CITY OF DULUTH
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
ENGINEERING DIVISION

CONSTRUCTION PLANS FOR:
4TH STREET AND OLD HOWARD MILL ROAD STORM DOWN DRAIN REPLACEMENT

FLOOD SITE NO. 666
CITY PROJECT NO. 1254

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY LEVEL 0. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ADCE 36-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPOSITION OF EXISTING SUBSURFACE UTILITY DATA".

WARNING: LOCATION OF UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR CALL BEFORE DIGGING. FOLLOW STATE ONE CALL 1-800-252-1166 REQUIRED BY LAW.

THE 2005 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.
AVAILABLE AT: http://www.dot.state.mn.us/procurement/specs/index.html

THE 2380 PLANT MIXED ASPHALT PAVEMENT SPECIFICATION DATED 01/2011 SHALL APPLY.
AVAILABLE AT: http://www.dot.state.mn.us/materials/alternatives.html

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE MnDOT, INCLUDING THE FIELD MANUAL DATED FEBRUARY 2011.
AVAILABLE AT: http://www.dot.state.mn.us/trafficsigns/policies/fieldmanual2011/

THE 2013 EDITION OF THE CITY OF DULUTH PUBLIC WORKS AND UTILITIES DEPARTMENT STANDARD CONSTRUCTION SPECIFICATIONS AND SUPPLIERS OR ACCOMPANYING SHEET SHALL APPLY.

INDEX

SHEET NO. DESCRIPTION
1 TITLE SHEET
2 DETAIL SHEETS
3 DETAIL DRAWINGS & STATEMENT OF ESTIMATED QUANTITIES
4 PLAN & PROFILE - PROPOSED
5 PLAN & PROFILE - RESTORATION

THIS PLAN CONTAINS 5 SHEETS

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

[Signature]

CITY APPROVAL

APPROVED CHIEF ENGINEER OF TRANSPORTATION DATE
APPROVED CHIEF ENGINEER OF UTILITIES DATE

DRAWN BY: JJM SHEET NO. 1 OF 5
SODIUM TYPICAL SECTION

NOTES:
1. CONTRACTOR TO SET GRADE TO FIT EXISTING GROUND, PERMIT CROSS DRAINAGE.
2. CONTRACTOR TO PROVIDE CONSTRUCTION STAKING.
3. FOR REPLACING EXISTING SIDEWALK,
   \[ A=5.5', B=5', C=13' \text{ MAX} \]
   FOR NEW SIDEWALKS WHERE NONE EXISTED,
   \[ A=4', B=4', C=11' \text{ MAX} \]
4. CONSTRUCTION LIMITS VARY FOR SIDEWALK EXTENDING FROM 4TH STREET TO THE PEDESTRIAN BRIDGE.

STATEMENT OF ESTIMATED QUANTITIES
FOR REFERENCE ONLY

<table>
<thead>
<tr>
<th>ITEM NUM</th>
<th>DESCRIPTION</th>
<th>UNIT</th>
<th>EST QUANTITY</th>
<th>FINAL</th>
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<td>1</td>
<td>INDUSTRIZATION</td>
<td>LUMP SUM</td>
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<tr>
<td>2</td>
<td>TRAFFIC CONTROL</td>
<td>LUMP SUM</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>CLEANING AND GRUBBLING</td>
<td>LUMP SUM</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>PIPE 4, ANCHORED MANHOLE</td>
<td>EACH</td>
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<tr>
<td>4.5.1</td>
<td>12&quot; DIA. HIGH PRESSURE PIPE</td>
<td>LIN FT</td>
<td>80</td>
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<td>6</td>
<td>32&quot; ALUMINUM HOPE MILL ADAPTOR</td>
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<td>7</td>
<td>COMMON BORROW</td>
<td>CY YD</td>
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<td>CATEGORY 4 PERVIOUS CONTROL BLANKET</td>
<td>SOLIDS</td>
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<td>9</td>
<td>STRAW BORROW</td>
<td>LIN FT</td>
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<td>TURF STABILIZATION</td>
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<td>SIDEWALK</td>
<td>SQ YD</td>
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<tr>
<td>12</td>
<td>REMOVE &amp; RE-INSTALL SIGN</td>
<td>EACH</td>
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NOTES:
1. ALL TRAFFIC CONTROL BY CONTRACTOR.
2. CLEANING AND GRUBBLING SHALL BE MINIMAL AMOUNT NEEDED FOR CONTRACTOR TO ACHIEVE ACCESS.
3. ITEM INCLUDES TRENCH EXCAVATION, PIPE BEDDING MATERIAL, PIPE COVER MATERIAL AND BACKFILL.
4. ITEM INCLUDES REMOVAL AND DISPOSAL OF EXISTING 12" PVC STORM SEWER PIPE.
5. MEASURED ALONG SLIDES, NOT HORIZONTAL DISTANCE.
6. COMMON BORROW SHALL BE COMPACTABLE CLAY TYPE MATERIAL.
NOTES:
1. INSTALL BORRILL ACROSS THE SLOPE OF THE DISTURBED AREA EVERY 20' UP THE SLOPE FROM THE OUTLET OF THE PIPE TO TOP OF SLOPE.
2. EROSION CONTROL BLANKET SHALL BE CATEGORY 4.