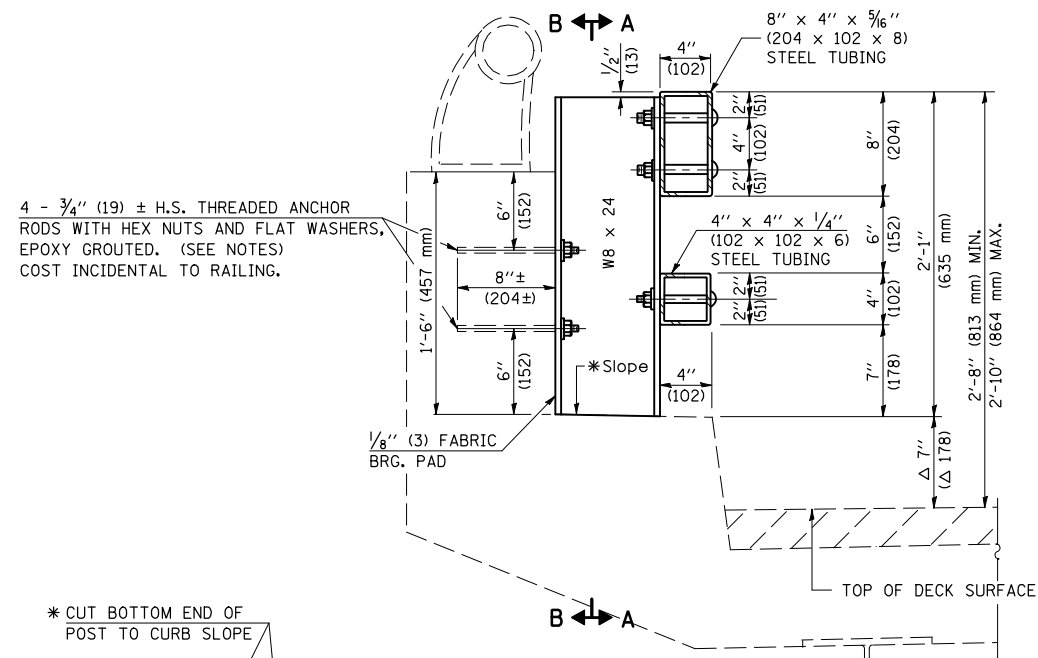
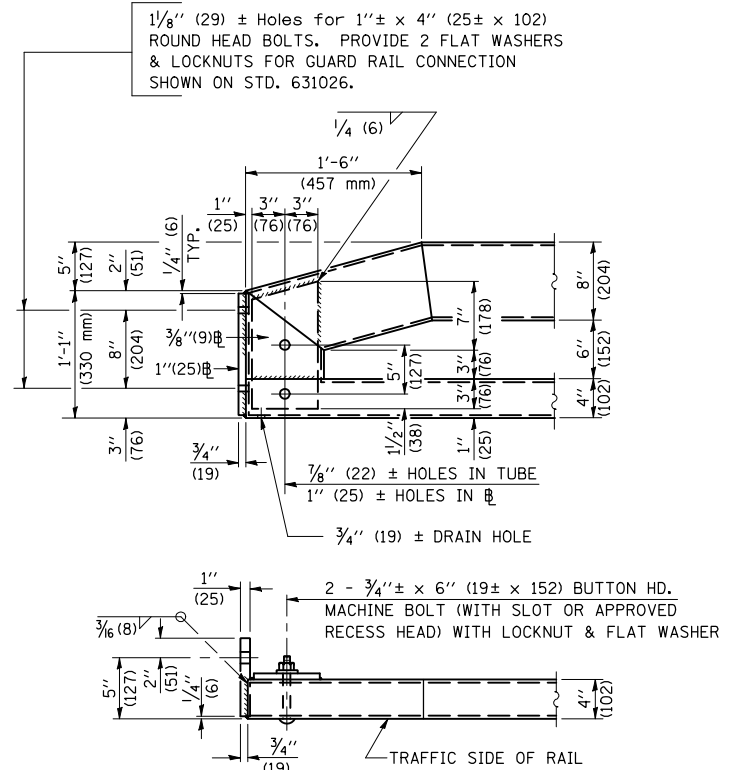


