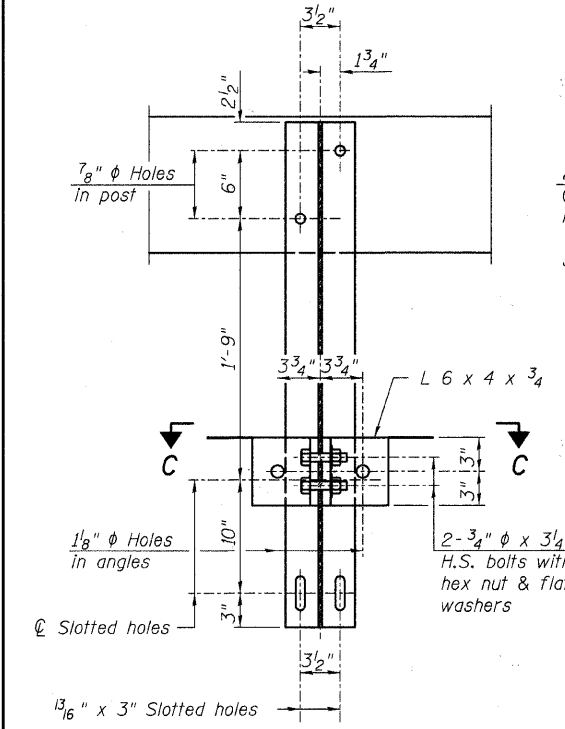
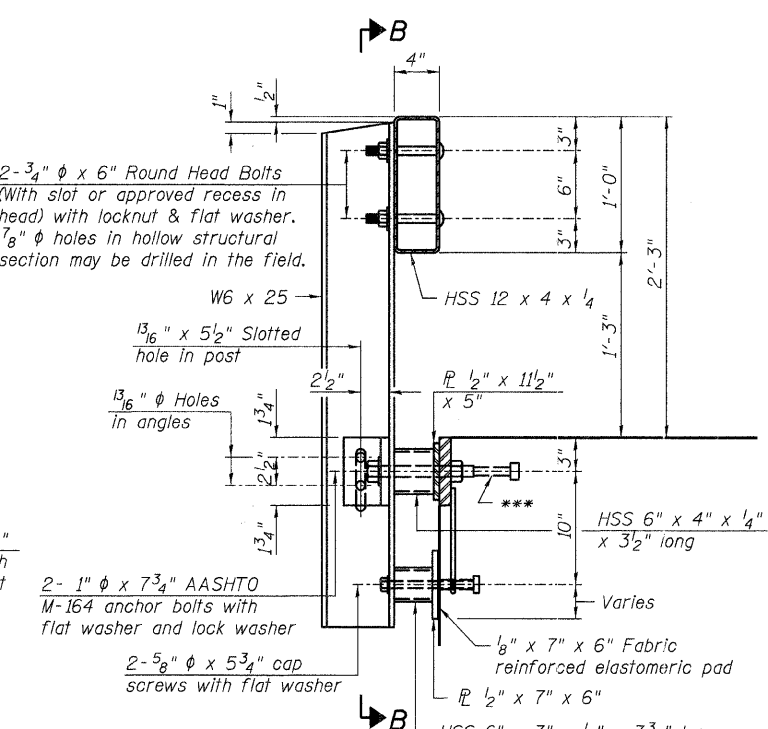


