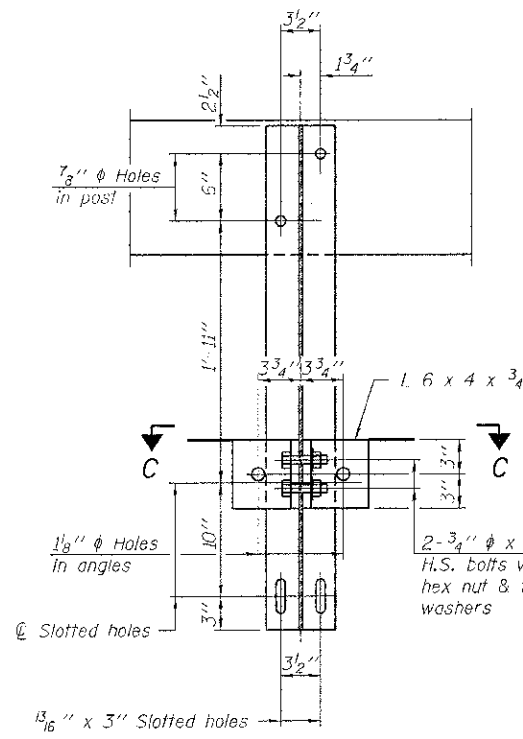
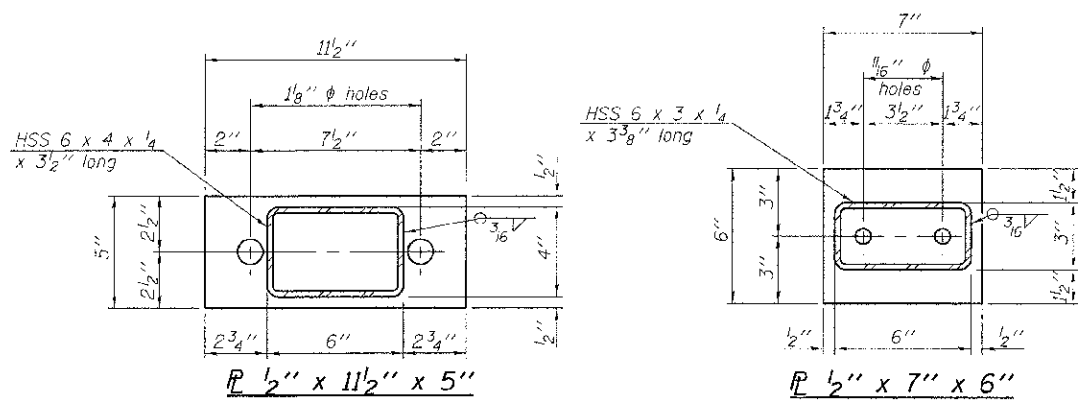
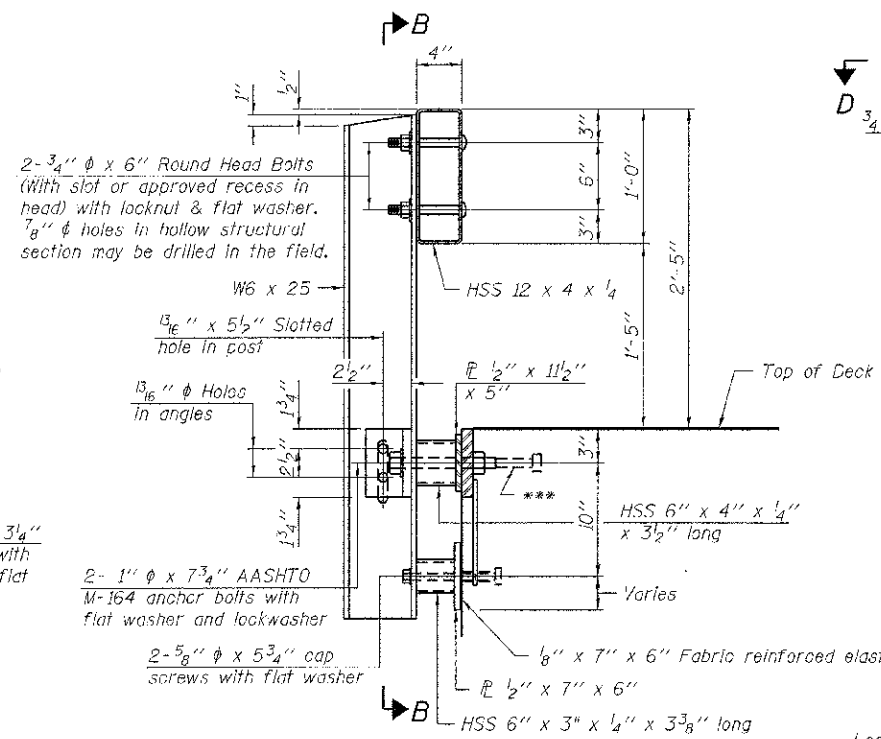


