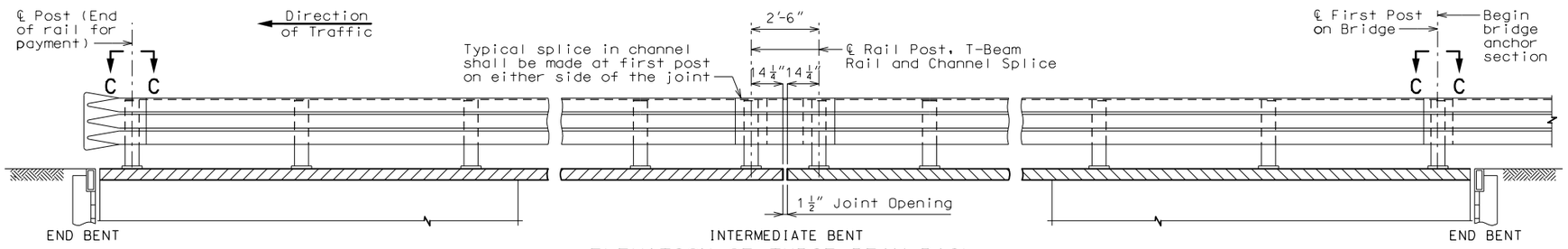
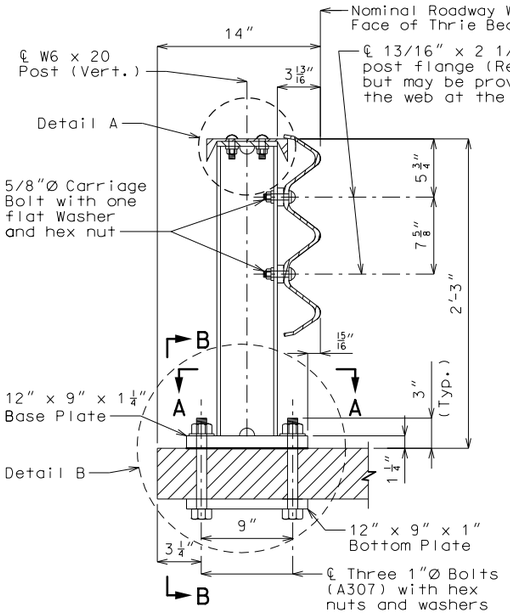


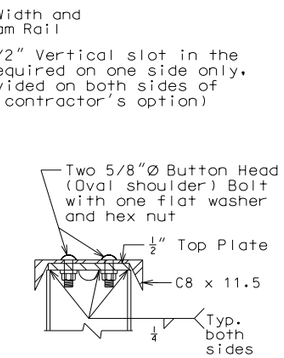
ELEVATION OF THRIE BEAM RAIL



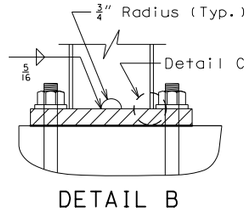
PART SECTION AT RAIL POST

The size of base and bottom plate may be increased depending on which grid option is used.

See preceding sheet for post spacing.

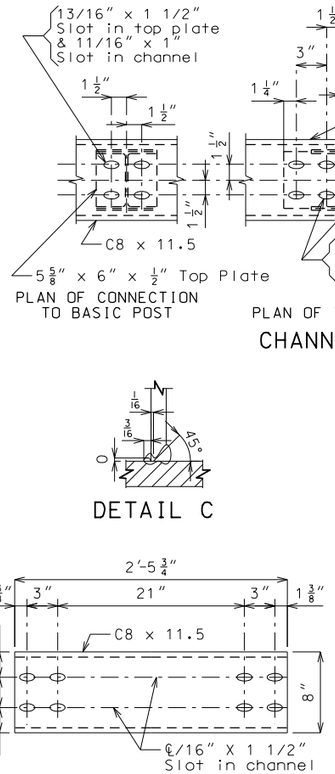


DETAIL A



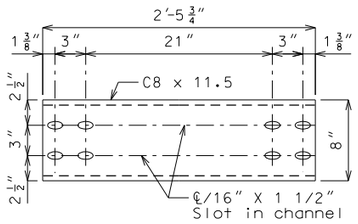
DETAIL B

Semi-circular notches centered on the axis of the post web ends may be made to facilitate galvanizing.

