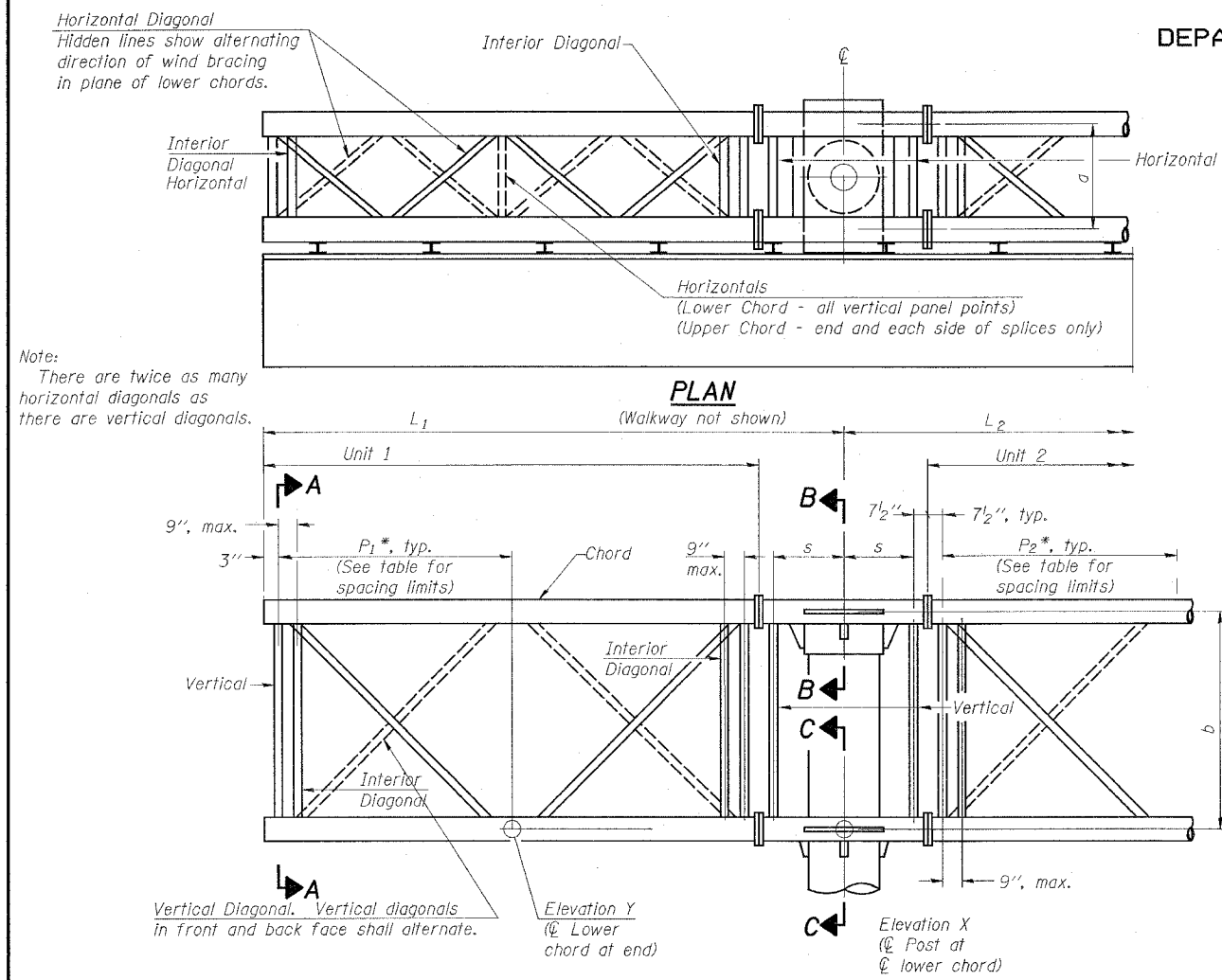


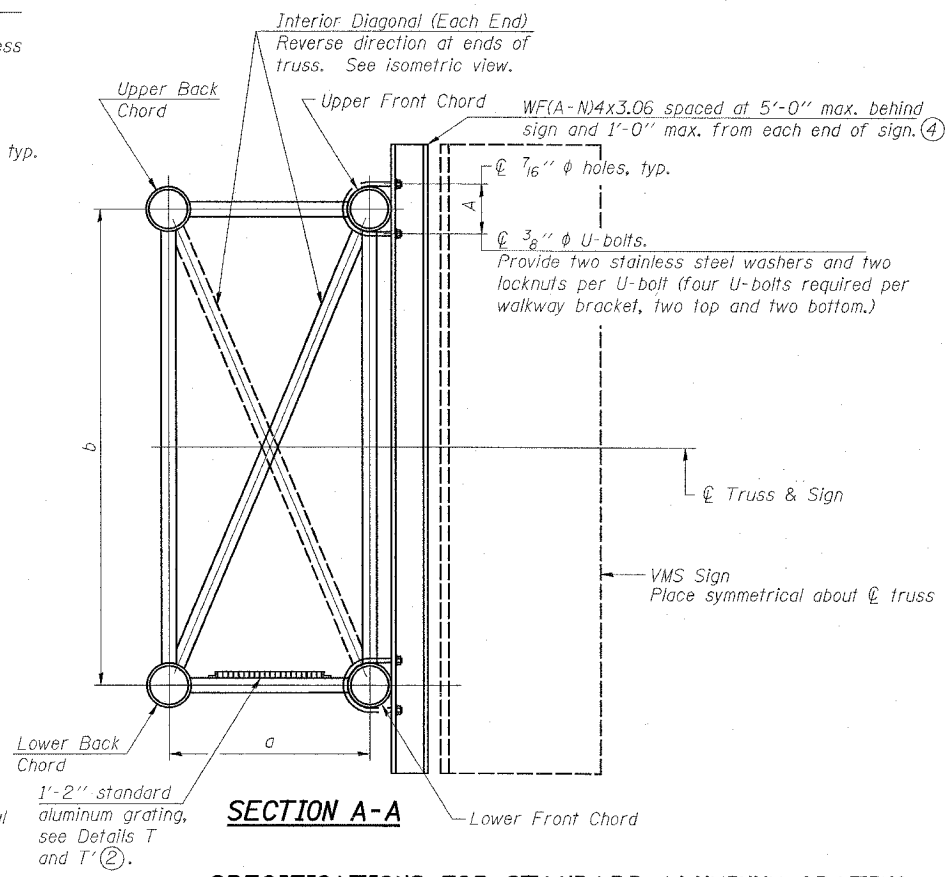
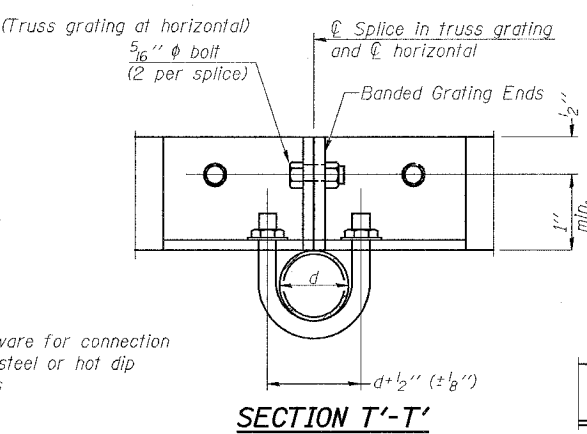
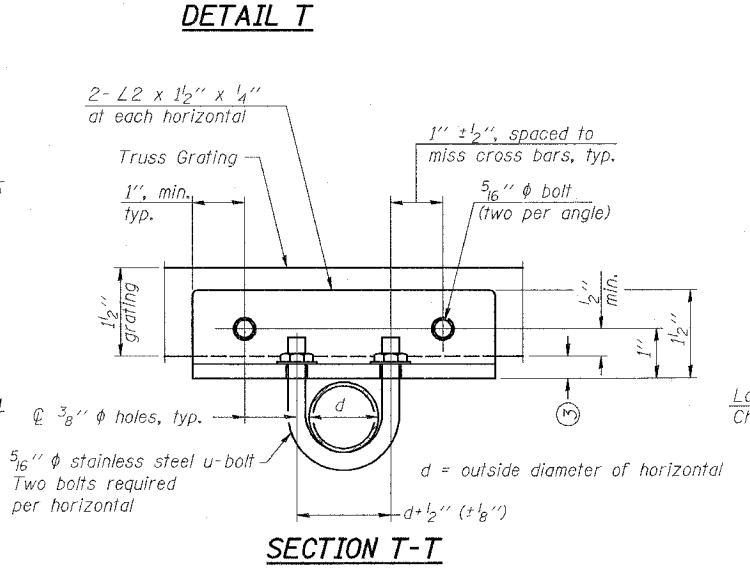
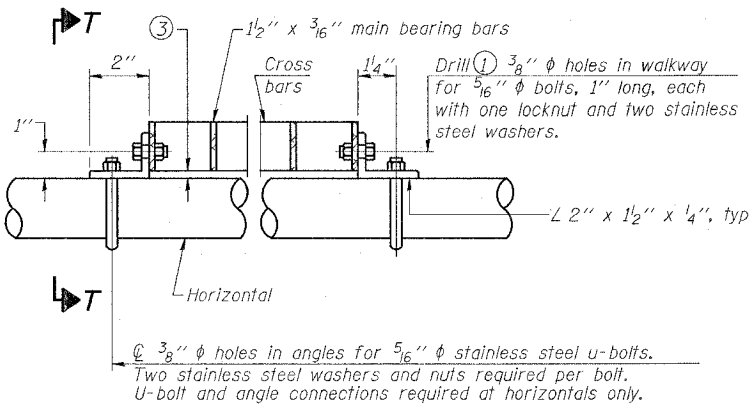
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Note:
There are twice as many horizontal diagonals as there are vertical diagonals.

