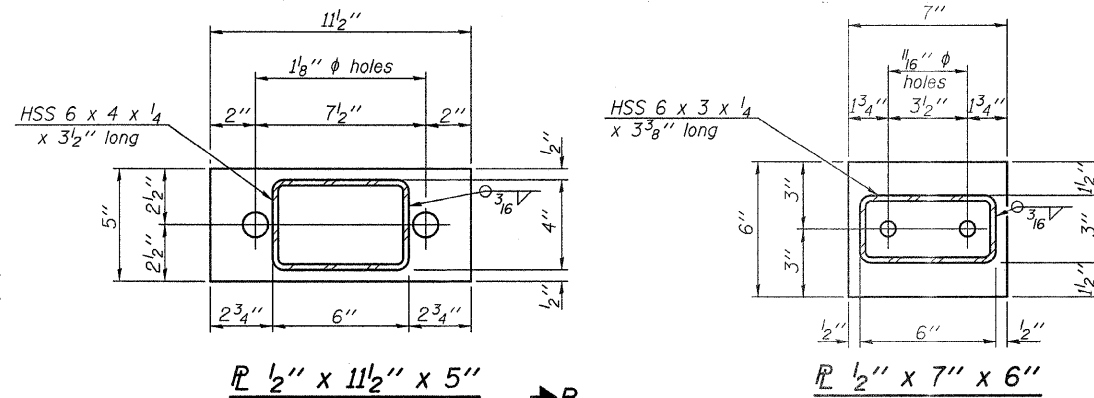
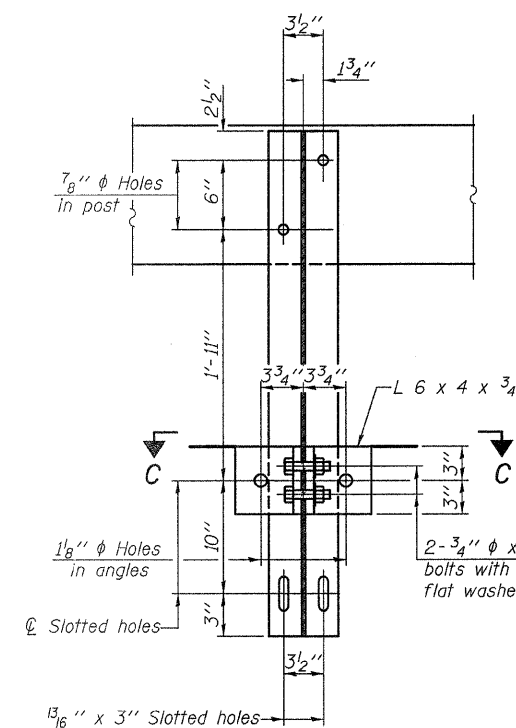


