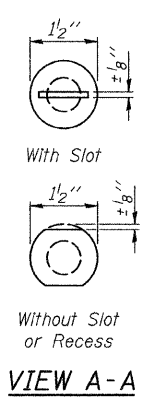
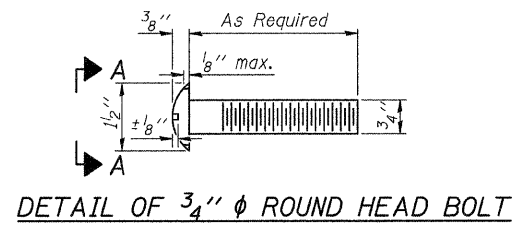
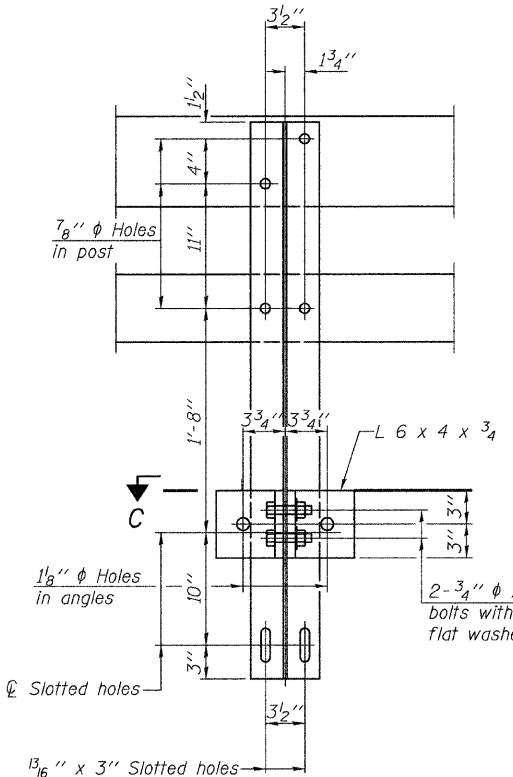


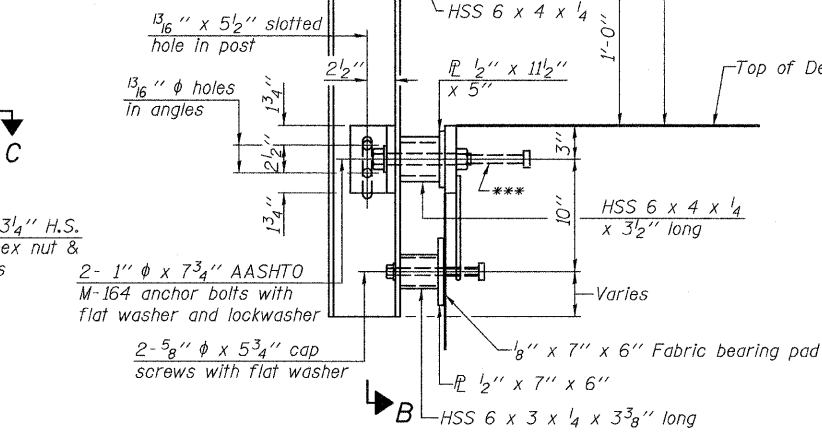
FOR RAIL POST SPACING SEE SH.#8 OF 22.



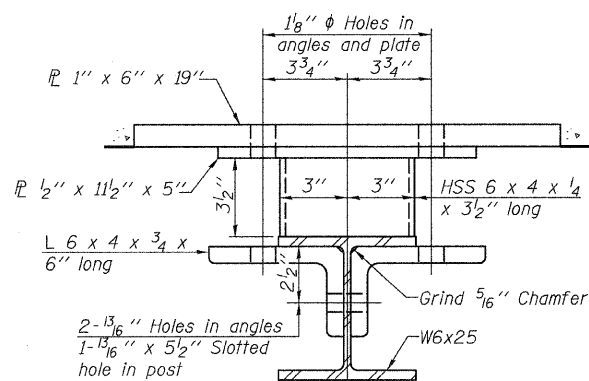
4- $\frac{3}{4}$ "  $\phi$  x 6" Round Head Bolts (With slot or approved recess in head) with locknut & flat washer.  $\frac{7}{8}$ "  $\phi$  holes in hollow structural section may be drilled in the field.



