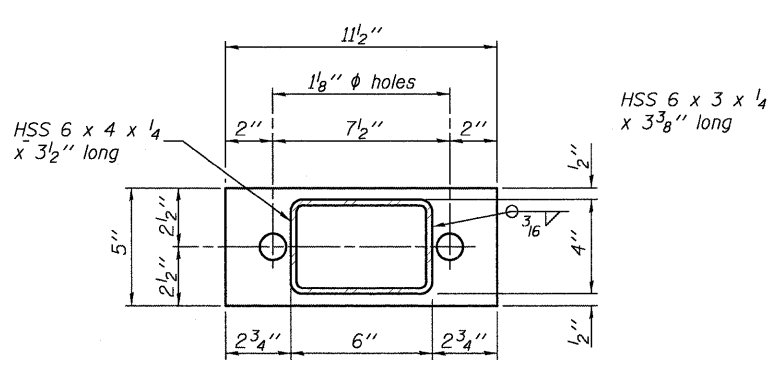
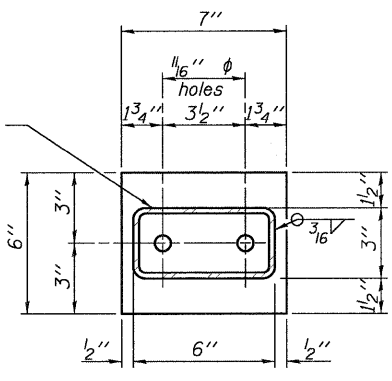


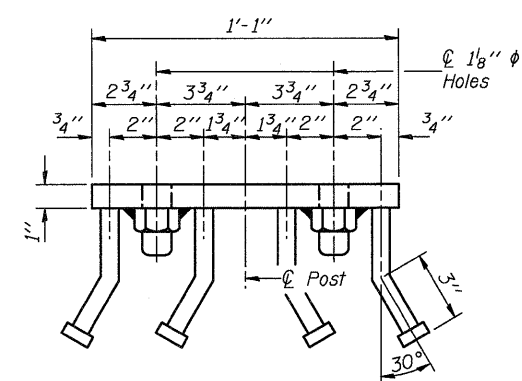
VIEW A-A
ROUND HEAD BOLT



SECTION B-B
1 1/2" x 11 1/2" x 5"



SECTION C-C
1 1/2" x 7" x 6"



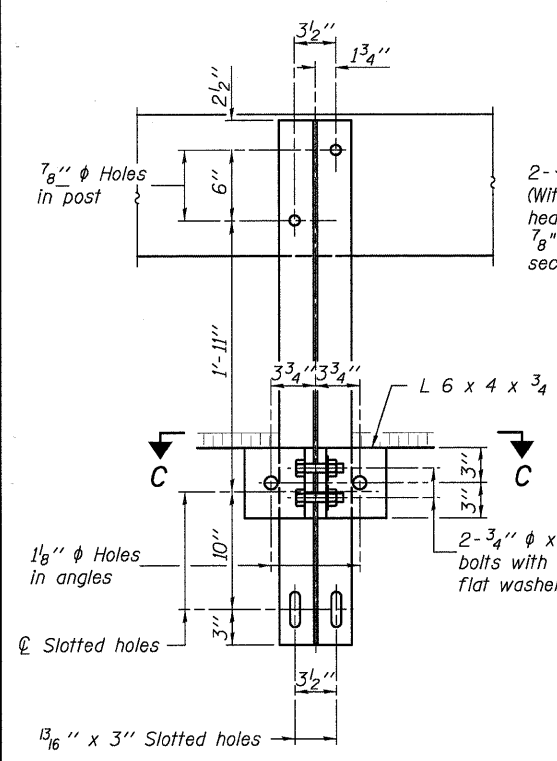
VIEW D-D

Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
For multi-span bridges, sufficient 1/4" x 6" 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.