VIEW A-A ROUND HEAD BOLT

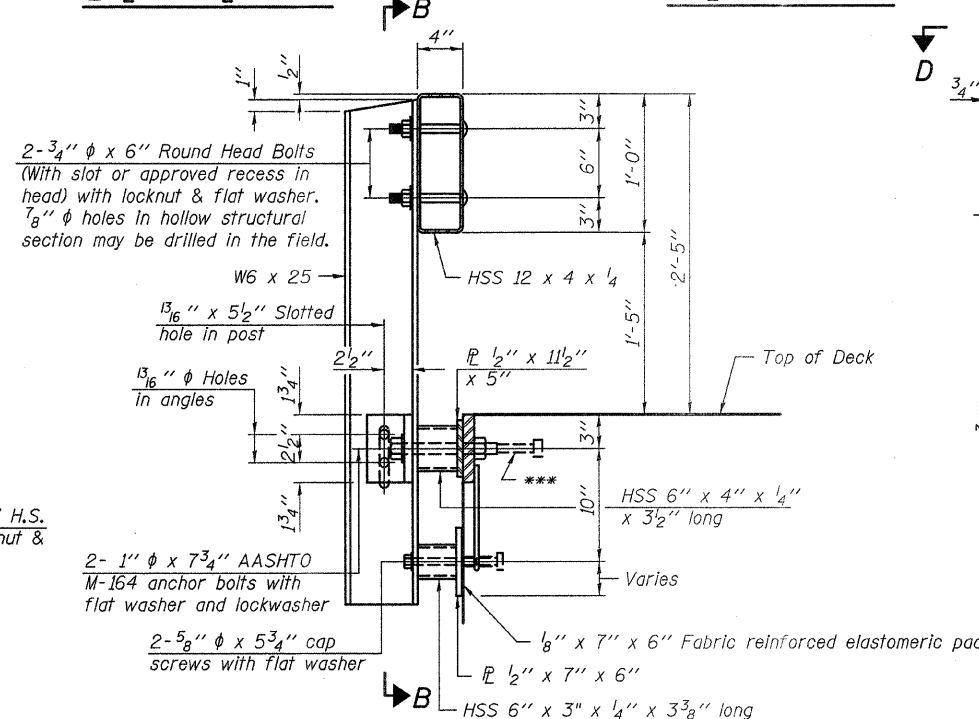


PL 1/2" x 11 1/2" x 5"

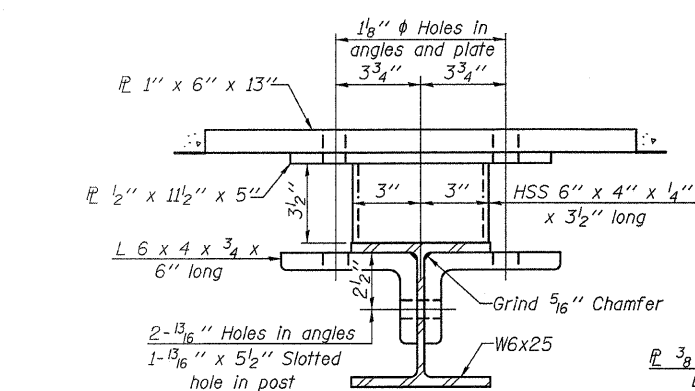
PL 1/2" x 7" x 6"



