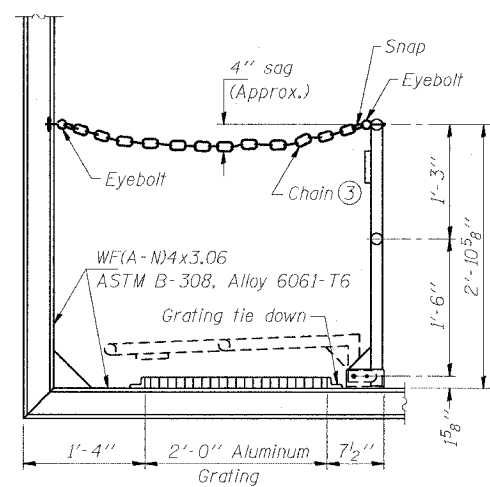


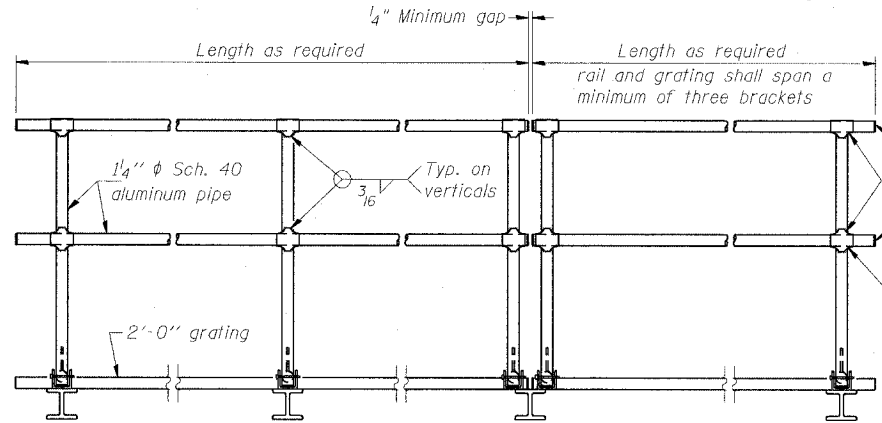
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNT	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94		COOK	460	146
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

*2021-922PT.1-AC
CONTRACT NO. 62693



SIDE ELEVATION
(Showing Safety Chain W/O Sign)

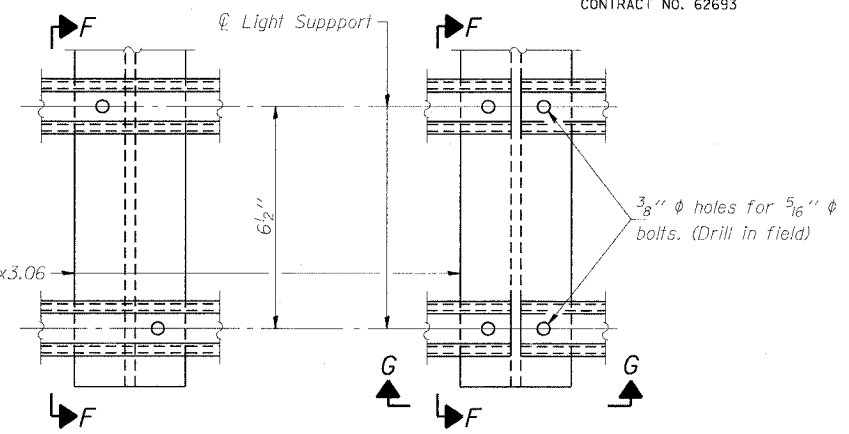


FRONT ELEVATION

HANDRAIL DETAILS

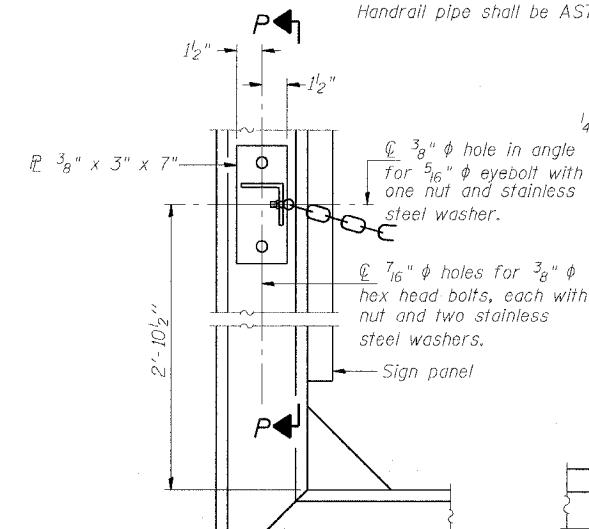
Handrail pipe shall be ASTM B241, Alloy 6063-T6 or Alloy 6061-T6.