RAIL POST SPACING

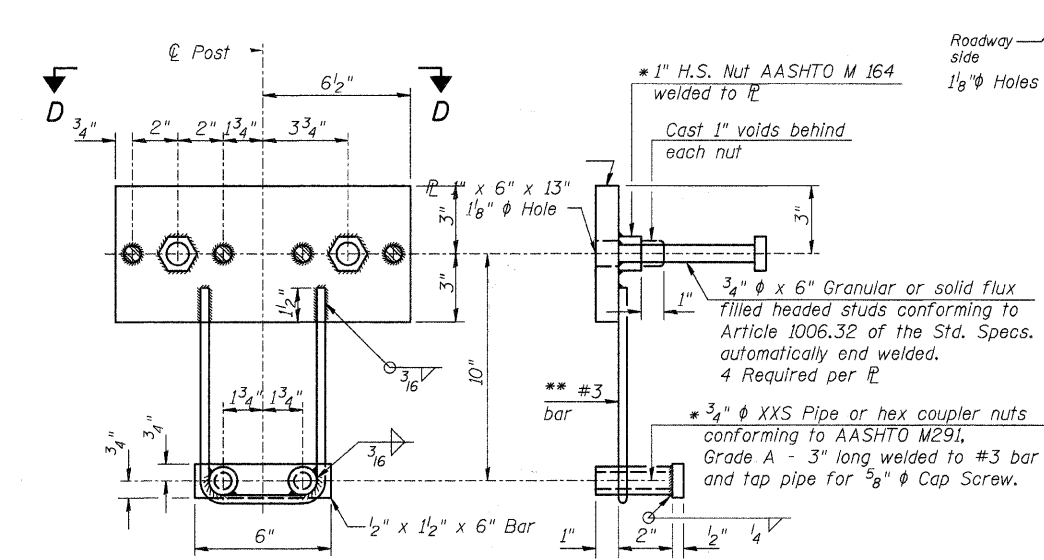
Note: The cost of the Curled End Sections shall be included in the contract unit price per foot for "STEEL RAILING, 1" Plate TYPE S1", and no additional compensation will be allowed.



