

DATE PREPARED
7/10/2025

ROUTE 25 STATE MO

DISTRICT SE SHEET NO. 2

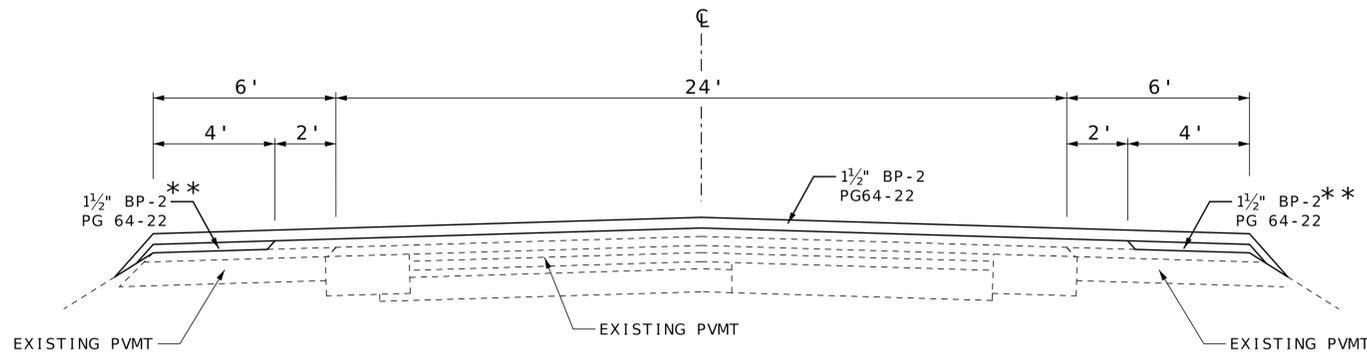
COUNTY CAPE GIRARDEAU/STODDARD

JOB NO. JSE0117

CONTRACT ID.

PROJECT NO.

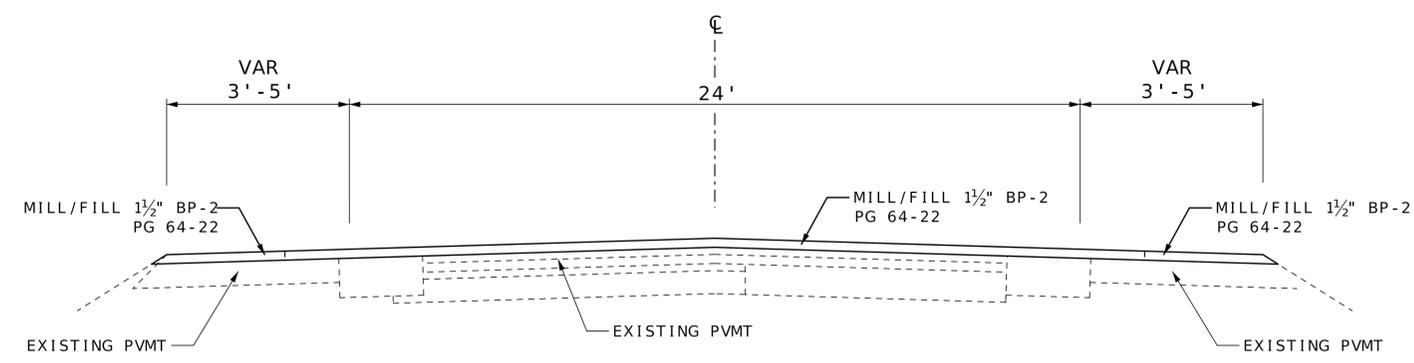
BRIDGE NO.



TYPICAL SECTION

RTE 25
LM 11.355 TO LM 15.674
LM 15.906 TO LM 27.005*

*EXCEPTIONS:
LM 22.713 TO LM 22.823
LM 23.753 TO LM 23.863
**PLACE 1 1/2" BP-2 FOR SHOULDERS
PRIOR TO PLACING MAINLINE
PAVEMENT.



