3. Maintain pedestrian access at all times during the entire duration of the project’s work. See applicable plan sheets for additional information. This work shall be included in the Item of Work “Minor Traffic Devices, Max. $_________” and will not be paid separately.

4. The Contractor shall conduct its operations and limit its excavation(s) and related work such that all applicable clearances associated with protecting the operation of the railroads are met. All costs associated with complying with this requirement shall not be paid separately, but shall be included in the cost of the associated items of work.

5. Any excavation and associated sheeting and shoring that must be performed within the MDOT railroad ROW must be reviewed and approved by Amtrak prior to commencement of the work. The Contractor shall take this requirement into consideration when preparing their project scope and work plan. The City of Ann Arbor will pay for the reasonable review fees of the sheeting and shoring plans.
Know what's below. Call before you dig.

City of Ann Arbor

Public Service

301 East Huron Street

P.O. Box 8647

Ann Arbor, MI 48107-8647

734-794-6410

www.a2gov.org

2014-027

Issued for Preliminary Review 8/24/2018

Issued for Owner Review 12/21/2018

Southside Interceptor Sanitary Sewer and Water Main Profile

Fuller Street Sanitary Sewer and Water Main Profile

HORIZ. 1" = 20'; VERT. 1" = 2'

Note: Backfill, Structure, CP shall be MDOT Class II Granular Material. The use of Sound Earth will not be allowed.

Fuller Street Sanitary and Water Profile

Modification of Existing Diversion Chamber (S-1)

NOTE MODIFICATION OF EXISTING DIVERSION CHAMBER (S-1)

NOTE: Backfill, Structure, CIP shall be MDOT Class II Granular Material. The use of Sound Earth will not be allowed.
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

CITY OF ANN ARBOR
PUBLIC SERVICE
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

PROPOSED ROAD IMPROVEMENTS

SYMBOL LEGEND

PROPOSED ROAD IMPROVEMENTS

1" = 20'

GLEN COURT

FULLER STREET

SOUTH SIDE INTERCEPTOR SANITARY DIVERSION PROJECT (GLEN/FULLER INTERSECTION)

ISSUED FOR PRELIMINARY REVIEW 8/24/2018

ISSUED FOR OWNER REVIEW 12/21/2018

PROPOSED ROAD IMPROVEMENTS
DRILLING, CORING OR CUTTING CONCRETE SHALL NOT BE

OPENINGS REQUIRED FOR SLABS AND WALLS REQUIRE

EXHIBIT A CONCRETE WALL REINFORCED WITH EA06 @ 12" R 21"

LAP (TYP.)

SHOCK DOWELS AND STRINGER TO PIPE THROUGH A CABLE FOR LIFTING.

SHACKLE AND PLACING THE CONCRETE DIVERSION CHAMBER SHALL BE TYPICAL DETAILS.

PLACING CONCRETE. SECURE EMBEDDED ITEMS USING WIRE TIES TO REINFORCING STEEL, ATTACH TO FORMS, OR USE OTHER SUITABLE METHODS.

PROTECTIVE COATING NOTE:

CAST-IN-PLACE CONCRETE NOTES:

1. USE WOOD FORMS TO SUPPORT THE SLAB TO REGAIN ITS SHAPE AFTER CONCRETE IS PLACED, THEN REMOVE SUPPORTS. ATTACH TO FORMS OR USE OTHER SUITABLE METHODS.

2. DRIED HANGING PIPES TO CONCRETE WALLS MUST MEET WATERSTOP DETAILS/DETAILS:

3. DO NOT LIFT SLABS, PLACE SLABS ON FORMS OR TOOLS OR SUPPORT THEM WITH WOOD BLOCKS.

4. CONCRETE COLUMNS TO THE SAME SIZE ARE REQUIRED AT ALL COORDINATES DETAILED IN SECTION.

5. UNLESS NOTED OTHERWISE, PROCESS SLABS CUT BY CIRCULAR SAW OR CHISEL WITH 3/4" RADIUS EDGE, THEN TOUGH - OL 0.5" TO 1/2".

6. UNLESS NOTED OTHERWISE, MEDIAN OF SPACING ENDS TO BE 4" MINIMUM.

7. UNLESS NOTED OTHERWISE, PROCESS SLABS ON ALL OTHER SURFACES WITH A 30" TAPER IN EL.

8. OPENINGS REQUIRED FOR SLABS AND MOLDS REQUIRE SNUG FITTING SMOOTHING THE PERIMETER, SEE DETAILS.

9. INSTALL EXPANSIVE WATERSTOP AROUND PIPES AND POUR CONCRETE AROUND PIPES AND POUR CONCRETE DIVERSION CHAMBER.

10. INSTALL EXPANSIVE WATERSTOP ALL AROUND. TYPICAL AT PIPES.
## Top Slab Top Bars

<table>
<thead>
<tr>
<th>Bar</th>
<th>Diameter</th>
<th>Spacing</th>
<th>Elongation</th>
</tr>
</thead>
<tbody>
<tr>
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<td>6&quot;</td>
<td>@ 2&quot;</td>
<td>0&quot;</td>
</tr>
<tr>
<td>2</td>
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<td>@ 4&quot;</td>
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</tr>
<tr>
<td>3</td>
<td>10&quot;</td>
<td>@ 6&quot;</td>
<td>0&quot;</td>
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</table>

