### TRUSS DATA

<table>
<thead>
<tr>
<th>TRUSS SPAN (FT)</th>
<th>L1 (FT)</th>
<th>L2 (FT)</th>
<th>L3 (FT)</th>
<th>CAMBER (IN)</th>
<th>BOX TRUSS</th>
<th>ESTIMATED WEIGHT (LBS/FT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>17.5</td>
<td>15</td>
<td>17.5</td>
<td>5/8</td>
<td>6'-0&quot; x 5'-4&quot;</td>
<td>143</td>
</tr>
<tr>
<td>55</td>
<td>17.5</td>
<td>20</td>
<td>17.5</td>
<td>3/4</td>
<td>6'-0&quot; x 5'-4&quot;</td>
<td>143</td>
</tr>
<tr>
<td>60</td>
<td>22.5</td>
<td>15</td>
<td>22.5</td>
<td>7/8</td>
<td>6'-0&quot; x 5'-4&quot;</td>
<td>143</td>
</tr>
<tr>
<td>65</td>
<td>22.5</td>
<td>20</td>
<td>22.5</td>
<td>1</td>
<td>6'-0&quot; x 5'-4&quot;</td>
<td>143</td>
</tr>
<tr>
<td>70</td>
<td>22.5</td>
<td>25</td>
<td>22.5</td>
<td>1</td>
<td>6'-0&quot; x 5'-4&quot;</td>
<td>143</td>
</tr>
</tbody>
</table>

The camber given in the above table is the ordinate at the center of the assembled truss prior to dead load deflection. Allowable camber tolerance for truss is ±25%.

### 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 500 square feet for no more than three signs. Maximum 6 foot projection above the top chord.
4. Hot-dip galvanized (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 galvanizing.
5. Provide 13/16" Ø holes for 3/4" Ø high strength (HS) bolts for all connections unless otherwise stated. Provide high strength bolts, nuts, and washers in accordance with subsection 906.07 of the most standard specifications for construction.
6. Tighten all high strength bolts by the turn of nut method per subsection 707.03.D of the most standard specifications for construction.
7. Do not lift the truss by the web members.
8. The cambering must be provided in the fabrication so that the flanges are correctly sloped to assure obtaining full contact in the relaxed assembled position prior to snugging up the flange bolts. The flange bolts must not be tightened in an attempt to close any flange misalignment.
9. The truss section lengths tabulated may be increased in 5 foot increments to reduce the number of field splices.
10. The maximum section length must not exceed 40 feet. Any deviation from the details shown on these standards will require approved shop drawings 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 the American Society of Nondestructive Testing (ASNT) Level II. All complete joint penetration (CJP) welds must be 100 percent ultrasonic test (UT), inspected by a technician qualified in accordance with ASNT Level II.
12. See current MDOT sign support typical plan sign-600-series for sign foundation.
13. See current MDOT sign support typical plan sign-700-series for sign connection.
14. Base plate (H) warpage must not exceed 1/16 inch per foot.
15. HSS denotes hollow structural shape.
DETAIL OF BASE LEVELING NUTS

SECTION C-C

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION
DIRECTOR BUREAU OF DEVELOPMENT

SHEET 4 OF 14

SIGN-540-B
FLAT WASHER (TYP)

TOP OR BOTTOM CHORD

FACES TO BE FLAT & SQUARE

DETAIL A

SECTION D-D

TOP AND BOTTOM CHORD CONNECTION DETAILS

NOT TO SCALE
DETAIL D
TOP CHORD TO DIAGONAL CONNECTION DETAIL

SECTION E-E
*WRAP WELD AROUND ENDS AND STOP 1/4" SHORT OF CLIP.*
SECTION F-F

DETAIL E

BOTTOM CHORD TO DIAGONAL CONNECTION DETAIL

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION
DIRECTOR, BUREAU OF DEVELOPMENT

SIGN-540-B  SHEET 7 OF 14
SECTION G-G

* Wrap weld around ends and stop 1/4" short of clip.

SECTION H-H
DETAIL OF UPPER CLAMP

U-BOLT DETAIL

(12 REQUIRED)

3/4" Ø STAINLESS STEEL BOLT WITH FLAT 3/16"
THICK WASHER AND 3/4" Ø NYLON INSERT LOCKNUT (TYP)

RADIUS TO FIT OUTSIDE OF TUBE

5 1/2"
SECTION J-J

SEAT DETAIL
DIAGONAL NOT SHOWN FOR CLARITY

SECTION K-K

NOT TO SCALE
SEAT DETAIL

DIMENSIONS FOR DIAGONAL ANGLE

DETAIL M

* WRAP WELD AROUND ENDS AND STOP 1/4" SHORT OF CLIP.
END CAP DETAIL

Seal end of chord with 1/4" HDG STEEL (WELD BEFORE GALVANIZING) (TYP)

Optional: Cap with set screws may be used as end cap (see column end cap details)

COLUMN CAP DETAIL

NOT TO SCALE