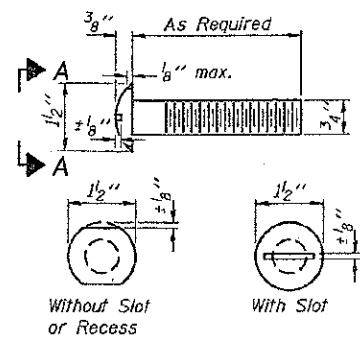
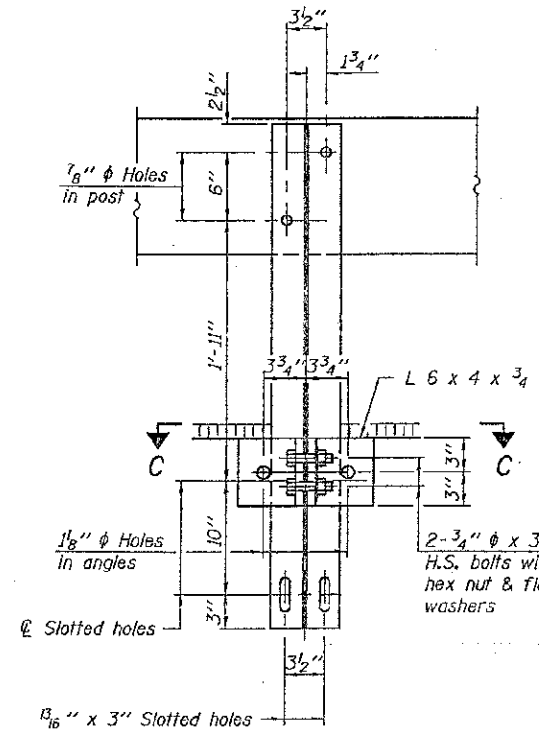
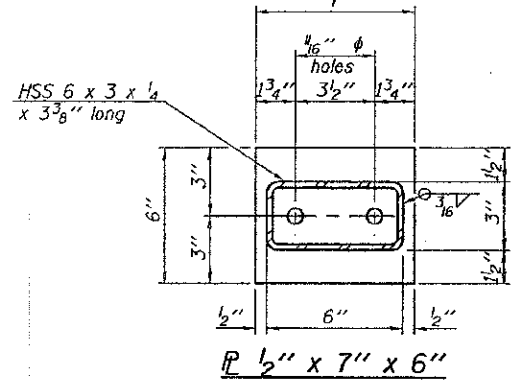
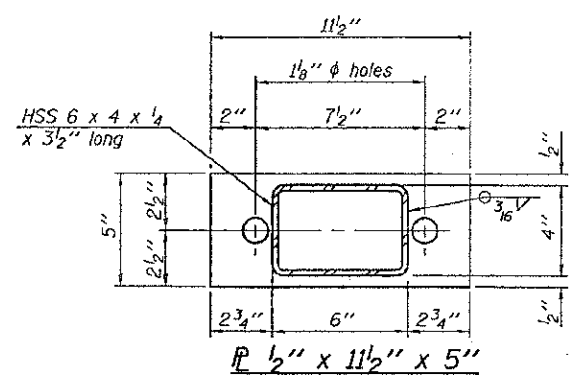


