## TRUSS DATA

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<th>TRUSS SPAN (FT)</th>
<th>NUMBER OF PANELS</th>
<th>END PANEL LENGTH (FT)</th>
<th>TRUSS DEPTH (CHORD-TO-CHORD) (FT)</th>
<th>BASE PLATE DIAMETER (IN)</th>
<th>CAMBER AT MIDPOINT (IN)</th>
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*SEE CAMBER DIAGRAM SHEET 3*
NOTES:

1. THE DESIGN OF THIS STRUCTURE IS BASED ON THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS, CURRENT EDITION.


3. MAXIMUM SIGN AREA IS 1200 SQUARE FEET. SIGNS MUST NOT PROJECT PAST THE ENDS OF THE TRUSS. MAXIMUM 6 FOOT SIGN PROJECTION ABOVE THE TOP CHORD.

4. FOR TRUSS LENGTHS 50 FEET TO 105 FEET, MINIMUM SIGN HEIGHT WITH ALUMINUM BEAM IS 7 FEET. FOR TRUSS LENGTHS 110 FEET TO 140 FEET, MINIMUM SIGN HEIGHT WITH ALUMINUM BEAM IS 9 FEET.

5. TYPE I SIGNS MUST NOT BE USED ON THE SAME TRUSS AS VARIABLE MESSAGE SIGNS.

6. HOT-DIP GALVANIZE (HDG) ALL TRUSS COMPONENTS PER ASTM A123 PRIOR TO BOLTED ASSEMBLY. HDG ALL FASTENER COMPONENTS PER ASTM A153. BLAST CLEAN BASE PLATES, STIFFENERS, AND ALL WELDMENTS PRIOR TO GALVANIZE.

7. PROVIDE 15/16"Ø HOLES FOR 7/8"Ø HIGH STRENGTH (HS) BOLTS FOR ALL CONNECTIONS UNLESS OTHERWISE STATED. PROVIDE HIGH STRENGTH BOLTS, NUTS, AND WASHERS IN ACCORDANCE WITH SUBSECTION 906.03 OF THE MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION. PROVIDE LOCK WASHERS THAT MEET ANSI B18.21.1.

8. TIGHTEN ALL HIGH STRENGTH (HS) BOLTS BY THE TURN OF NUT METHOD PER SUBSECTION 707.03.D OF THE MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, EXCEPT AT SPLICE CONNECTIONS. SPLICE CONNECTIONS MUST HAVE A FLAT WASHER AND LOCK WASHER UNDER EACH NUT AND TIGHTENED TO A SNUG TIGHT CONDITION PER SUBSECTION 707.03.D OF THE MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.

9. DO NOT LIFT THE TRUSS BY THE WEB MEMBERS.

10. FIELD SPLICES MAY BE PLACED ALONG THE TRUSS CHORD TO FACILITATE FABRICATION. PLACE FIELD SPLICE 1'-6" MINIMUM TO THE GusSET PLATE EDGE. ANY DEVIATION FROM THE DETAILS SHOWN ON THIS TYPICAL WILL REQUIRE APPROVAL BY THE ENGINEER IN WRITING BEFORE FABRICATION.

11. ALL WELDS MUST BE 100 PERCENT VISUAL TEST (VT) INSPECTED BY AN AWS CERTIFIED WELDING INSPECTOR (CWI). ALL FILLET WELDS (EXCEPT END CAP AND COLUMN CAP WELDS) MUST BE 25 PERCENT MAGNETIC PARTICLE TEST (MT) INSPECTED BY A TECHNICIAN QUALIFIED IN ACCORDANCE WITH AMERICAN SOCIETY OF NONDESTRUCTIVE TESTING (ASNT) LEVEL I. ALL COMPLETE JOINT PENETRATION (CJP) WELDS MUST BE 100 PERCENT ULTRASONIC TEST (UT) INSPECTED BY A TECHNICIAN QUALIFIED IN ACCORDANCE WITH ASNT LEVEL I.

