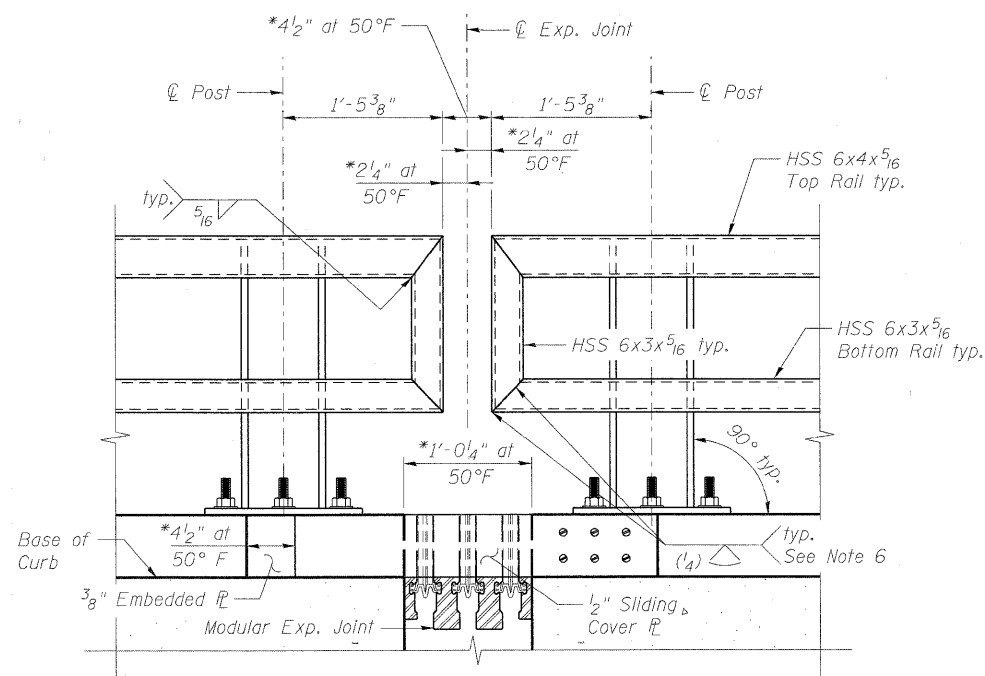
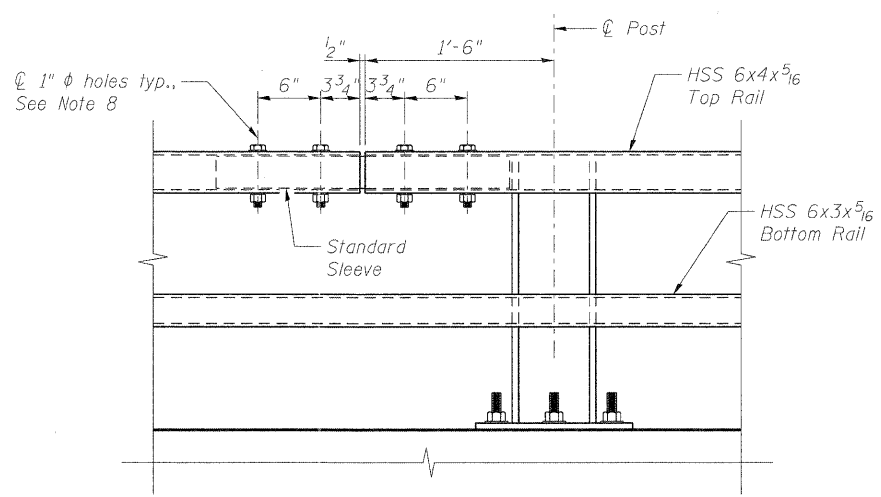


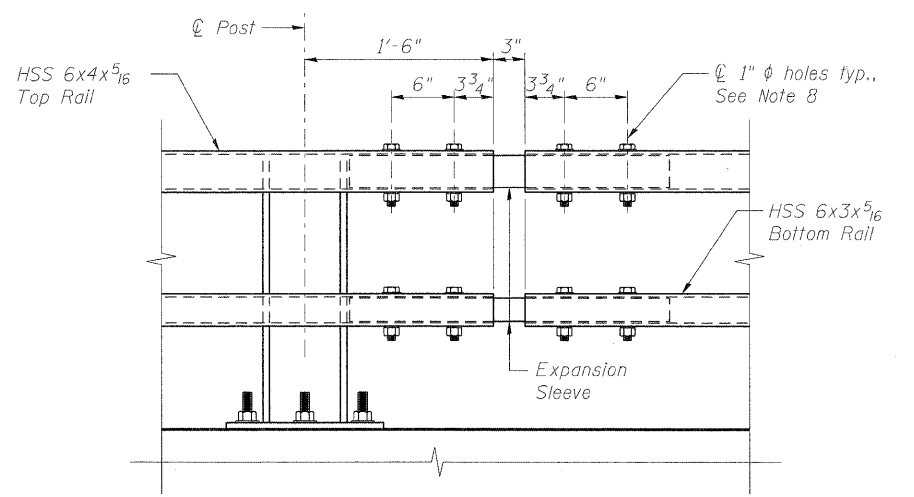
RAILING END TERMINAL DETAIL AT WEST MODULAR JOINT



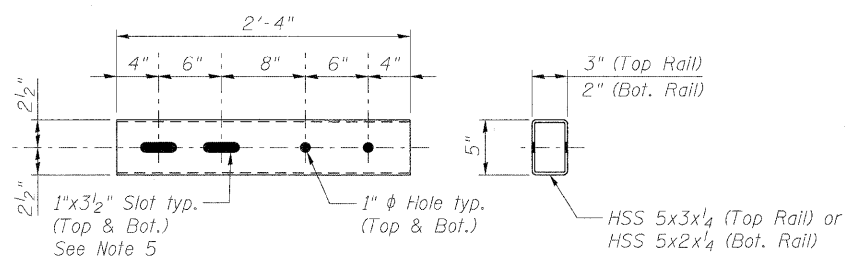
RAILING END TERMINAL DETAIL AT EAST MODULAR JOINT



STANDARD SPLICE
(Top or bottom rail)



