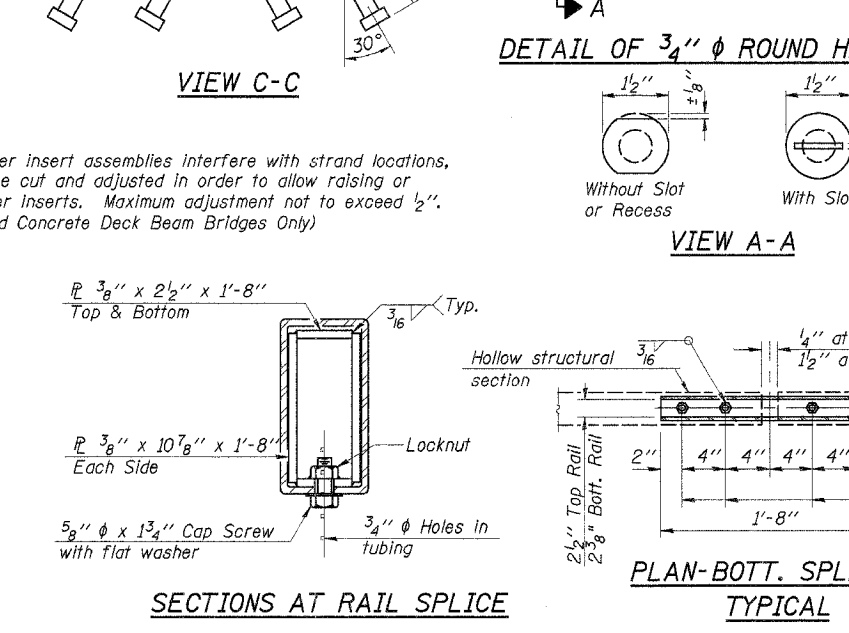
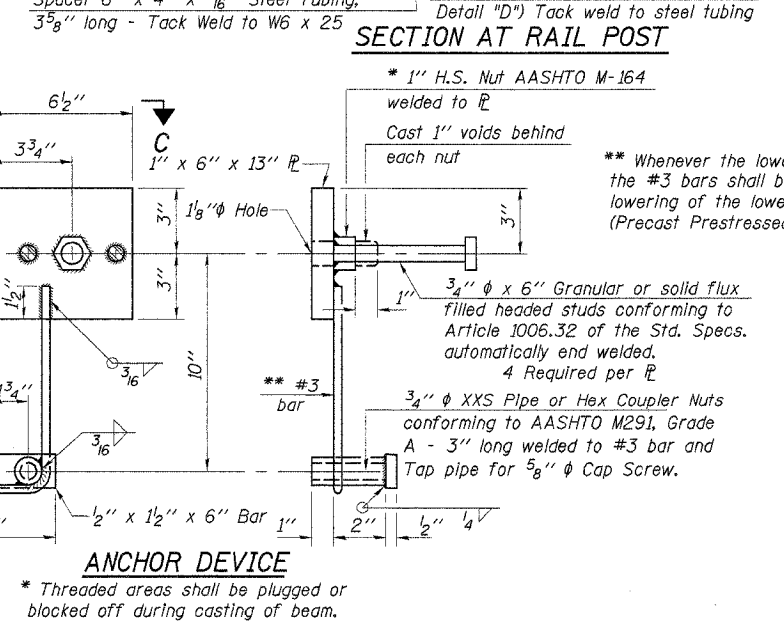
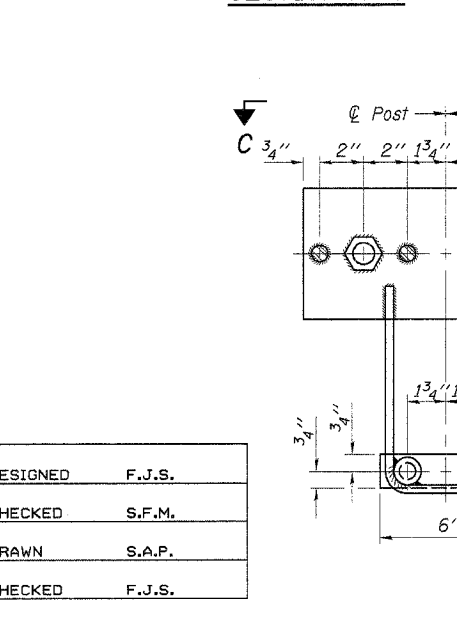
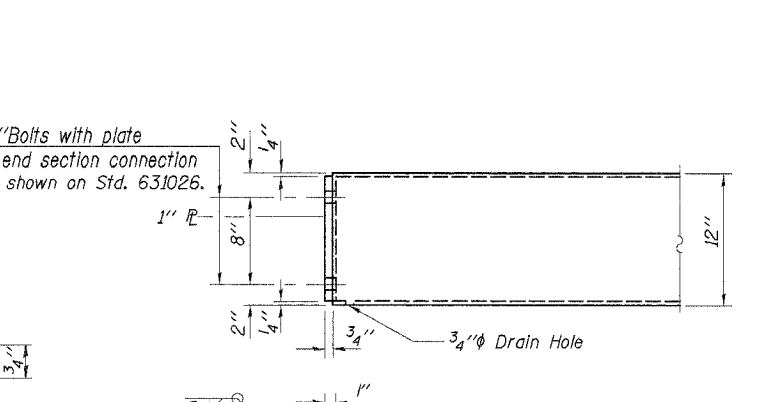
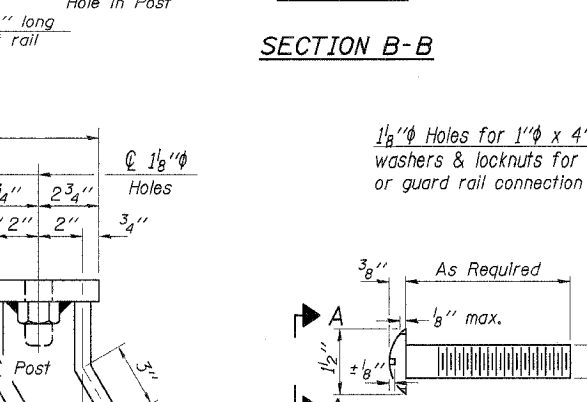
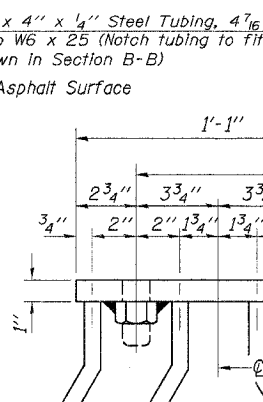
