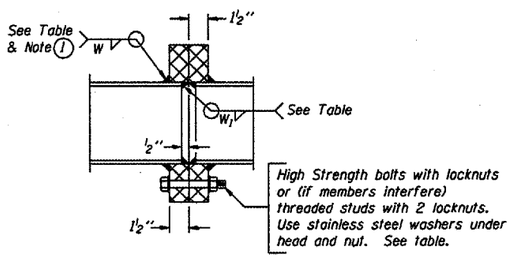
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



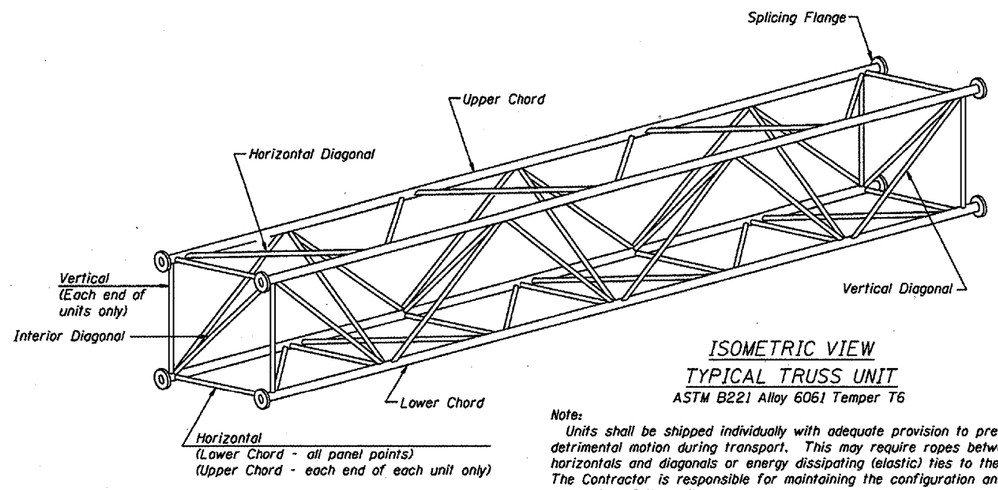
## TRUSS UNIT TABLE

| 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.($L_e$) | Panel Lgth.(P) | No. Req'd. | No. Panels per Unit | Unit Lgth.($L_i$) | Panel Lgth.(P) | O.D. | Wall | O.D. | Wall | | Bolts No./Splice | Bolts Dia. | Weld Sizes W | Weld Sizes $W_1$ | A | B |
| 2S037I080L011.4 | 1026 + 40 | I-A | 5 | 25'-10" | 4'-9 1/2" | | | | | 5" | 1/4" | 2 1/2" | 1/4" | 1 1/4" | 6 | 7/8" | 5/16" | 1/4" | 8 3/4" | 11 3/4" |
| 2S050I080R073.4 | 486 + 00 | I-A | 6 | 28'-9" | 4'-5 3/4" | 1 | 6 | 28'-1 1/2" | 4'-5 3/4" | 5" | 5/16" | 2 1/2" | 5/16" | 2 1/2" | 6 | 7/8" | 5/16" | 1/4" | 8 3/4" | 11 3/4" |



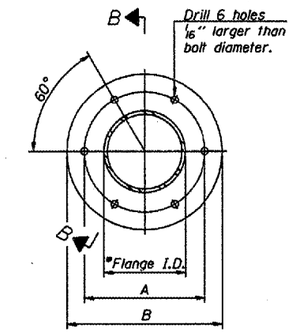

SECTION B-B

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 tacks shall be made to secure flanges until remaining welds are made after disassembly. Adjacent flanges shall be "match marked" to insure proper field assembly.

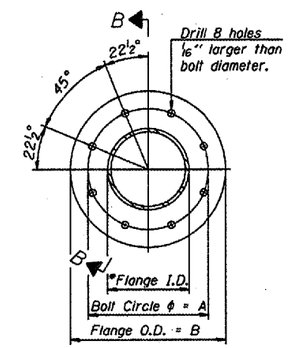



ISOMETRIC VIEW
TYPICAL TRUSS UNIT
ASTM B221 Alloy 6061 Temper T6

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.

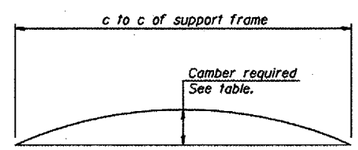



TRUSS TYPES I-A, II-A, & III-A



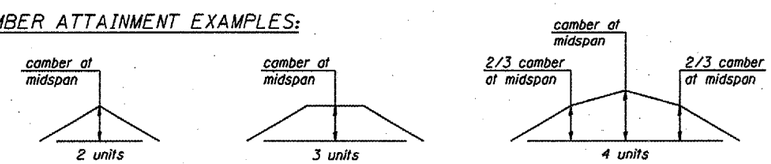

TRUSS TYPES II-A & III-A

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".




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)

| NUMBER | REVISION | DATE |
|---|---|---|
| | | |

| | |
|---|---|
| DESIGNED - | |
| CHECKED - | |
| DRAWN - | |
| CHECKED - | |

EXAMINED _____ 20
ENGINEER OF BRIDGE DESIGN
PASSED
ENGINEER OF BRIDGES AND STRUCTURES

OS4-A-2 1-7-05

OVERHEAD SIGN STRUCTURES
ALUMINUM TRUSS DETAILS
FOR TRUSS TYPES I-A, II-A and III-A

District 2
Overhead Sign
Structure Replacement