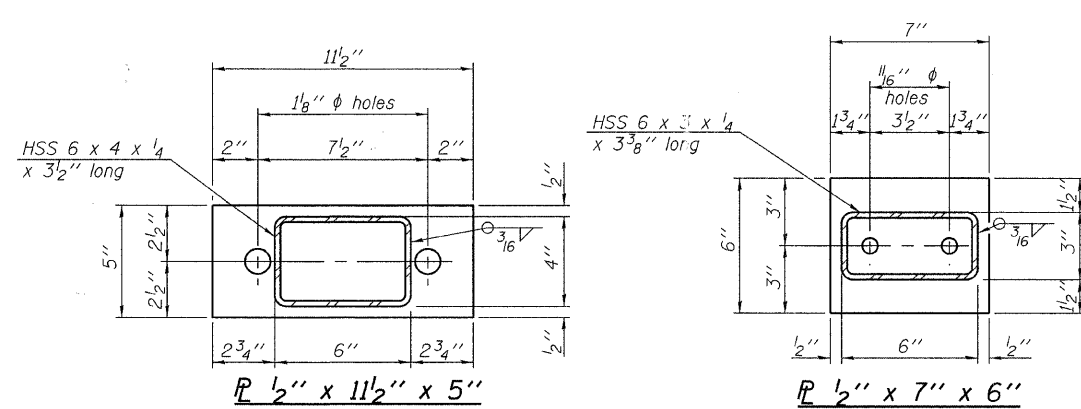


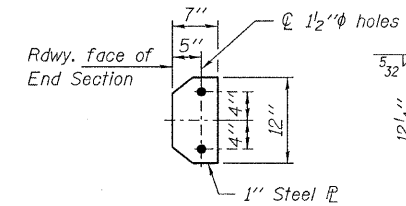
**VIEW A-A  
ROUND HEAD BOLT**



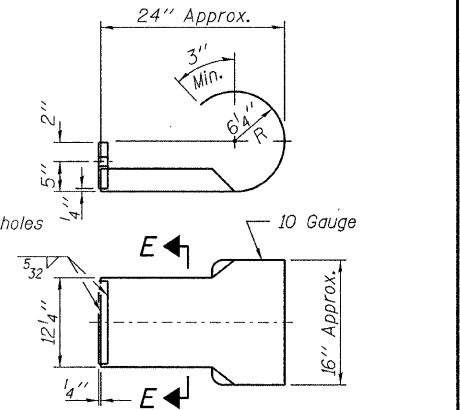
**SECTION B-B**

**SECTION AT RAILING POST**

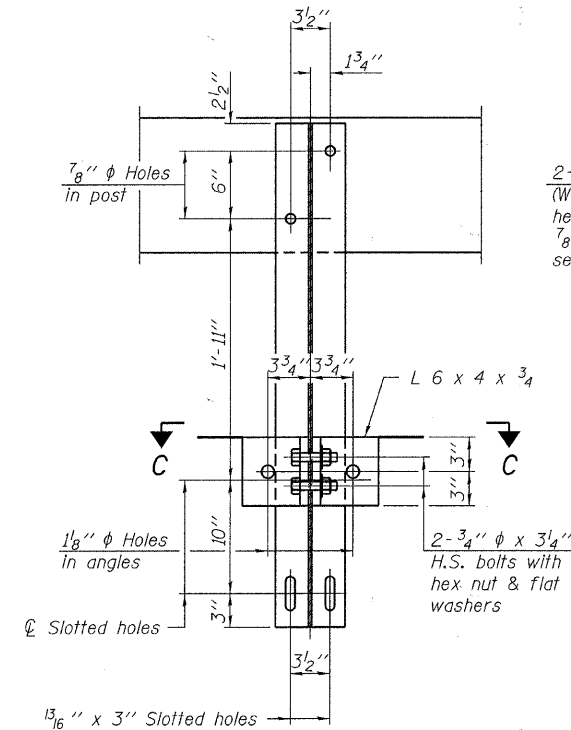
Note: Cost of curled end sections shall be included with the Steel Railing. (4 Required)



