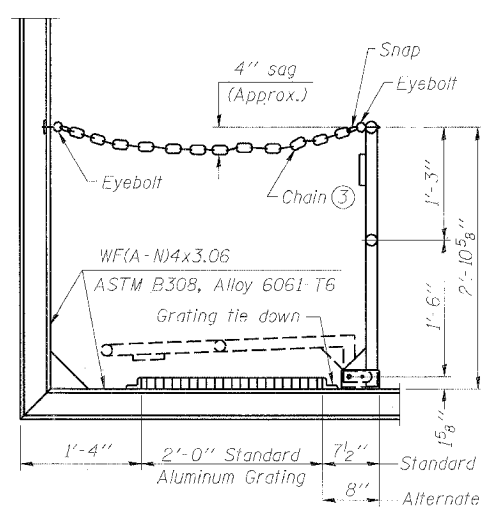


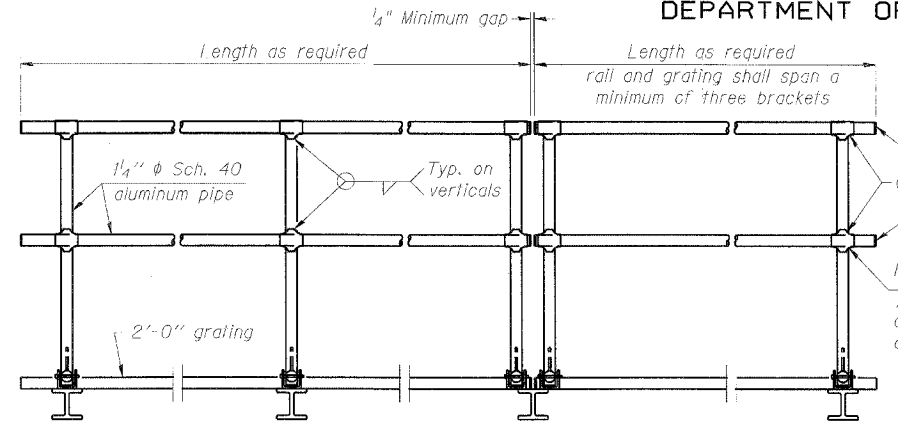
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DATE NO.	SECTION	QUANTITY	SHEET NO.	SHEET NO.
FAI 90/91	2007-056 SG	COOK	30	21
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SHEET NO. 9  
12 SHEETS



**SIDE ELEVATION**  
(Showing safety chain w/o sign)

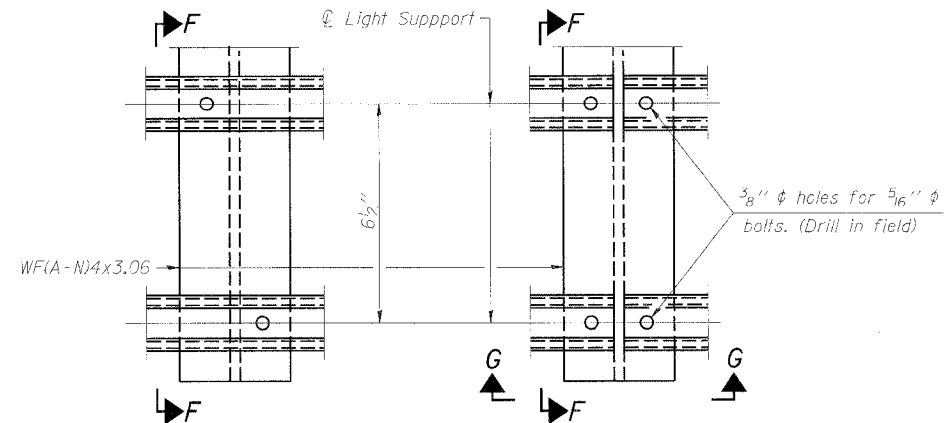


**FRONT ELEVATION**

**HANDRAIL DETAILS**

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

- Install standard force-fit end caps or weld 1/8" end plates with 1/8" c.f.w. and grind smooth. (All rail ends)
- Horizontal handrail member shall be continuous thru fitting. Provide 1/16" hole in fitting for 3/8" bolt. Field drill 1/16" 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**