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



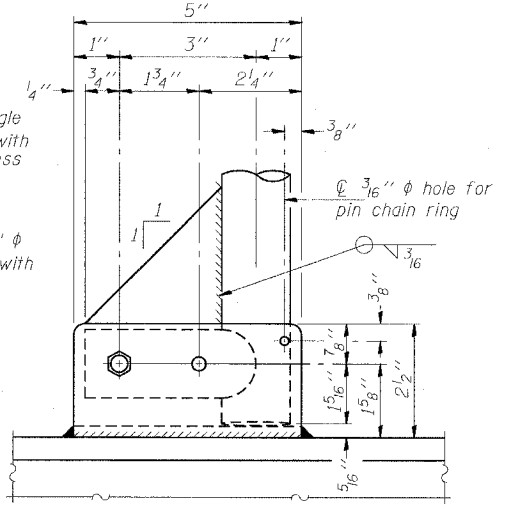
DETAIL F

DETAIL G

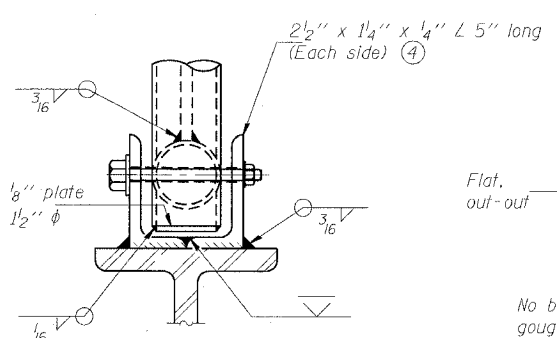


ALTERNATE SAFETY CHAIN ATTACHMENT
(With Sign Present)

Items not shown same as "Side Elevation" of "Handrail Details"

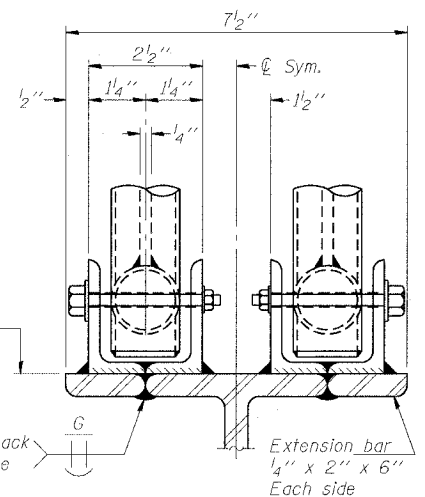


SIDE ELEVATION



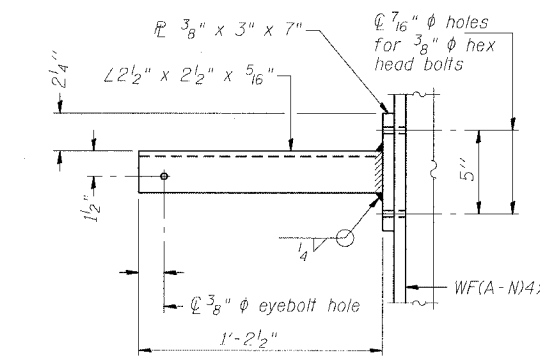
FRONT ELEVATION

Details not shown same as "ELEVATION" at right.

