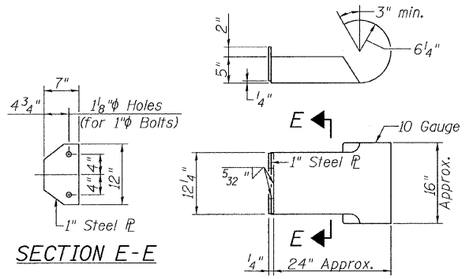
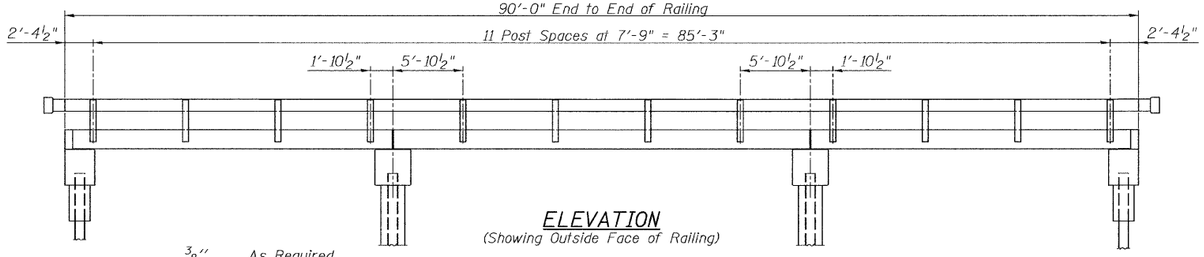


SECTION E-E

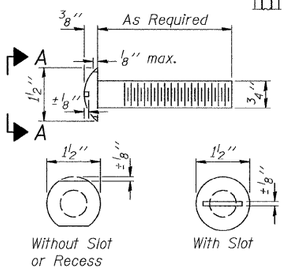
CURLED END SECTION DETAILS (4 Required)

(Cost of Curled End Sections to be included in the cost of Steel Railing, Type S-1.)



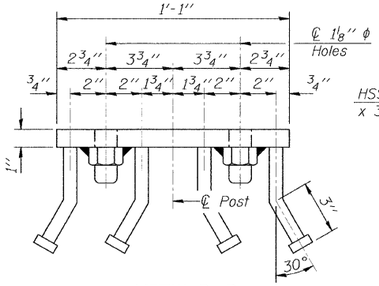
ELEVATION

(Showing Outside Face of Railing)

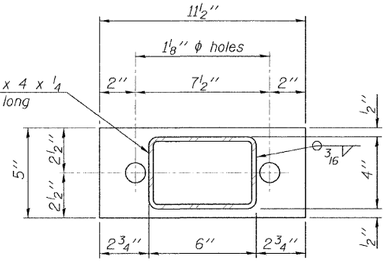


VIEW A-A

ROUND HEAD BOLT

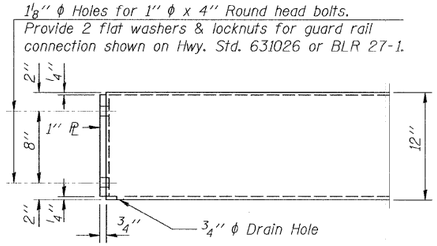


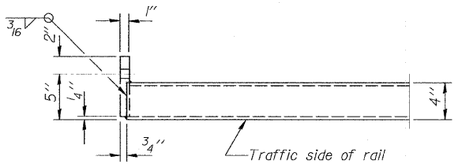
VIEW D-D



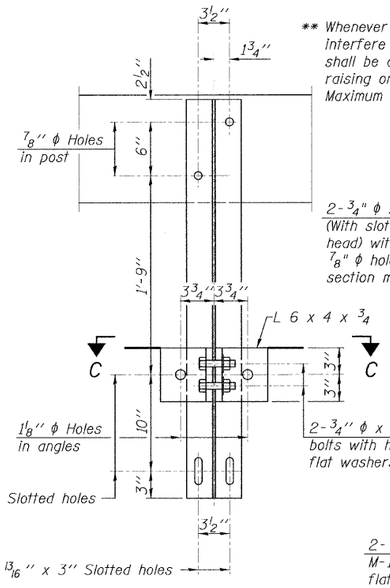
PL 1/2" x 11 1/2" x 5"

1 1/8" ϕ Holes for 1" ϕ x 4" Round head bolts.
Provide 2 flat washers & locknuts for guard rail connection shown on Hwy. Std. 631026 or BLR 27-1.



