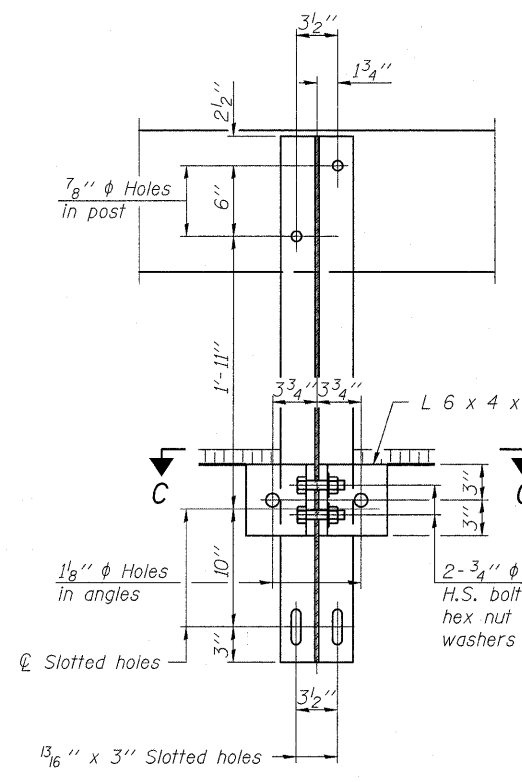
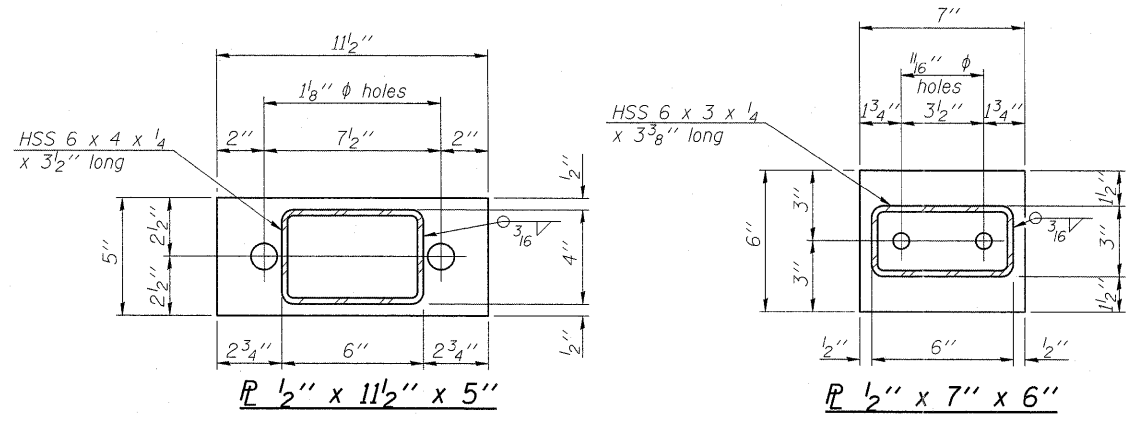
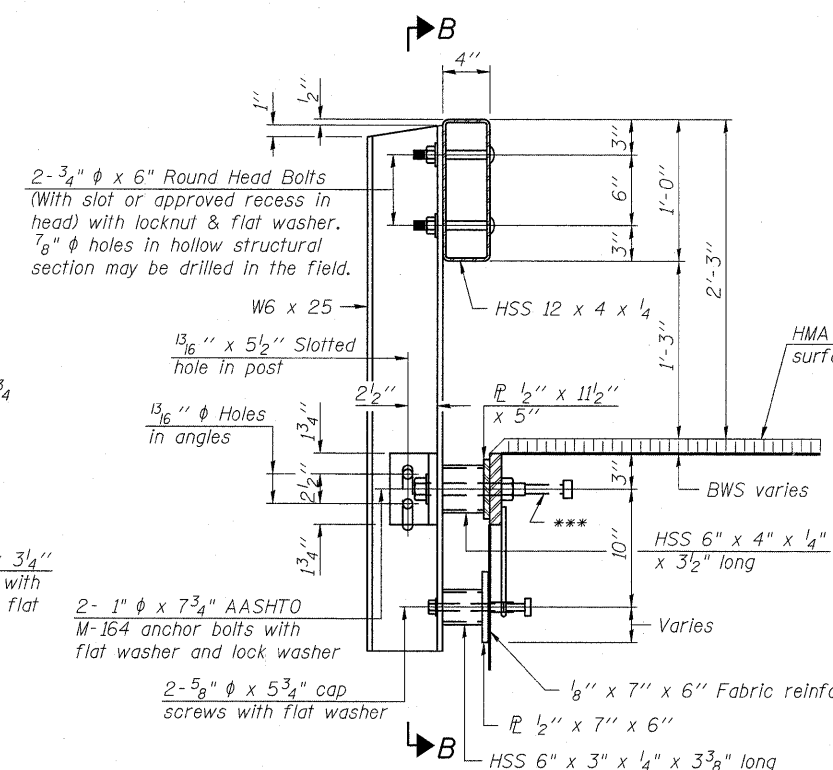


