

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2007-0577	COOK	60	32
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

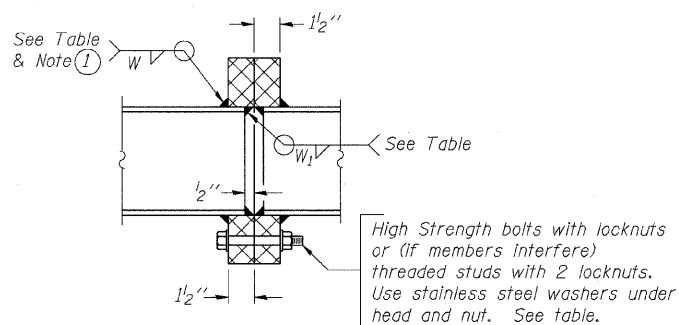
SHEET NO. 5

13 SHEETS

Contract #60D93

TRUSS UNIT TABLE

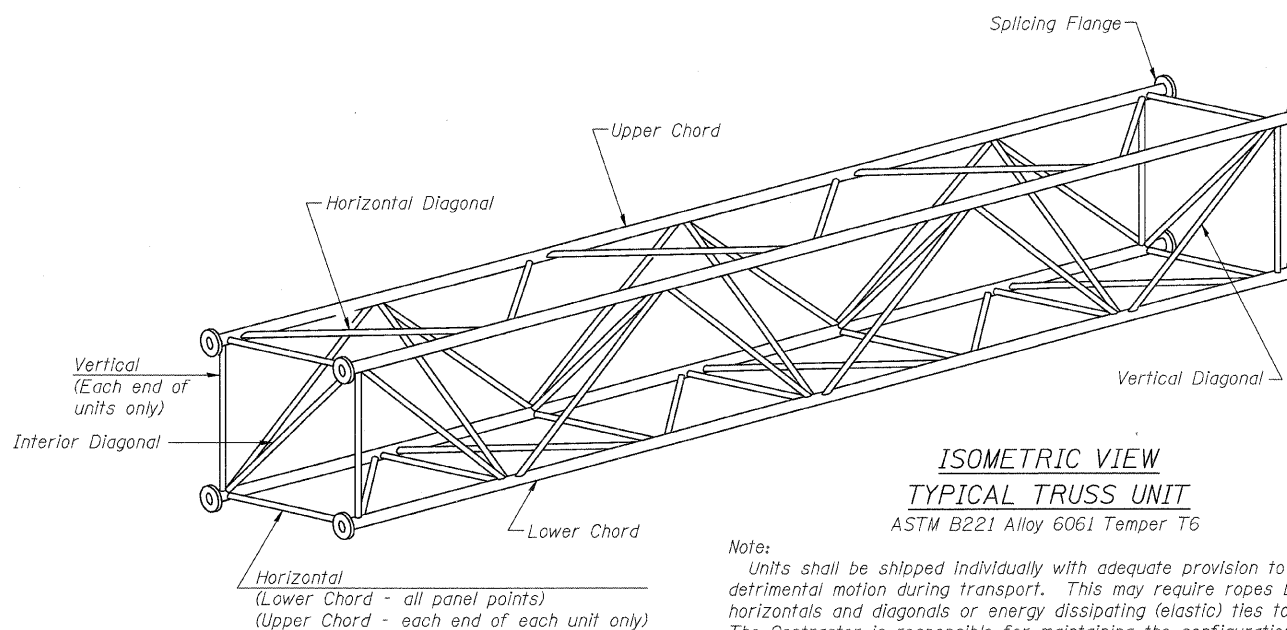
Structure Number	Station	Design Truss Type	Exterior Units (2)			Interior Unit				Upper & Lower Chord		Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals				Camber at Midspan	Splicing Flange			
			No. Panels per Unit	Unit Lgth.(L <sub>e</sub> )	Panel Lgth.(P)	No. Req'd.	No. Panels per Unit	Unit Lgth.(L <sub>i</sub> )	Panel Lgth.(P)	O.D.	Wall	O.D.	Wall	Bolts			Weld Sizes		A	B
														No./Splice	Dia.		W	W <sub>1</sub>		
ISO16I290R029.7	19+00	III-A	See Sht 2 of 13			1	6	31'-9"	5'-1"	7"	5/16"	3 1/4"	5/16"	2 1/2"	6	1"	7/16"	5/16"	11 1/2"	15"