TYPICAL SECTION

RTE 25
LM 15.674 TO LM 15.906

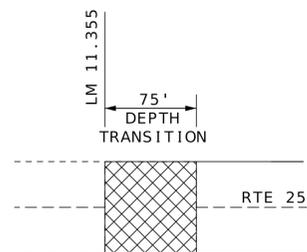
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

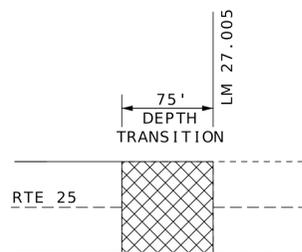
TYPICAL SHEET
SHEET 1 OF 1

BEGIN PROJECT

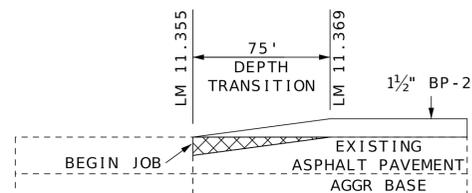


PLAN VIEW AT RTE 25

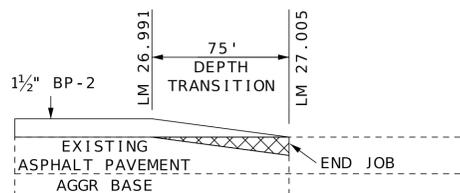
END PROJECT



PLAN VIEW AT RTE 25

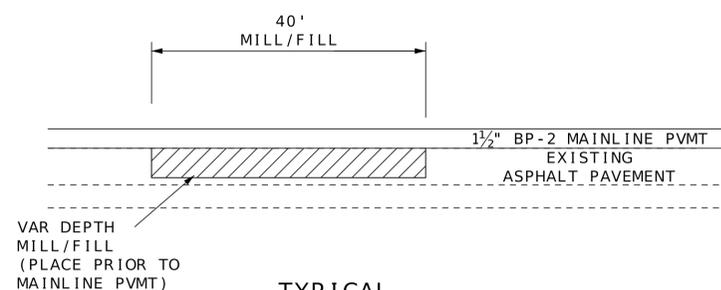


TYPICAL
RTE 25



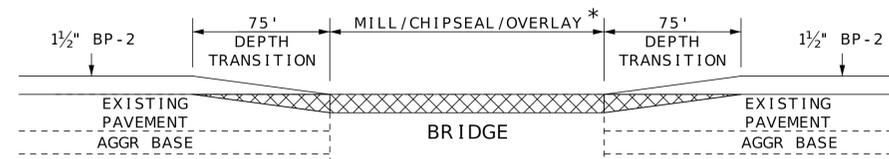
TYPICAL
RTE 25

PROFILE GRADE AND
CROSS SLOPE CORRECTION



TYPICAL
RTE 25
LM 24.474 (SBL)

- MILL/FILL
- MODIFIED COLDMILLING

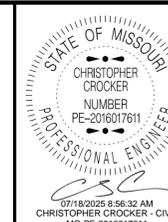


TYPICAL AT BRIDGE
G0854 LOG MILE 13.350 TO LOG MILE 13.363
G0853 LOG MILE 14.447 TO LOG MILE 14.460
K0247 LOG MILE 16.759 TO LOG MILE 16.780

