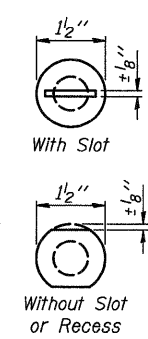
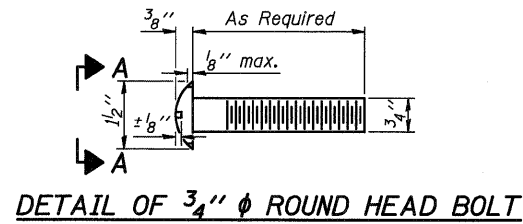
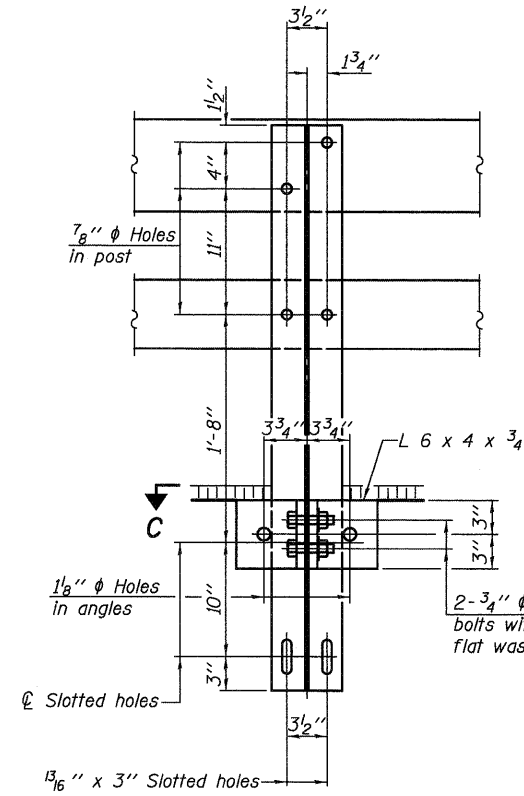


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

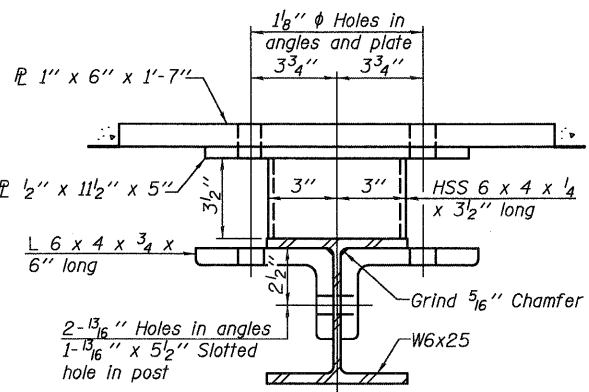


VIEW A-A

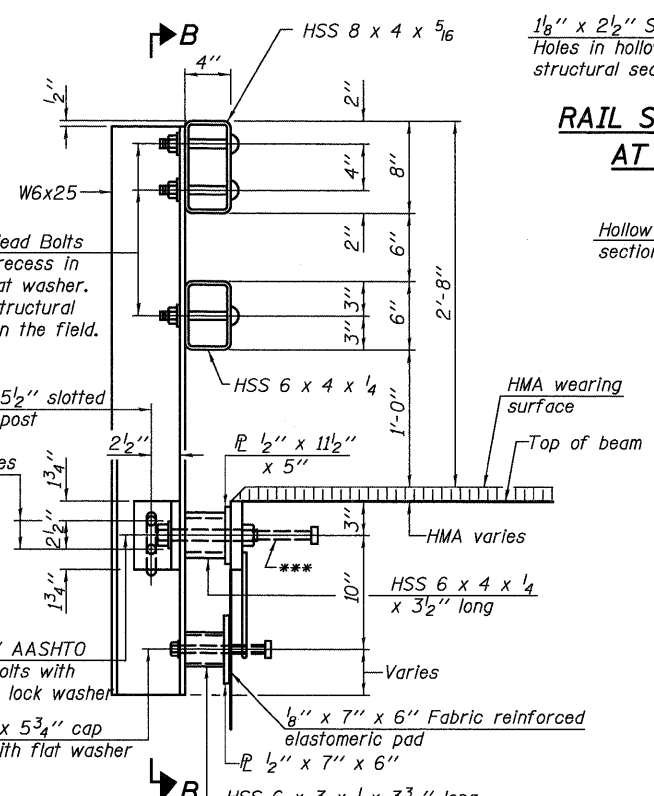
4-3/4" ϕ x 6" Round Head Bolts
(With slot or approved recess in head) with locknut & flat washer.
7/8" ϕ holes in hollow structural section may be drilled in the field.



