UTILITIES
MSS DIG/UNDERGROUND UTILITY NOTIFICATION
For the protection of underground utilities and in conformance with Public Act 174 of 2013, the Contractor shall contact MSS DIG System, Inc. by phone at 811 or 800-458-7777 or via the web at either mss挖t.org or single address or mss挖t.org, a minimum of 3 business days prior to excavating, excluding weekends and holidays.

EXISTING WATER MAINS AND SEWERS
The Contractor shall be responsible for any damage to properly identified existing water mains and/or existing sewers during the construction of this project.

ROW / REAL ESTATE
PROPERTY OWNERS
Property owner’s names, where shown, are for information only, and their accuracy is not guaranteed.

SURVEY
ADJUSTING MONUMENT BOXES
All government corners on this project shall be preserved, whether shown or not. It may be necessary to place or adjust monument boxes, as required.

EXISTING INFORMATION
EXISTING INFORMATION
The following plans and reports were referred to in the design of this project:
Bridge Rehabilitation Plans, City File No. 2000028
Bridge Inspection Plans, City File No. 89029
City Drawings, City File No. 4840
2014 Underwater Bridge Inspection
2014 Concrete Testing Services
2012, 2014 Bridge Inspection Reports

These files may be requested up to one week before the bids are due by contacting Michael Neary, City of Ann Arbor, at mneary@annarbor.org or 734-796-4430 ext 42602.

EARTHWORK
SOIL EROSION MEASURES
Appropriate soil erosion and sedimentation control measures shall be in place prior to earth-disturbing activities. Place turf establishment items as soon as possible on potential erodible slopes as directed by the Engineer. Critical slopes shall be protected with either sod or seedmix or mulch blast as directed by the Engineer.

TURF ESTABLISHMENT
SEED MIXTURE
The symbol for the permanent turf seed mixture on this project is symbol Tufi.

ENVIRONMENTAL
PROTECTED TURTLES
Historical records for protected turtles exist within or near this project. Those turtle species warrant special consideration as they are rare in Michigan. In the event turtles are observed within the construction zone, move the turtle(s) into adjacent vegetative cover, away from physical work activities. If possible, please take a photo and immediately contact Richard Widmer, MDOT Ecologist, at (517) 335-2603 or the Environmental Services Section at (517) 373-4650 to confirm identification.

VENOMOUS SNAKES
Historical records for the Eastern Massasauga Rattlesnake exist within or near this project. This venomous snake is a state special concern and federal candidate species that warrants special consideration. In the event that this species is discovered within the construction zone, immediately move personnel away from the snake and contact Richard Widmer, MDOT Ecologist, at (517) 335-2603 or the Environmental Services Section at (517) 373-4650 to confirm identification.

INDIANA BAT AND LONG EARED BAT
No tree cutting will be conducted between April 1 and October 1 as a mitigation measure to avoid potential impacts to the Indiana Bat. Trees greater than 3 inches diameter at breast height (dbh) shall not be removed as part of vegetation clearing activities within the above dates.

EMERALD ASH Borer
All materials generated from removing ash trees or ash stumps shall be handled and disposed of as per the Michigan Department of Agriculture requirements. Any additional cost shall be included in the pay items for horticultural work, clearing, tree or stump removal.

NOTES APPLYING TO STANDARD PLANS
Where the following items are called for on plans, they are to be constructed according to the MDOT standard plan given below opposite each item unless otherwise indicated:

<table>
<thead>
<tr>
<th>Title</th>
<th>R</th>
<th>M</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOIL EROSION &amp; SEDIMENTATION CONTROL MEASURES</td>
<td>R-96-E</td>
<td></td>
<td></td>
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<tr>
<td>SEEDING AND TREE PLANTING</td>
<td>R-108-H</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BRIDGE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOLDING, BEVEL, LIGHT STANDARD ANCHOR BOLT ASSEMBLY AND NAME PLATE DETAILS</td>
<td>B-103-E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WORK ZONE DEVICES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GROUND-DENNED SIGN SUPPORTS FOR ISSUES WORK</td>
<td>IND-130-E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEMPORARY TRAFFIC CONTROL DEVICES</td>
<td>IND-125-E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delineators Special Detail</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MAINTENANCE OF TRAFFIC PLAN

CAUTION
CONSTRUCTION IN RIVER DOWNSTREAM PORTION OF RIVER IS BLOCKED

NOTES:
SEE DETAILED SPECIFICATION FOR MAINTENANCE OF TRAFFIC AND CONSTRUCTION SEQUENCING AND HOURS OF WORK.

