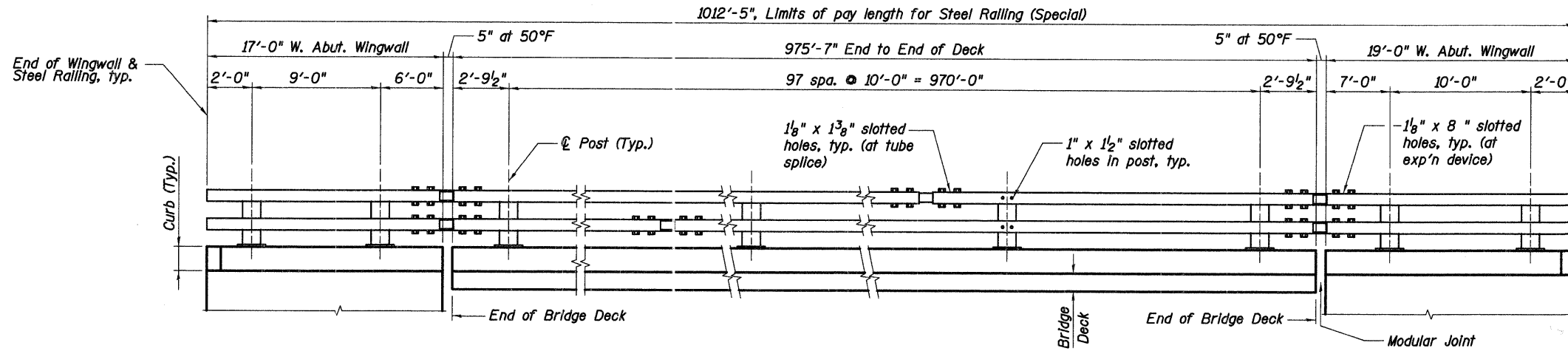


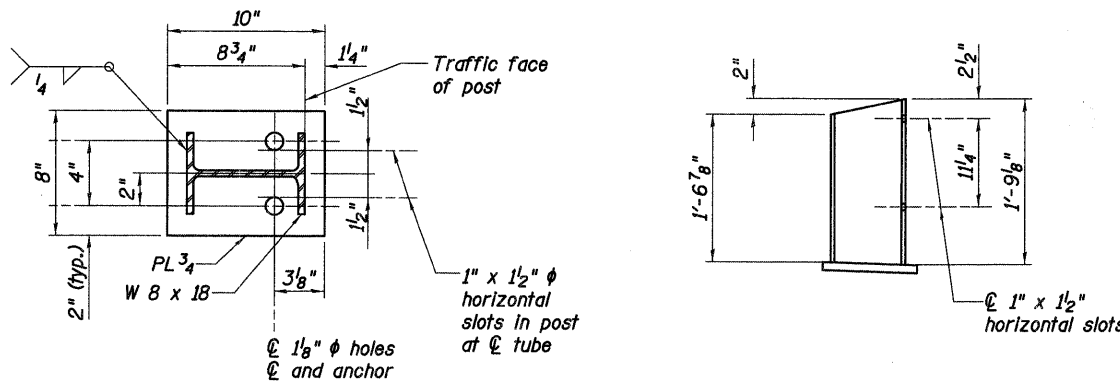
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
361	06-00214-20-BR	KANE	320	128
STA. 511+80.00		TO STA. 609+14.92		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				
SHEET NO. S23 OF S108				



ELEVATION - INSIDE FACE OF BRIDGE RAIL
(looking north, north rail shown, south rail similar)

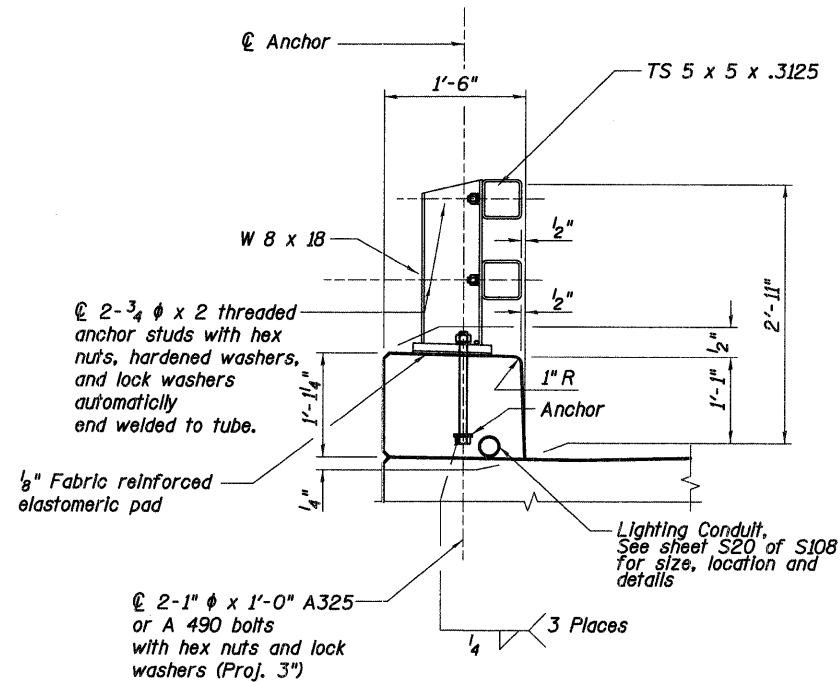
Structural Steel:
 AASHTO M-183 (ASTM A-36) $f_y = 36,000 \text{ psi}$
 AASHTO M-223 (ASTM A-572) GRADE 50 $f_y = 50,000 \text{ psi}$
 COLD FORMED ASTM A-500 GRADE B $f_y = 46,000 \text{ psi}$

