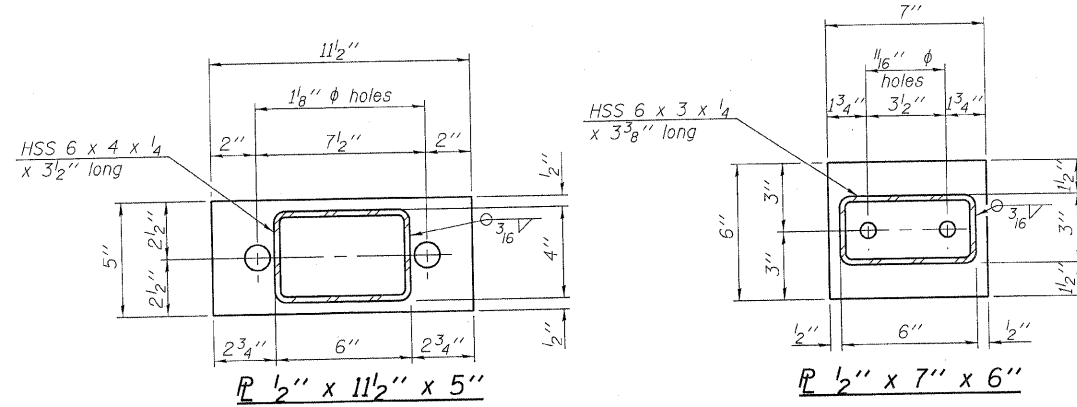
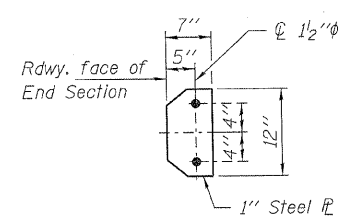


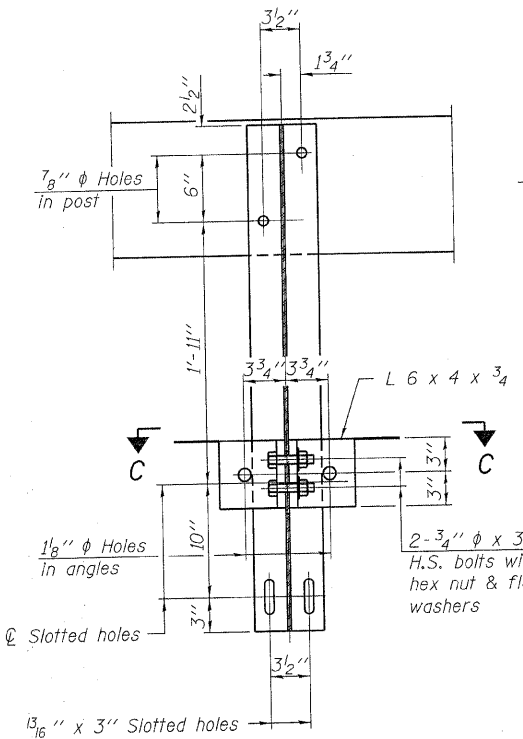
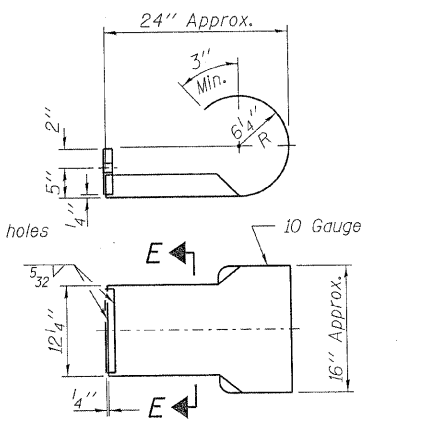
VIEW A-A  
ROUND HEAD BOLT



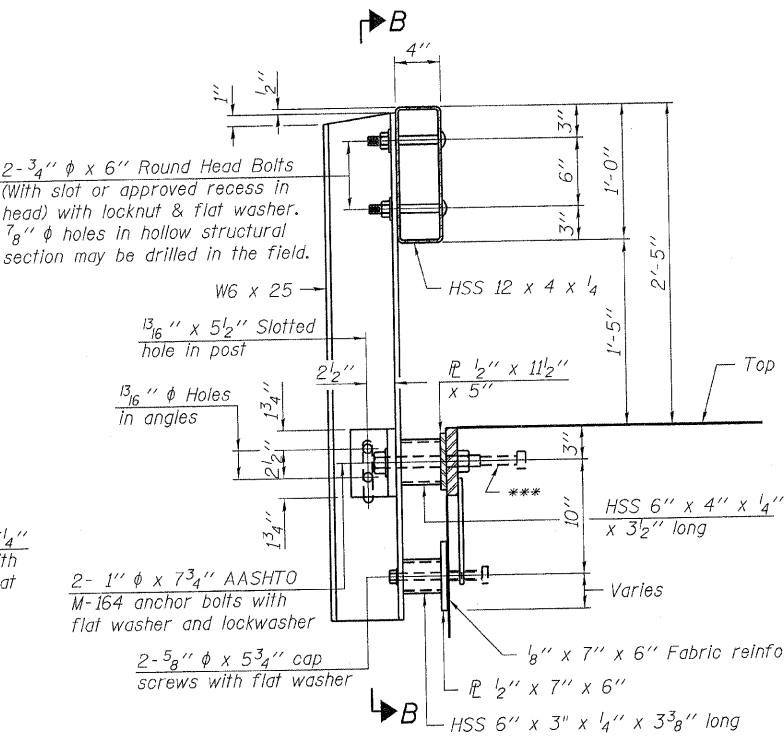
Note: Cost of curled end sections shall be included with the Steel Railing. (4 Required)



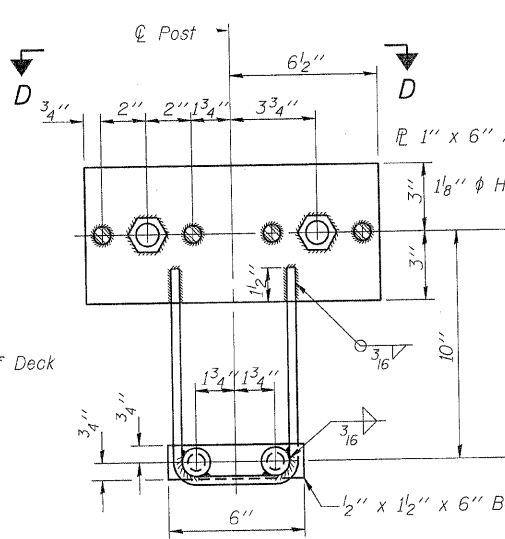
SECTION E-E  
CURLLED END SECTION DETAILS



