**4-CHORD GALVANIZED STEEL SIGN BRIDGE**

**DESIGN DATA**

- Dead Load: 3% of sign wt of supporting structure, catwalk, lights, and railing.
- Wind Load: 90 mph for 3-second gust speed.
- Ice Load: 3 psf to 1 face of sign & around surface of members.
- Dead Load: 3 psf of sign, wt. of supporting structure, catwalk, lights and railing.

**NOTES**

- Steel column and chord pipes shall be ASTM A500 Grade Fy = 33,000 psi.
- Plates, bars & structural angles shall be ASTM A36 Grade Fy = 36,000 psi.
- Steel anchor rods shall meet the requirements of ASTM F1554 Grade 55.
- Structural steel members, plates, anchor rods, bolts, washers & nuts shall be galvanized per Section 641 of the WisDock Standard Specifications.
- Welded connections can be used in lieu of bolted connections, if a truss unit can be galvanized in one piece.
- Weld test as per AASHTO.
- Exact location of sign bridge shall be determined by the region traffic engineer.
- See Section 39.3 in the Bridge Manual for acceptable materials.
- An alternate material may be substituted upon approval of the Structures Development Section.
- Elevations shown on "General Layout" sheet.
- A 200'-0" wide for outermost clearance route, 18'-3" minimum for all others.

**TYPICAL TRUSS SECTION**

- ELEVATION
  - Looking at F.F. of Sign

- END VIEW
  - TOWER MEMBER
  - BOTTOM WEB
  - TOP WEB
  - FRONT WEB
  - REAR WEB
  - TRANSVERSE WEB
  - MEMBERS CONNECTION DETAILS
  - TRUSS CHORD MEMBER
  - BEDDING ENDS AT SUPPORTS AND ALIGN TO L 2'-0" X 2'-0" X 1/2"

**TYPICAL SIGN CONNECTION**

- USE PER TYPICAL TRUSS SECTIONS
- CHORD SPA. APPROACH, Workshop SP. APPROACH, CHORD BOOM, BOOM TO TOWER
- USE FOR TYPE I AND II SIGNS ONLY
- 4-CHORD GALVANIZED STEEL SIGN BRIDGE

**ELEVATIONS TO BE SHOWN ON "GENERAL LAYOUT" SHEET.**

**STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS.**

CANTILEVER TRUSS FOOTING

BILL OF BARS

<table>
<thead>
<tr>
<th>BAR</th>
<th>NO.</th>
<th>ENG.</th>
<th>VAR.</th>
<th>BAR</th>
<th>DIA.</th>
<th>LENGTH</th>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>A</td>
<td>001</td>
<td></td>
<td>001</td>
<td>001</td>
<td>001</td>
<td></td>
</tr>
<tr>
<td>002</td>
<td>A</td>
<td>002</td>
<td></td>
<td>002</td>
<td>002</td>
<td>002</td>
<td></td>
</tr>
<tr>
<td>003</td>
<td>A</td>
<td>003</td>
<td></td>
<td>003</td>
<td>003</td>
<td>003</td>
<td></td>
</tr>
<tr>
<td>004</td>
<td>A</td>
<td>004</td>
<td></td>
<td>004</td>
<td>004</td>
<td>004</td>
<td></td>
</tr>
<tr>
<td>005</td>
<td>A</td>
<td>005</td>
<td></td>
<td>005</td>
<td>005</td>
<td>005</td>
<td></td>
</tr>
<tr>
<td>006</td>
<td>A</td>
<td>006</td>
<td></td>
<td>006</td>
<td>006</td>
<td>006</td>
<td></td>
</tr>
</tbody>
</table>

NOTES

1. DRAWINGS SHALL NOT BE SCALED.
2. TYPICAL DIMENSIONS ARE OUT TO OUT OF BAR.
3. MATERIALS AND BAR OR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR UNLESS OTHERWISE INDICATED.
4. ULTIMATE DESIGN STRESSES
   - CONCRETE MASONRY: f'c=3,500 PSI
   - BAR STEEL REINFORCEMENT, GRADE 60: fy=60,000 PSI
   - ANCHOR BOLTS ASTM F1554: fy=55,000 PSI

FOUNDATION DATA

ALLOWABLE SOIL BEARING PRESSURE: 1 T/SF

TOTAL ESTIMATED QUANTITIES
- 1000 CT
- 990 LB

Approved: Bill Oliva
Date: 1-10
BE STAINLESS STEEL

NUT, BOLT AND WASHERS SHALL

LOCK WASHER
FLAT WASHER
NUT
"J" HOOK
HOOK TO POLE
FACTORY WELDED
HANDHOLE
WALL OPPOSITE HANDHOLE

SEE TABLE*

TYPICAL "J" HOOK LOCATION

HANDHOLE DETAILS
HANDHOLE NOTES

HANDHOLE ELEMENTS TO BE GALVANIZED PER SECTION 641 OF THE WISDOT STANDARD SPECIFICATIONS.

<table>
<thead>
<tr>
<th>COLUMN SIZE</th>
<th>HANDHOLE PIPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.562&quot; X 0.500&quot;</td>
<td>4.625&quot; X 0.600&quot;</td>
</tr>
<tr>
<td>6.625&quot; X 0.562&quot;</td>
<td>5.625&quot; X 0.625&quot;</td>
</tr>
</tbody>
</table>

ANCHOR RODS

ANCHOR RODS WITH GALVANIZED ASSEMBLY TWICE AND SECURE TO WRAP PERIMETER OF ANCHOR ROD.

RODENT SCREEN

ONLY HEAD, MAIN ELECTRICAL DEVICES ARE INSTALLED.

GROUNDING LUG DETAIL

EQUIPMENT GROUNDING CONDUCTORS

GROUNDING LUG INSIDE WELD ELECTRICAL EQUIPMENT

AL/CU - U.L. LISTED CONNECTOR (LUG) THROUGH TYPE MECHANICAL NEMA APPROVED FEED BRACKET TO POLE

3" X 1" X 20 TPI HEX HEAD BOLT

16" X 0.375" UP TO AND INCLUDING 24" X 0.375"

24" X 0.375" TO AND INCLUDING 48" X 0.375"

GREATER THAN 56" X 0.375"

UP TO 400 X 0.500"

GREATER THAN 24" X 0.500"

7-18 WIRE AT EACH ANCHOR ROD.