TYPICAL TRUSS UNIT
(Sign omitted for clarity)
For Section B-B and Section C-C, see Base Sheet OSF-A-3-VMS.

Structure Number	Station	Truss Type	L ₁	L ₂	Number of Panels Unit 1	Panel Length (P ₁)*	Number of Panels Unit 2	Panel Length (P ₂)*
		I-F-A			2		2	



SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

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

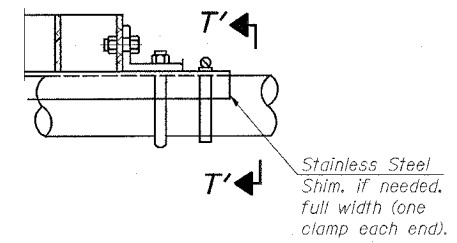
NUMBER	REVISION	DATE

- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- 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.
- Tube to grating gap may vary from 0 to 1/2" max. to align walkway, allow for camber, etc.
- Sign manufacturer must design and supply hardware for connection of VMS to WF(A-N)4's. Bolts must be stainless steel or hot dip galvanized high strength per IDOT specifications

TRUSS UNIT TABLE

Truss Type	Dimension "a"	Dimension "b"	Dimension "s"	Limits for Panel Spacing (P)*	Up. & Low. Chord		Verticals; Horizontals; Vertical Horizontals; and Interior Diagonals	
					C.D.	Wall		
I-F-A	24"	54"	16"	36" min. to 48" max.	5"	5/16"	2 1/2"	5/16"

*P = $\frac{L-s-1'-6''}{\# \text{ Panels}}$



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.

**BUTTERFLY SIGN STRUCTURES
TRUSS DETAILS FOR FRONT ACCESS VMS
ALUMINUM TRUSS & STEEL POST**

FAI 55/70
SECTION DIST 8 ITS 2006-2
MADISON AND ST. CLAIR COUNTY
AND ST. LOUIS, MO

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

PLOT DATE = 5/23/2006
 FILE NAME = c:\projects\edil189\electrical\truss\111
 PLOT SCALE = 100.0000 1/1 IN.
 REFERENCE = #REF#