SECTION B-B

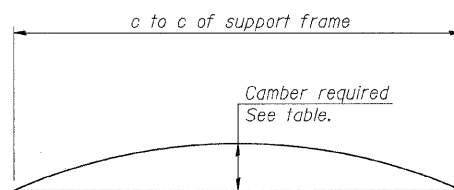
High Strength bolts with locknuts or (if members interfere) threaded studs with 2 locknuts. Use stainless steel washers under head and nut. See table.

① Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or locks shall be made to secure flanges until remaining welds are made after disassembly. Adjacent flanges shall be "match marked" to insure proper field assembly.



ISOMETRIC VIEW  
TYPICAL TRUSS UNIT  
ASTM B221 Alloy 6061 Temper T6

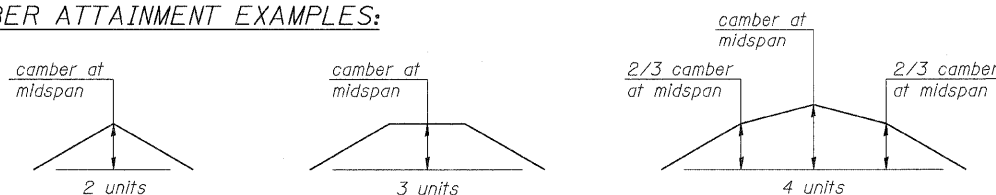
Note:  
Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection of the units.



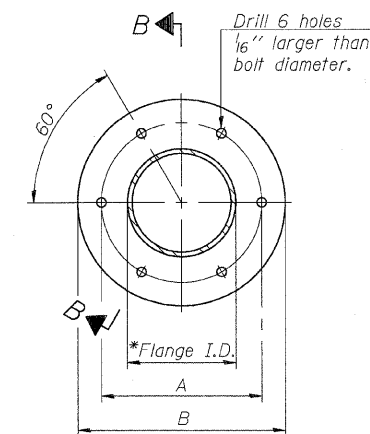
CAMBER DIAGRAM

Camber curve shown is theoretical. Actual camber attained by slope changes at splices between units.

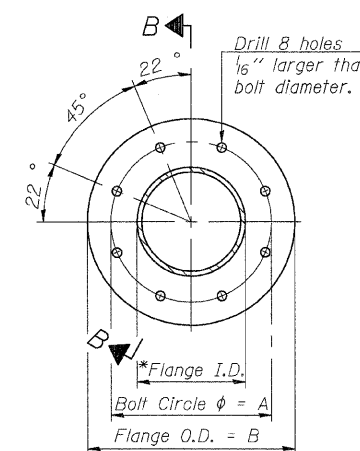
CAMBER ATTAINMENT EXAMPLES:



Camber shown is for fabrication only, measured with truss fully supported. (No-load condition)



TRUSS TYPES I-A, II-A, & III-A



TRUSS TYPES II-A & III-A

SPLICING FLANGES

ASTM B221, Alloy 6061-T6  
or ASTM B209, Alloy 6061-T651  
\*To fit O.D. of Chord with maximum gap of 1/16".

NUMBER	REVISION	DATE

DESIGNED - DSE	200
CHECKED - PT	EXAMINED
DRAWN - RTT	PASSED
CHECKED - PT	ENGINEER OF BRIDGE DESIGN
DATE - SEPT 24, 2008	ENGINEER OF BRIDGES AND STRUCTURES

OS4-A-2 5/16/08

OVERHEAD SIGN STRUCTURES  
ALUMINUM TRUSS DETAILS  
FOR TRUSS TYPES I-A, II-A and III-A  
CIRCLE INTERCHANGE SIGN STRUCTURE  
I-94/I-290  
FROM I-290 EB RAMP  
TO DES PLAINES AVE  
F.A.I. 94/290-SECT. (2007-057T)  
COOK COUNTY