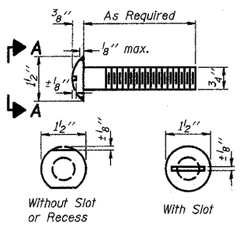
91334

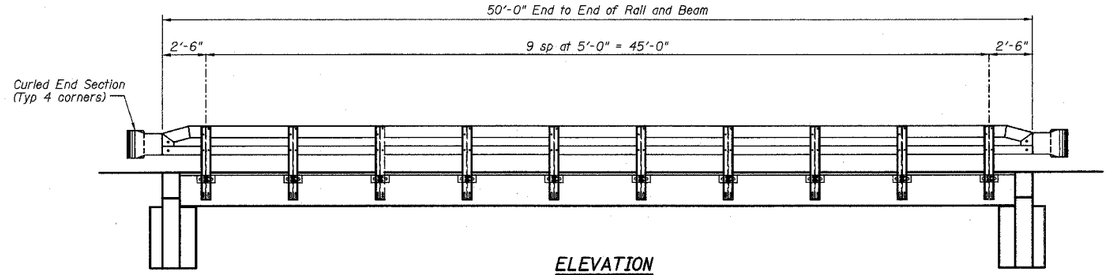
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 137A	*	EDGAR	18	8
FED.ROAD DIST.NO.		ILLINOIS	PROJECT	

*89-05126-00-BR

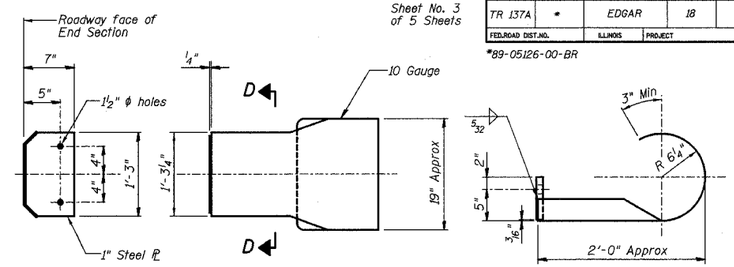
Sheet No. 3 of 5 Sheets



VIEW A-A ROUND HEAD BOLT



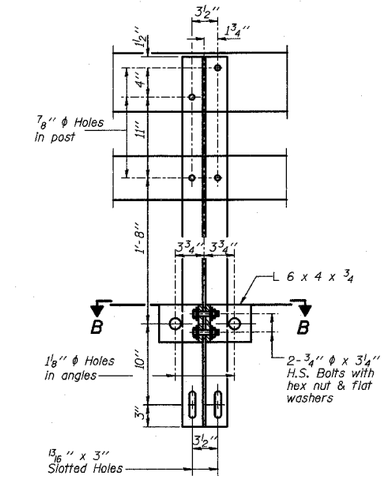
ELEVATION



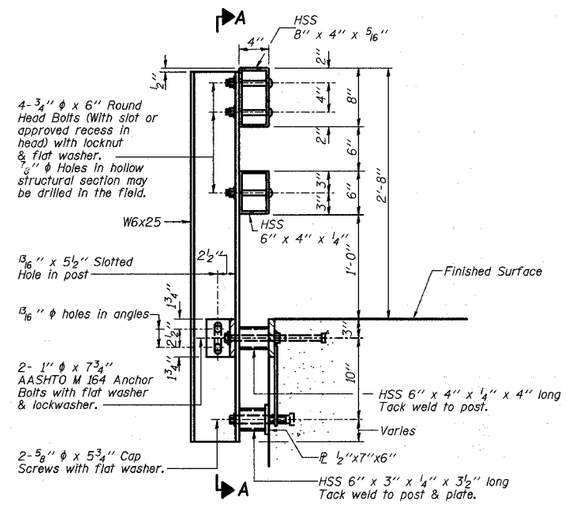
SECTION D-D

DETAILS OF CURLED END SECTION

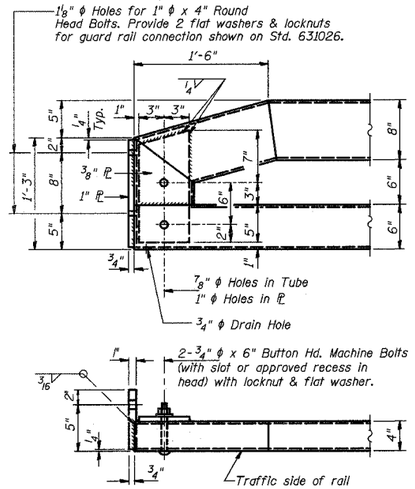
(Cost included with Steel Railing, Type SM)



