

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars (MBS) shall be 3/16" x 1/2" on 1 3/16" centers and conform to ASTM B211 Alloy 6061-T6.
Cross bars (CB) shall be 3/16" x 1/2" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

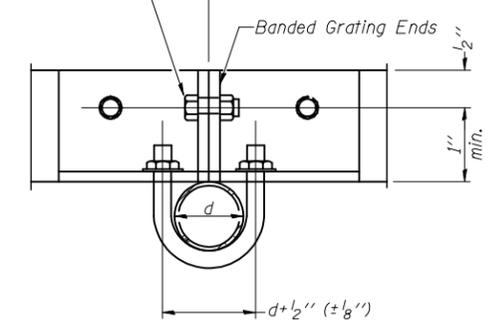
OR

Aluminum Grating with modified "4" sections for main bearing bars shall meet the following requirements:

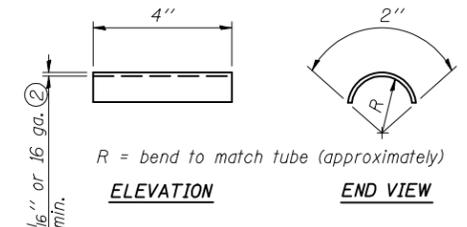
Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.³ per bar, a depth of 1 1/2", spaced on 1 3/16" centers.

Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.

5/16" φ bolt with locknut and two stainless steel washers (2 per splice)

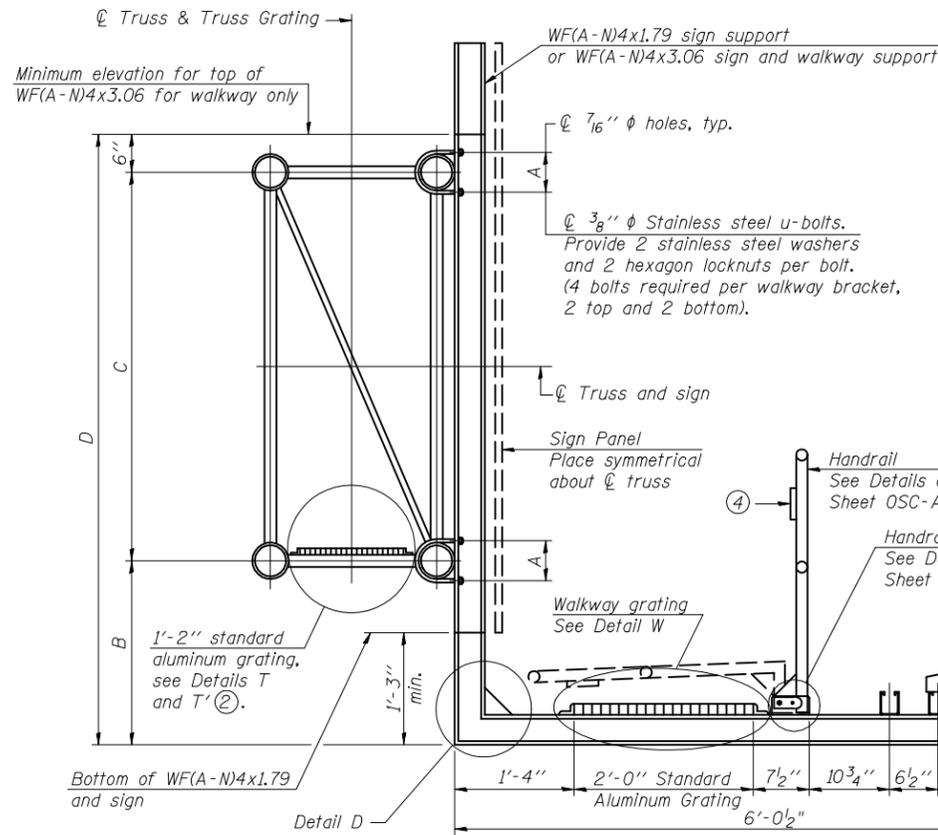


SECTION T'-T'



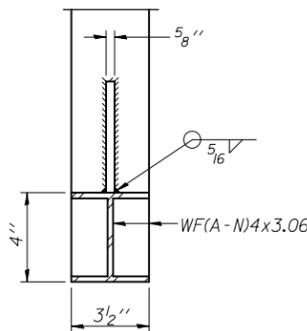
SHIM DETAIL

- ① Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- ② Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.
- ③ If Handrail Joint present, weld angle to WF(A-N)4 and 1/4" extension bars. (See Base Sheet OSC-A-8.)
- ④ 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
- ⑤ Tube to grating gap may vary from 0 to 1/2", max. to align walkway, allow for camber, etc.
- ⑥ Based on actual sign height, D_s, given on OSC-A-1.



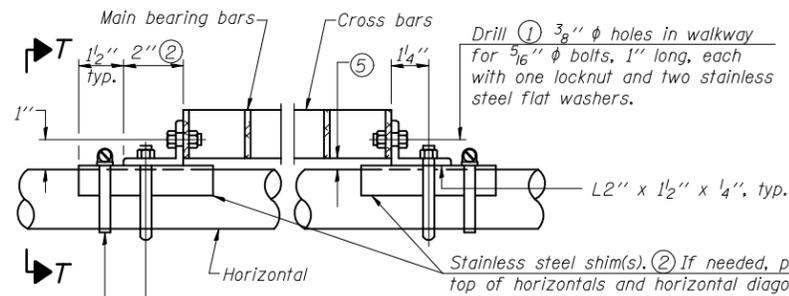
SECTION B-B

Sign shall be even with the top of the bracket, but it may extend no more than 6" above the top of the bracket for field adjustments.



