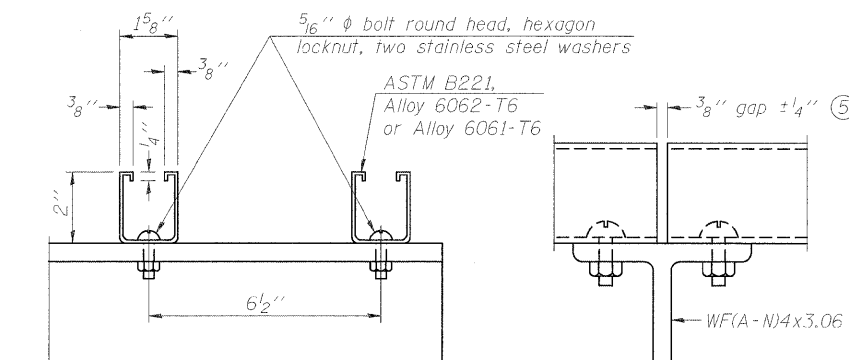
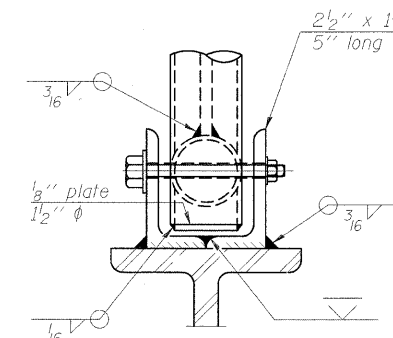
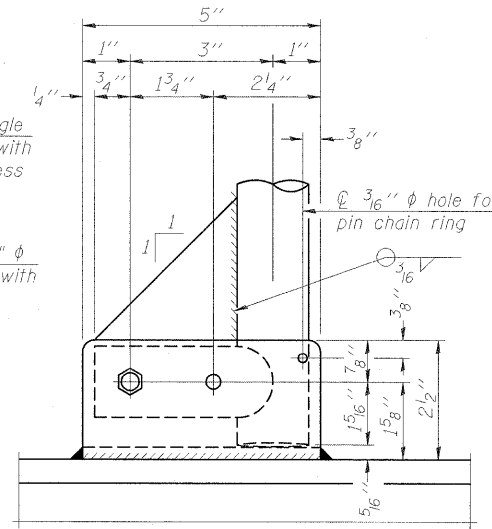
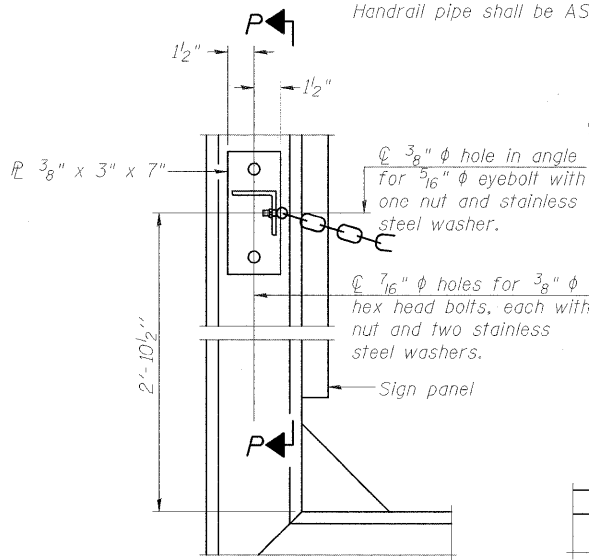


HANDRAIL DETAILS

Handrail pipe shall be ASTM B241 or B429, Alloy 6063-T6 or Alloy 6061-T6.

① Install standard force-fit end caps or weld 1/8" end plates with 1/8" c.f.w. and grind smooth. (All rail ends)
② Horizontal handrail member shall be continuous thru fitting. Provide 7/16" φ hole in fitting for 3/8" φ bolt. Field drill 7/16" φ hole in horizontal rail member. Provide locknut and two stainless steel washers for bolt. (Use 5/16" eyebolts in 7/16" φ holes on top rail at ends only.)