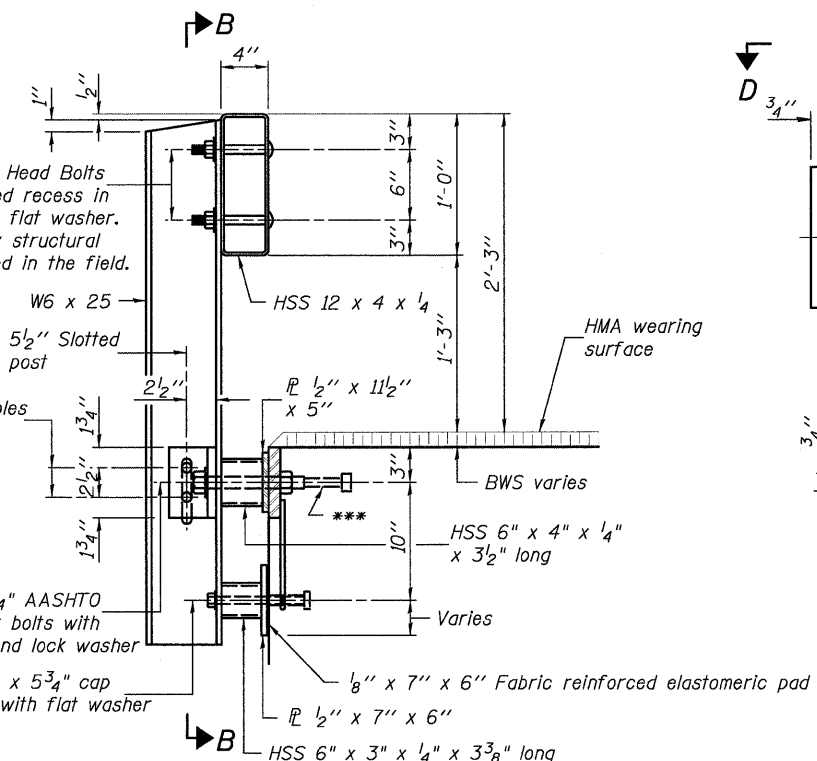
*** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

BILL OF MATERIAL

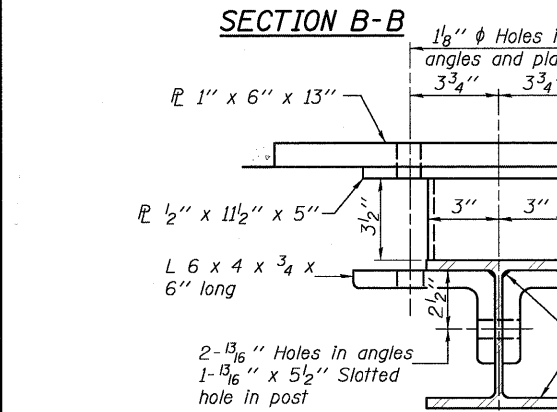
Item	Unit	Quantity
Steel Railing, Type S-1	Foot	138