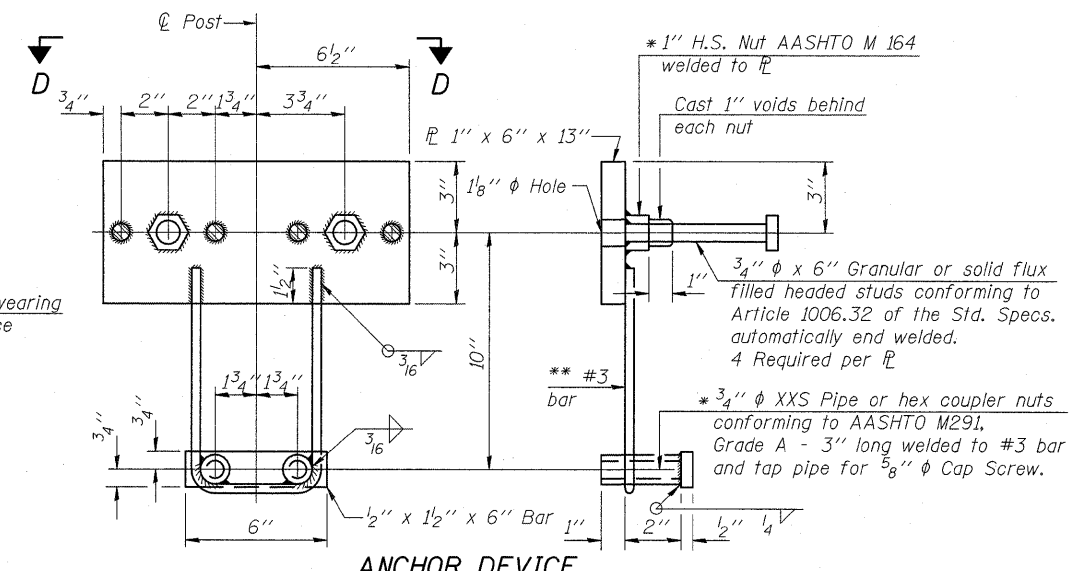
**VIEW A-A
ROUND HEAD BOLT**



SECTION B-B

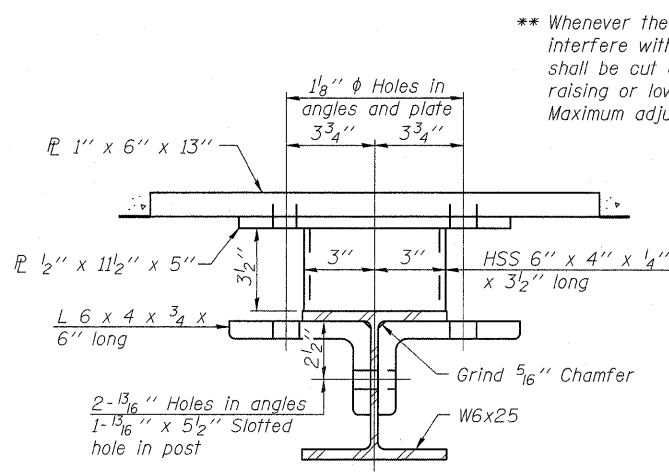


SECTION AT RAILING POST

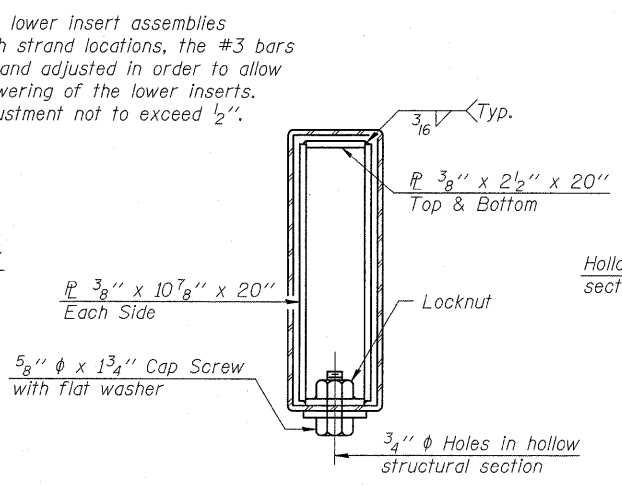


ANCHOR DEVICE

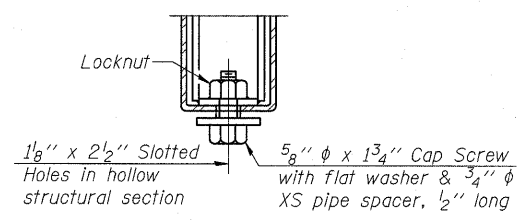
Notes:
 All field drilled holes shall be coated with an approved zinc rich paint before erection.
 For multi-span bridges, sufficient 1/4 inch x 6 inch x 1'-2 inch galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
 All steel rail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



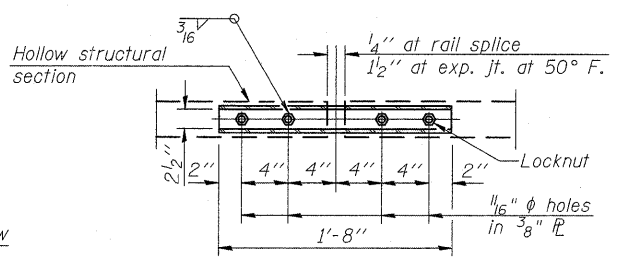
SECTION C-C



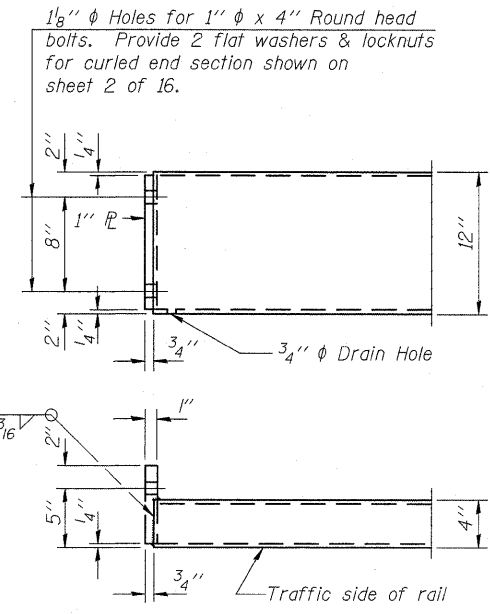
SECTIONS AT RAIL SPLICE