* MILL ALL EXISTING ASPHALT OFF BRIDGE



TYPICAL AT BRIDGE
H0429 LOG MILE 22.713 TO LOG MILE 22.823
H0431 LOG MILE 23.753 TO LOG MILE 23.863



DATE PREPARED

7/10/2025

ROUTE 25 STATE MO

DISTRICT SE SHEET NO. 4

COUNTY CAPE GIRARDEAU/STODDARD

JOB NO. JSE0117

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

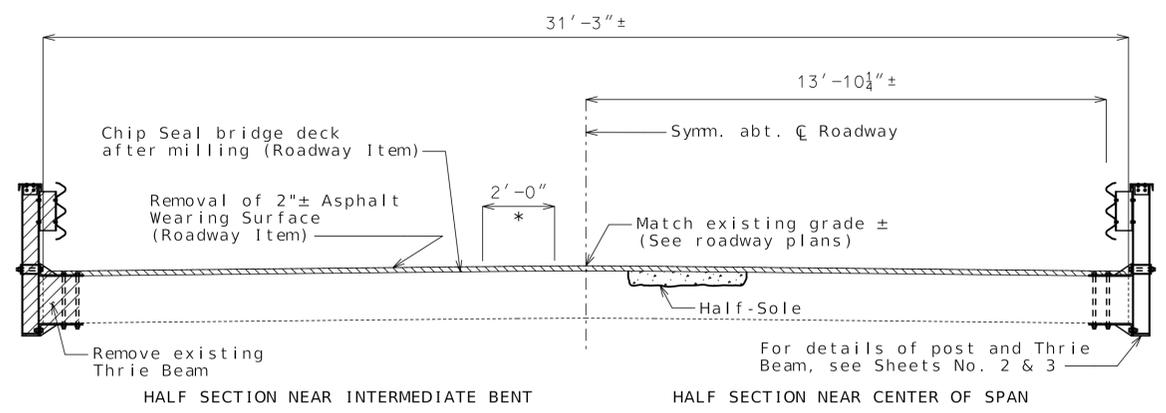


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SPECIAL SHEET SHEET 1 OF 3

U.I.P. & REHAB. EXISTING (3 @ 22.5') CONTINUOUS CONCRETE SOLID SLAB SPANS
(SKEW: 25° L.A.)

SEC/SUR 3 TWP 29N RGE 12E



TYPICAL SECTION THRU EXISTING DECK
Existing reinforcement not shown for clarity.
* Temporary Traffic Control Device (Roadway Item)

Estimated Quantities		
Item		Total
Removal of Bridge Guardrail (Thrie Beam)	linear foot	137
** Half-Sole Repair	square foot	100
Bridge Guardrail (Thrie Beam)	linear foot	135

**If half-sole repairs are not required, the amount shall be underrun accordingly and per the approval of the engineer.

General Notes:

Design Specifications:
2002 AASHTO LFD (17th Ed.) Standard Specifications
Bridge Deck Rating = 6

Design Loading:
H20-44 (1949); HS20-44 (New Construction)

Design Unit Stresses:
Class B-2 Concrete $f'_c = 4,000$ psi

Miscellaneous:
Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (Roadway Item).

All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

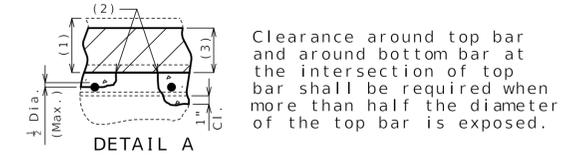
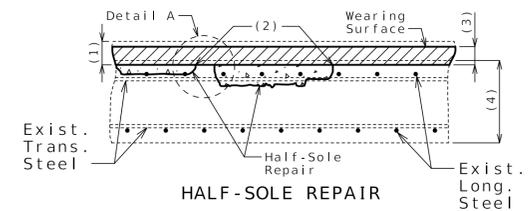
Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

Contractor shall verify all dimensions in field before finalizing shop drawings or ordering new material.