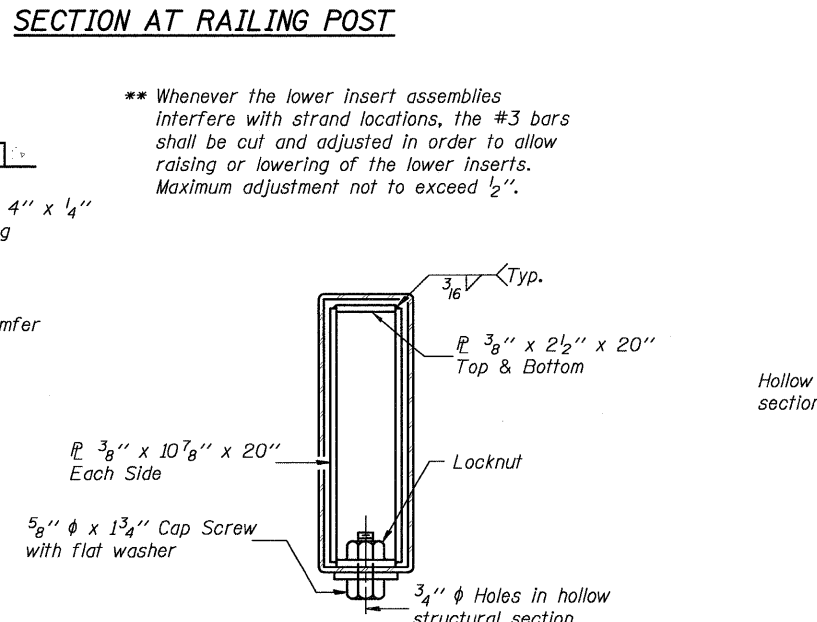
SECTION B-B



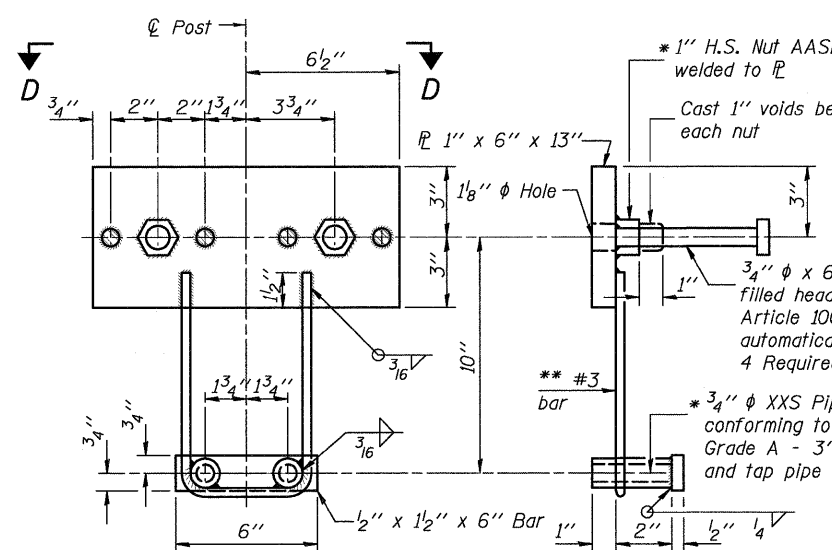
SECTION AT RAILING POST



SECTION C-C

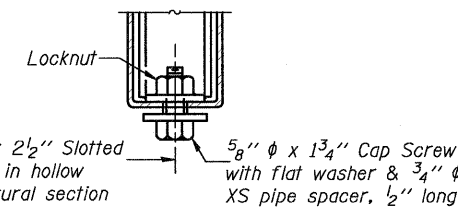


SECTIONS AT RAIL SPLICE

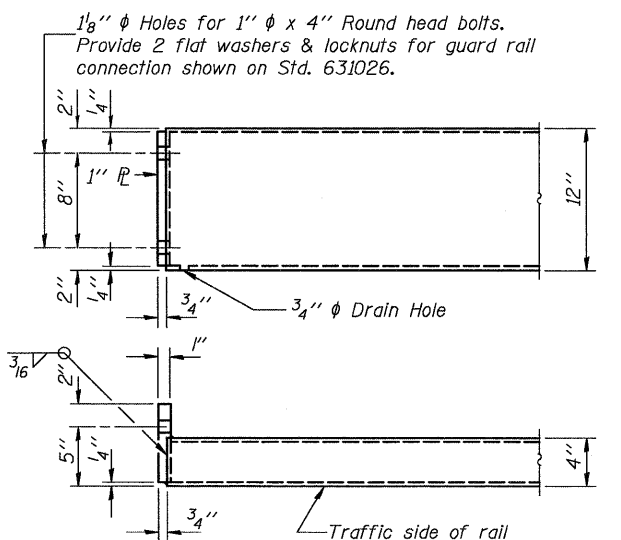


ANCHOR DEVICE

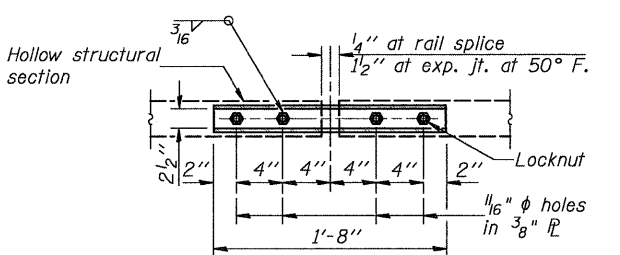
* Threaded areas shall be plugged or blocked off during casting of beam.



RAIL SPLICE CONNECTION AT EXPANSION JT.



END OF RAIL DETAILS



PLAN-BOTT. SPLICE PL TYPICAL

DESIGNED	B.I.B.
CHECKED	L.D.G.
DRAWN	K.H.L.
CHECKED	B.G.H.

R-23A 10-1-08

(10'-9" Maximum Post Spacing)

STEEL RAILING, TYPE S-1

SHEET NO.	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	165	96-14115-00-BR	WASHINGTON	15	10
8 SHEETS			S.N. 095-3251 CONTRACT NO. 97435		
FED. ROAD DIST. NO. -		ILLINOIS FED. AID PROJECT			