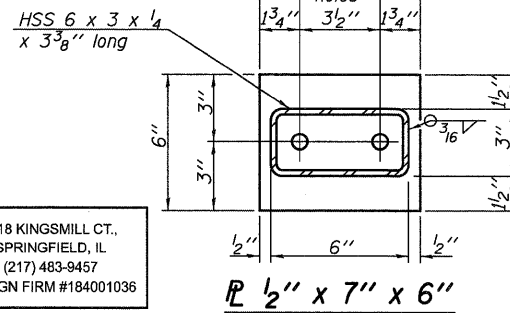
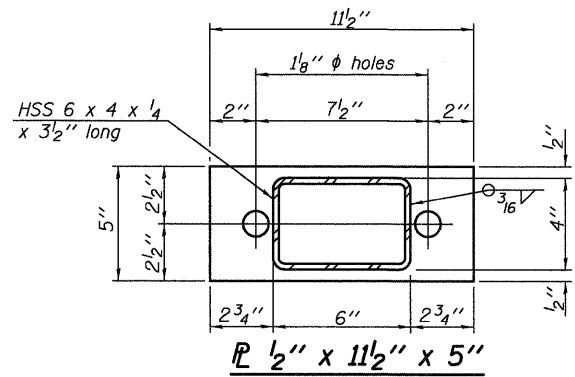
SECTION B-B



SECTION C-C



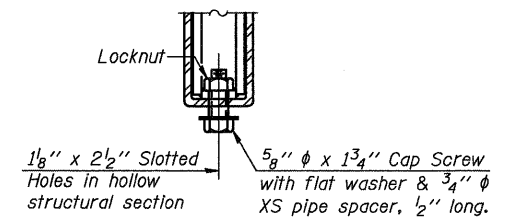
SECTION AT RAIL POST



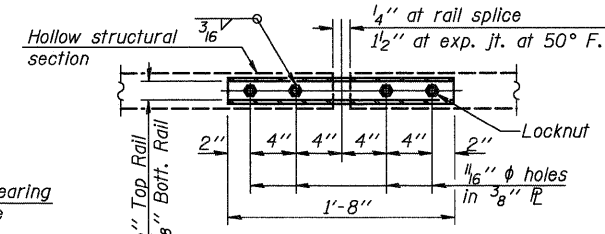
| |
|----------------|
| DESIGNED - CMV |
| CHECKED - SDS |
| DRAWN - DLH |
| CHECKED - CMV |

WHKS & CO.
ENGINEERING
7018 KINGSMILL CT.,
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

R-34HMAWS 5-16-08 (6'-3" Maximum Post Spacing) (1 1/4" minimum to 3/8" maximum HMA thickness)

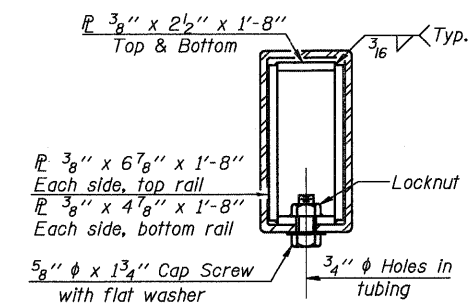


RAIL SPLICE CONNECTION
AT EXPANSION JT.



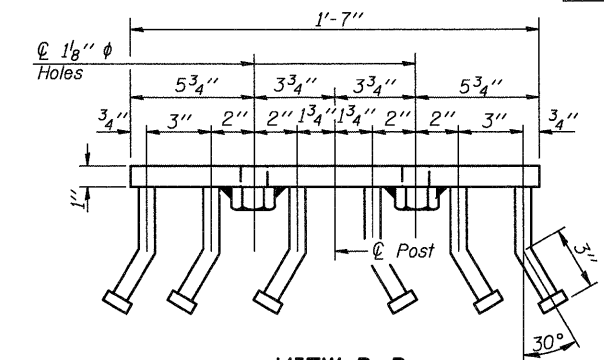
PLAN-BOTTOM. SPLICE P TYPICAL

1/8" x 2 1/2" Slotted Holes in hollow structural section
5/8" ϕ x 1 3/4" Cap Screw with flat washer & 3/4" ϕ XS pipe spacer, 1/2" long.