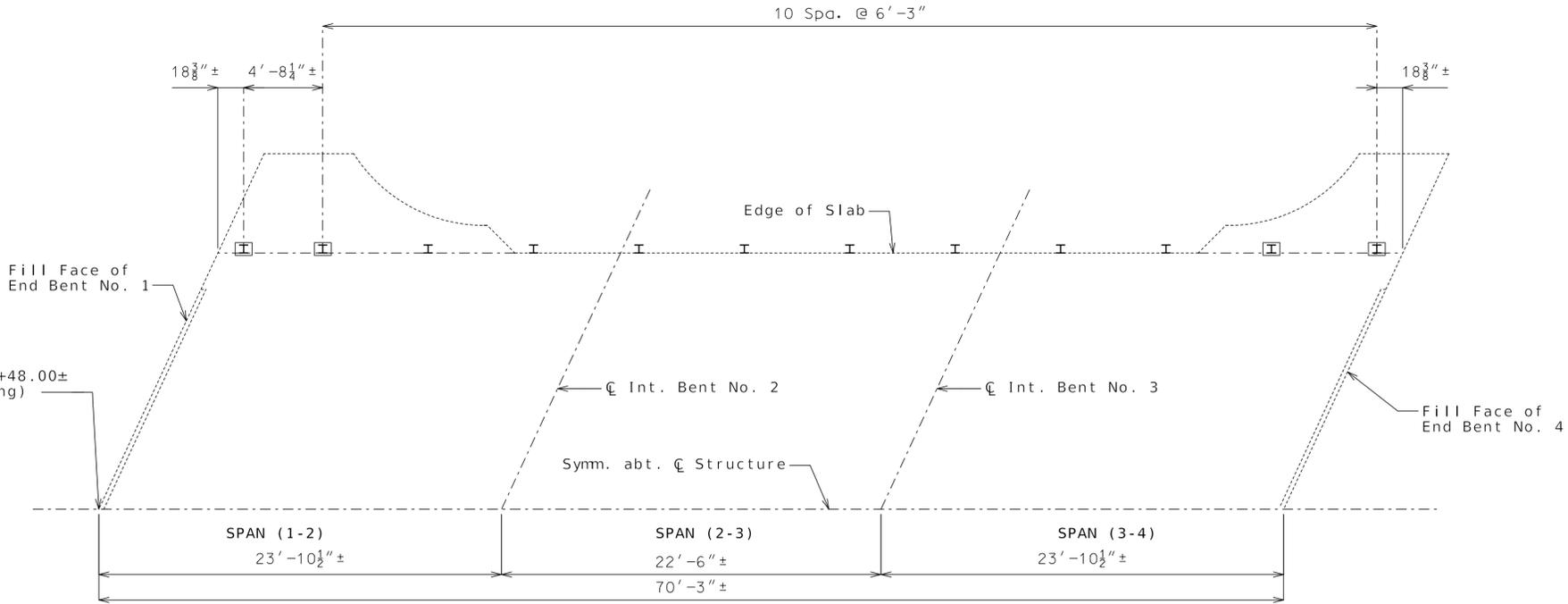
In order to maintain grade and a minimum thickness of wearing surface as shown on plans it may be necessary to use additional quantities of wearing surface at various locations throughout the structure. The cost of furnishing and installing the wearing surface will be considered completely covered in the contract unit price, including all additional labor, materials or equipment for variations in thickness of wearing surface. See roadway plans.

Existing resin anchors to be cut off one inch below concrete surface and the resulting holes shall be filled with a qualified special mortar.

Traffic Handling:
Traffic to be maintained on structure during construction. See roadway plans for traffic control.



- (1) Removal of existing 2"± Asphalt wearing surface
- (2) 1" vertical side shall be established outside the deteriorated area.
- (3) 2" minimum Asphalt wearing surface (Roadway Item)
- (4) Original depth of deck minus previous scarification



PART PLAN OF EXISTING SLAB SHOWING RAIL POST SPACING

REPAIRS TO BRIDGE: ROUTE 25
OVER DRAINAGE DITCH NO. 14

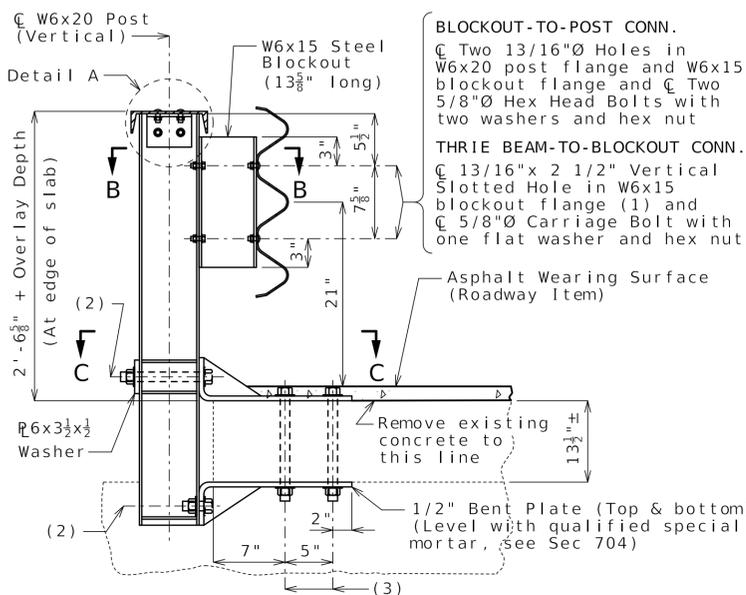
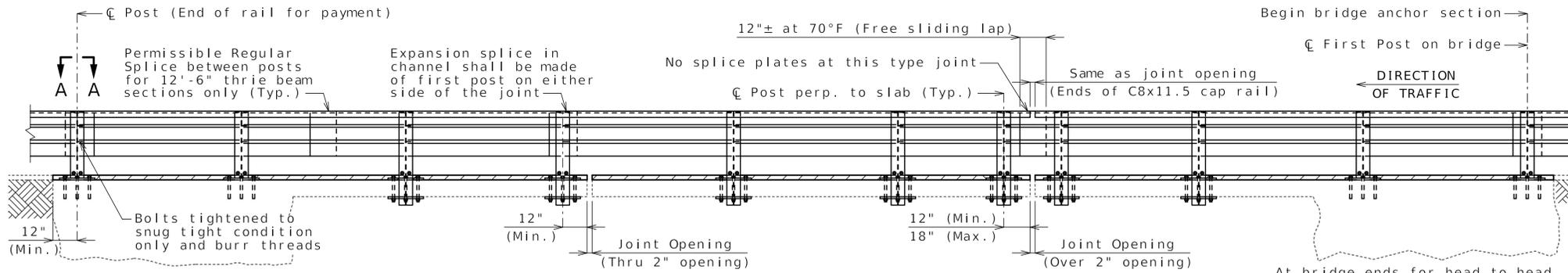
ROUTE 25 FROM ROUTE N TO ROUTE 77
ABOUT 3.3 MILES WEST OF ROUTE 77
BEGINNING STATION 134+48.00± (Match Existing)