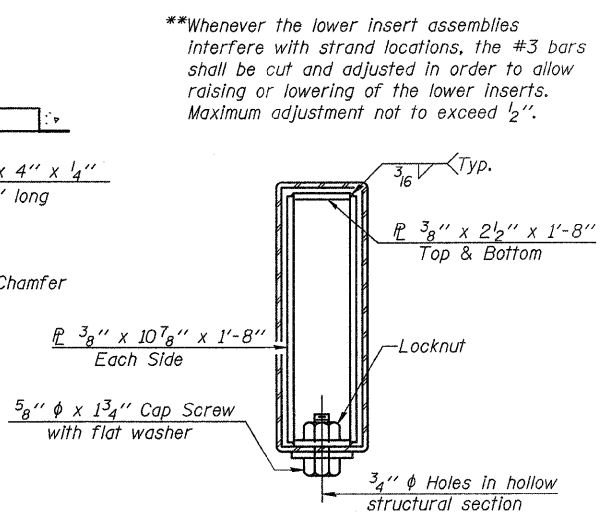
SECTION B-B



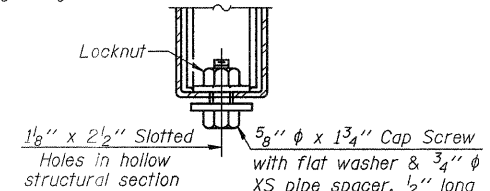
SECTION AT RAILING POST



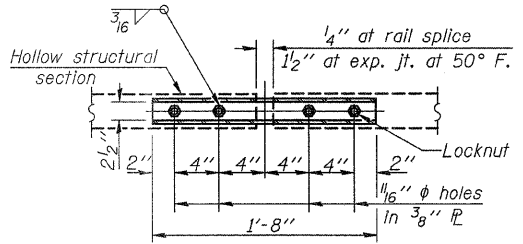
SECTION C-C



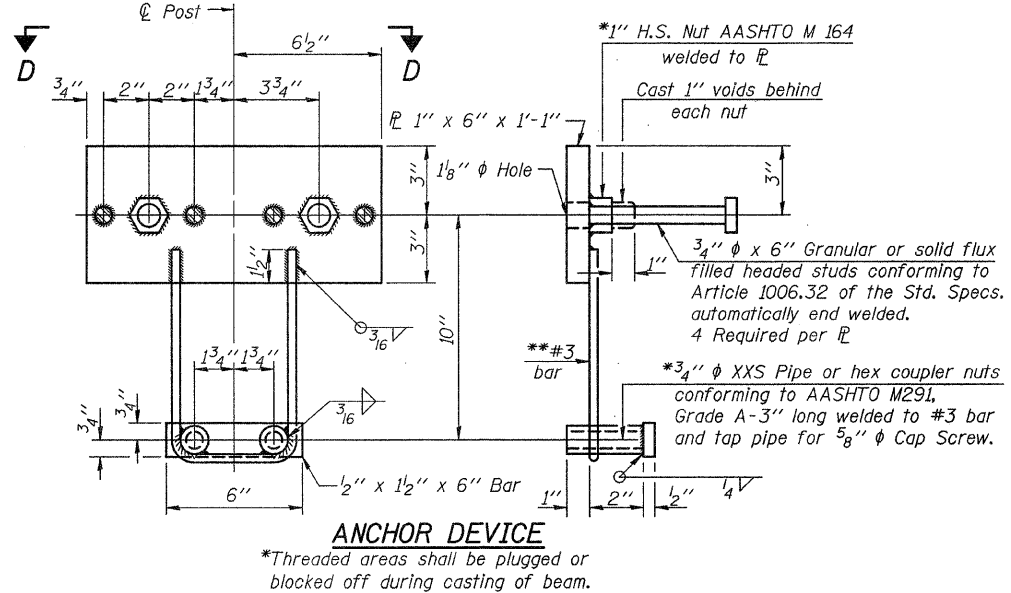
SECTIONS AT RAIL SPLICE



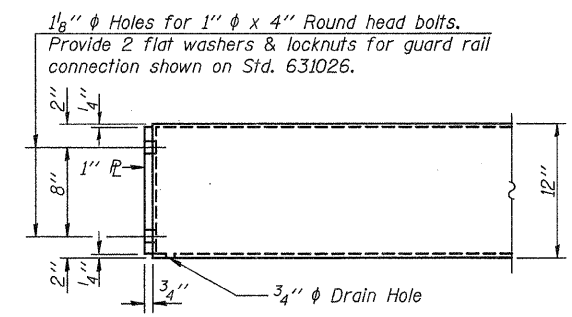
RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTTOM SPLICE PL TYPICAL

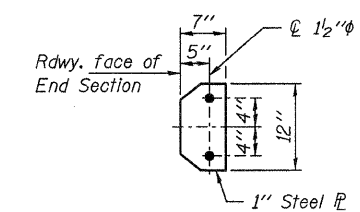


ANCHOR DEVICE

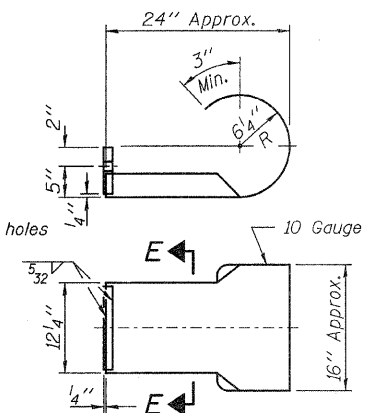


END OF RAIL DETAILS

Note: Cost of curled end sections shall be included with the Steel Railing. (4 Required)

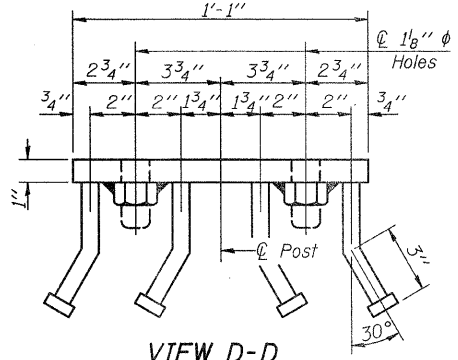


SECTION E-E



CURLED END SECTION DETAILS

Notes:
 All field drilled holes shall be coated with an approved zinc rich paint before erection.
 For multi-span bridges, sufficient 1/4 inch x 6 inch x 1-2 inch galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
 All 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.



VIEW D-D

DESIGNED - S.M.S.
CHECKED - S.W.M.
DRAWN - D.A.B.
CHECKED - D.T.M.

(10'-9" Maximum Post Spacing)

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	137

**STEEL RAILING, TYPE S-1
 STRUCTURE NO. 033-3309**

HAMPTON, LENZINI & RENWICK, INC. CIVIL & STRUCTURAL ENGINEERS LAND SURVEYORS 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 (217) 548-3400 PROJECT NUMBER: 08.0104.130 DATE: 01/21/09	SHEET NO. 5	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	8 SHEETS	376	08-0115-00-BR	HAMILTON	12	9
		BEAVER CREEK ROAD DISTRICT		CONTRACT NO. 99355		
		FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT BROS-065(44)			