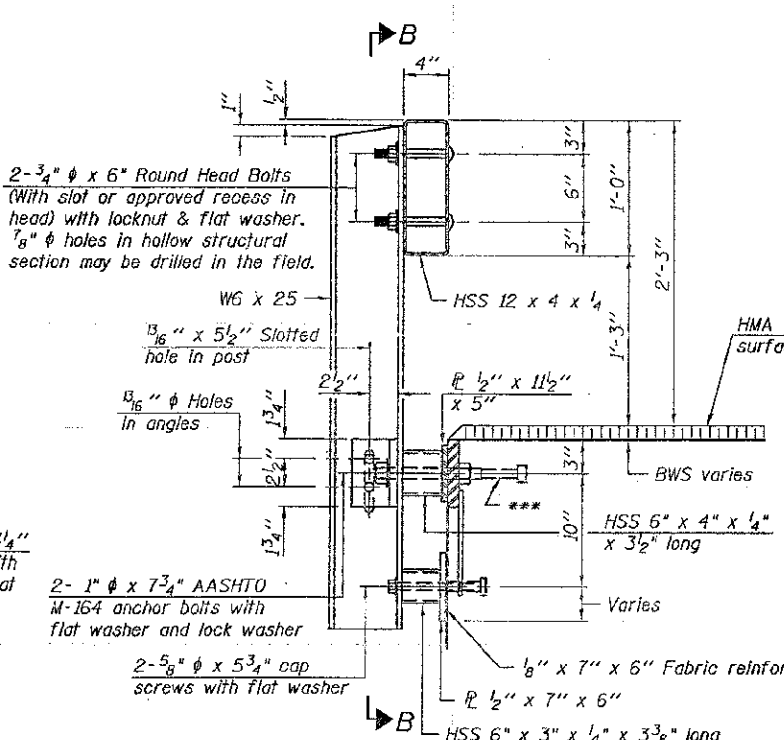
SECTION NO.	COUNTY HIGHWAY	COUNTY	SHEET OF SHEETS
08-00087-06-BR	C.H. 48	ST. CLAIR	13 of 15
FHWA REG. NO. 7	ILLINOIS	PROJ: BROS-0163(031)	
STEEL RAILING TYPE S-1	CONTRACT 97525		



