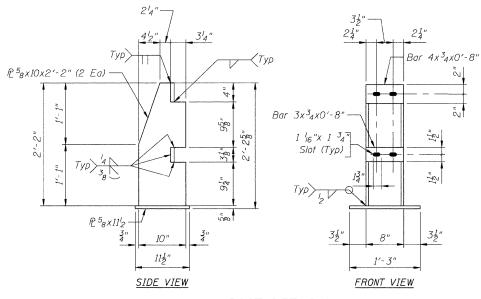


ASSEMBLY DETAIL

(Shown near € Post) (Bridge slab shown, approach slab similar)



3'-0"

Bar 21/2x3/8x3'-0" (Typ)

Bar $2^{l}_{2}x^{3}_{8}x1'-2"$ (Typ)

 $\int_{-1}^{1} I_2$ " R Notch

5 Alt Spa 🛭 4" = 1'-8"

(Typ)

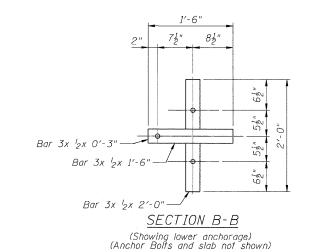
SECTION B-B

(Showing upper anchorage) (Anchor Bolts and slab not shown)

7<u>1</u>"

POST DETAILS (See View A-A for anchor bolt hole spacing)

-Bar ⁵8¢x0′-8½" ⁵₁₆ x2 x0'-5 ¹₂" P Washer w/ ⁷₈"\$ Holes (Centered) Lock Washer (Typ) Hex Nut (Tyρ) 55" RAIL BOLT DETAIL



Clear Roadway 1'-8" 53" 112" 71" -FF Curb - £ 5₈ x 11½ x 1′-3" -1¹⁄₄"\$ Hole (Typ) 73" 71"

> VIEW A-A (anchor bolts, rails and rail bolts not shown)

- Note: 1) Anchor bolts may be tack welded to lower anchorage (Shop or field). 2) At post locations, drill two $1_{16}^{\prime\prime}$ ϕ holes in the rails to receive rails
 - bolts (Shop or field). See Post Details for hole spacing 3) Before installing rails, paint all cut, drilled or otherwise damaged
 - surface areas of the railing components with two coats of zinc rich paint conforming to the requirements of ASTM A 780
 - 4) After installing the rails, paint all exposed bolt threads with two coats of zinc rich paint conforming to the requirements of ASTM A 780.
 - 5) Steel components shall be galvanized according to AASHTO M111, unless noted otherwise.
 - 6) Shim Plates shall be provided in accordance with Article 509.05(a) of the Standard Specifications.

BILL OF MATERIAL

Item	Unit	Total
Steel Railing (Special)	Foot	282

1170 SOUTH HOUBOLT ROAD USER NAME = brianf JOLIET, ILLINOIS 60431 STRAND (815) 744-4200

DESIGNED RRD REVISED CHECKED AJS REVISED PLOT SCALE = DRAWN BJF REVISED PLOT DATE = 1/3/2012 CHECKED RRD REVISED

MCHENRY COUNTY DIVISION OF TRANSPORTATION HILL ROAD BRIDGE OVER NORTH BRANCH NIPPERSINK CREEK

WYOMING 2-TUBE BRIDGE RAILING DETAILS (1 OF 2) STRUCTURE NO. 056-3192 SHEET NO. 8 OF 18 SHEETS

COUNTY TOTAL SHEE SHEETS NO. SECTION MCHENRY 67 38 21 08-00356-00-BR CONTRACT NO. 63666 ILLINOIS FED. AID PROJECT