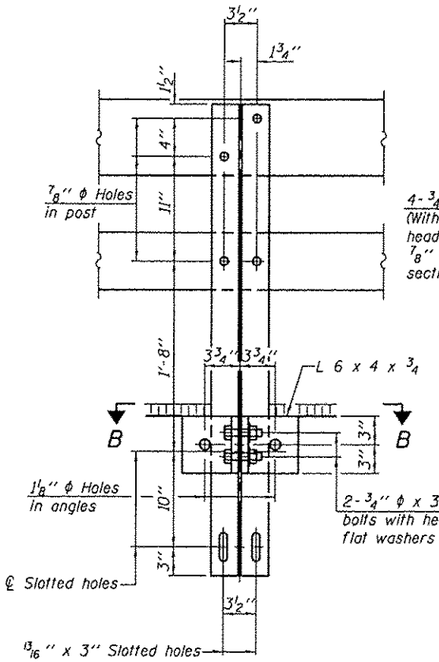
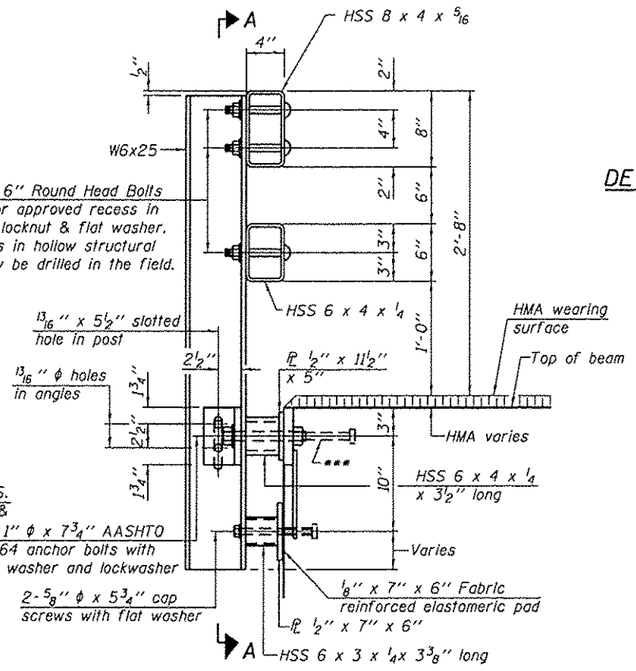
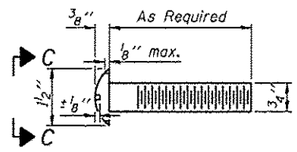


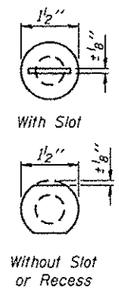
SECTION A-A



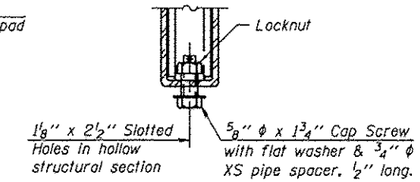
SECTION AT RAIL POST



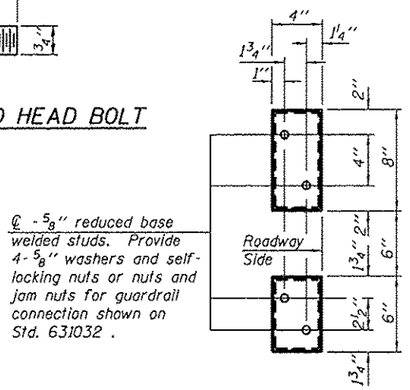
DETAIL OF ¾" ϕ ROUND HEAD BOLT



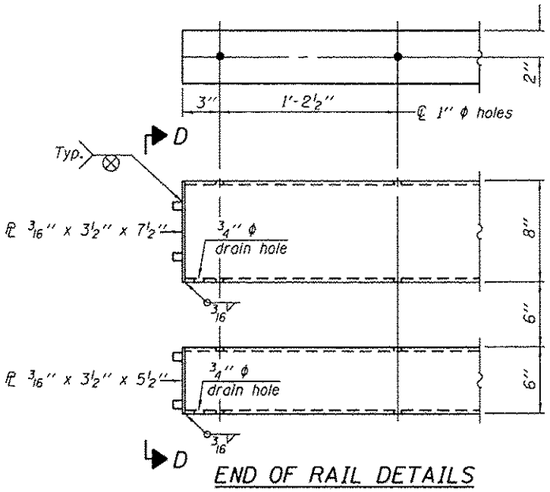
VIEW C-C



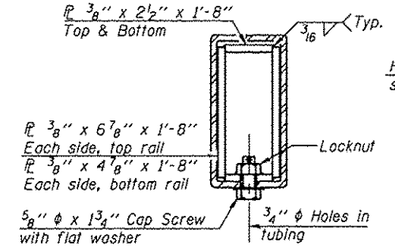
RAIL SPLICE CONNECTION AT EXPANSION JT.



