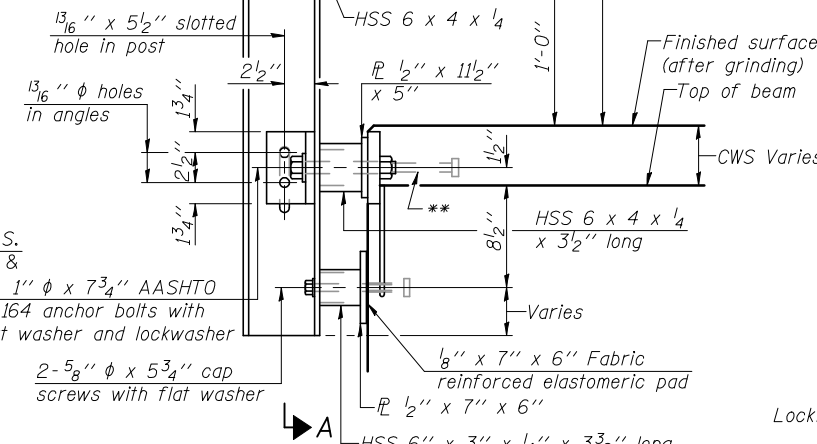
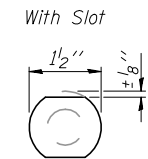
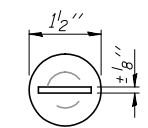
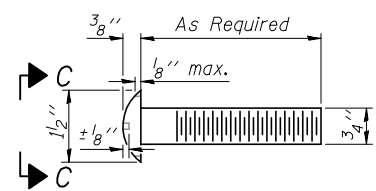


4- 3/4" φ x 6" Round Head Bolts (With slot or approved recess in head) with locknut & flat washer. 7/8" φ holes in hollow structural section may be drilled in the field.

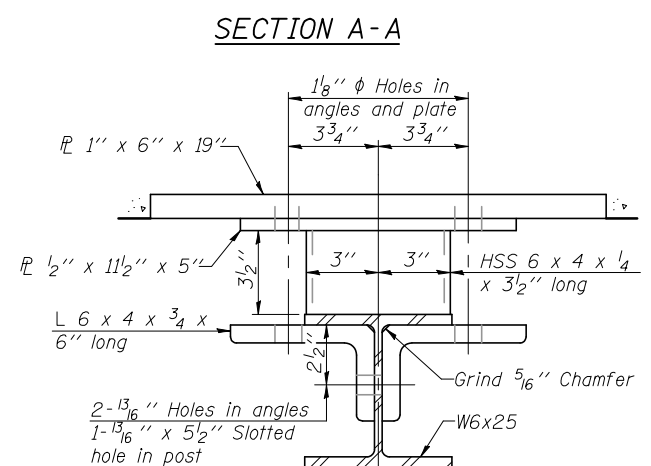
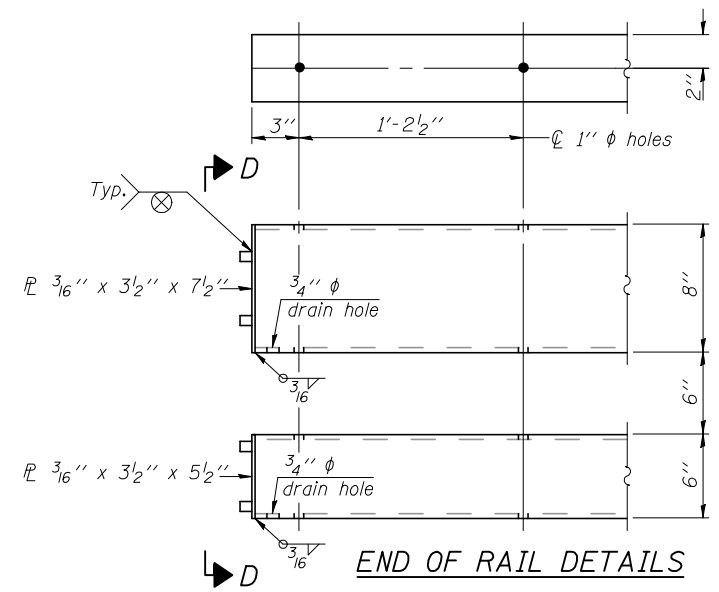
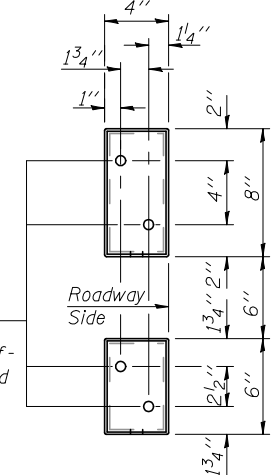