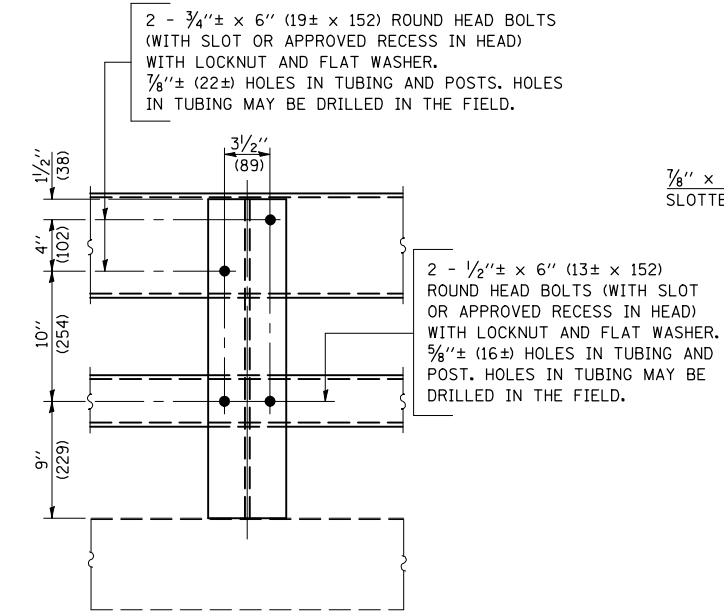
DESIGNER NOTE: SEE PPM 60-09



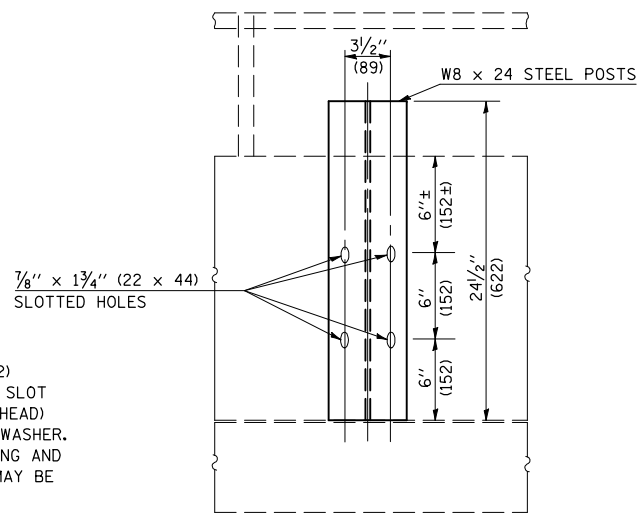
SECTION AT RAIL POST



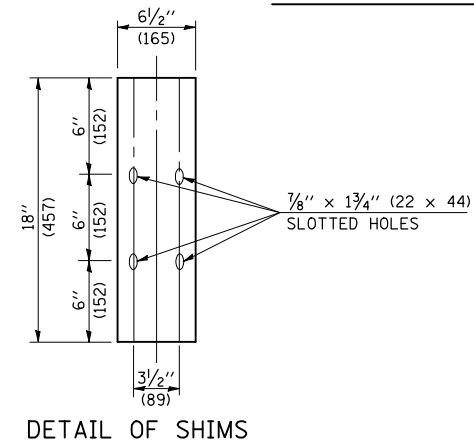
END OF RAIL DETAILS



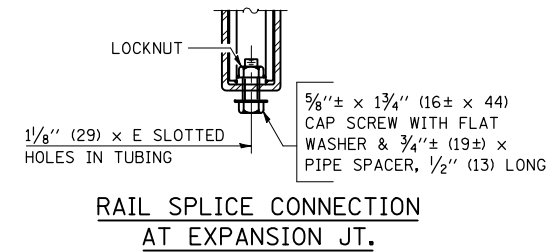
SECTION A-A



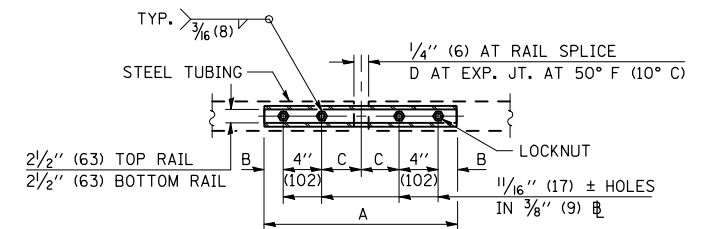
SECTION B-B



DETAIL OF SHIMS



RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPLICE TYPICAL

6' - 4" (1.930 m) MAXIMUM POST SPACING

SECTIONS AT RAIL SPLICE

SPLICE DIMENSIONS

T	D	A	B	C	E
≤ 4" (102)	2 1/2" (63)	1'-8" (508 mm)	2" (51)	4" (102)	2 1/2" (63)
> 4" ≤ 6 1/2" (102) (165)	3 3/4" (95)	2'-0" (610 mm)	2 1/2" (63)	5 1/2" (140)	3 1/2" (89)
> 6 1/2" ≤ 9" (165) (229)	5" (127)	2'-4" (711 mm)	3 1/2" (89)	6 1/2" (165)	9" (229)
> 9" ≤ 13" (229) (330)	7" (178)	2'-10" (864 mm)	4 1/2" (114)	8 1/2" (216)	11" (279)
RAIL SPLICE	1/4" (6)	1'-8" (508 mm)	2" (51)	4" (102)	—

T = TOTAL MOVEMENT AT EXPANSION JOINT AS SHOWN ON THE DESIGN PLANS.

NOTES

HOLLOW STRUCTURAL STEEL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A-500, GRADE B, STRUCTURAL STEEL TUBING.

ALL OTHER STEEL SHAPES AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-183 EXCEPT POSTS SHALL CONFORM TO AASHTO M-223, GRADE 50.

BOLTS, CAP SCREWS AND NUTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A-307 EXCEPT THAT THREADED RODS, NUTS AND WASHERS SHALL CONFORM TO AASHTO M-164.

ALL BOLTS, NUTS, CAP SCREWS, WASHERS AND LOCK WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M-232.

ALL POSTS, RAILING, RAIL SPLICES AND ANCHOR RODS SHALL BE GALVANIZED AFTER SHOP FABRICATION IN ACCORDANCE WITH AASHTO M-111 AND ASTM A-385. GALVANIZED RAIL SHALL NOT BE PAINTED.