DESCRIPTION

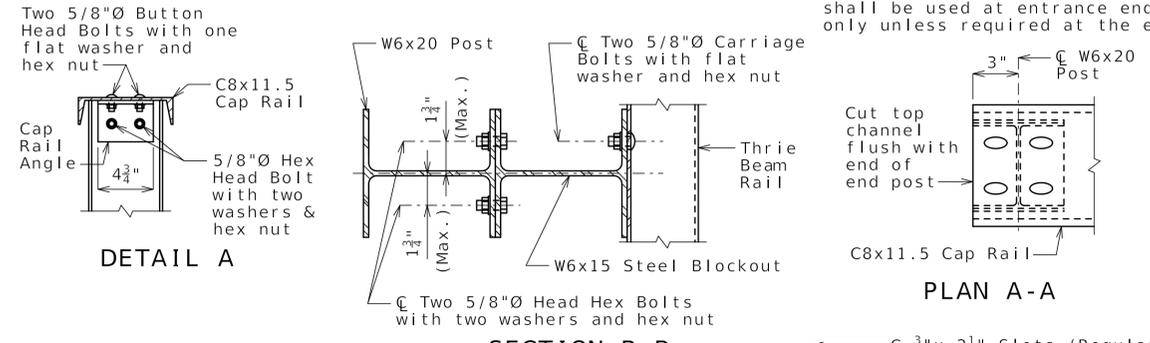
DATE

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105 WEST CAPITOL JEFFERSON CITY, MO 65102
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ELEVATION OF THRIE BEAM RAIL



PART SECTION AT RAIL POST

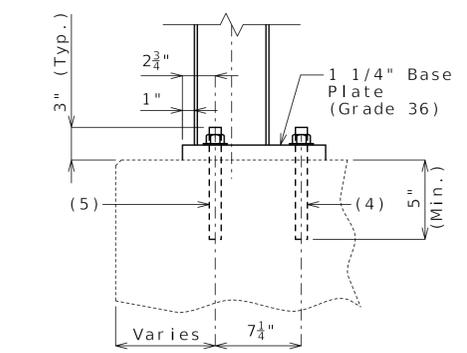
For Section C-C see Sheet No. 3.
 See Sheet No. 1 for rail post spacing.

- Required on one side of web only, but may be provided on both sides of web at the contractor's option.
- POST-TO-BENT PLATE CONNECTION**
 C Two 1"Ø ASTM F3125 Grade A325 Type 1 Bolts with hardened washers and hex nuts
 C Two 1 1/16" x 1 1/2" Vertical Slotted Holes in both upper post flanges
 C Two 1 1/16"Ø Holes in washer plate, inside lower post flange and both bent plates
- BENT PLATE-TO-DECK CONNECTION**
 C Three 1 1/8"Ø Drilled Holes in slab
 C Three 1"Ø ASTM A307 Bolts with plate washer, hardened locking washers and hex nuts
 C Three 1 1/4"Ø Holes in both bent plates

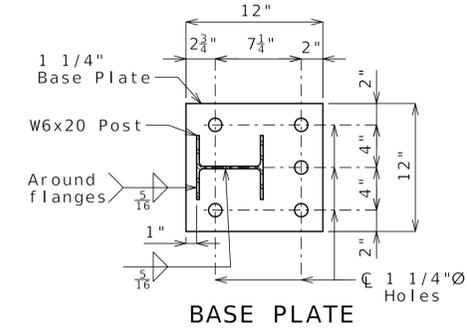
Resin Anchors:
 The contractor shall use one of the qualified resin anchor systems in accordance with Sec 1039.

