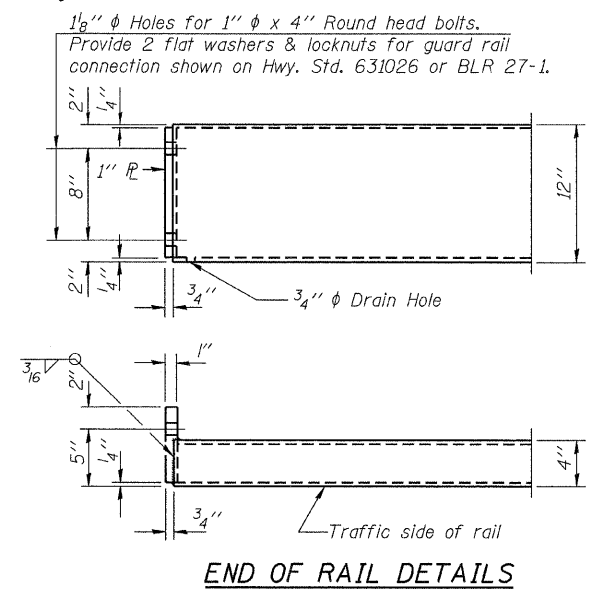
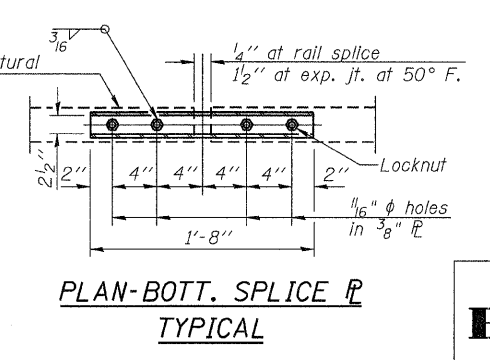
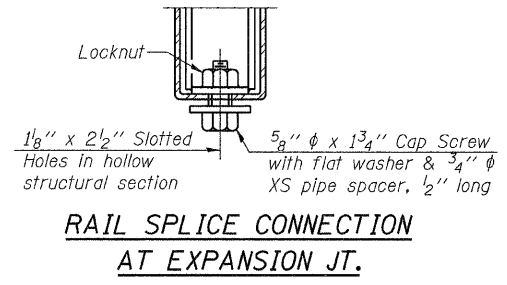
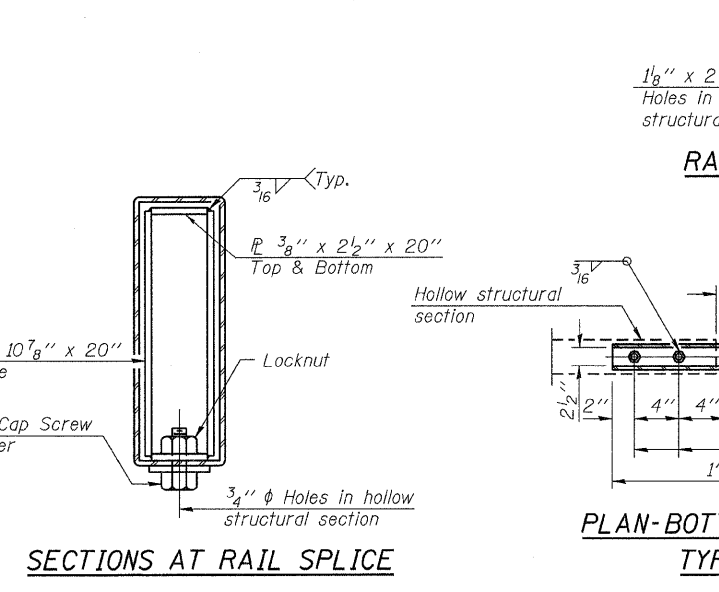
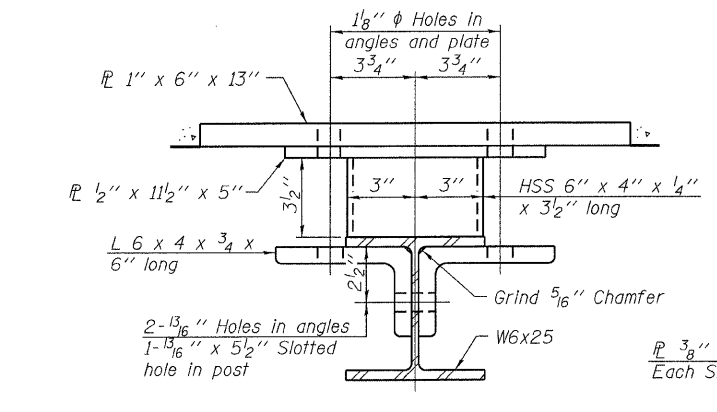
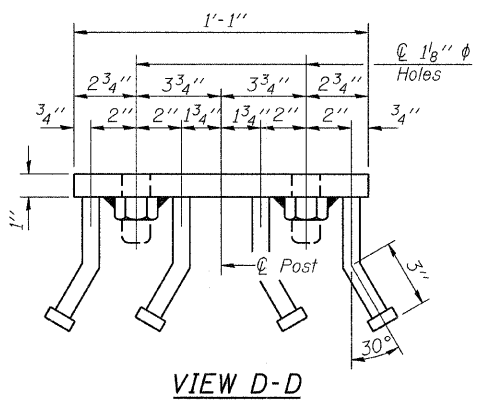


**Notes:**  
All field drilled holes shall be coated with an approved zinc rich paint before erection.  
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.  
All steel rail elements 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	107

**STEEL RAILING, TYPE S-1  
STRUCTURE NO. 053-3036**

DESIGNED - A.S.L.  
CHECKED - M.G.B.  
DRAWN - D.T.M.  
CHECKED - D.A.B.

R-23A 11-1-09 (10'-9" Maximum Post Spacing)

**HAMPTON, LENZINI AND RENWICK, INC.**  
CIVIL ENGINEERS - STRUCTURAL ENGINEERS - LAND SURVEYORS  
3085 STEVENSON DRIVE, SUITE 201  
SPRINGFIELD, ILLINOIS 62703  
217.546.3400 www.hlrengineering.com  
184.000993  
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORPORATION  
PROJECT NUMBER: 09.0125.130 DATE: 03/25/10

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	08-00161-01-BR	LIVINGSTON	23	17
CONTRACT NO. 87452				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT BRS-0473(108)		