STAGE 1: SIGNING SHOWN IN LEGEND BELOW SHALL BE IN PLACE DURING THE DURATION OF THE PROJECT.

STAGE 2: SIGNING SHOWN IN LEGEND BELOW SHALL BE IN PLACE DURING THE DURATION OF ANY COMPLETE CLOSURE OF THE BRIDGE DURING TIMES ALLOWED IN THE DETAILED SPECIFICATION FOR MAINTENANCE OF TRAFFIC AND CONSTRUCTION SEQUENCING.

PLACE SIGN X ALONG THE DOWNSPOUT PARKWAY EAST OF THE SOUTH DOWNSPOUT ROAD BRIDGE, AT A LOCATION SPECIFIED BY THE ENGINEER. SUPPORT SIGN ON POST (S) DRIVER SIDE POSTS WITH BOTTOM OF SIGN HEADING 7 FEET ABOVE GRADE. SIGN SHALL BE PLACED PRIOR TO PLACING THE PORTIONS COUNTERSTREAM AND REMAIN IN PLACE UNTIL THE PORTIONS COUNTERSTREAM ARE REMOVED.

THE DETAILED SPECIFICATION FOR MAINTENANCE OF TRAFFIC AND CONSTRUCTION SEQUENCING PROVIDES FABRICATION DETAILS FOR SIGNS & ROAD SIGNS. SEE THE DETAILED SPECIFICATION FOR "MAINTENANCE OF TRAFFIC AND CONSTRUCTION SEQUENCING".

LEGEND:
1. STAGE 1 = WORK IN STREET AREA
2. STAGE 2 = CLOSURE OF BRIDGE

QUANTITIES

<table>
<thead>
<tr>
<th>QUANTITY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A4</td>
<td>Sign, Type B, Temp, Prismatic, White</td>
</tr>
<tr>
<td>A5</td>
<td>Sign, Type B, Temp, Prismatic, Green</td>
</tr>
<tr>
<td>B2</td>
<td>Sign, Type B, Temp, Prismatic, Silver</td>
</tr>
<tr>
<td>B1</td>
<td>Barriers, Type B, High Intensity, Reflective Form</td>
</tr>
<tr>
<td>D4</td>
<td>Barriers, Type B, High Intensity, Lighted, Opal</td>
</tr>
</tbody>
</table>
WEST ABUTMENT ELEVATION

Notes:

Removal of concrete shall be paid for as hand chipping, other than decay and included all areas of substructure chipping.

Forms for large patches shall be installed in 2" to 4" high sides with the top of form no more than 4" above the level of concrete as the form progresses.

Patching mixture shall be pine, latex modified (C-L) concrete.

The hand chipping and cleaning of deteriorated abutment areas shall be as directed by the engineer. It is the intent of these plans that all such deteriorated concrete be removed and should any excess as to the quality of the concrete, removal shall continue until, perfectly sound concrete is exposed. The estimated areas for removal are shown on the sheets. This area will be subject to Field Inspection. The final removal area will be determined by the engineer prior to removal. Any damage to the existing reinforcing as a result of the contractor's means and methods shall be repaired at the expense of the contractor. Contractor shall remove all dirt and debris from the tops of the abutments.

See Sheet 7 for concrete patching detail and section.

DETERIORATED CONCRETE AREA

EAST ABUTMENT ELEVATION

Legend:

- Deteriorated concrete area

Diagram details include:

- Water surface elevation
- Abutment crack repair
- Loose mortar and blocks around existing pipe
- Place back of varying sized to minimize voids, minimum thickness of 2 inches
CONCRETE PATCHING DETAIL

Note: Limits of repair to be determined by the contractor, to be provided by the engineer. To be used for repair as determined by the engineer. See note 1 for more details.

SECTION AT SUBSTRUCTURE PATCHING

No more than one bar shall be replaced at any time, as directed by the engineer.
### SIGN MATERIAL SELECTION TABLE

<table>
<thead>
<tr>
<th>SIGN SIZE</th>
<th>TYPE I</th>
<th>TYPE II</th>
<th>TYPE III</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;= 30&quot; x 30&quot;</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>30&quot; x 30&quot; x 36&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; 36&quot; wide to 114&quot; wide</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>&gt; 114&quot; wide</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Type I:** Aluminum extrusion
**Type II:** Acrylic sheet
**Type III:** Stainless steel.

