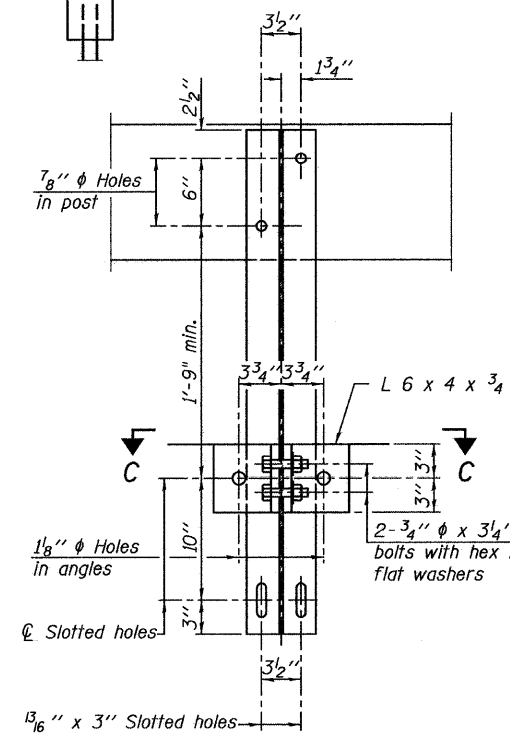
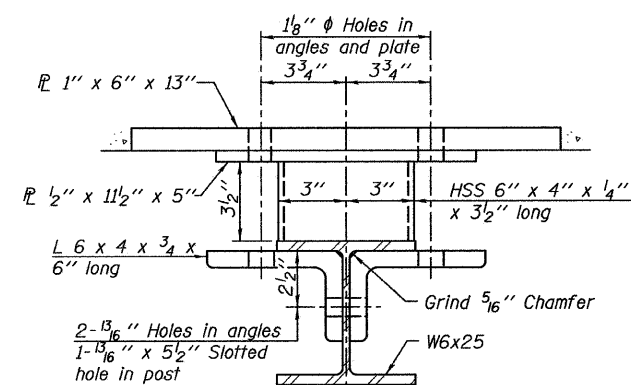


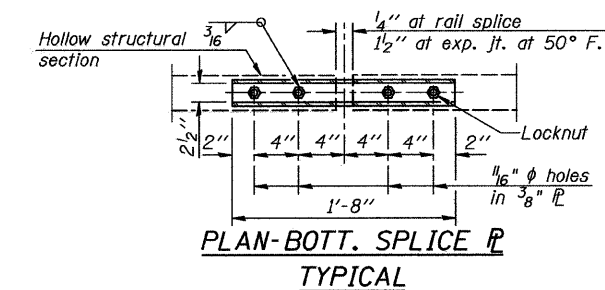
ELEVATION
(Showing Outside Face)