## Top Slab Bottom Bars

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<tr>
<td>6</td>
<td>10&quot;</td>
<td>@ 6&quot;</td>
<td>0&quot;</td>
</tr>
</tbody>
</table>

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### Notes

1. Field cut bars with epoxy
2. Paint cut bars with epoxy

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### Field Cut EB06 Dowels As Paint Cut Ends With Epoxy

---

### Required for Pipe

---

### Repair Coating
Know what's below. Call before you dig.
<table>
<thead>
<tr>
<th>ITEM No.</th>
<th>ITEM DESCRIPTION</th>
<th>QUANTITY</th>
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<tbody>
<tr>
<td>8110063</td>
<td>Pavt Mrkg, Only Cold Plastic, Lt Turn Arrow Sym</td>
<td>2 EA</td>
</tr>
<tr>
<td>8110066</td>
<td>Pavt Mrkg, Only Cold Plastic, Only</td>
<td>1 EA</td>
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<tr>
<td>8110070</td>
<td>Pavt Mrkg, Only Cold Plastic, Right and Lt Turn Arrow Sym</td>
<td>2 EA</td>
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<td>Pavt Mrkg, Polyurea, 4 inch, White</td>
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<td>8110092</td>
<td>Pavt Mrkg, Polyurea, 4 inch, Yellow</td>
<td>318 LF</td>
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<td>8110093</td>
<td>Pavt Mrkg, Polyurea, 6 inch, Crosswalk</td>
<td>89 LF</td>
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<td>8110094</td>
<td>Pavt Mrkg, Polyurea, 6 inch, White</td>
<td>185 LF</td>
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<td>8110100</td>
<td>Pavt Mrkg, Polyurea, 12 inch, Crosswalk</td>
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<td>8110101</td>
<td>Pavt Mrkg, Polyurea, 24 inch, Stop Bar</td>
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<td>Recessing Pavement Markings, Longhi</td>
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<tr>
<td>8110467</td>
<td>Recessing Pavement Markings, Trainer</td>
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</tr>
</tbody>
</table>
Know what's below. Call before you dig.
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.
NOTICE: ANY ONLY BE USED ON ROADWAY WITH POSTED SPEED OF 40 MPH OR LESS.

GENERAL NOTES
- When closing or relocating crosswalks or sidewalks, the contractor shall provide detectable Temporary Pedestrian Control Devices and in large, legible characters
- Provide Temporary Pedestrian Control Devices for pedestrians are shown. Other devices may be necessary to control vehicle traffic. Please refer to Exception 1, Exception 2, Exception 3.
- Provide an Alternate Pedestrian Route (APR) Detour with signage as shown on project plans.
- Provide temporary delineation with flags or other Engineer-approved devices at no additional cost to the project.
- Provide temporary closure with detectable markings.
- Provide temporary curb ramps with detectable warnings. A temporary curb ramp with detectable warnings shall be installed when crossing a minor road or commercial drive.
- Provide Temporary Truncated Domes Required if crossing a minor road or commercial drive.
- Provide an Alternate Pedestrian Route (APR) at all times. For roadways with no available detours, maintain one open sidewalk at all times.
- Provide a smooth, continuous hard surface through the length of the APR.
- Provide a smooth, continuous hard surface through the closed area.
- Provide Temporary Traffic Control Devices for pedestrians are shown. Other devices may be necessary to control vehicle traffic. Please refer to Exception 1, Exception 2, Exception 3.
- Provide an Alternate Pedestrian Route (APR) Detour with signage as shown on project plans.
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- Provide temporary delineation with flags or other Engineer-approved devices at no additional cost to the project.
- Provide a smooth, continuous hard surface through the length of the APR.
- Provide a smooth, continuous hard surface through the closed area.
CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE PLACED ABOVE A CURB RAMP or LANDING PLATFORM OR A VERTICAL DROP OF 6" OR GREATER OR A SIDE APRON SLOPE STEEPER THAN 1:3. PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE PLACED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

CROSS SLOPE 2% MAX.

CLEAR SPACE OF 48" x 48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A CONTRASTING COLOR, 2" TO 4" WIDE MARKING. THE MARKING IS OPTIONAL WHERE COLOR CONTRASTING EDGING IS USED.

WATER FLOW IN THE GUTTER SYSTEM SHALL NOT BE IMPEDED.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHOULD BE VERTICAL UP TO 1/4" MAX AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2" HEIGHT.

DETECTABLE EDGING 6" MIN. HEIGHT

EDGE TREATMENT

CROSS SLOPE 2% MAX.