12. SEE CURRENT MDOT SIGN SUPPORT TYPICAL PLAN SIGN-340-SERIES FOR SIGN FOUNDATION.

13. SEE CURRENT MDOT SIGN SUPPORT TYPICAL PLAN SIGN-100-SERIES FOR SIGN CONNECTION.

14. COLUMN SECTIONS MUST BE ASTM A53, GRADE B OR API-5L-X42. SECTIONS FOR 50 FEET TO 105 FEET TRUSSES MUST BE 24"Ø X 0.938" OR 24"Ø X 0.969". SECTIONS FOR 110 FEET TO 140 FEET TRUSS MUSTS BE 24"Ø X 1.219". CHORD SECTIONS MUST BE ASTM A500, GRADE B 6"Ø X 0.500". ASTM A519-4140 ANNEALED 6"Ø X 0.375" OR ASTM A500, GRADE B 6 5/8"Ø X 0.432".

15. WEB ANGLES MUST BE ASTM A709, GRADE 36 OR ASTM A36 L5" X 5" X 7/16" OR L5" X 5" X 1/2". STEEL PLATES MUST BE ASTM A709, GRADE 36 OR ASTM A 36 STEEL.

16. THE ESTIMATED WEIGHT OF THE TRUSS IS 195 LBS/FT.

17. DURING THE ERECTION PROCESS THE MINIMUM NUMBER OF BOLTS REQUIRED TO BE INSTALLED PRIOR TO LETTING TRAFFIC RESUME UNDER THE ERECTED TRUSS MUST BE: 2 BOLTS MINIMUM PER CHORD-COLUMN CONNECTION PLATE FOR SPAN LENGTHS BETWEEN 50' AND 105', AND 4 BOLTS MINIMUM PER CHORD-COLUMN CONNECTION PLATE FOR SPAN LENGTHS BETWEEN 110' AND 140'. NO SIGNS SHALL BE ERECTED UNTIL ALL BOLTS ARE INSTALLED.

18. BASE PLATE (B) WARPAGE MUST NOT EXCEED 1/16 INCH PER FOOT.

19. BACKING BAR FOR OPTIONAL COLUMN SPLICE MUST BE MINIMUM 1/4 INCH X 2 INCH PLATE OR STANDARD CHILL RING. BACKING BAR FOR COLUMN TO BASE PLATE MUST BE MINIMUM 1/4 INCH X 1 INCH PLATE OR STANDARD CHILL RING.
RIGHT COLUMN TRUSS CONNECTION DETAIL

WEB MEMBERS AND CONNECTION PLATES OMITTED FOR CLARITY (LEFT COLUMN SIMILAR)

* WRAP WELD AROUND OUTSIDE EDGE, STOP 1/4" SHORT OF CORNER CLIP

SECTION A-A

CAMBER DIAGRAM

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.
PLAN VIEW 38" BASE PLATE DETAIL

SECTION C-C
ELEVATION VIEW FOR 50’ TO 105’ TRUSS

DETAIL B
* WRAP WELD AROUND OUTSIDE EDGE
STOP 1/4" SHORT OF CORNER CLIP

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.
DETAIL D

DETAIL E

DETAIL F

DETAIL G

DETAIL H

DETAIL J

DETAIL K

DETAIL L

SEE SHEET 9 FOR ALTERNATE CONNECTION DETAILS.

* DIMENSION TYPICAL FOR ALL CONNECTION DETAILS.

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN

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ALTERNATE DETAIL D

ALTERNATE DETAIL E

ALTERNATE DETAIL F

ALTERNATE DETAIL G

ALTERNATE DETAIL H

ALTERNATE DETAIL J

ALTERNATE DETAIL K

ALTERNATE DETAIL L

* DIMENSION TYPICAL FOR ALL CONNECTION DETAILS.
ELEVATION

SECTION G-G

CHORD SPLICE CONNECTION DETAILS

END CAP DETAIL

COLUMN CAP DETAIL

DETAIL OF WASHER PLACEMENT

SECTION H-H

NOT TO SCALE