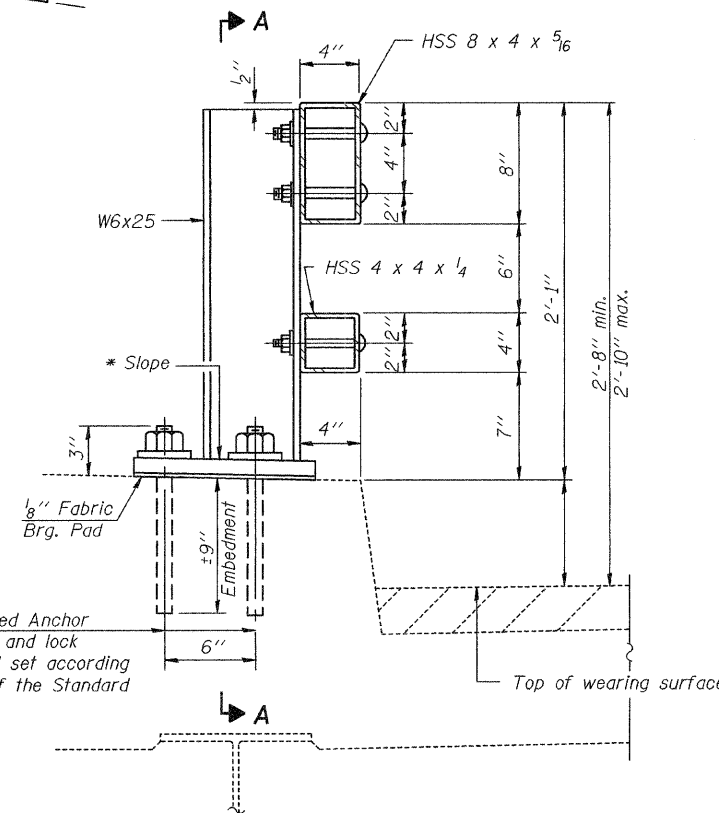
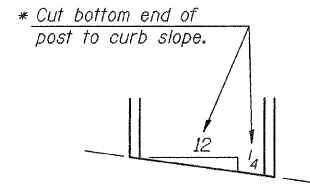


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

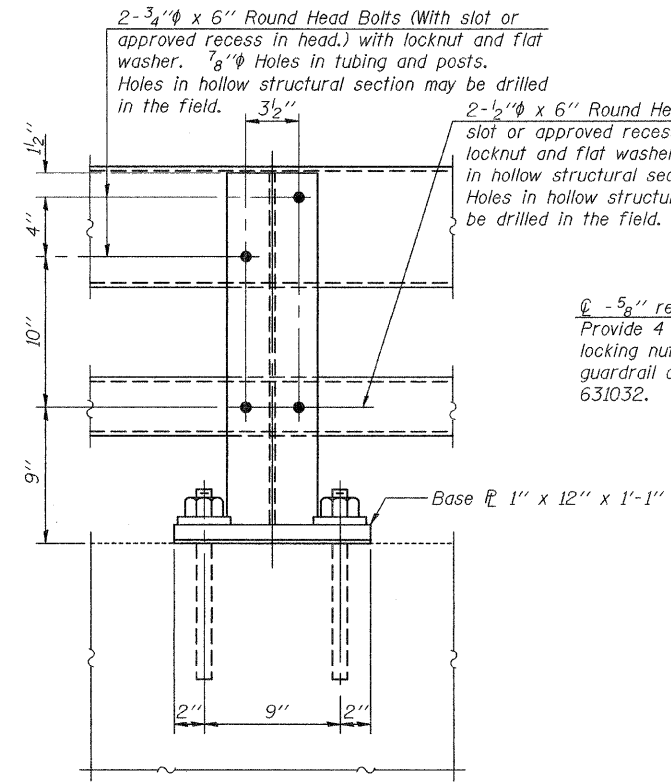
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2 2 SHEETS
FAU 6176	(79) W&RS & 140RS	KAWKAKEE	109	67	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract # 66560

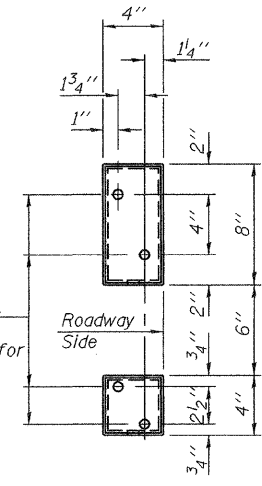


4- 1" ϕ H.S. Threaded Anchor Rods with hex nuts and lock washers, drilled and set according to Article 509.06 of the Standard Specifications.