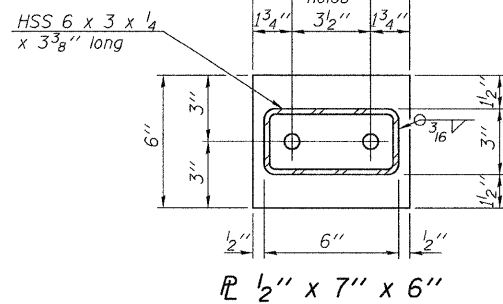
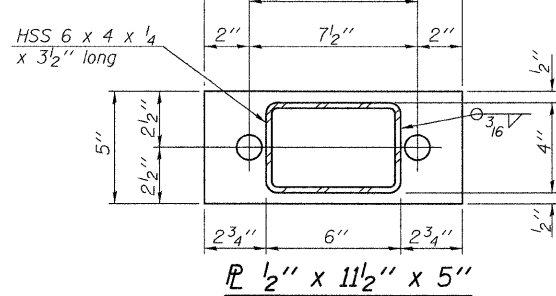
SECTION B-B



SECTION AT RAIL POST

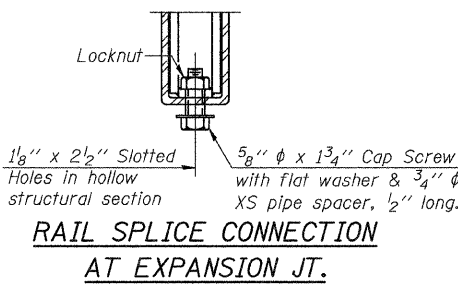


SECTION C-C

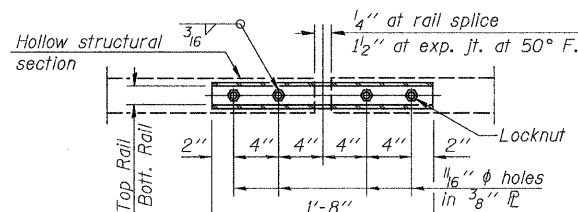


ANCHOR DEVICE

\*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.

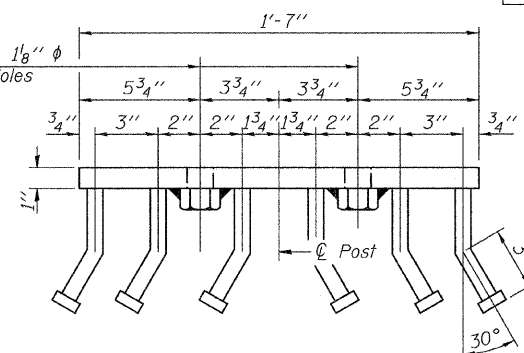


RAIL SPLICE CONNECTION AT EXPANSION JT.

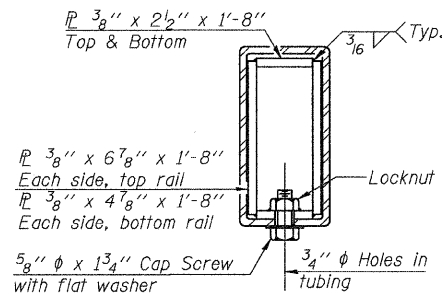


PLAN-BOTT. SPLICE TYPICAL

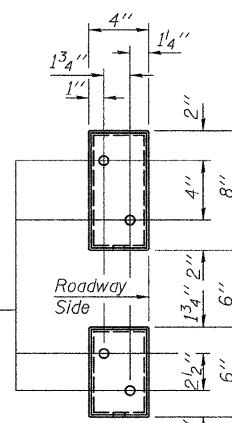
$\phi$  -  $\frac{5}{8}$ " reduced base welded studs. Provide 4 -  $\frac{5}{8}$ " washers and self-locking nuts or nuts and jam nuts for guardrail connection shown on Std. 631032



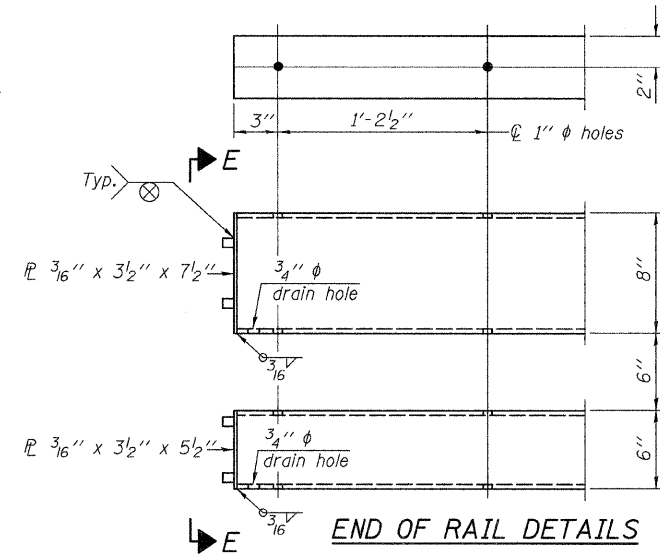
VIEW D-D



SECTION AT RAIL SPLICE



VIEW E-E



END OF RAIL DETAILS

Notes:  
 All field drilled holes shall be coated with an approved zinc rich paint before erection.  
 For multi-span bridges, sufficient  $\frac{1}{4}$ " x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.  
 All steel rail members 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 SM	Foot	293

STEEL RAILING, TYPE SM  
 C.H. 12 OVER JOES CREEK  
 SECTION 07-00090-00-BR  
 MACOUPIN COUNTY

SHEET NO. 11	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 12	07-00090-00-BR	MACOUPIN	77	40
22 SHEETS	SN 059-3557		CONTRACT NO. 93538		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BRS-0732(148)			