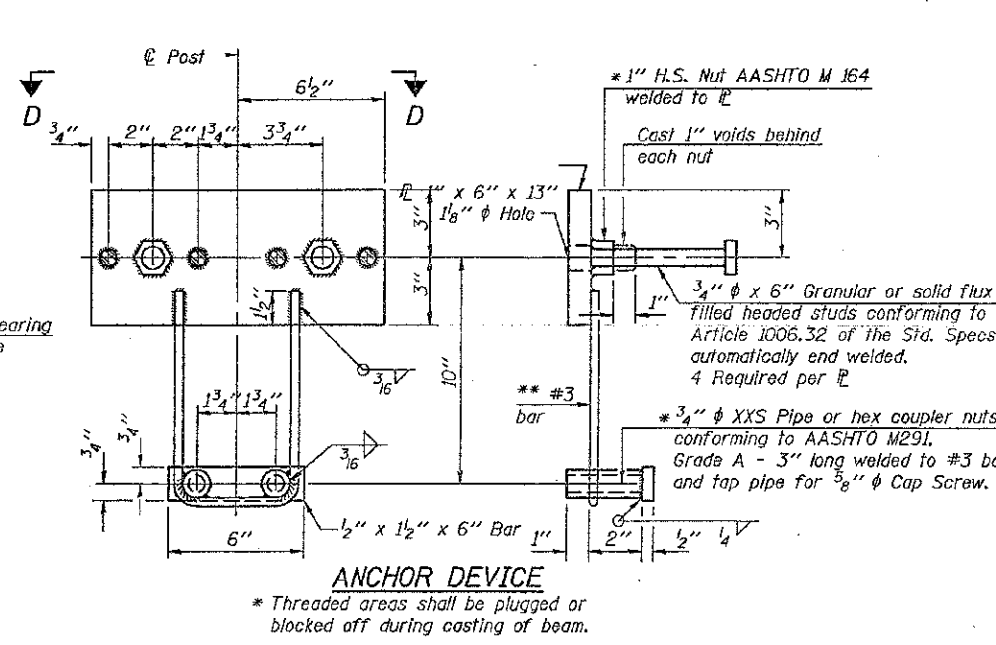
VIEW A-A  
ROUND HEAD BOLT



SECTION B-B

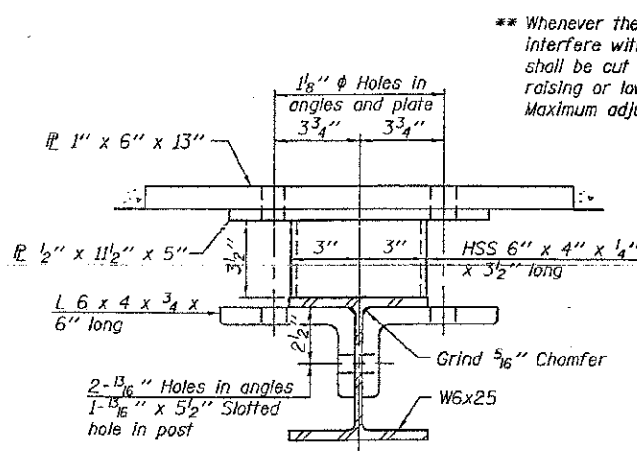


SECTION AT RAILING POST

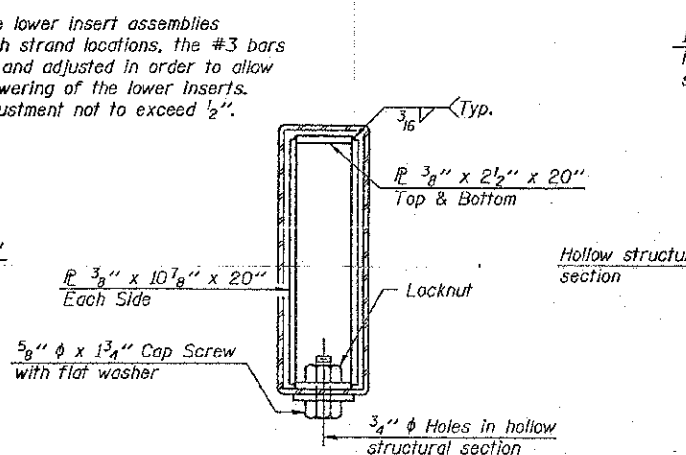


ANCHOR DEVICE

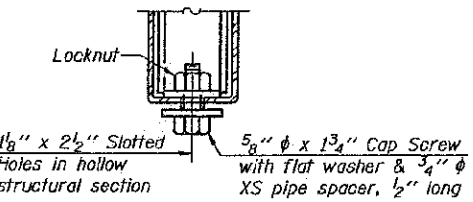
Notes:  
 All field drilled holes shall be coated with an approved zinc rich paint before erection.  
 For multi-span bridges, sufficient 1/4 inch x 6 inch x 1'-2 inch galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.  
 All steel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



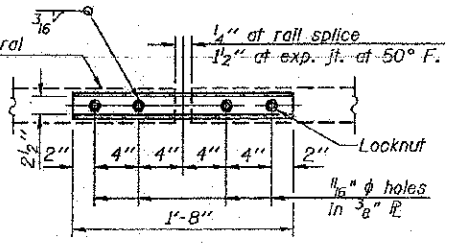
SECTION C-C



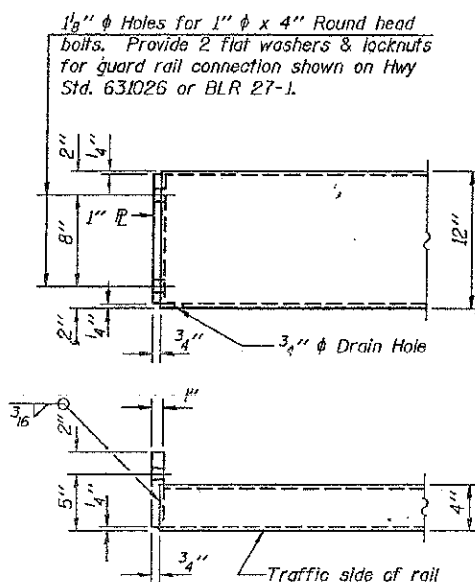
SECTIONS AT RAIL SPLICE



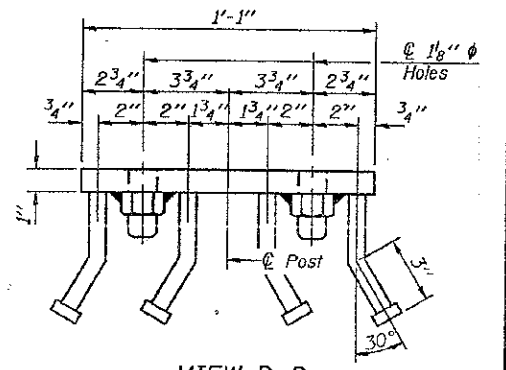
RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPLICE TYPICAL



END OF RAIL DETAILS



VIEW D-D

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	242

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

FILE NAME =	USER NAME =	DESIGNED -	REVISOR -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STEEL RAILING, TYPE S-1 STRUCTURE NO.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED -	REVISOR -							
		DRAWN -	REVISOR -							
		CHECKED -	REVISOR -							
						SHEET NO. OF SHEETS		CONTRACT NO.		
								ILLINOIS FED. AID PROJECT		