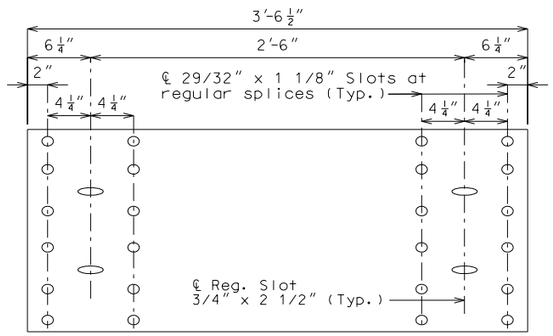


CHANNEL MEMBER DETAILS

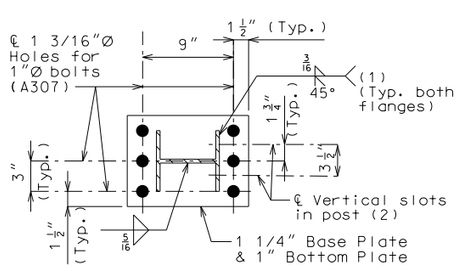
DETAIL C



CHANNEL MEMBER AT INTERMEDIATE BENT



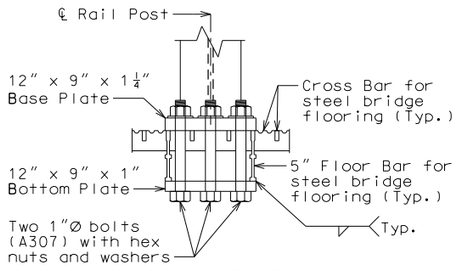
THRIE BEAM MEMBER AT INT. BENT



SECTION A-A

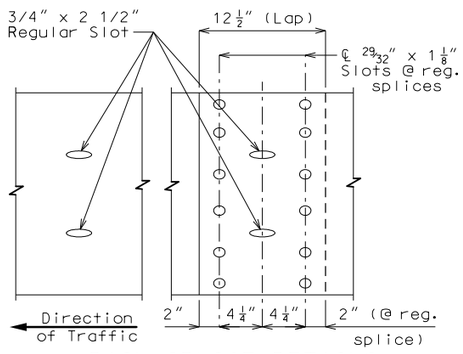
(1) Optional welding of the post to the base plate, in lieu of the weld shown, is a 5/16-inch fillet weld all around, including the edges of the post flanges.

(2) Required on one side only, but may be provided on both sides of web at contractor's option.



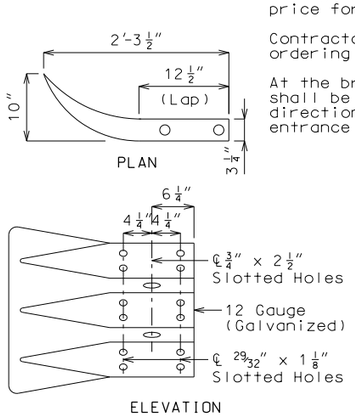
SECTION B-B

Bottom plate shall be fabricated from ASTM A709 Grade 50W steel and shall be welded to two 5-inch floor bars. Bottom plate shall not be galvanized.

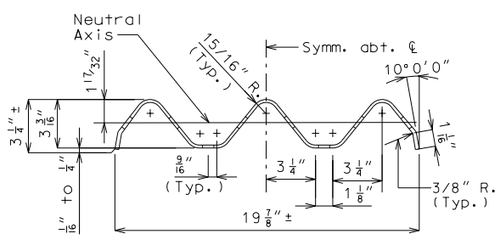


RAIL SPLICE DETAILS

(Part Elevation Thrie Beam Member)



DETAILS OF FLARED END



THRIE BEAM RAIL MEMBER

General Notes:

Design Specification: 2002 - AASHTO 17th Edition

Guardrail delineators shall be attached to the top of the bridge guardrail and shall similarly use the delineator details of Missouri Standard Plan 617.10, except that the delineator body shall be attached to the top of the cap rail using galvanized anchorage as shown on Missouri Standard Plan 606.00. Delineators on bridges with two-lane, two-way traffic shall have retroreflective sheeting on both sides. Cost of supplying and installing new delineators will be considered completely covered by other pay items. Delineators shall be stored with bridge guardrail after use.

Panel lengths of channel members shall be attached continuously to a minimum of four posts and a maximum of six posts (except at end bents).

All bolts, nuts, washers and plates will be considered completely covered by the contract unit price for other items.

All steel connecting bolts and fasteners for posts and railing, and all anchor bolts, nuts, washers and plates shall be galvanized after fabrication except for bottom plate. Protective coating and material requirement of steel railing shall be in accordance with Sec 1040.

Rail posts shall be set perpendicular to roadway profile grade, vertically in cross section and aligned in accordance with Sec 713 except that the rail posts shall be aligned by the use of 3 x 1 3/4-inch shims such that the post deviates not more than 1/2 inch from true horizontal alignment after final adjustment. The shims shall be placed between the post and the thrie beam rail. The thickness of the shims shall be determined by the contractor and verified by the engineer before ordering material for this work.

At the expansion slots in the thrie beam rails and channels, the bolts shall be tightened and backed off one-half turn and the threads shall be burred.

At the thrie beam connection to posts on wings, the bolts shall be tightened and backed off one-half turn and the threads shall be burred.

Minimum length of thrie beam sections is equal to one post space.

A 5/8-inch diameter button head, oval shoulder bolt with a minimum 3/8-inch thick hex nut shall be used at all slots.

Thrie beam guardrail on the bridge shall be 12 gage steel.

Posts, top plates, base plates, channels and channel splice plates shall be fabricated from ASTM A709 Grade 36 steel and galvanized.

Flat washers, 3 x 1 3/4 x 3/16-inch minimum, shall be used at all post bolts between the bolt head and beam. The washers shall be rectangular in shape with an 11/16 x 1-inch slot, or when necessary of such design as to fit the contour of the beam. Rectangular Washer, 3 x 1 3/4 x 5/8-inch, shall be used between the post and the thrie beam rail.

Special drilling of the thrie beam may be required at the splices. All drilling details shall be shown on the shop drawings.

Fabrication of structural steel shall be accordance with Sec 1080.

If Type A guardrail is not attached to ends of the temporary structure, flared ends shall be required. The existing thrie beam rails shall be modified to accept flared ends. Cost for furnishing and installing flared ends will be considered completely covered by the contract unit price for other items.

Contractor shall verify all dimensions in field before ordering materials.

At the bridge ends for head to head traffic, guardrail shall be used at all four corners and for single directional traffic, guardrail shall be used at the entrance ends only unless required at the exit.

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED 4/16/2018

ROUTE * | STATE MO

DISTRICT BR | SHEET NO. *

COUNTY *

JOB NO. *

CONTRACT ID.

PROJECT NO.

BRIDGE NO. TEMP 4

DATE | DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

Detailed
Checked

Note: This drawing is not to scale. Follow dimensions.

Sheet No. of