Cost of furnishing and installing the resin anchor systems, complete in place, will be considered completely covered by the contract unit price for Bridge Guardrail (Thrie Beam).

The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor systems shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 5".

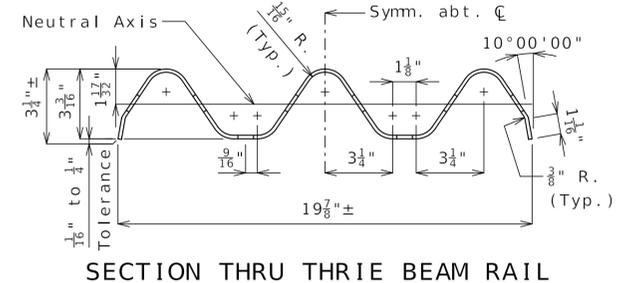
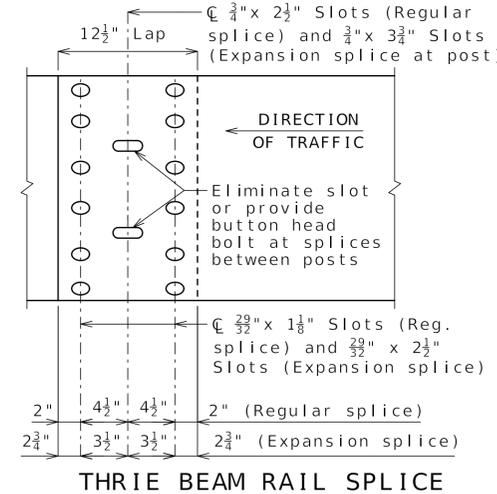


PART SECTION AT RAIL POST (NEAR END BENTS)



- Three 1-inch diameter ASTM F1554 Grade 36 anchor bolts with ASTM A563 Grade A hex nuts and ASTM F436 hardened washers

- Two 1-inch diameter ASTM F1554 Grade 36 anchor bolts with ASTM A563 Grade A hex nuts and ASTM F436 hardened washers



See Missouri Standard Plan 606.00 for details not shown.

General Notes:

Guardrail delineators shall be attached to the top of the 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. Guardrail delineators will be considered completely covered by the contract unit price for Bridge Guardrail (Thrie Beam).

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 Bridge Guardrail (Thrie Beam).

All steel connecting bolts and fasteners for posts and railing, and all bolts, nuts, washers and plates shall be galvanized after fabrication. 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 blockout 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 blockout 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-gauge steel.

Posts, cap rail angles, bent plates, blockouts, 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 washers 3 x 1 3/4 x 5/8-inch shall be used between the blockout 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.

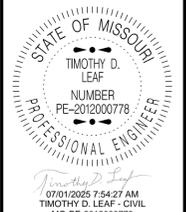
Fabrication of structural steel shall be in accordance with Sec 1080.

Expansion splices in the thrie beam rail shall be made at either the first or second post on either side of the joint and on structure at bridge ends. When the splice is made at the second post, an expansion slot shall be provided in the thrie beam rail for connection to the first post to allow for movement.

In addition to the expansion provisions at the expansion joints, expansion splices in the thrie beam rail and the channel shall be provided at other locations so that the maximum length without expansion provisions does not exceed 200 feet.

Shim plates 6 x 6 x 1/16-inch may be used between the top of the post and the channel member as required for vertical alignment.

Shim plates shall be galvanized after fabrication.



DATE PREPARED 7/1/2025	
ROUTE 25	STATE MO
DISTRICT BR	SHEET NO. 2
COUNTY CAPE GIRARDEAU	
JOB NO. JSE0117	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. G08543	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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