RAILING SHALL BE IN ACCORDANCE WITH SECTION 509 OF THE STANDARD SPECIFICATIONS, EXCEPT AS NOTED, AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAL FOOT (METER) FOR STEEL BRIDGE RAIL (SPECIAL).

ALL FIELD DRILLED HOLES SHALL BE COATED WITH AN APPROVED ZINC RICH PAINT BEFORE ERECTION.

POSTS SHALL NOT BE LOCATED CLOSER THAN 1'-3" (381 mm) TO AN EXISTING BRIDGE EXPANSION JOINT OR END OF BRIDGE.

STEEL BRIDGE RAIL (SPECIAL) EXPANSION JOINT SHALL BE PROVIDED BETWEEN ANY TWO (2) POSTS WHICH SPAN A BRIDGE EXPANSION JOINT. BOLTS LOCATED AT EXPANSION JOINT SHALL BE PROVIDED WITH LOCKNUTS AND SHALL BE TIGHTENED ONLY TO A POINT THAT WILL ALLOW RAILING MOVEMENT.

PROVIDE ONE 1/8" (3 mm) AND TWO 1/16" (2 mm) STEEL SHIMS FOR 25% OF THE POSTS. SHIMS SHALL BE AS SHOWN IN DETAIL.

EXPANSION JOINT WIDTH SHALL BE "D" AT 50° F (10° C) AND SHALL BE ADJUSTED FOR OTHER TEMPERATURES ACCORDING TO ARTICLE 503.10(c) OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL USE THE CAPSULE OR THE ADHESIVE CARTRIDGE TYPE ANCHOR RODS THAT HAVE BEEN PREVIOUSLY TESTED AND GIVEN A PRIOR APPROVAL BY THE DEPARTMENT. THE CONTRACTOR SHALL INSTALL THESE ANCHOR RODS IN PRE-DRILLED HOLES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES.

THE CAPSULE OR THE ADHESIVE CARTRIDGE SHALL BE A SEALED GLASS CAPSULE OR A SEALED GLASS ADHESIVE CARTRIDGE CONTAINING PREMEASURED AMOUNTS OF THE ADHESIVE CHEMICAL.

NUTS FOR 3/4" (19 mm) Ø THREADED ANCHOR RODS CONNECTING THE STEEL POST TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

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		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL BRIDGE RAIL (SPECIAL)

SCALE: SHEET NO. OF SHEETS STA. TO STA.

DISTRICT 5 DETAIL NO. 50901002

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				