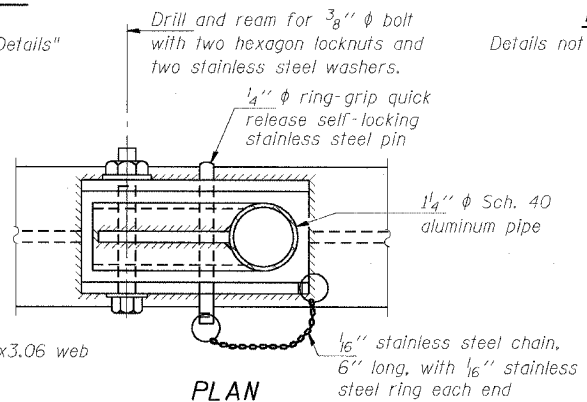


ELEVATION AT HANDRAIL JOINT ④

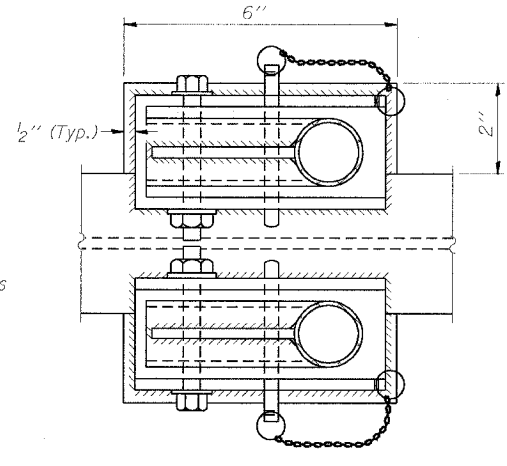
Details not shown same as "FRONT ELEVATION"



SECTION P-P

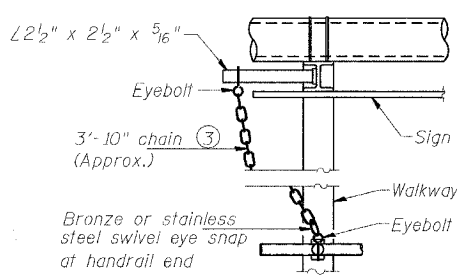


PLAN DETAIL E HANDRAIL HINGE



PLAN AT HANDRAIL JOINT

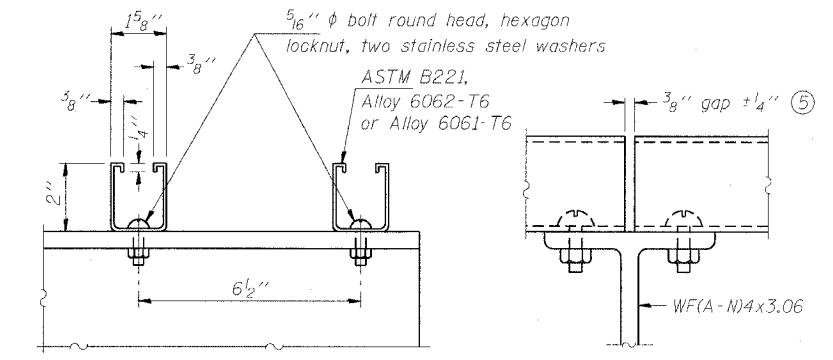
Details not shown same as "PLAN"



ALTERNATE SAFETY CHAIN ATTACHMENT

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

- 3/16" galvanized steel chain, approximately 12 links per foot. Chain to be hot dip galvanized after manufacture and suitable for prolonged exterior exposure. Alternate materials may be substituted with the Engineer's approval.
- Extrusions may be used in lieu of the details shown, with approval of the Engineer.

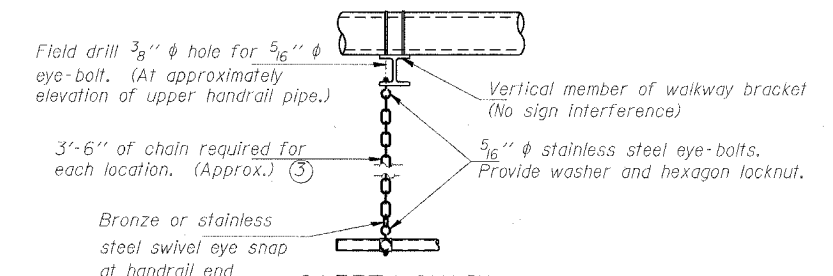


SECTION F-F

SECTION G-G

LIGHTING FIXTURE MOUNTS (IF REQUIRED)

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



SAFETY CHAIN

One required for each end of each walkway.

**CANTILEVER SIGN STRUCTURES
HANDRAIL DETAILS
ALUMINUM TRUSS & STEEL POST**

F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
63RD ST TO 59TH ST (FRONTAGE RD AND RAMPS)

DESIGNED - SWANG	EXAMINED	20
CHECKED - RMG	ENGINEER OF STRUCTURAL SERVICES	
DRAWN - SWANG	PASSED	
CHECKED - RMG	ENGINEER OF BRIDGES AND STRUCTURES	

NUMBER	REVISION	DATE

10/21/2004 04:54F PW