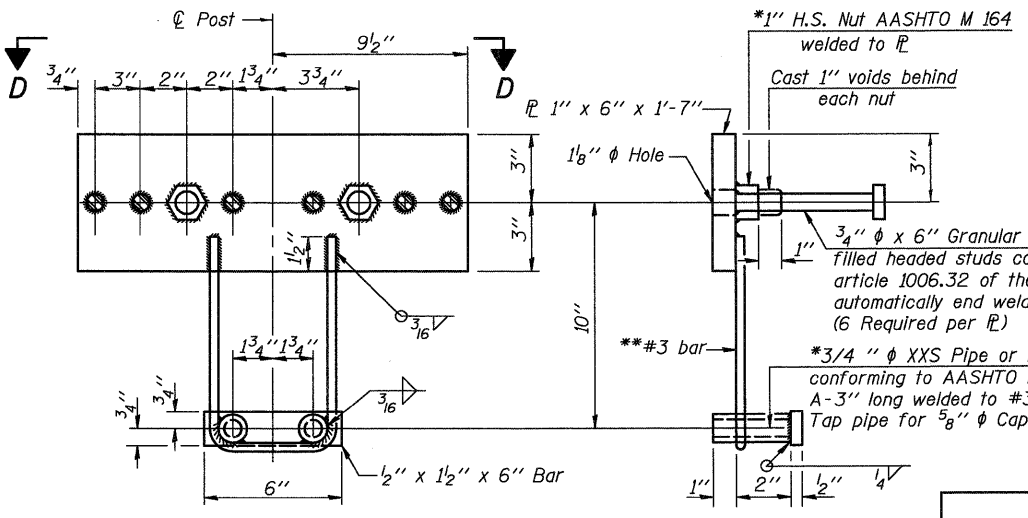


SECTION AT RAIL SPLICE

3/8" x 2 1/2" x 1'-8" Top & Bottom
3/16" Typ.
3/8" x 6 7/8" x 1'-8" Each side, top rail
3/8" x 4 7/8" x 1'-8" Each side, bottom rail
5/8" ϕ x 1 3/4" Cap Screw with flat washer
3/4" ϕ Holes in tubing

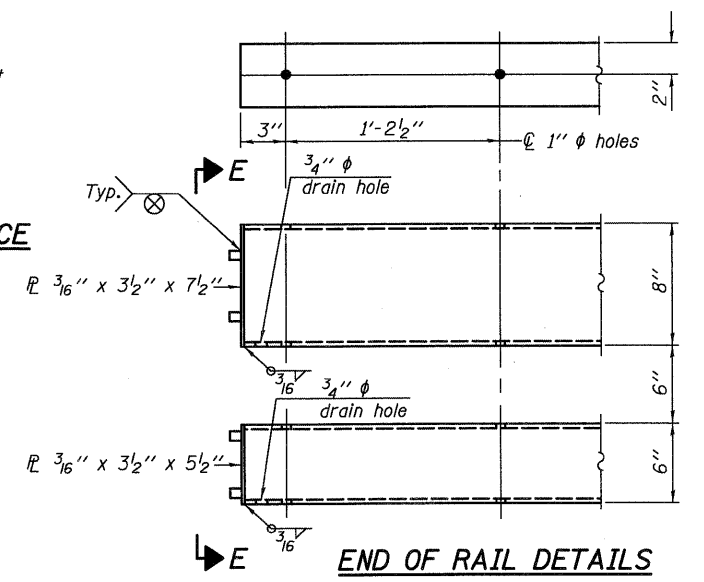


VIEW D-D

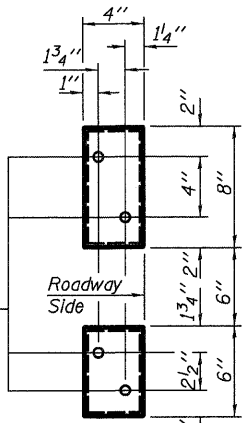


ANCHOR DEVICE

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



END OF RAIL DETAILS



VIEW E-E

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 SM.
All steel rail members 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.

**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".

BILL OF MATERIAL

| Item | Unit | Quantity |
|------------------------|------|----------|
| Steel Railing, Type SM | Foot | 303 |

STEEL RAILING, TYPE SM WITH HOT-MIX ASPHALT WEARING SURFACE
PAWNEE ROAD (FAS 1622)
OVER BRUSH CREEK

| | | | | | |
|---|------------------|------------------------|--------------------|-----------------|-------------|
| SHEET NO. 5 | F.A.S. RTE. 1622 | SECTION 07-00100-00-BR | COUNTY SANGAMON | TOTAL SHEETS 16 | SHEET NO. 9 |
| 12 SHEETS | S.N. 084-3037 | | CONTRACT NO. 93506 | | |
| FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT | | | | | |