CITY OF DULUTH
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
ENGINEERING DIVISION

CONSTRUCTION PLANS FOR: REHABILITATION AND RENAME OF BREWERY CREEK STORM SEWER SECTION 29 (PHASE A) AND SECTION 31 (PHASE B)

GEOGRAPHIC LOCATION: LOCATED BELOW THE 500 BLOCK OF EAST TENTH STREET BETWEEN NORTH 5TH AVENUE EAST AND CENTRAL ENTRANCE.

INDEX MAP

CITY OF DULUTH, Proj. No. 00365T

SCALE 1:2,000

MANHOLE & CATCH BASIN INDEX

WARNING
LOCATION OF UNDERGROUND UTILITIES
TO BE REVIEWED BY CONTRACTOR
BEFORE DIGGING
CORNER STATE, ONE CALL
1-800-252-1166
REQUIRES LAW

INDEX

C.P. No. 00365T
BEG. PROJECT STA. 44+57

C.P. No. 00365T
END PROJECT STA. 49+56

INDEX SHEET 01 OF 13 SHEETS

City of Duluth Proj. No. 00365T

GOVERNIG SPECIFICATIONS

THE 2019 EDITION OF THE CITY OF DULUTH PUBLIC WORKS AND UTILITIES DEPARTMENT STANDARD CONSTRUCTION SPECIFICATIONS SHALL APPLY.

ALL TRAFFIC CONTROL DEVICES AND SIGNS SHALL CONFORM TO THE MANUAL, INCLUDING THE FIELD MANUAL, DATED "LATEST EDITION".

INDEX SHEET NO.
1 TITLE SHEET
2 STATEMENT OF ESTIMATED QUANTITIES
3 DIVISION CONTROL NOTICES
4 DIVISION CONTROL DRAWING
5 TRAFFIC CONTROL - PHASE A
6 TRAFFIC CONTROL - PHASE B
7 GENERAL NOTES
8 GROUND ACCESS DETAIL - PHASE A
9 GROUND ACCESS DETAIL - PHASE B
10 STORM SEWER PROFILE - PHASE A
11 STORM SEWER DETAILS - PHASE B
12 STORM SEWER PROFILE - PHASE B
13 STORM SEWER DETAILS

THIS PLAN CONTAINS 13 SHEETS

I HEREBY CERTIFY THAT THIS PLAN SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM QUALIFIED TO PRACTICE ENGINEERING UNDER THE LAWS OF THE STATE OF MINNESOTA

JOHN W. BURGER
PRESIDENT

11/09/2015 2015

CITY APPROVAL

PERFORMANCE DESIGN

PROJECT OWNER (TYPE OR PRINTED NAME)

PERFORMANCE DESIGN (DATE OF PERFORMANCE DESIGN)

APPROVED (DATE OF PERFORMANCE DESIGN)

APPROVED (DATE OF PERFORMANCE DESIGN)
KEY NOTES:
1. CONTRACTOR SHALL PROVIDE ACCESS TO FRONT ENTRANCE OF EXISTING BUILDING THROUGHOUT DURATION OF THE PROJECT.
2. PRECAST CONCRETE BARRIERS SHALL BE PLACED AS SHOWN TO PROVIDE WALKWAY BETWEEN BUILDING AND BARRIERS EXCEPT AS NOTED BELOW.
3. PRECAST CONCRETE BARRIERS TO BE PLACED AROUND PERIMETER OF EXCAVATION LIMITS EXCEPT AS NOTED BELOW. CONTRACTOR MAY OMIT BARRIERS WHERE ACCESS IS REQUIRED FOR CONSTRUCTION AND REPLACE WITH ORANGE SAFETY FENCE (INCIDENTAL).
4. INSTALL ORANGE SAFETY FENCE BETWEEN/ALONG PLASTIC DRUMS (INCIDENTAL).
5. IN LIEU OF SINGLE POST SIGNAGE, "NO PARKING" SIGNS SHALL BE TEMPORARILY ATTACHED TO EXISTING FENCE/DRUMS DURING PHASE A CONSTRUCTION.

GENERAL NOTES:
- LAYOUT SHOWN IS APPROXIMATE AND SHALL BE DEPENDENT ON CONTRACTOR'S OPERATIONS AND OCCASIONAL ADJUSTMENTS/REQUIREMENTS.
- IN NO CASE SHALL THE ACTUAL CONSTRUCTION AREA EXCEED WHAT SHOWN WITHOUT PRIOR APPROVAL FROM THE ENGINEER IN THE FIELD.
- ADJUSTMENTS TO LAYOUT AND LOCATION OF PRECAST CONCRETE BARRIER SHALL BE MADE AS DIRECTED BY THE ENGINEER IN THE FIELD TO ACCOMMODATE FIELD OPERATIONS, TRAFFIC, AND/OR SAFETY CONCERNS.
- "PHASE A" AND "PHASE B" TRAFFIC CONTROL SHALL NOT BE IMPLEMENTED CONCURRENTLY. PHASE A SHALL BE IMPLEMENTED FIRST AND ALL WORK (EXCEPT FINAL PAVING IF REQUIRED) SHALL BE COMPLETED PRIOR TO BEGINNING WORK AT PHASE B.

LEGEND:
- DENOTES TYPE III BARRIERS
- DENOTES SINGLE POST SIGNAGE
- DENOTES PLASTIC DRUM
- DENOTES PRECAST CONCRETE BARRIER
- DENOTES PROPOSED WORK AREA LIMITS
- DENOTES TRAFFIC FLOW

NOTE:
PRECAST CONCRETE BARRIERS WILL BE REQUIRED ONLY IF CONTRACTOR'S CHISEL METHOD OF EXCAVATION REQUESTS EXCAVATION AND RECONSTRUCTION OF CASTING MANNHOLDS.
**TRAFFIC CONTROL NOTES**

- All signs indicated on this traffic control plan, except those signs which are influent, shall be furnished and installed by the contractor. All appropriate signs, including influent signs, shall be maintained by the contractor during the life of the contract. Existing stop signs shall be maintained for the duration of the project.
- All traffic control devices and signs shall conform to, and be placed in accordance with, the Minnesota Manual on Uniform Traffic Control Devices (MUMTD).

The contractor shall receive compensation for all work described herein and elsewhere in these plans on the basis of a lump sum payment for item traffic control (520.46).

- The contractor shall place adequate plasticDriven Warning signs and barricades within the construction zone to protect vehicular traffic and pedestrian traffic from construction operations. Additional signs may include, but is not limited to, "Bump Driveway", "Loose Gravel", etc. The number and placement of traffic control devices, including the number and location of signs, shall be at the discretion of the engineer. The traffic control devices shall be adjusted in the field as directed by the engineer.

- All traffic control devices shall be removed or covered as soon as they are no longer required or appropriate.

- The initial construction signage shall be erected prior to construction operations.

**TRAFFIC - BILL OF MATERIALS**

The following items are included and paid for under specific tailored traffic control.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>RB-3</td>
<td>Road Closed</td>
<td>Item</td>
<td>1</td>
</tr>
<tr>
<td>RSH-2</td>
<td>Road Closed</td>
<td>Item</td>
<td>1</td>
</tr>
<tr>
<td>RSH-4</td>
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<td>1</td>
</tr>
<tr>
<td>W1-6</td>
<td>Bump</td>
<td>Item</td>
<td>1</td>
</tr>
<tr>
<td>W2-1</td>
<td>Road Work Ahead</td>
<td>Item</td>
<td>1</td>
</tr>
<tr>
<td>W2-3</td>
<td>Road Closed</td>
<td>Item</td>
<td>1</td>
</tr>
<tr>
<td>TYPE B</td>
<td>Barri:</td>
<td>Item</td>
<td>1</td>
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<tr>
<td>TYPE B</td>
<td>Barri:</td>
<td>Item</td>
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</tr>
<tr>
<td>PLASTIC</td>
<td>Drum</td>
<td>Item</td>
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<td>TEMPORARY PORTABLE</td>
<td>PRECAST CONCRETE</td>
<td>ITEMS</td>
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<tr>
<td>TYPE A</td>
<td>FLASHERS</td>
<td>Item</td>
<td>1</td>
</tr>
</tbody>
</table>

**KEY NOTES:**

1. Posts, markers and hardware required for sign placement are included.
2. All sign pane dimensions are in inches.
3. Total represents estimated maximum quantity. Contractor shall verify total quantity needed based on access location for proposed construction. Only required if existing barriers require excavation to permit lining.

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City of Duluth Proj. No. 00365T TRAFFIC CONTROL NOTES Sheet No. 07 of 13 Sheets
LEGEND:

- "D" signifies "LIVE SPRING PIPE 60".

KEY NOTES:

1. Storm sewer/drainage; inlet located at station 51+50.9.
2. See sheets 09-13 for details.
3. Estimated excavation and work area limits based on assumed excavation limits shown on sheets 09 & 11. In additional excavation and/or surface disturbance is required, the contractor shall furnish temporary shoring as required such that the assumed area of disturbance is not exceeded. The cost of all excavation, shoring, backfill, and surface restoration in excess of that shown in the plans shall be borne solely by the contractor.
4. Excavation and restoration work adjacent to manholes as shown in sheets 09-13 is only required if contractor's erosion method of sewer lining requires partial manhole removal/modifications.

GENERAL LAYOUT

SCALE: 1" = 20'