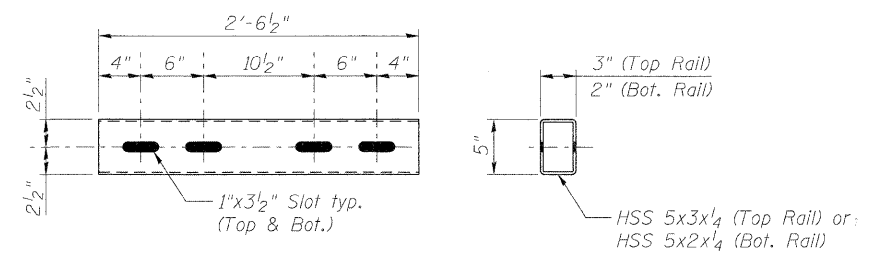
EXPANSION SPLICE



TOP VIEW

END VIEW

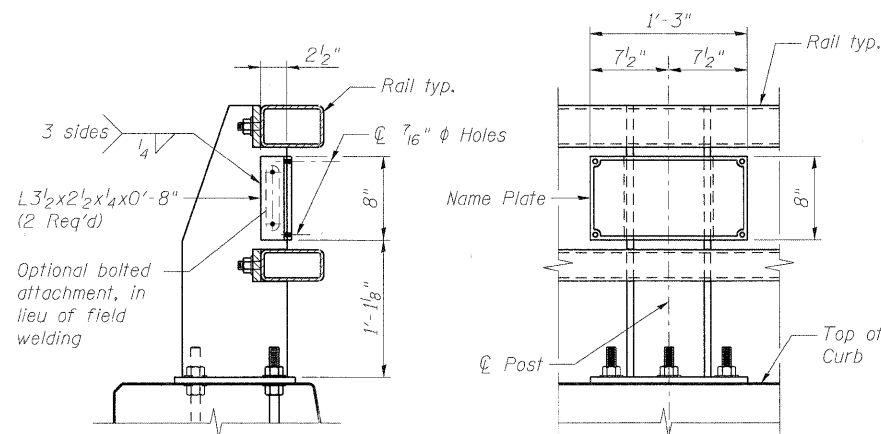
STANDARD & DOUBLE-BOLTED SLEEVE DETAILS



TOP VIEW

END VIEW

EXPANSION SLEEVE DETAILS



SIDE VIEW

FRONT VIEW

NAME PLATE MOUNT DETAILS

(See Std. 515001 for Name Plate Details, cost of mounting name plate shall be included in the cost for "Name Plate")

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Steel Railing (Special)	Foot	3,087

This quantity also includes 673 feet of steel railing along Red Gate Road between SN 045-6024 and SN 045-6019.

NOTES:

- Splices may be located on either side of post.
- Not more than one splice is permitted per side of post, except at expansion splices.
- Shop splices of rails are not permitted.
- Center to center post spacing shall be a maximum of 9'-3" and a minimum of 7'-0". Edge of base plate shall not be less than 6" from any cold joint or curb discontinuity including the back of abutment or end of approach slab.
- Rails shall be continuous over a minimum of two posts. Rails at end terminals are considered continuous if either the top or bottom rail in the terminal is continuous over a minimum of two posts.
- Fabricator shall prepare a macroetched sample of the indicated joint to demonstrate that the required effective throat is achieved.
- Drill 1" diameter holes in Rails for 3/4" diameter x 5 1/2" bolts (Top Rail) and 3/4" diameter x 4 1/2" bolts (Bot. Rail). Bolts shall be A325 H.S. with hex nut, washer and lock washer. Wrench tight, do not crush rail.
- An expansion splices shall be located over the joint at the west end of the west approach slab of SN 045-6019, joining the bridge railings with the railings placed along the roadway.
- Top and bottom rails shall be curved to match the radius at the flow line of curb.
- Cover plates shall be mounted towards oncoming traffic.
- Either top or bottom rail in the terminal section may be the longer rail.
- Brace bars shall be placed 2'-0" from the splice end of the shorter tube at end terminals. See Sheet S13 for details.

benesch
engineers - scientists - planners
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10092

FILE NAME = 0456024_014_WgoRail12.dgn	USER NAME = akoeschall	DESIGNED - MFH	REVISIONS -
PLOT SCALE =	PLOT DATE = 11/9/2011	CHECKED - AJK	REVISIONS -
		DRAWN - RMG	REVISIONS -
		CHECKED - AJK	REVISIONS -



CITY OF ST. CHARLES

2-TUBE RAILING DETAILS (2 OF 2)
STRUCTURE NO. 045-6024 RED GATE ROAD OVER THE FOX RIVER
SHEET NO. S14 OF S56 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	04-00092-00-BR	KANE	440	236
			CONTRACT NO. 63650	
ILLINOIS FED. AID PROJECT				

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