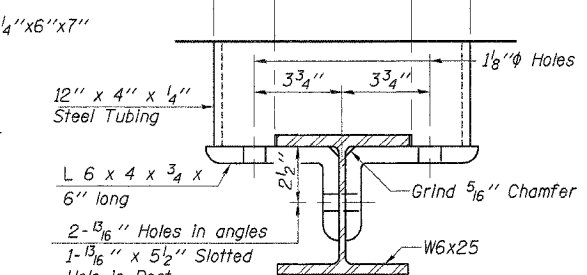
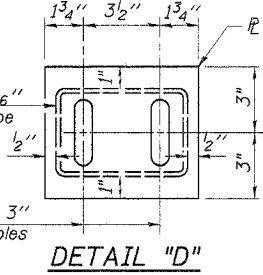
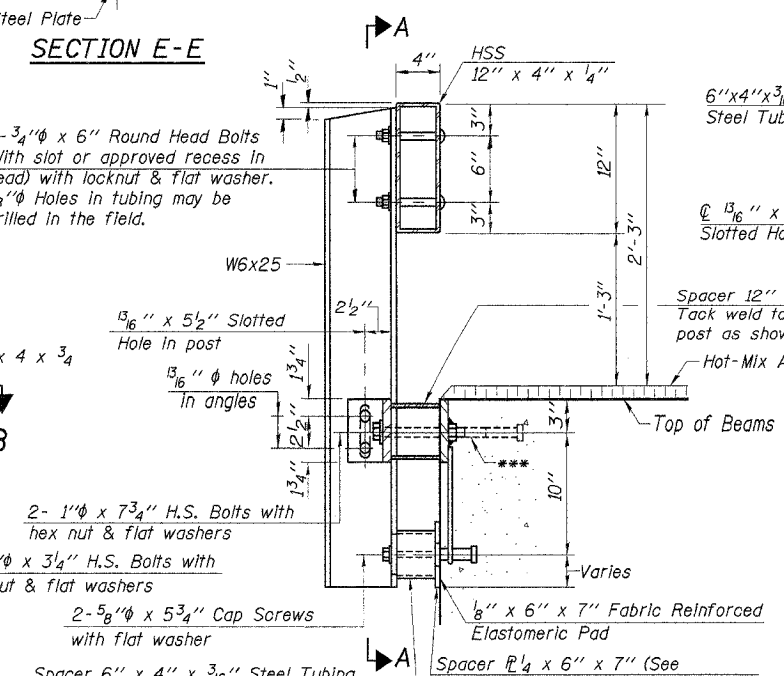
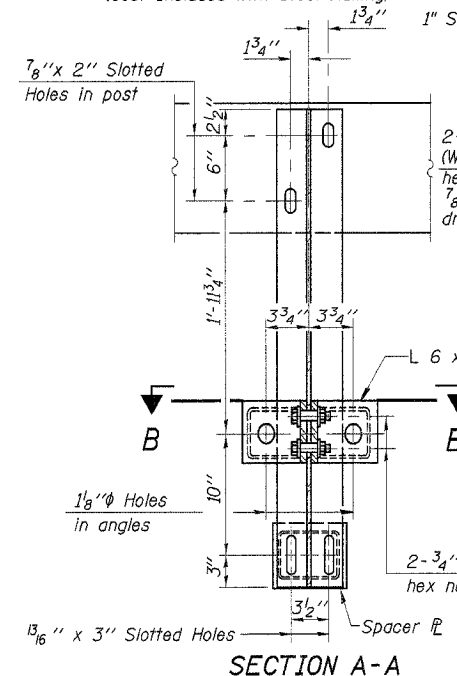
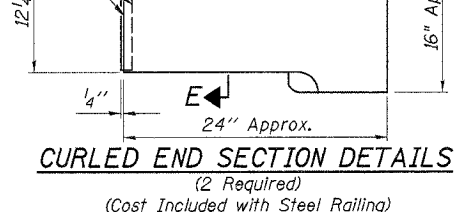
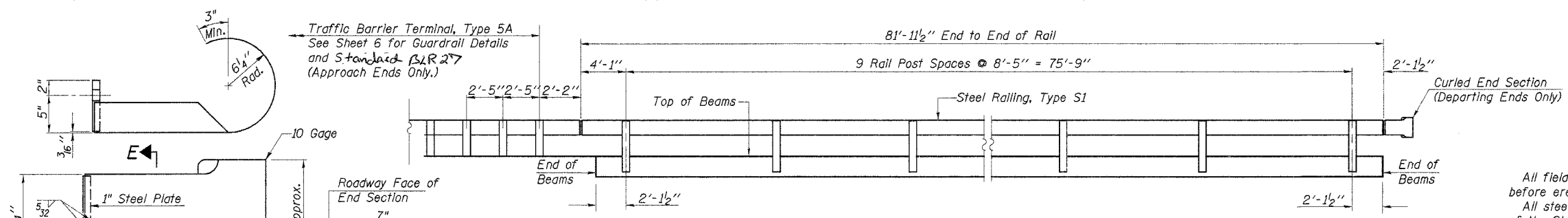