SECTION B-B



SECTION C-C

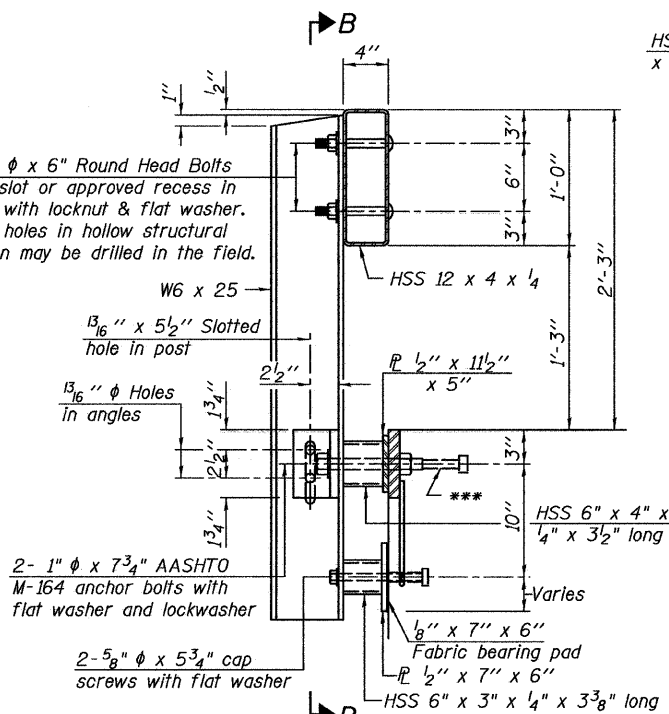


**PLAN-BOTT. SPLICE P
TYPICAL**

2-3/4" ϕ x 6" Round Head Bolts (With slot or approved recess in head) with locknut & flat washer. 7/8" ϕ holes in hollow structural section may be drilled in the field.

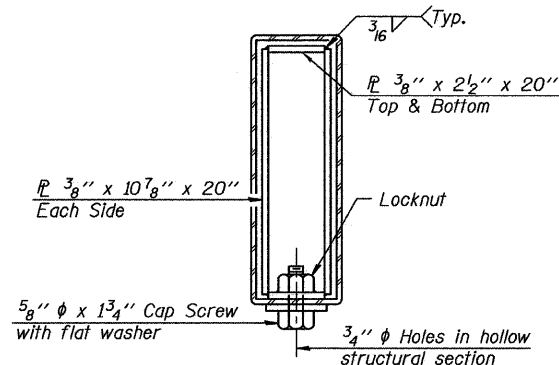
L 6 x 4 x 3/4

2-3/4" ϕ x 3 1/4" H.S. bolts with hex nut & flat washers

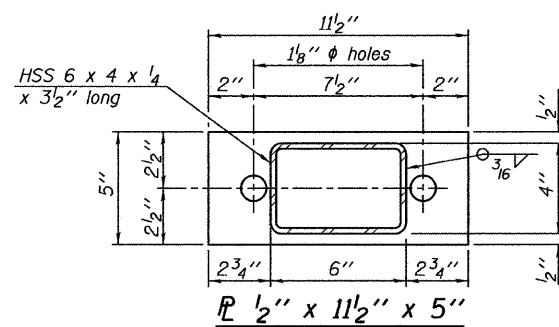


SECTION AT RAILING POST

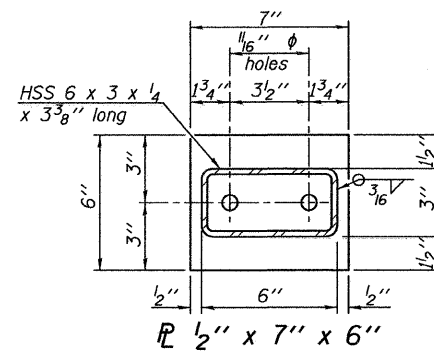
** Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".