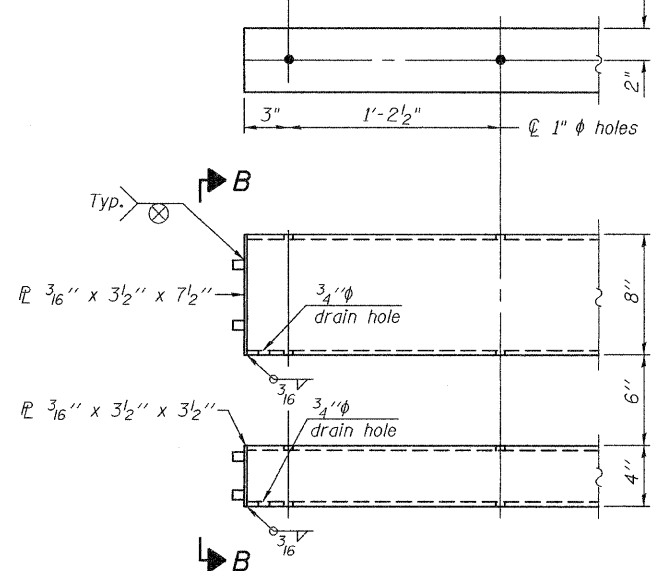
SECTION AT RAIL POST



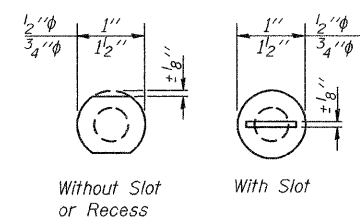
SECTION A-A



VIEW B-B

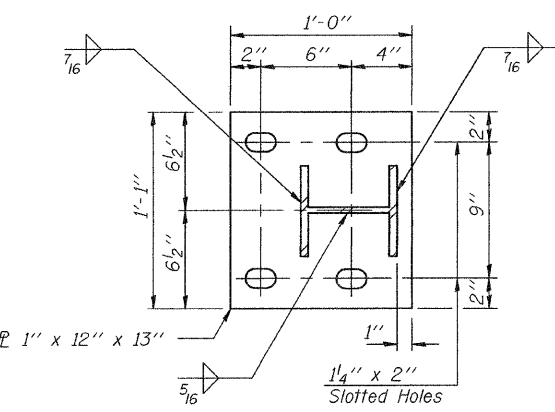


END OF RAIL DETAILS

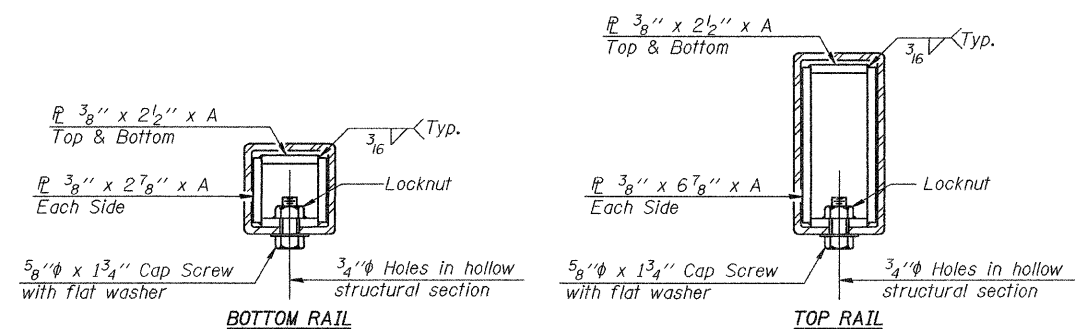


VIEW C-C

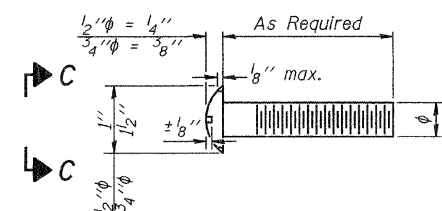
Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.
Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow ralling movement.
Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



BASE PLATE DETAIL



SECTIONS AT RAIL SPLICE



DETAIL OF 1/2" ϕ & 3/4" ϕ ROUND HEAD BOLTS

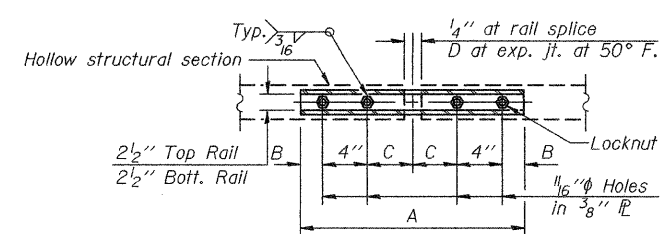
SPLICE DIMENSIONS

T	D	A	B	C	E
$\leq 4"$	2 1/2"	1'-8"	2"	4"	2 1/2"
$> 4" \leq 6 1/2"$	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
$> 6 1/2" \leq 9"$	5"	2'-4"	3 1/2"	6 1/2"	9"
$> 9" \leq 13"$	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	4"	1'-8"	2"	4"	—

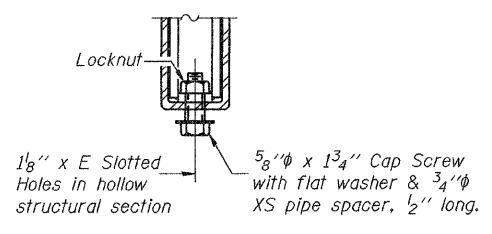
T = Total movement at expansion joint as shown on the design plans.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	356



PLAN-BOTT. SPLICE TYPICAL



RAIL SPLICE CONNECTION AT EXPANSION JT.

DESIGNED
CHECKED
DRAWN
CHECKED

R-31 10-1-08

(6'-3" Maximum Post Spacing)

STEEL RAILING, TYPE 2399
STRUCTURE NO. 046-0063