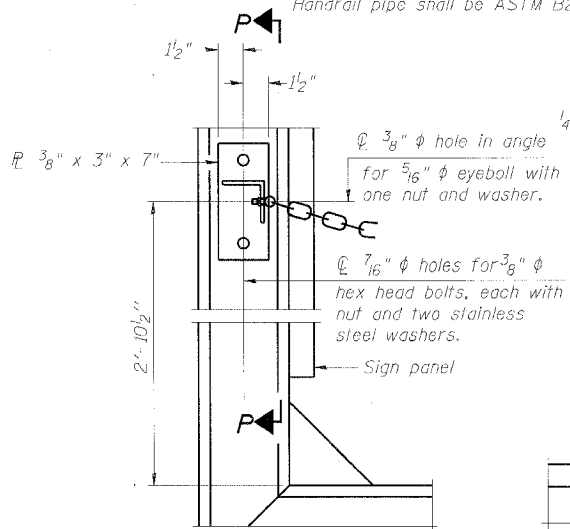
**DETAIL G**

**SECTION F-F**

**SECTION G-G**

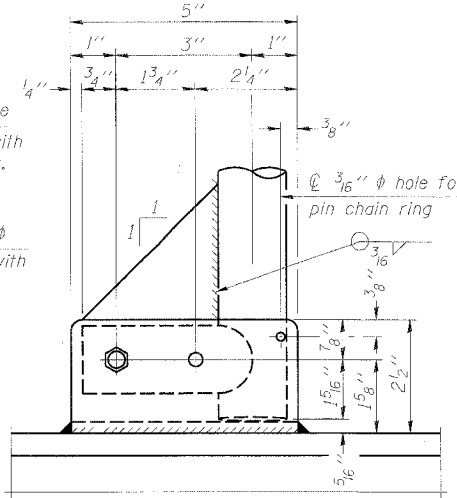
**LIGHTING FIXTURE MOUNTS (IF REQUIRED)**

