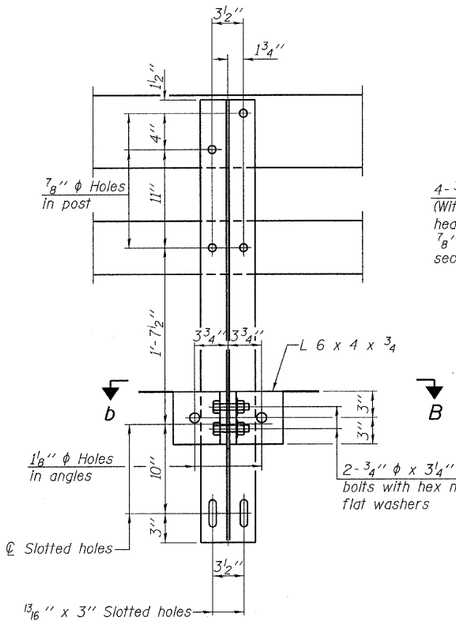
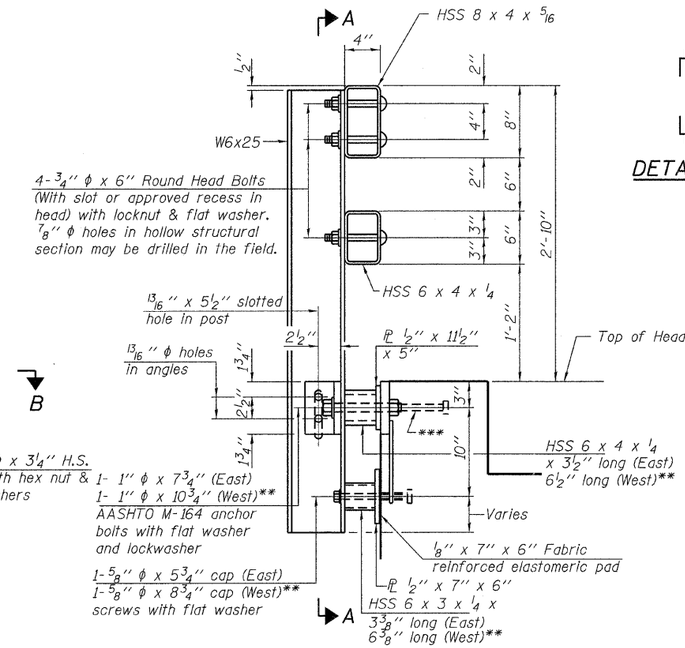
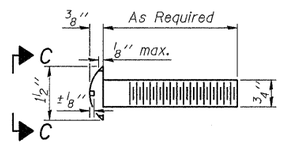


SECTION A-A

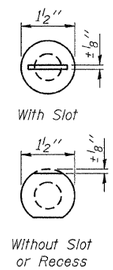


SECTION AT RAIL POST

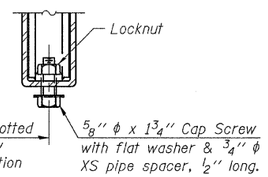
Reinforcement bars in the top of the headwall may be placed with a 1½" minimum clearance in the area of the rail post anchor devices. The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.



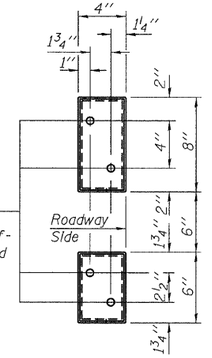
DETAIL OF ¾" ϕ ROUND HEAD BOLT



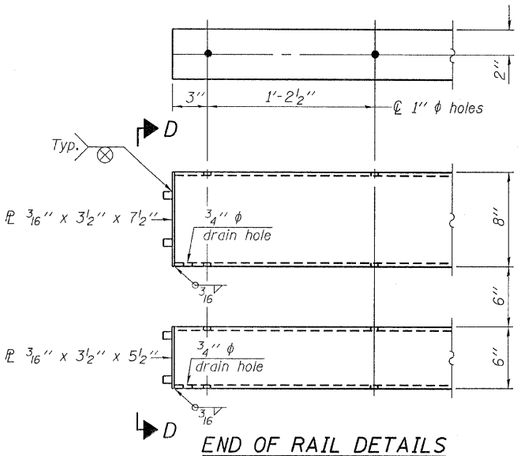
VIEW C-C



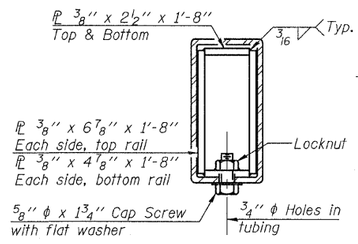
RAIL SPLICE CONNECTION AT EXPANSION JT.