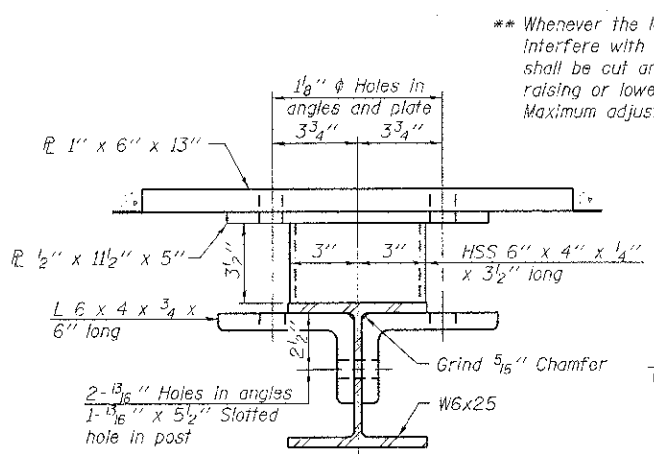
**VIEW A-A
ROUND HEAD BOLT**



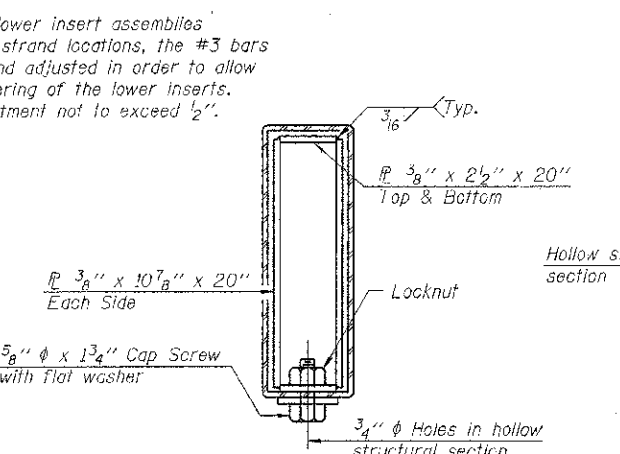
SECTION B-B



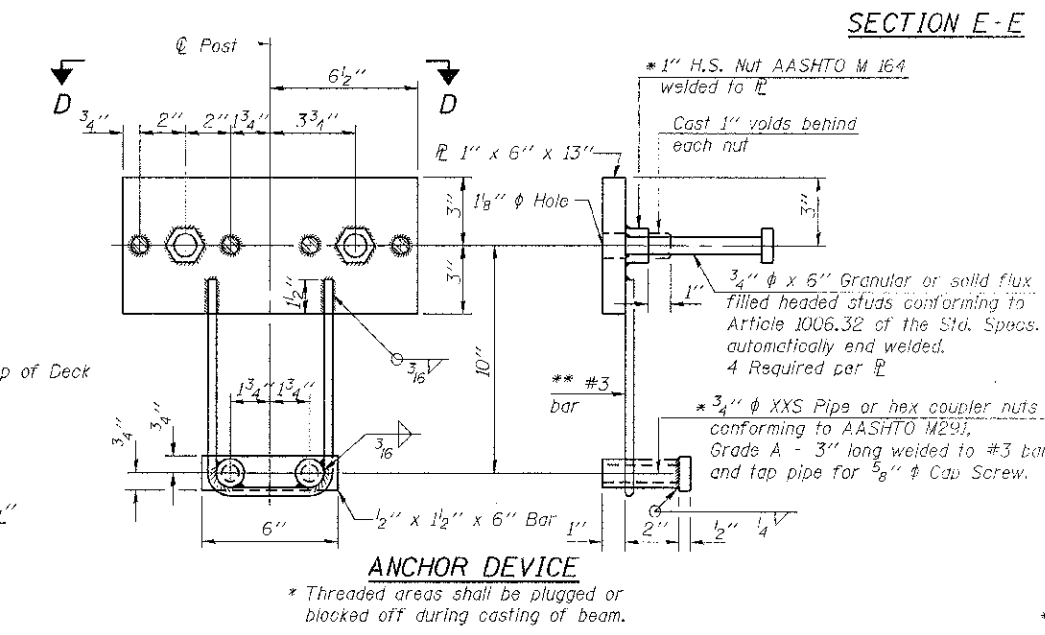
SECTION AT RAILING POST



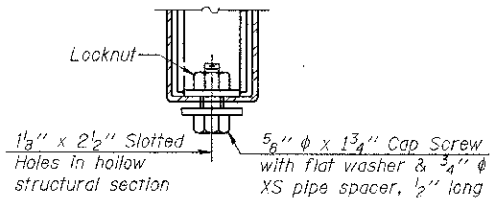
SECTION C-C



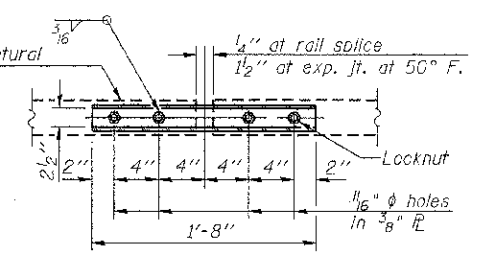
SECTIONS AT RAIL SPLICE



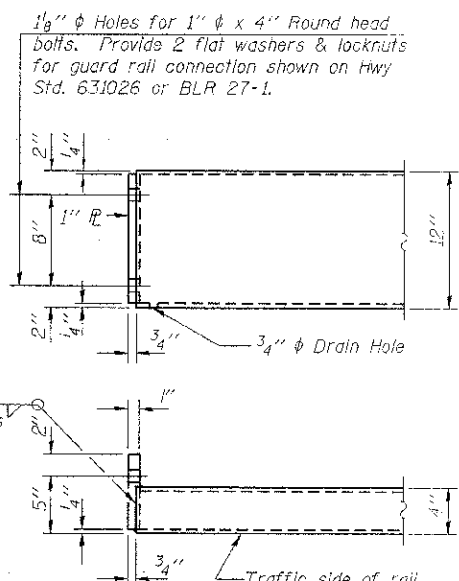
ANCHOR DEVICE



**RAIL SPLICE CONNECTION
AT EXPANSION JT.**

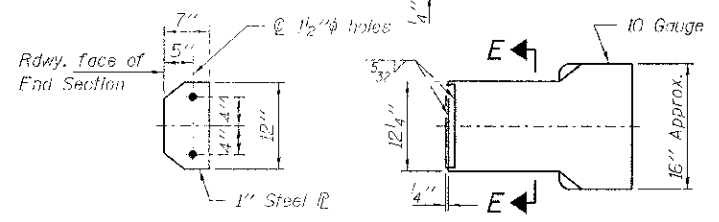


**PLAN-BOTT. SPLICE
TYPICAL**



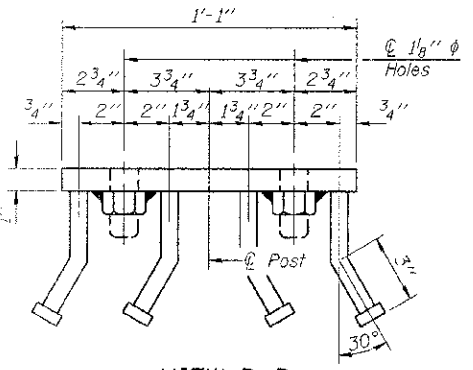
END OF RAIL DETAILS

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



**SECTION E-E
CURLLED 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

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	88

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

FILE NAME = 110298-ehh-br.dgn	USER NAME =	DESIGNED - A.S.L.	REVISED -
HAMPTON LENZINLAND RENWICK, INC.		CHECKED - S.W.M.	REVISED -
3800 STEVENSON DRIVE, SUITE 301 SPRINGFIELD, ILLINOIS 62708	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
ILLINOIS PROFESSIONAL GEO 241 FIRM L5 1/2 PC 0000 104 20089	PLOT DATE = 7/28/2013	CHECKED - S.W.M.	REVISED -

**STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT**

**STEEL RAILING, TYPE S-1
STRUCTURE NO. 092-3523**

SHEET NO. 5 OF 9 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEET NO.
131	10-15145-00-BR	VERMILION	20 16
PILOT ROAD DISTRICT		CONTRACT NO. 91477	
ILLINOIS FED. AID PROJECT			