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

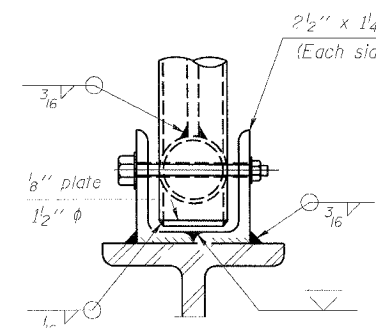


**ALTERNATE SAFETY CHAIN ATTACHMENT**  
(With Sign Present)

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

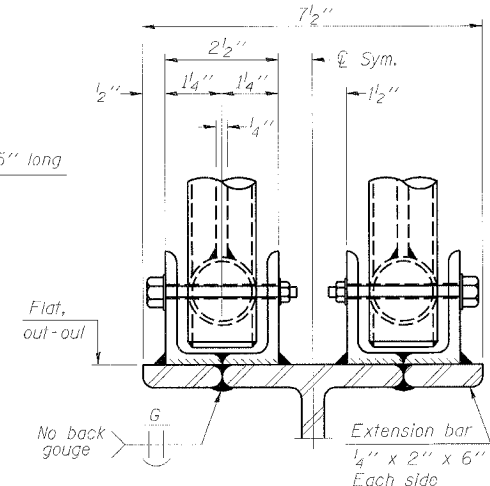


**SIDE ELEVATION**

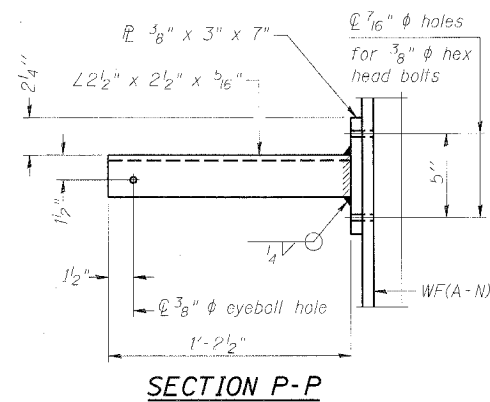


**FRONT ELEVATION**

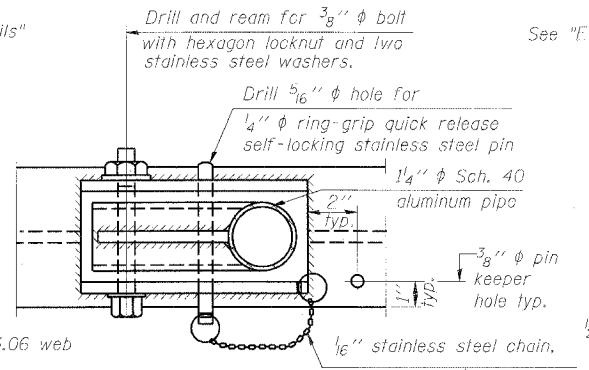
See "Elevation" at right for dimensions.



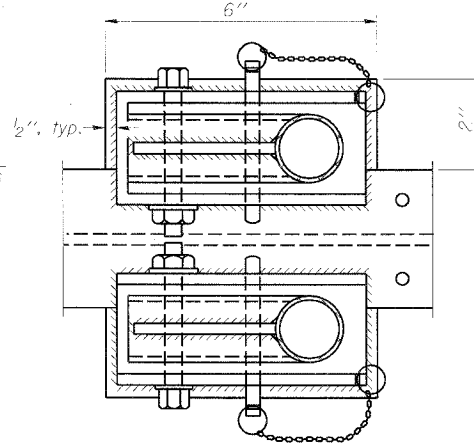
**ELEVATION AT HANDRAIL JOINT**



**SECTION P-P**

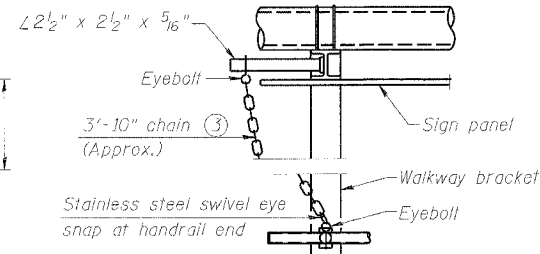


**PLAN**  
**DETAIL E HANDRAIL HINGE**



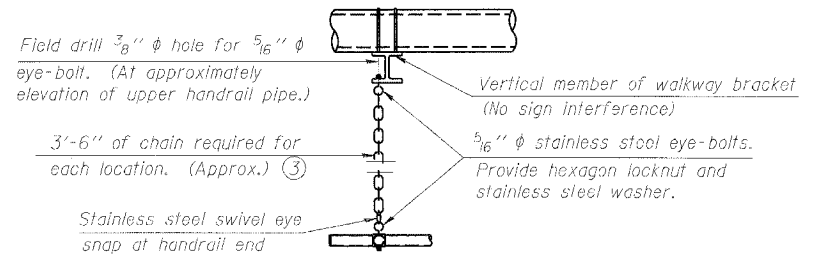
**PLAN AT HANDRAIL JOINT**

Details not shown same as "PLAN"



**ALTERNATE SAFETY CHAIN ATTACHMENT**

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



**SAFETY CHAIN**

One required for each end of each walkway.

3/16" Type 304L stainless steel chain, approximately 12 links per foot.

Extrusions may be used in lieu of the details shown, with approval of the Engineer.

DESIGNED - ASP	200
CHECKED - RLP	EXAMINED
DRAWN - BEM	PASSED
CHECKED - ASP	ENGINEER OF BRIDGE DESIGN
	ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE

OVERHEAD SIGN STRUCTURES  
ALUMINUM HANDRAIL DETAILS  
I-90/94 KENNEDY EXPRESSWAY  
(HUBBARDS CAVE TO I-290)  
STATION 30+74.00 (I90/94)  
COOK COUNTY  
STRUCTURE NUMBER IS016I094L051.5