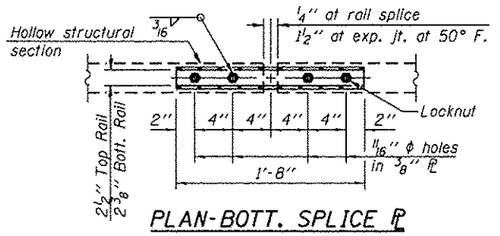
VIEW D-D



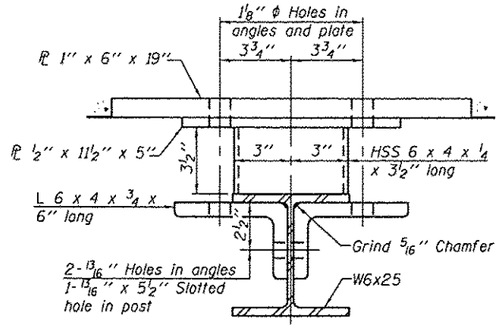
END OF RAIL DETAILS



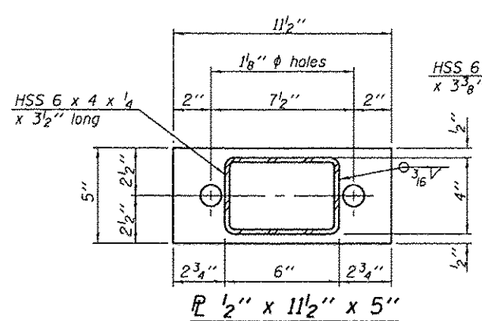
SECTION AT RAIL SPLICE



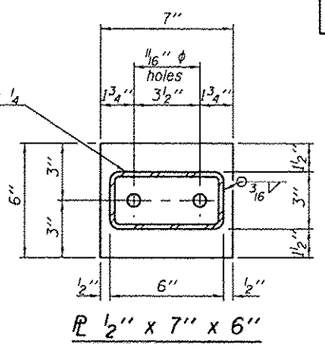
PLAN-BOTT. SPLICE ℄ TYPICAL



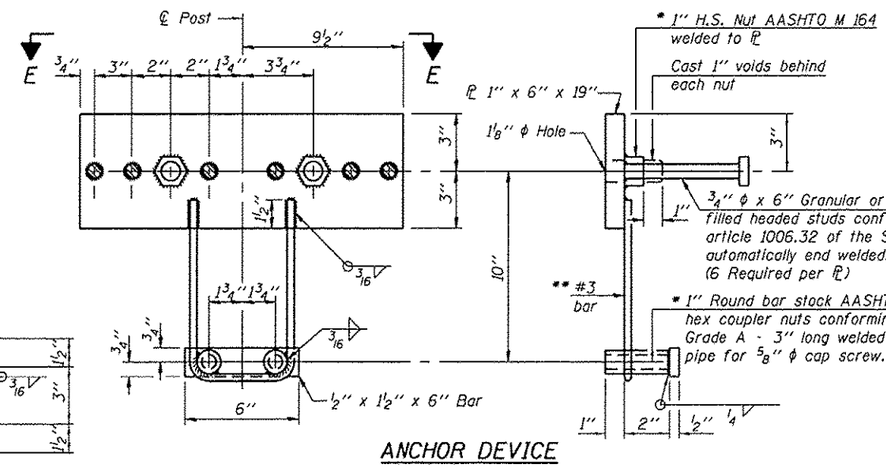
SECTION B-B



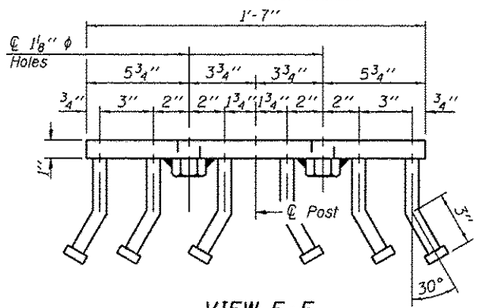
℄ ½" x 11½" x 5"



℄ 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.

See sheet 9 of 15 for Rail Post Spacing.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	237

** Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed ½".

*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 = RAIL_SM-6A-WS.DGN 12-540_RAIL_SM-6A-WS.dgn	USER NAME = rfitzenko	DESIGNED - J.A.M.	REVISED -
		CHECKED - A.R.K.	REVISED -
	PLOT SCALE = *SCALE1*	DRAWN - A.D.S.	REVISED -
	PLOT DATE = 3/23/2013	CHECKED -	REVISED -

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL
ILLINOIS DESIGN FIRM NO. 184-001365
FREEPORT, IL ROCKFORD, IL
ROCHELLE, IL SPRINGFIELD, IL
MONROE, WI

STEEL RAILING, TYPE SM
S.N. 004-3096
SHEET NO. 8 OF 15 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
33	12-08120-00-BR	BOONE	26	14
		CONTRACT NO. 85589		
		ILLINOIS FED. AID PROJECT		

*12-540