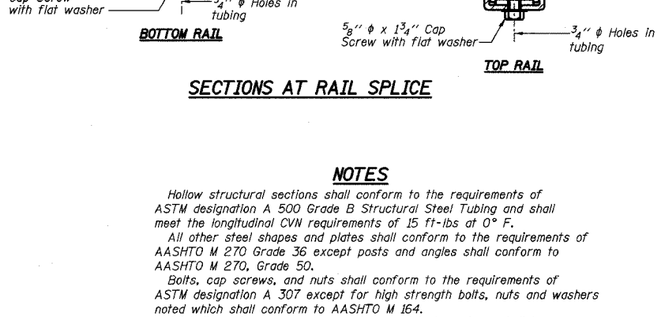
SECTION A-A



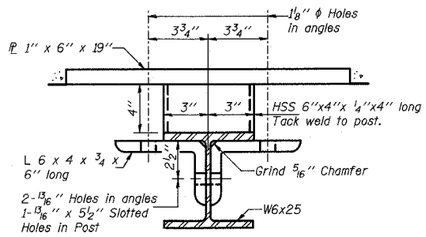
SECTION AT RAIL POST



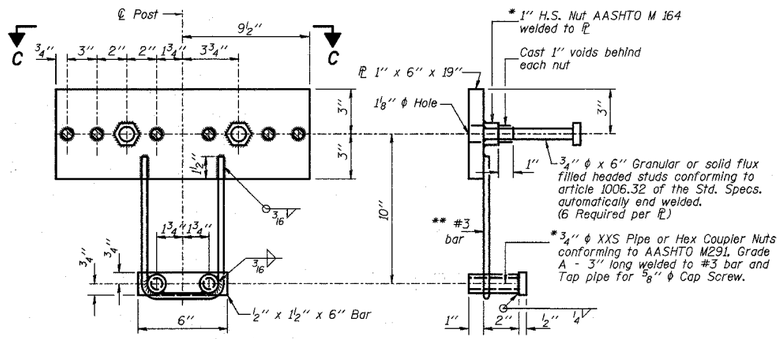
END OF RAIL DETAILS



SECTIONS AT RAIL SPLICE

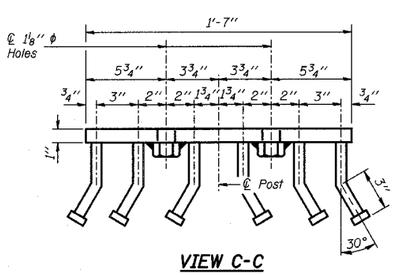


SECTION B-B



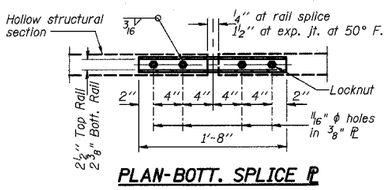
ANCHOR DEVICE

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

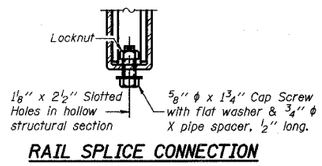


VIEW C-C

**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".



PLAN-BOTT. SPLICE ℙ TYPICAL



RAIL SPLICE CONNECTION AT EXPANSION JT.

NOTES

Hollow structural sections shall conform to the requirements of ASTM designation A 500 Grade B Structural Steel Tubing and shall meet the longitudinal CVN requirements of 15 ft-lbs at 0° F.

All other steel shapes and plates shall conform to the requirements of AASHTO M 270 Grade 36 except posts and angles shall conform to AASHTO M 270, Grade 50.

Bolts, cap screws, and nuts shall conform to the requirements of ASTM designation A 307 except for high strength bolts, nuts and washers noted which shall conform to AASHTO M 164.

All bolts, nuts, cap screws, washers and lock washers shall be galvanized according to AASHTO M 232.

All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication according to AASHTO M 111 and ASTM A 385. Galvanized rail shall not be painted.

Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for Steel Bridge Rail, Type SM.

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

The 1/2" x 7" x 6" plates that come in contact with concrete shall receive two coats of asphalt paint conforming to Section 1060.07 Type II or place 1/8" fabric bearing pads between the plates and concrete.

The 3/4" ϕ high strength bolts used to connect the 6 x 4 x 3/4 angles to the post shall be tightened according to Article 505.04(f)(2) of the Standard Specifications. The 1" ϕ high strength bolts connecting the angles to the concrete shall be tightened to a snug fit and given an additional 1/8 turn. The 5/8" ϕ cap screws in bottom of posts shall be tightened to a snug fit only.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Bridge Rail, Type SM	Foot	100

TYPE SM STEEL BRIDGE RAIL SIDE MOUNTED

REVISIONS		
No.	DATE	INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

TR 137A OVER TRIBUTARY OF CATFISH CREEK

TR 137A SEC 89-05126-00-BR

SN 023-4424

EDGAR COUNTY

HOMER L. CHASTAIN & ASSOCIATES, LLP
CONSULTING ENGINEERS
184-001397

DRAWN BY / DATE	R King 11/04
CHECKED BY / DATE	JMB 11/04
QA/QC BY / DATE	CWC 11/04
BOOK NUMBER	469
PROJECT No.	4817
SHEET No.	

R-34 9-01-03 (6'-3" Maximum Post Spacing)