SECTION B-B

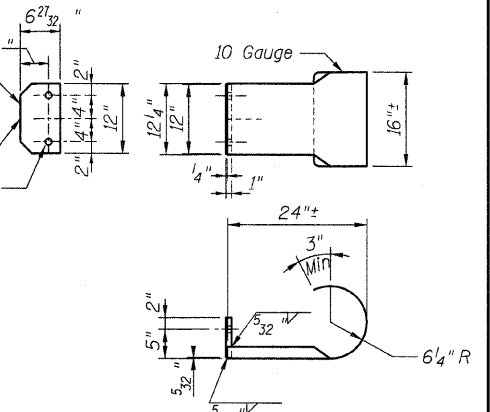


SECTION AT RAILING POST



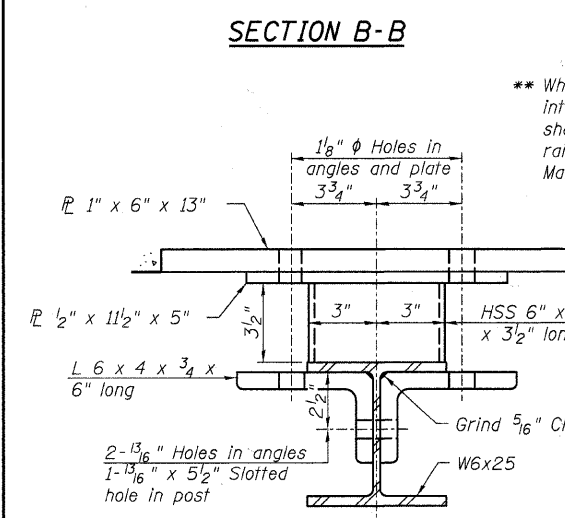
ANCHOR DEVICE

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

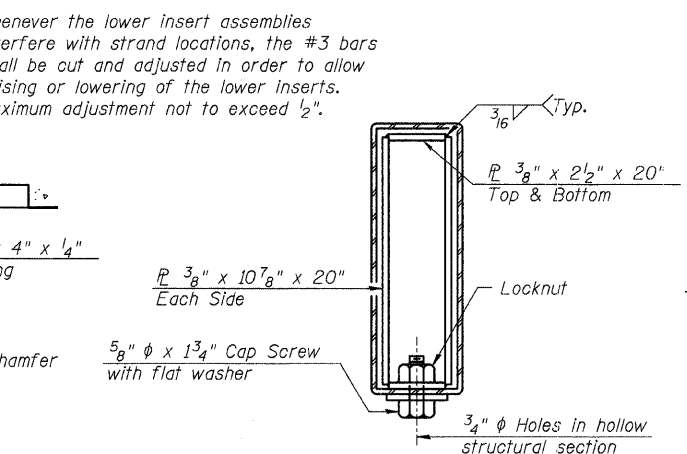


CURLLED END SECTION

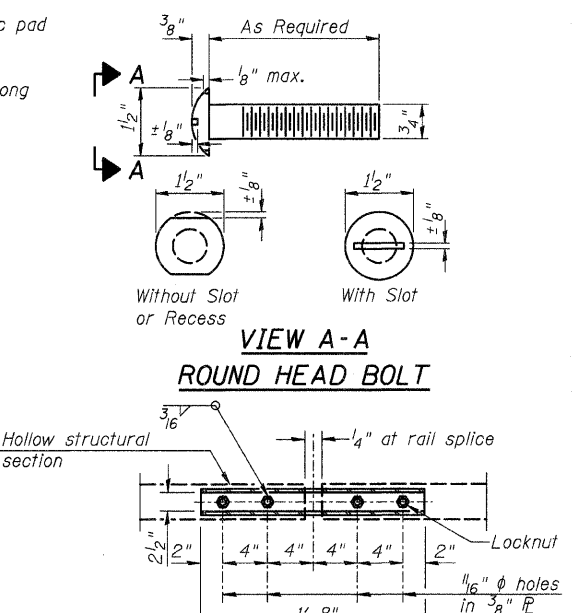
Notes:
 All field drilled holes shall be coated with an approved zinc rich paint before erection.
 For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
 All steel rail elements shall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



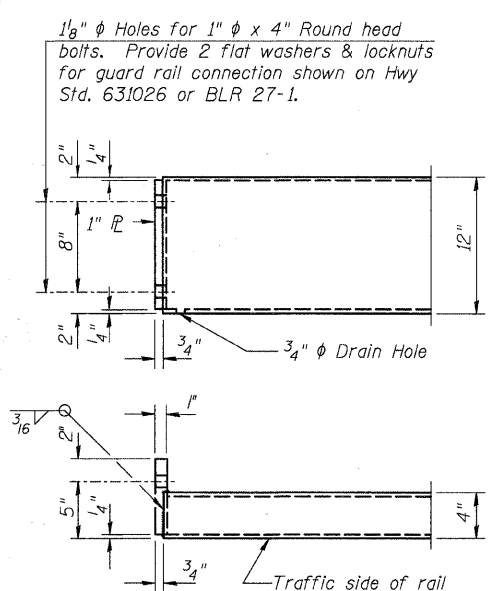
SECTION C-C



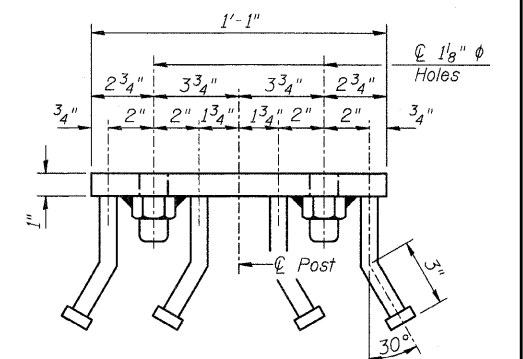
SECTIONS AT RAIL SPLICE



VIEW A-A ROUND HEAD BOLT



END OF RAIL DETAILS



VIEW D-D

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S1	Foot	139

R-23A 7-1-10 (10'-9" Maximum Post Spacing)

RHUTASEL and ASSOCIATES, INC.
 CONSULTING ENGINEERS • LAND SURVEYORS
 CENTRALIA, ILLINOIS FREEBURG, ILLINOIS
 ILLINOIS DESIGN FIRM LICENSE NO. 184-000287

DESIGNED - BLT	REVISED -
CHECKED - GLH	REVISED -
DRAWN - JN	REVISED -
CHECKED - 12/14/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL RAILING, TYPE S1
STRUCTURE NO. 096-3456

F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2821	07-00117-00-BR	WAYNE	11	9
RAAI JOB NO. 52111			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 95671	