DETAIL OF 3/4" φ ROUND HEAD BOLT



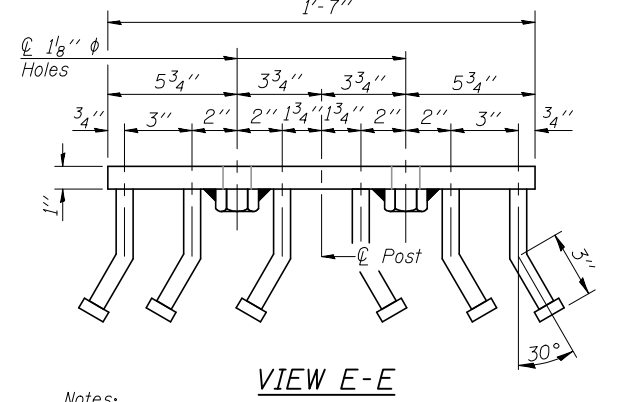
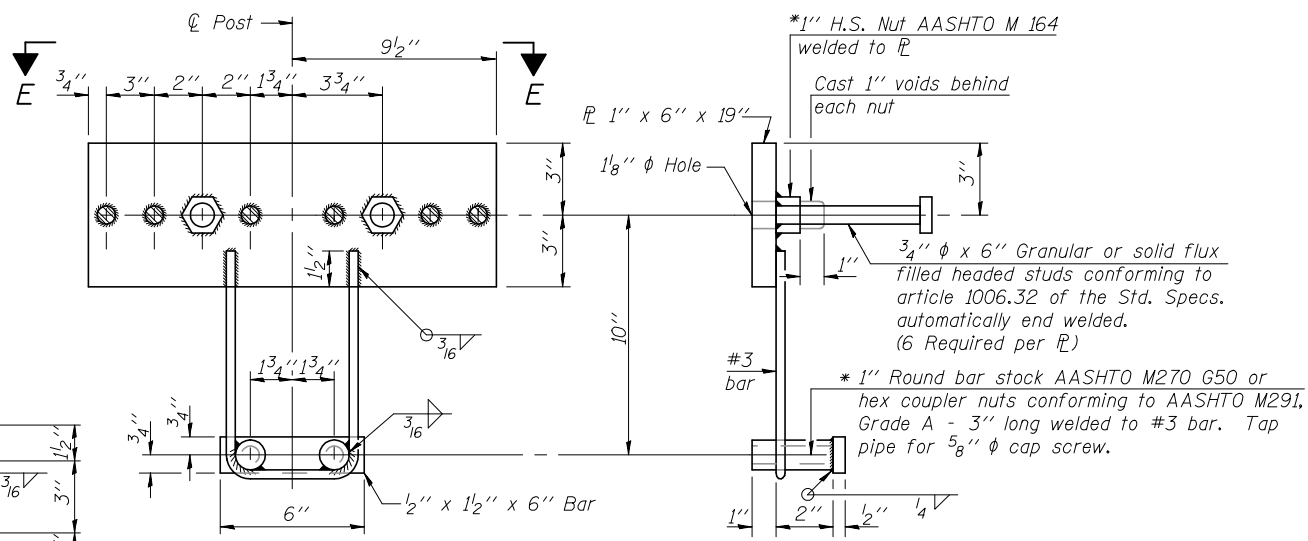
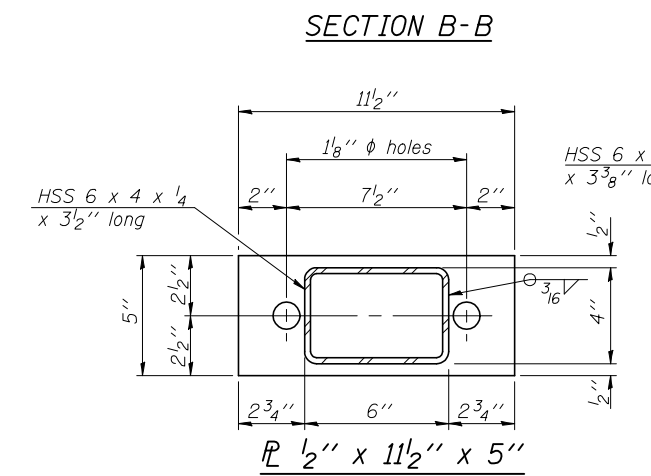
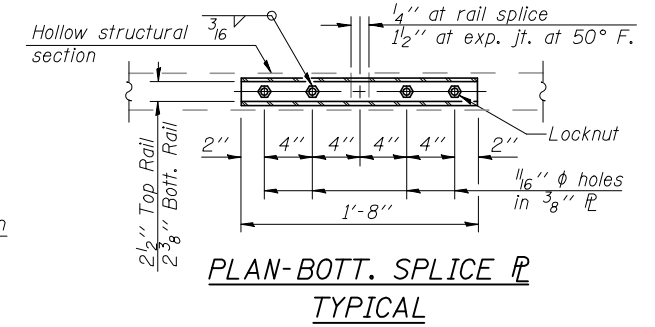
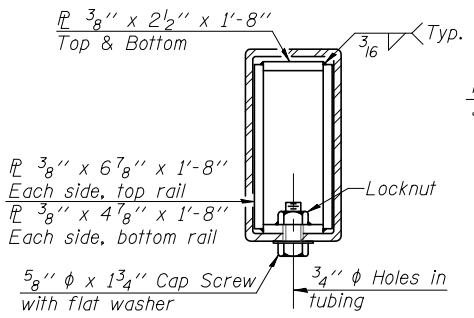
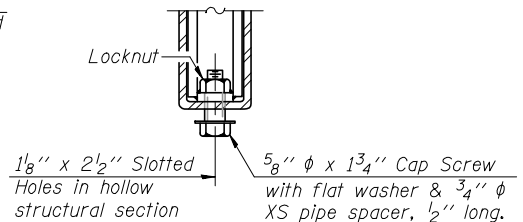
4- 5/8" reduced base welded studs. Provide 4- 5/8" washers and self-locking nuts or nuts and jam nuts for guardrail connection shown on Std. 631032.

VIEW D-D



SECTION AT RAIL POST

RAIL SPLICE CONNECTION AT EXPANSION JT.



Notes:  
 All field drilled holes shall be coated with an approved zinc rich paint before erection.  
 For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.  
 Steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.  
 \*\* The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	254

R-34CWS 7-1-10  
 BLANK, WESSELINK, COOK & ASSOCIATES ENGINEERS - CONSULTANTS DECATUR, ILLINOIS

DESIGN FIRM NO. 18400894

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

STEEL RAILING, TYPE SM WITH CONCRETE WEARING SURFACE  
 STRUCTURE NO. 023-0025

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
323	150BR-1	EDGAR	48	23

CONTRACT NO. 70609

SHEET NO. 6 OF 15 SHEETS

ILLINOIS FED. AID PROJECT

FILE NAME =	USER NAME =	DESIGNED	REVISIONS
		PBB	-
		RJC/SAL	-
		MLO	-
		PBB	-