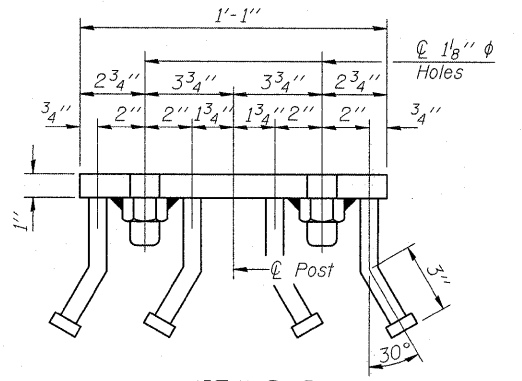
**RAIL SPLICE CONNECTION
AT EXPANSION JT.**



**PLAN-BOTT. SPLICE P
TYPICAL**



END OF RAIL DETAILS



VIEW D-D

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	224

FILE NAME = 53173-bridge sheets.dgn

DESIGNED - K. HEFFERN	REVISED -
DRAWN - C. BECKER	REVISED -
CHECKED - C. EPPERLY	REVISED -
DATE - NOVEMBER 2010	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STEEL RAILING, TYPE S-1
STRUCTURE NO. 082-4158**

SCALE: N/A SHEET NO. 13 OF 16 SHEETS STA. 34+16.75 TO STA. 35+27.25

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-18101-04-BR	ST. CLAIR	16	13
PROJECT BROS-163(32)			CONTRACT NO. 97466	
ILLINOIS FED. AID PROJECT				