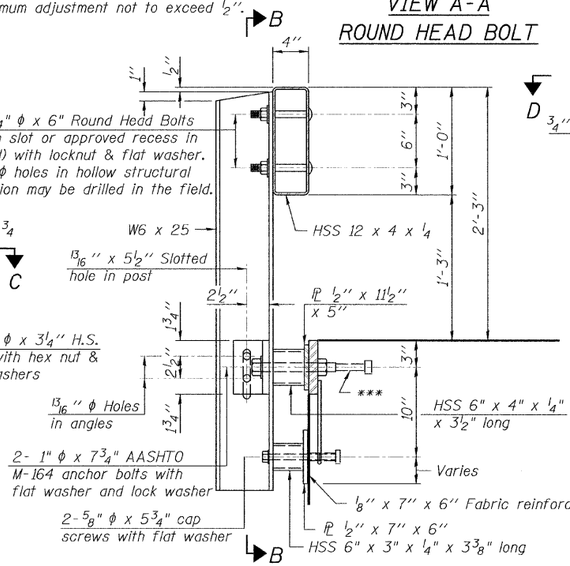


END OF RAIL DETAILS

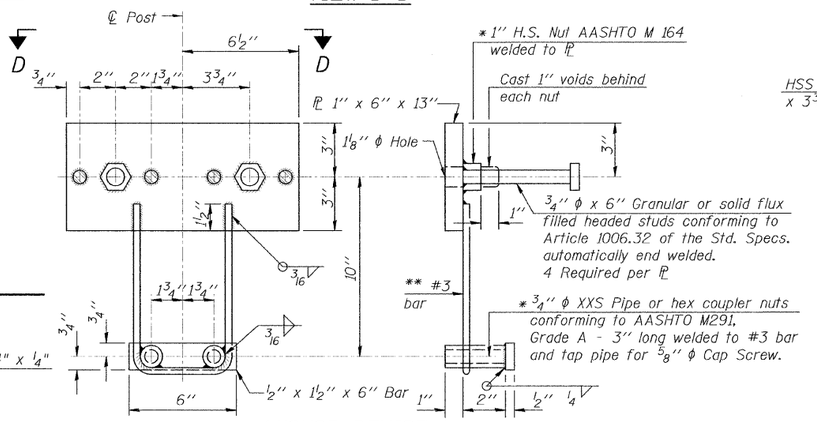


SECTION B-B

** 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 1/2".

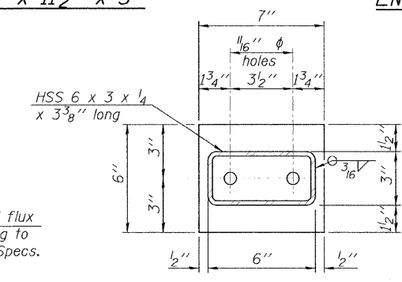


SECTION AT RAILING POST

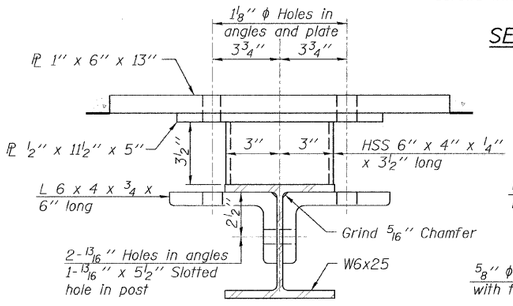


ANCHOR DEVICE

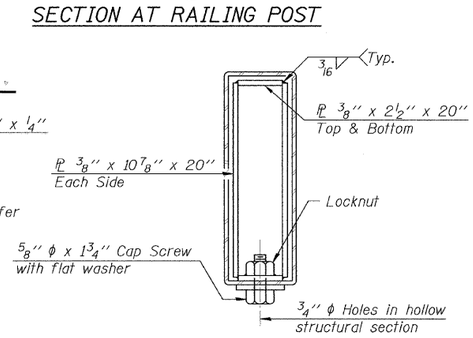
* Threaded areas shall be plugged or blocked off during casting of beam.



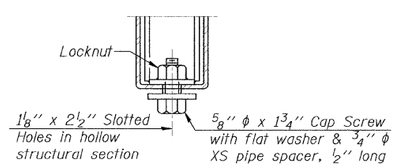
PL 1/2" x 7" x 6"



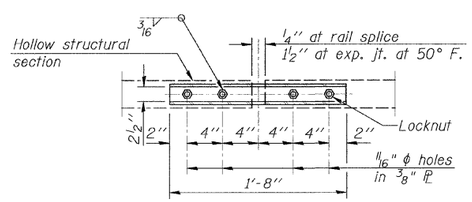
SECTION C-C



SECTIONS AT RAIL SPLICE



RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPLICE PL TYPICAL

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	180

STEEL RAILING TYPE S-1
S.N. 087-3571

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

Allen Henderson & Associates, Inc.
Civil and Structural Engineers Springfield, IL.
62703 Phone: (217)544-8033 IL. Design Firm
No. 184-001907

SHEET NO. 7
10 SHEETS

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
140	09-05118-00-BR	SHELBY	21	10
STR. NO. 087-3571		CONTRACT NO. 95628		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		