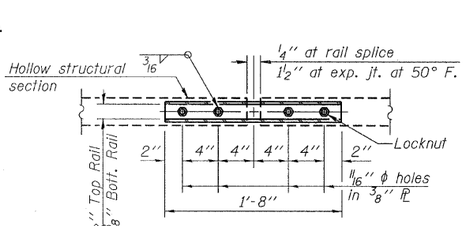
VIEW D-D



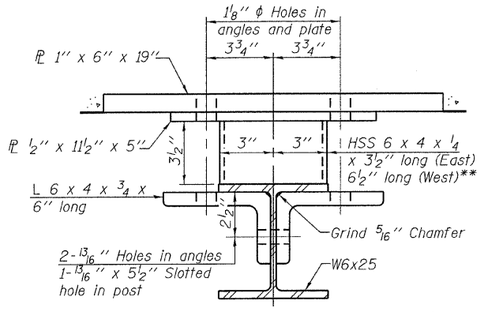
END OF RAIL DETAILS



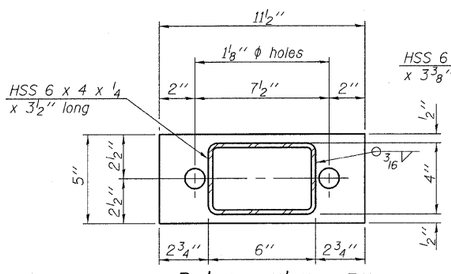
SECTION AT RAIL SPLICE



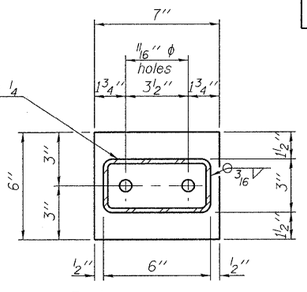
PLAN-BOTT. SPLICE PL TYPICAL



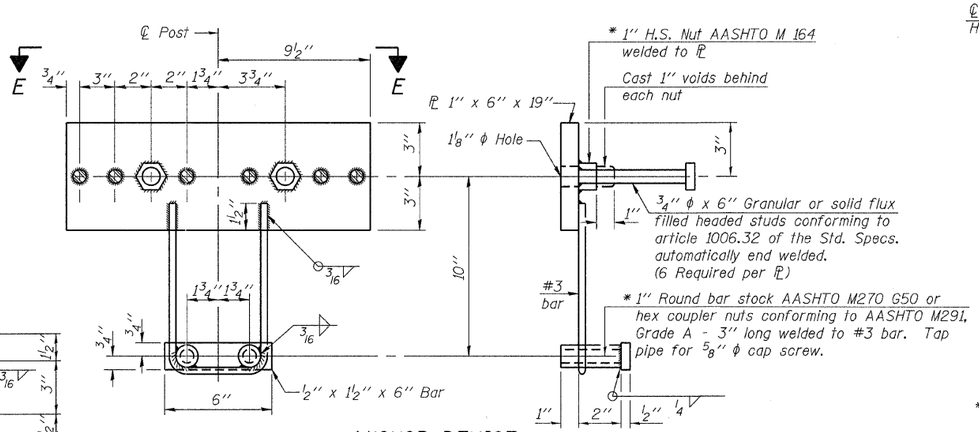
SECTION B-B



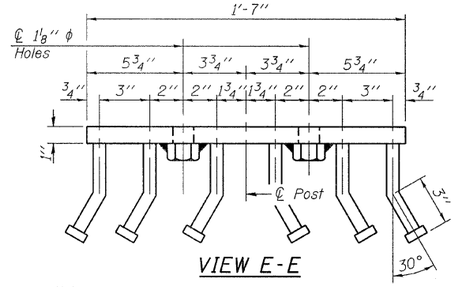
PL ½" x 11½" x 5"



PL ½" x 7" x 6"



ANCHOR DEVICE



VIEW E-E

Notes:

All field drilled holes shall be coated with an approved zinc rich paint before erection.

For multi-span bridges, sufficient ¼" 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.*

** *The Contractor shall fabricate modified cap screws, anchor bolts and HSS spacers at West Headwall posts.*

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	25

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

R-34HMAWS 7-1-10 (6'-3" Maximum Post Spacing) (1¼" minimum to 3⅛" maximum HMA thickness)

FILE NAME = 110330-sht-culvertextensions.dgn	USER NAME =	DESIGNED - A.S.L.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3055 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		CHECKED - S.W.M.	REVISED -
	PLOT SCALE =	DRAWN - D.T.M.	REVISED -
	PLOT DATE = 1/19/2012	CHECKED - S.W.M.	REVISED -

STATE OF ILLINOIS
EDGAR COUNTY HIGHWAY DEPARTMENT

STEEL RAILING, TYPE SM
CULVERT STA. 58 + 72.31
SHEET NO. 4 OF 4 SHEETS

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4	10-00101-00-SP	EDGAR	132	51
		CONTRACT NO. 91467		
	ILLINOIS FED. AID PROJECT HSIP-0680(109)			