- Rounding of corners is not required for Type I signs.
- Vertical joints are not permitted.
- Horizontal joints through use of symbols are not permitted.

### POST SIZE REQUIREMENTS TABLE

<table>
<thead>
<tr>
<th>POST TYPE</th>
<th>SIGN AREA (FT²)</th>
<th>U-COLUMN STEEL</th>
<th>SQUARE TUBULAR STEEL</th>
<th>WOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;= 9</td>
<td>1-3 / 12吼</td>
<td>2-7 / 12吼</td>
<td>1-4吼 x 6吼</td>
<td>N/A</td>
</tr>
<tr>
<td>&gt; 9-25</td>
<td>2-5 / 12吼</td>
<td>2-7 / 12吼</td>
<td>1-4吼 x 6吼</td>
<td>N/A</td>
</tr>
<tr>
<td>&gt; 25-50</td>
<td>N/A</td>
<td>N/A</td>
<td>2-4吼 x 6吼</td>
<td>N/A</td>
</tr>
<tr>
<td>&gt; 50-84</td>
<td>N/A</td>
<td>N/A</td>
<td>2-4吼 x 6吼</td>
<td>N/A</td>
</tr>
<tr>
<td>&gt; 84</td>
<td>N/A</td>
<td>N/A</td>
<td>3-6吼 x 6吼</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*(Some sizes and distances are not shown in the table.)*

- Signs 4 feet and greater in width require 2 posts.
- Signs greater than 9 feet in width require 2 or 3 wood posts depending on area of sign.
- A minimum of 2 posts within a "Y" path is permitted.

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**Ground Driven Sign Supports for Temp Signs**

- Michigan Department of Transportation
- Bureau of Highway Maintenance
- 2015 Access Bridge Repair Project
- Wastewater Treatment Plant, City of Ann Arbor

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**Not to Scale**

- Michigan Department of Transportation
- Bureau of Highway Maintenance
3 lb. U - CHANNEL STEEL POST
(WITH SPlice)

NOT TO SCALE
MICHIGAN DEPARTMENT OF TRANSPORTATION

TRAFFIC FLOW

UPPER SPlice
LOWER SPlice

NOTE:
1. THE SPACER THICKNESS SHALL BE 1/4" LESS THAN THE GAP BETWEEN THE POST WHEN POSITIONED IN THE UNSPACED CONFIGURATION.

2. THE EXTERIOR BOLT IS PLACED IN THE #1 SLOT, Spacer, Washer, AND Nut Shall Be Installed IN A PREPAVED HOle 1" To 2" FROM THE END OF THE LAP.

3. THE INTERIOR BOLT (FASTEST FOR LAP), Spacer, Washer, AND Nut Shall Be Installed IN THE NEXT PREPAVED HOle.

4. THE BOLTS POST SHALL ALWAYS BE MOUNTED IN FRONT OF THE UPPER POST WITH RESPECT TO THE ALIGNED BESIDE TRAFFIC, REGARDLESS OF THE DIRECTION THE SIGN IS FACING.

5. THE SPICE LAP SHALL BE FASTENED ON FOUR STEEL C. GALVANIZED ARMS BOLTS (SIZE AND QUNTE S1 BE GALVANIZED BOLTS).
GENERAL NOTES:

1. A maximum of two posts within a 1 foot path is permitted.
2. All sign posts shall comply with MCHP 35G.
3. All posts shall be embedded a minimum of 42".
4. Bracing of post is not permitted.
5. Sign shall be level, and upright for the duration of installation.
6. Erect posts so the sign face and supports do not vary from plumb by more than 3/16" in 3'. Provide a center-to-center distance between posts within 2 percent of plan distance.
7. No more than one splice per post, as shown, will be permitted.
8. Post types shall not be mixed within a sign support installation.
9. No vertical joints are permitted in sign. No horizontal joints through sign legend or symbols are permitted in sign.
10. Remove sign posts and/or post stubs in their entirety when no longer required.
11. All labor, materials, and equipment, including temporary supports required to install, maintain, relocate, cover, and/or remove the temporary sign, including supports, are considered to be included in the cost of the temporary sign.
12. Saw cuts in wood posts are to be parallel to the bottom of the sign.
13. Posts shall not extend more than 4" above top of sign.