CLEAR SPACE

SOUTHSIDE INTERCEPTOR SANITARY DIVERSION PROJECT

MAINTENANCE OF PEDESTRIAN TRAFFIC DETAILS

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

CITY OF ANN ARBOR

PUBLIC SERVICES

301 EAST HURON STREET

P.O. BOX 8647

ANN ARBOR, MI 48107-8647

734-794-6410

www.a2gov.org

2014-027

TEMPORARY CURB RAMP

PARALLEL TO CURB

TEMPORARY CURB RAMP

PERPENDICULAR TO CURB

SHOWN WITH PROTECTIVE EDGE

SHOWN WITH SIDE APRON

2" TO 4" WIDE EDGE MARKING

2" TO 4" WIDE EDGE MARKING

48" x 48" MIN. LANDING AREA

48" x 48" MIN. LANDING AREA

EDGE TREATMENT

EDGE TREATMENT

EDGE TREATMENT

EDGE TREATMENT

CLEAR SPACE

CLEAR SPACE

NON-SLIP SURFACE

NON-SLIP SURFACE

CURB FACE

CURB FACE

DRAINAGE

DRAINAGE

PROTECTIVE EDGING 2" MIN. HEIGHT ABOVE RAMP SURFACE

PROTECTIVE EDGING 2" MIN. HEIGHT ABOVE RAMP SURFACE

DETECTABLE EDGING 6" MIN. HEIGHT

DETECTABLE EDGING 6" MIN. HEIGHT

JOINT GAP TREATMENT

JOINT GAP TREATMENT

2" TO 4" WIDE EDGE MARKING

2" TO 4" WIDE EDGE MARKING

EDGE TREATMENT

EDGE TREATMENT

LEADING EDGE

LEADING EDGE

0.25 INCH MAXIMUM

0.25 INCH MAXIMUM

0.5 INCH MAXIMUM

0.5 INCH MAXIMUM

EDGE TREATMENT

EDGE TREATMENT
**GENERAL NOTES**

RAILINGS OR OTHER OBJECTS MAY PROTRUDE A MAXIMUM OF 4 INCHES INTO THE WALKWAY CLEAR SPACE WHEN LOCATED A MINIMUM OF 27 INCHES ABOVE THE WALKWAY SURFACE.

ANY PEDESTRIAN DEVICES USED TO PROVIDE POSITIVE PROTECTION FOR PEDESTRIANS OR WORKERS SHALL MEET NCHRP 350 CRASHWORTHY REQUIREMENTS APPROPRIATE FOR THE BARRIER'S APPLICATION.

BARRICADES SHALL BE PLACED CONTINUOUSLY ACROSS THE ENTIRE WIDTH OF THE WALKWAY SURFACE BEING CLOSED.

**SPECIFIC NOTES**

ANY TRIPPING HAZARD IN THE WALKWAY NEEDS A DETECTABLE EDGE. BALLAST SHALL BE LOCATED BEHIND OR INTERNAL TO THE DEVICE. ANY SUPPORT ON THE FRONT OF THE DEVICE SHALL NOT EXCEED THE 48 INCH MINIMUM WALKWAY CLEAR SPACE AND SHALL NOT EXCEED 0.5 INCHES IN HEIGHT ABOVE THE WALKWAY SURFACE.

DETECTABLE EDGES SHALL BE CONTINUOUS AND A MINIMUM OF 6 INCHES HIGH ABOVE THE WALKWAY SURFACE AND HAVE COLOR MARKINGS CONTRASTING WITH THE WALKWAY SURFACE.

DEVICES SHALL NOT BLOCK WATER DRAINAGE FROM THE WALKWAY. A GAP HEIGHT OR OPENING FROM THE WALKWAY SURFACE UP TO A MAXIMUM OF 2 INCHES IS ALLOWED FOR DRAINAGE PURPOSES.

WHEN HAND GUIDANCE IS REQUIRED, THE TOP RAIL OR TOP SURFACE SHALL:

- BE IN A VERTICAL PLANE PERPENDICULAR TO THE WALKWAY ABOVE THE DETECTABLE EDGE.
- BE CONTINUOUS AT A HEIGHT OF 34 TO 38 INCHES ABOVE THE WALKWAY SURFACE, AND
- BE SUPPORTED WITH MINIMAL INTERFERENCE TO THE PEDESTRIAN’S HANDS OR FINGERS.

ALL DEVICES SHALL BE FREE OF SHARP OR ROUGH EDGES, AND FASTENERS (BOLTS) SHALL BE ROUNDED TO PREVENT HARM TO HANDS, ARMS OR CLOTHING OF PEDESTRIANS.

ALL DEVICES USED TO CHANNELIZE PEDESTRIAN FLOW SHOULD INTERLOCK SUCH THAT GAPS DO NOT ALLOW PEDESTRIANS TO STRAY FROM THE INTENDED CHANNELIZED PATH.

A WALKWAY SURFACE SHALL BE FIRM, STABLE, AND SLIP RESISTANT. COMPACTED GRAVEL, AGGREGATE, OR SLAG MATERIALS ARE NOT ALLOWED.

LONGITUDINAL CHANNELIZING DEVICES FOR PEDESTRIANS SHALL BE 32 INCHES IN HEIGHT OR GREATER.

**NARROW TEMPORARY PEDESTRIAN ACCESS ROUTE PASSING DETAIL**

DETECTABLE EDGE SHALL BE CONTINUOUS AND A MINIMUM OF 6 INCHES HIGH ABOVE THE WALKWAY SURFACE.