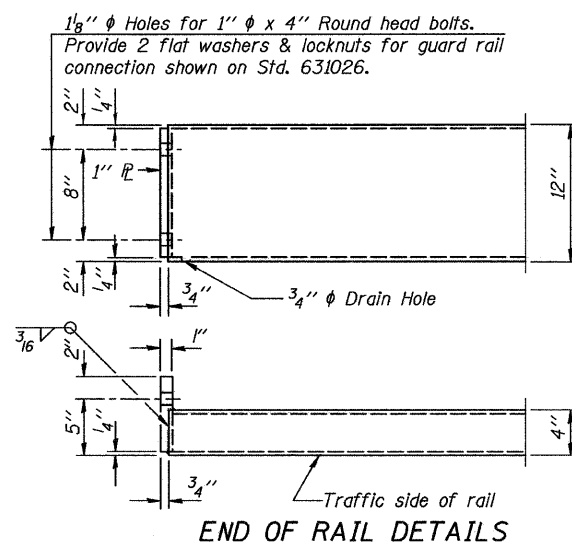
SECTIONS AT RAIL SPLICE



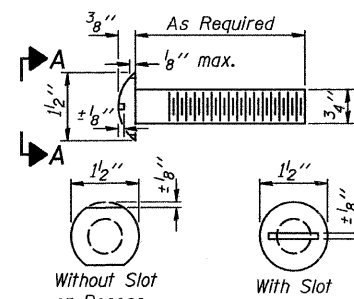
**VIEW A-A
ROUND HEAD BOLT**



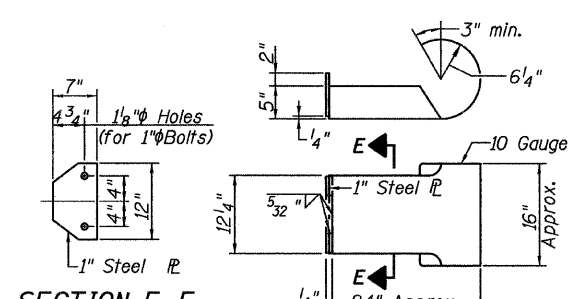
VIEW D-D



END OF RAIL DETAILS

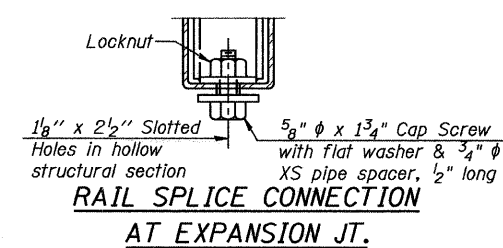


**VIEW A-A
ROUND HEAD BOLT**

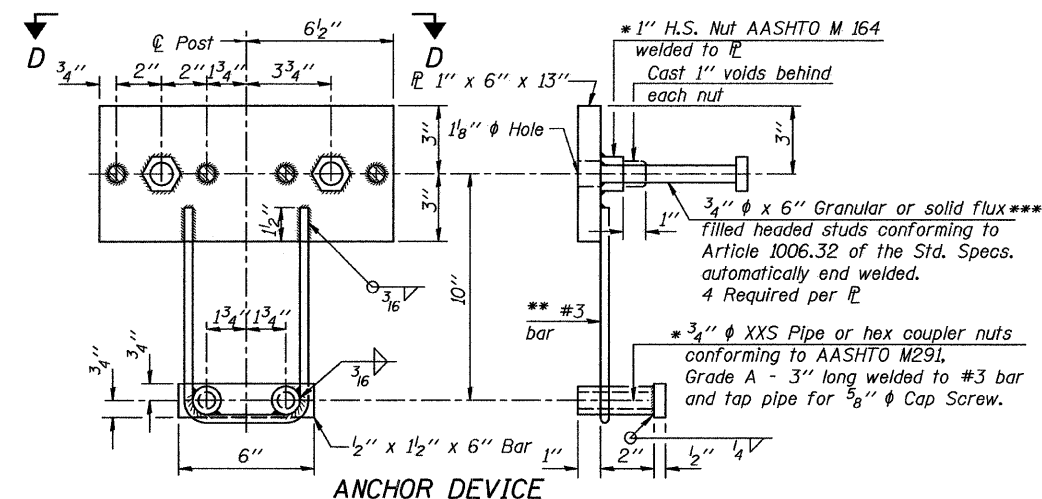


SECTION E-E

**CURLED END SECTION
DETAILS (4 Required)**



**RAIL SPLICE CONNECTION
AT EXPANSION JT.**



ANCHOR DEVICE

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

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

Railing shall be in accordance with Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for Steel Railing, Type S-1.

The cost of curled end sections shall be included in the cost of Steel Railing, Type S1.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S1	Foot	144

**STEEL RAILING, TYPE S-1
T.R. RTE. 81 OVER STREAM
SECTION NO. 05-10012-00-BR
JERSEY COUNTY**



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

SHEET NO. 4
8 SHEETS

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
81	05-10012-00-BR	JERSEY	19	8
CONTRACT NO. 97409				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				