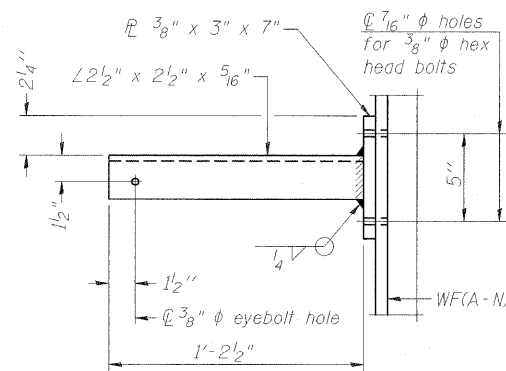


SECTION F-F and SECTION G-G LIGHTING FIXTURE MOUNTS (IF REQUIRED)

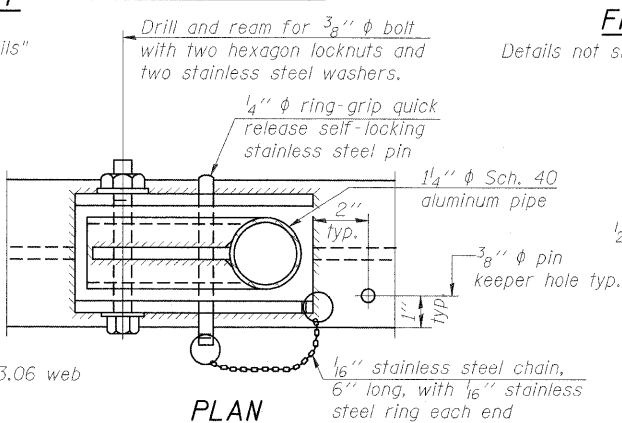
⑤ Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.

ALTERNATE SAFETY CHAIN ATTACHMENT

(With Sign Present)
Items not shown same as "Side Elevation" of "Handrail Details"



SIDE ELEVATION

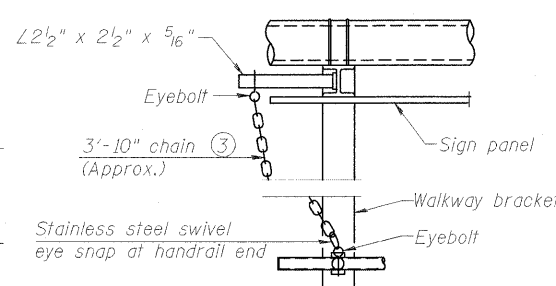


FRONT ELEVATION

Details not shown same as "ELEVATION" at right.

ELEVATION AT HANDRAIL JOINT ④

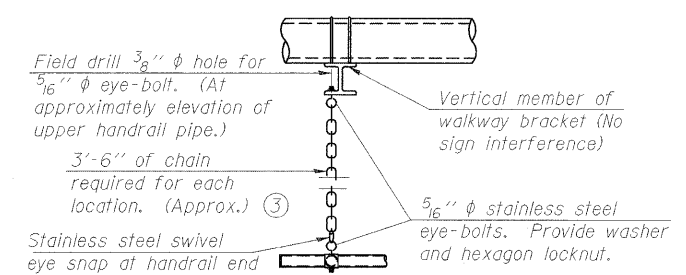
Details not shown same as "FRONT ELEVATION"



ALTERNATE SAFETY CHAIN ATTACHMENT

Details not shown similar to "Safety Chain" Details (Walkway omitted for clarity)

- ③ 3/16" Type 304L stainless steel chain, approximately 12 links per foot.
- ④ Extrusions may be used in lieu of the details shown, with approval of the Engineer.



SAFETY CHAIN

One required for each end of each walkway.

PLAN AT HANDRAIL JOINT

Details not shown same as "PLAN"

OSC-A-8

9-15-11

FILE NAME = ...D978182-sht-sign181-Cantilever-OSC-A-8.dgn	USER NAME = Rob Heady	DESIGNED - JH	REVISED -
PLOT SCALE = 50.0000' / IN.	CHECKED - SD	DRAWN - JH	REVISED -
PLOT DATE = 10/7/2011	DATE - 10/07/11	CHECKED - SD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES - HANDRAIL DETAILS
ALUMINUM TRUSS & STEEL POST

SCALE: SHEET NO. 8 OF 9 SHEETS STA. TO STA.

EFK•Moen, LLC
Civil Engineering Design

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
• DXI-6-2HBK-2, HB-1,2; (IX-1R-1	WILLIAMSON	968	514	
• F.A.I. 57 AND F.A.P. 331	CONTRACT NO. 78182			

ILLINOIS FED. AID PROJECT