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 11	08-00022-00-BR	PUTNAM	23	9
ILLINOIS				

CONTRACT NO. 89434



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. In addition to the elements specified in Article 509.05, all angles and spacers are to be galvanized in accordance with AASHTO M-111, and all cap screws, washers, and lock washers are to be galvanized in accordance with AASHTO M-232.
 The 3/4" (M20) diameter high strength bolts used to connect the 6x4x3/4" angles to the post shall be tightened in accordance with Article 504.04(f)(2) of the Standard Specifications. The 1" (M24) diameter high strength bolts connecting steel to concrete shall be brought to a snug tight condition and given an additional 1/8 turn. The 5/8" (M16) cap screws in the bottom of the posts shall be brought to a snug tight condition only.
 *** The studs for 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 S1	Foot	164

STEEL RAILING, TYPE S1

COUNTY HIGHWAY 11
 SECTION 08-00022-00-BR
 PUTNAM COUNTY
 STATION 27+43

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8800 www.fehr-graham.com	FEHR-GRAHAM & ASSOCIATES, LLC ENGINEERING AND SCIENCE CONSULTANTS PREPARED BY: ROBERT L. BOGGS, P.E., ROBERT L. BOGGS, P.E., ROBERT L. BOGGS, P.E.	JOB NO.: 46856 FILE: RAIL.dgn DATE: 04/12/07
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DESIGNED	F.J.S.
CHECKED	S.F.M.
DRAWN	S.A.P.
CHECKED	F.J.S.