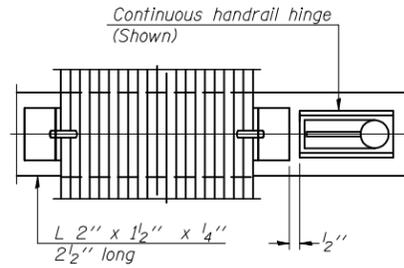
SECTION D-D

Screw type stainless steel tube clamp at shim location



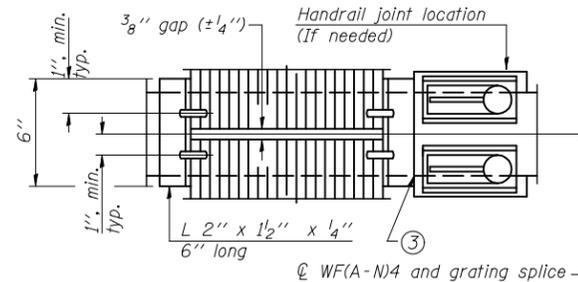
DETAIL T

(Continuous Truss grating)

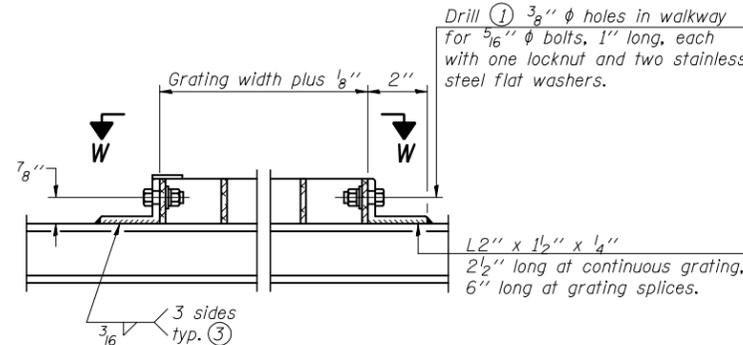


(CONTINUOUS WALKWAY GRATING)

SECTION W-W

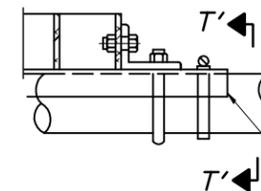


(AT WALKWAY GRATING SPLICE)



DETAIL W

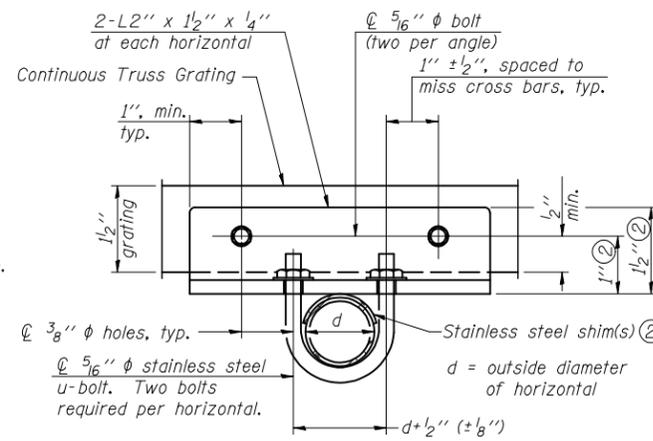
(Walkway grating)



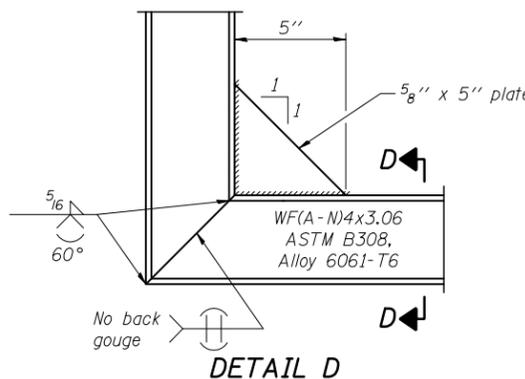
DETAIL T'

(Truss grating splice)

Details not shown same as Detail T. Alternate materials may be used subject to the Engineer's review and approval.



SECTION T-T



DETAIL D

Structure Number	Station	A	⑥ B	C	⑥ D

NUMBER	REVISION	DATE

DESIGNED -	200
CHECKED -	EXAMINED
DRAWN -	PASSED
CHECKED -	ENGINEER OF BRIDGES AND STRUCTURES

OSC-A-7

6-1-09

CANTILEVER SIGN STRUCTURES WALKWAY DETAILS ALUMINUM TRUSS & STEEL POST				
*CHAMPAIGN & DOUGLAS				
SHEET NO. 6	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS
8 SHEETS	57	(21-28,21-10-29,10-30)RS-1	*	115
			CONTRACT NO. 70251	
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	