- NOTES:**
- All tubes shall be ASTM A-500 Grade B.
 - All posts and base plates shall be ASTM A-572 Grade 50.
 - All other steel shall be ASTM A-36 unless otherwise noted.
 - The material listed in notes 1 thru 3 shall be painted using the Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System. The finish coat shall be Federal Standard 595B, color #14062; submit paint chips to the Engineer for approval prior to ordering any finish coat material.
 - All anchor bolts and miscellaneous bolts, nuts and washers shall be galvanized after fabrication according to AASHTOM111 or M232.
 - Post anchor, encased in concrete, shall be ASTM A-36 (AASHTO M-183) steel and need not be galvanized.
 - Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.
 - Tubes shall be continuous over not less than two posts. No welded butt splices will be allowed in the tube sections.
 - The centerline of the tube splice shall be 1'-8" minimum and 2'-6" maximum from the centerline of the posts.
 - All bolts that have lock washers shall be tightened to snug only.
 - Posts shall be perpendicular to the longitudinal roadway grade.
 - Cost of curb concrete included with Concrete Superstructure.
 - For curb reinforcement on bridge deck see sheets S14 to S19 of S108.
 - For modular expansion joint details see sheet S34 of S108.
 - For additional steel railing details see sheet S24 S108
 - For curb reinforcement on wingwalls see sheets S36 and S38 of S108.

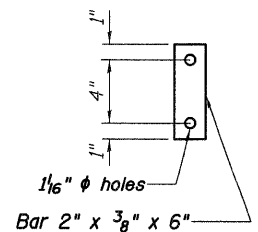


PLAN - POST DETAIL

ELEVATION



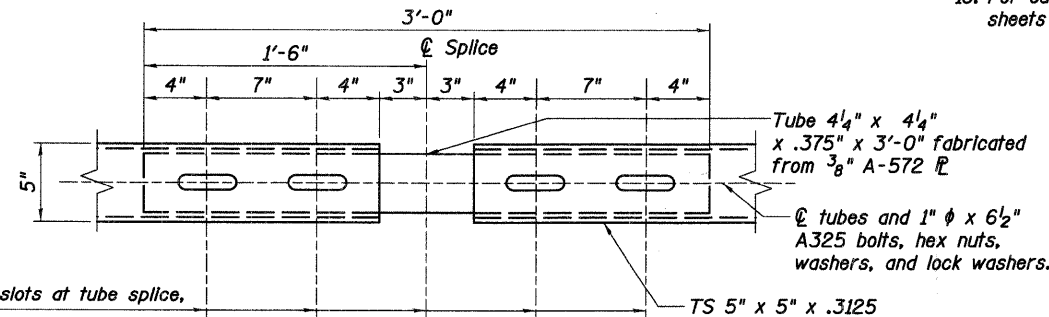
SECTION THRU BRIDGE RAIL



ANCHOR DETAIL

1/16" ϕ holes
 Bar 2" x 3/8" x 6"

1/16" x 1 3/8" slots at tube splice, and 1/8" x 4 1/4" slots at modular joint. Slot both inner and outer tubes. Stagger top and bottom splices into different post spacings except at modular joint, place at opposite ends of same post space. (Range of motion = 1'-0" at modular joint.)



PLAN - TUBE SPLICE

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing (Special)	Foot	2,025

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STEEL RAILING DETAILS I

STEARNS ROAD PUBLIC
 OVER THE FOX RIVER WATERS
 STRUCTURE NUMBER 045-3166

KANE COUNTY FAP 361 SECTION 06-00214-20-BR
 STATION 571+42.96 DESIGNED: GWG DRAWN: JB
 DATE: JANUARY 16, 2009 CHECKED: KPZ CHECKED: KPZ

Baker

Baker Engineering, Inc.