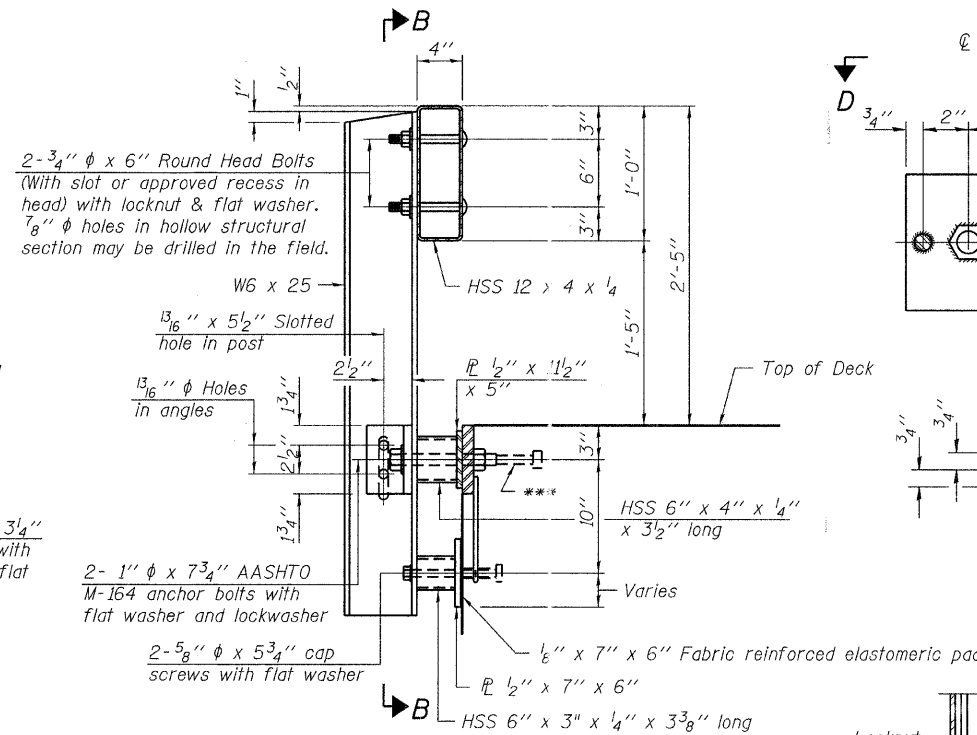
**SECTION E-E**



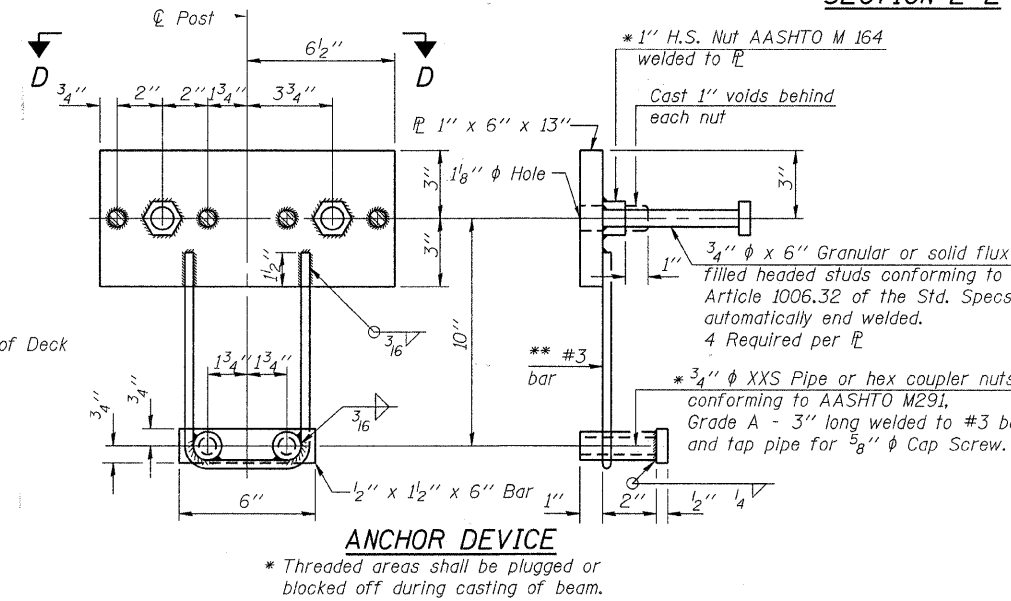
**CURLED END SECTION DETAILS**



**SECTION C-C**

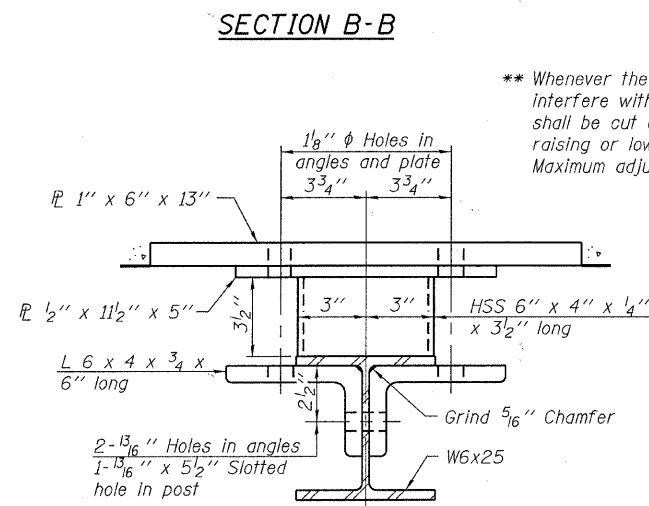


**SECTION AT RAILING POST**



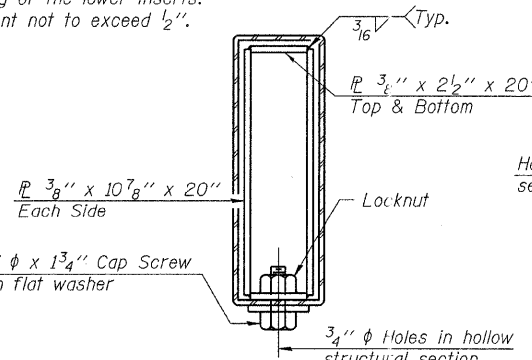
**ANCHOR DEVICE**

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' 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.

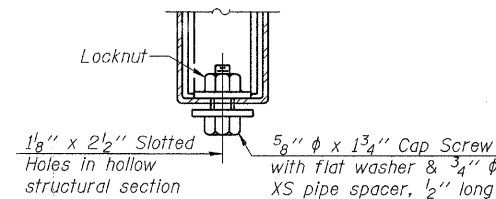


**SECTION C-C**

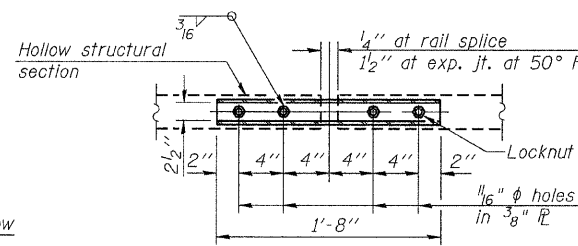
\*\* Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2 inch.



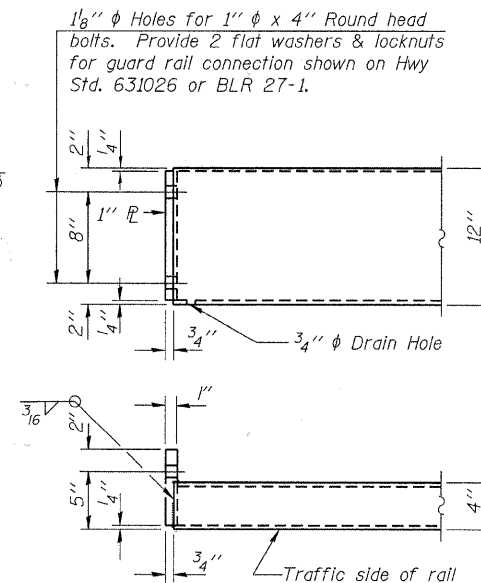
**SECTIONS AT RAIL SPLICE**



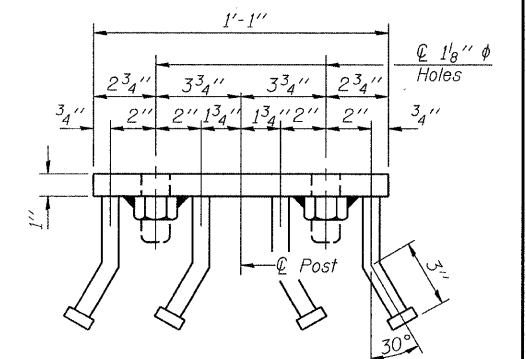
**RAIL SPLICE CONNECTION AT EXPANSION JT.**



**PLAN-BOTT. SPLICE P TYPICAL**



**END OF RAIL DETAILS**



**VIEW D-D**

**BILL OF MATERIAL**

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	109

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

FILE NAME = 100058-shr-bridge.dgn	USER NAME =	DESIGNED - V.J.H.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.	326 STEVENSON DRIVE, SUITE 201	CHECKED - S.W.M.	REVISED -
SPRINGFIELD, ILLINOIS 62703	ILLINOIS PROFESSIONAL DESIGN FIRM	DRAWN - D.A.B.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM	LS/PE/SE CORP. 184-000059	CHECKED - S.W.M.	REVISED -
PLOT SCALE =	PLOT DATE = 4/12/2011		

STATE OF ILLINOIS  
WABASH COUNTY HIGHWAY DEPARTMENT

STEEL RAILING, TYPE S-1  
STRUCTURE NO. 093-3134

SHEET NO. 5 OF 9 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
52	06-04114-00-BR	WABASH	13	9
ROAD DISTRICT #4			CONTRACT NO. 95653	
ILLINOIS FED. AID PROJECT				