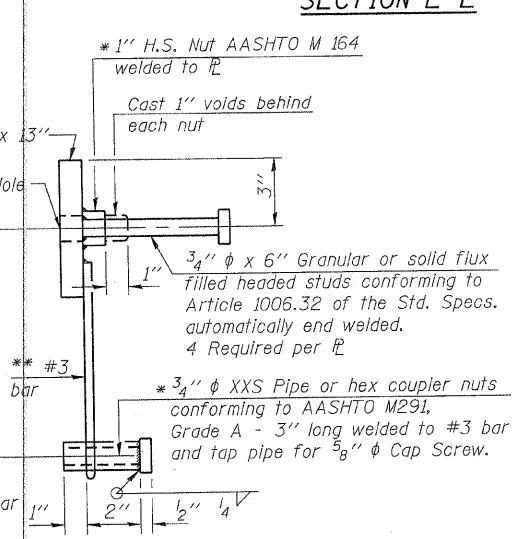
SECTION B-B



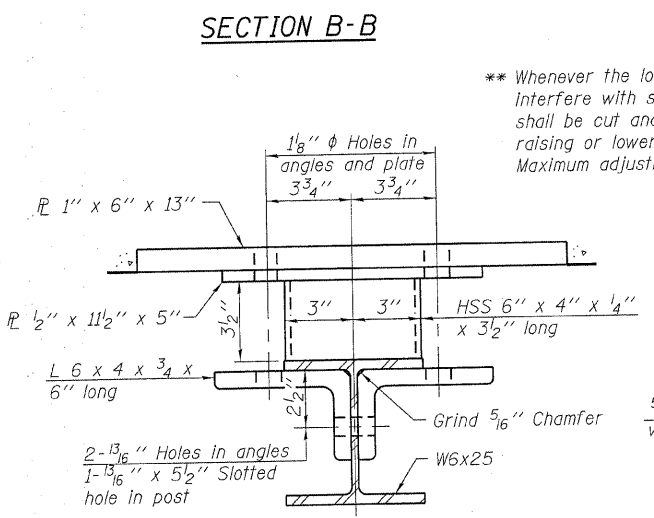
SECTION AT RAILING POST



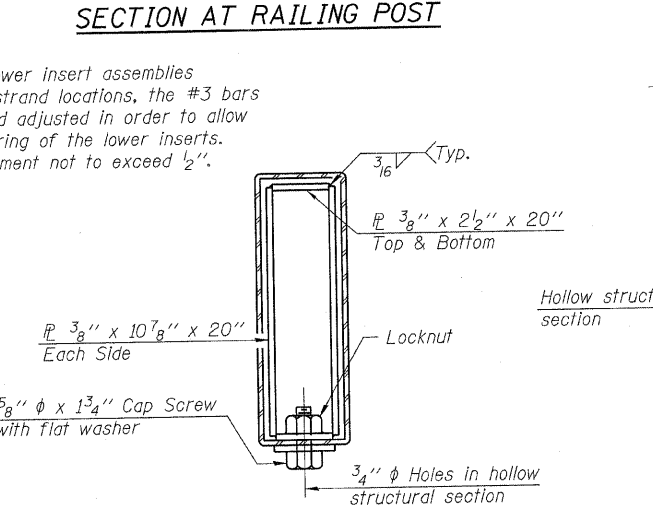
ANCHOR DEVICE



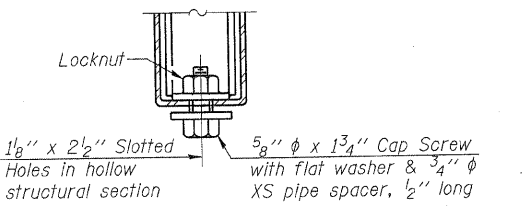
Notes:  
All field drilled holes shall be coated with an approved zinc rich paint before erection.  
For multi-span bridges, sufficient 1/4 inch x 6 inch x 1-2 inch galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.  
All steel rail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



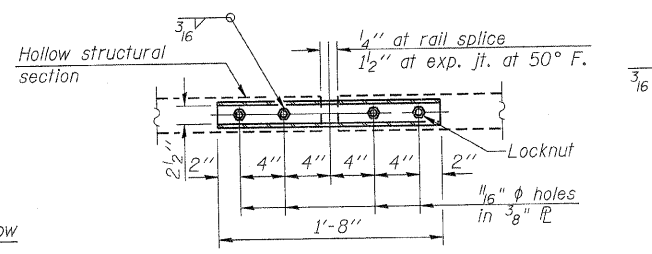
SECTION C-C



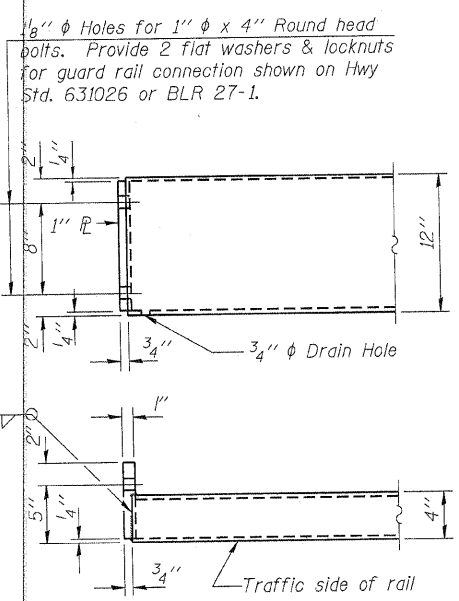
SECTIONS AT RAIL SPLICE



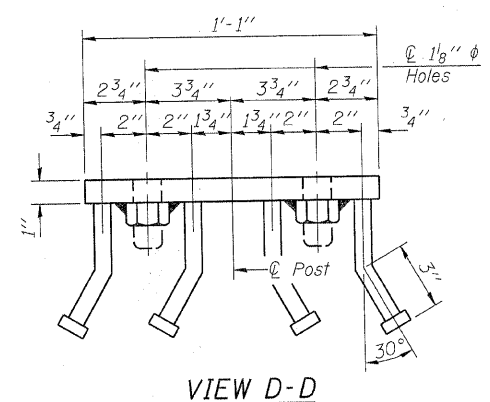
RAIL SPLICE CONNECTION  
AT EXPANSION JT.



PLAN-BOTT. SPLICE PL  
TYPICAL



END OF RAIL DETAILS



VIEW D-D

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	148

R-23A 7-1-10 (10'-9" Maximum Post Spacing)

FILE NAME = 09262-shr-bridge.dgn	USER NAME =	DESIGNED - A.S.L.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.	308A STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62709	CHECKED - S.W.M.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LPI P/S / SE CORP. 184 001058	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
	PLOT DATE = 2/16/2011	CHECKED - S.W.M.	REVISED -

STATE OF ILLINOIS  
HAMILTON COUNTY HIGHWAY DEPARTMENT

STEEL RAILING, TYPE S-1  
STRUCTURE NO. 033-3314

SHEET NO. 5 OF 8 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
296B	08-09114-00-BR	HAMILTON	12	9
SOUTH CROUCH ROAD DISTRICT		CONTRACT NO. 99454		
ILLINOIS FED. AID PROJECT BROS-0105(49)				