

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

¹₄" Minimum gap → Length as required Length as required rail and grating shall span a minimum of three brackets 14" \$ Sch. 40 Typ. or (1)Install standard force-fit end caps or aluminum pipe weld '8" end plates with '8" c.f.w. and grind smooth. (All rail ends) <u>Fi</u>ttings-ASTM B26, Alloy 356-T7 *⊢3′-0′′* grating

(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 rall member. Provide washer and locknut for bolt. (Use $^{5}_{16}$ ' eyebolts in $^{7}_{16}$ ' $^{\phi}$ holes on top rail at ends only.)

> € 3₁₆ " \$ hole for pin chain ring

-Walkwav bracket

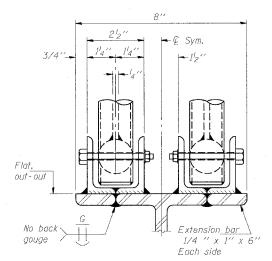
565

COOK

TOTAL

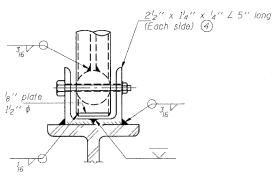
270

62301 (2021-922 PT2 ETC 2324.6-1P) R-10



90/94

ELEVATION AT HANDRAIL JOINT (4)



FRONT ELEVATION See "ELEVATION" at right for dimensions.

Field drill 3_8 " ϕ hole for ${}^5_{16}$ " ϕ eye-bolt. (At approximately Vertical member of walkway bracket elevation of upper handrail pipe.) (No sign interference) 3'-6" of chain required for 6" ♦ stainless steel eye-bolts. each location. (Approx.) (3) rovide washer and hexagon locknut. Stainless steel swivel eye snap at handrail end SAFETY CHAIN

One required for each end of each walkway.

SGN-28

OVERHEAD SIGN STRUCTURES ALTERNATE ALUMINUM HANDRAIL DETAILS

ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) GARFIELD BLVD TO 31ST STREET (NB LOCAL LANES) OVERHEAD SIGN STRUCTURES (SPAN)

SIDE ELEVATION

(Showing safety chain w/o sign)

→ € ³g" φ eyebolt hole

1'-212" SECTION P-P

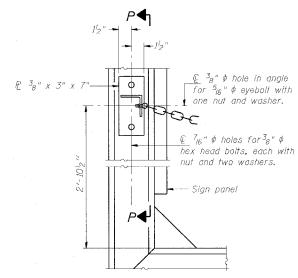
P 38" x 3" x 7"

122" x 212" x 516"

HANDRAIL DETAILS

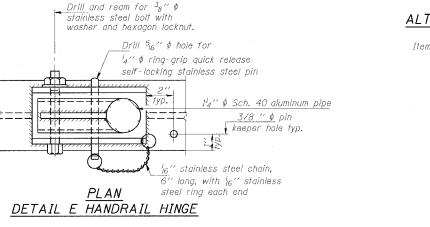
Handrail pipe shall be ASTM B241, Alloy 6063-T6 or Alloy 6061-T6.

FRONT ELEVATION



ALTERNATE SAFETY CHAIN ATTACHMENT

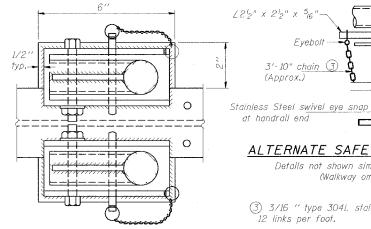
(With Sign Present) Items not shown same as "Side Elevation" of "Handrail Details"



€ 7₁₆ " \$ holes

for ³₈" ϕ hex head bolts

- WF6x5.04 web



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)

0

Evebolt

3'-10" chain ③

(Approx.)

at handrail end

SIDE ELEVATION

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

① Extrusions may be used in lieu of the details shown, with approval of the Engineer.

| DESIGNED | AC | | 19 |
|----------|-----|----------|----------------------------------|
| CHECKED | AS | EXAMINED | |
| DRAWN | RV | PASSED | ENGINEER OF BRIDGE DESIGN |
| CHECKED | MSA | ĒN | GINEER OF BRIDGES AND STRUCTURES |

OS-A-11-DMS2 1/7/2005

MSA/AS 2 8/7/06