REINFORCING STEEL LIST

<table>
<thead>
<tr>
<th>BAR</th>
<th>SPACING</th>
<th>BAR SIZES FOR SEWERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>12&quot; ON CENTER</td>
<td>48&quot; ~ 60&quot; 66&quot; ~ 78&quot; 84&quot; ~ 96&quot;</td>
</tr>
<tr>
<td>L</td>
<td>3&quot; ON CENTER</td>
<td>#5 #6 #7</td>
</tr>
<tr>
<td>D</td>
<td>AS SHOWN</td>
<td>#5 #5 #5</td>
</tr>
<tr>
<td>E</td>
<td>12&quot; ON CENTER</td>
<td>#5 #5 #5</td>
</tr>
</tbody>
</table>

INCLUDED FOR ESTIMATING PURPOSES ONLY. THE COST OF FURNISHING AND PLACING ALL REINFORCEMENT STEEL SHALL BE INCLUDED IN ITEM 604 FOR PAYMENT.

NOTES:
1. STEPS SHALL COMPLY WITH THE REQUIREMENTS SET FORTH ON CMS 711.31 AND STANDARD DRAWING AA-S119.
2. t = WALL THICKNESS OF INTERCEPTING SEWER.
3. ALL REINFORCING STEEL SHALL MEET CMS 709.2 SPECIFICATIONS.
4. 2" MINIMUM COVER ON ALL REINFORCEMENT STEEL.
5. NO STEPS TO BE INSTALLED BELOW PIPE SPRING LINE.
6. PRECAST MANHOLES SHALL BE IN ACCORDANCE WITH ASTM C478.

FOR SEWERS 48" DIAMETER AND OVER

SECTION A-A

SECTION B-B

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE & DRAINAGE

TYPE "E" MANHOLE

STANDARD DRAWING AA-S104
REVISED 8/8/14
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NOTES:

1. CONCRETE FOR THE BASES SHALL BE CLASS "C" OR MEET THE REQUIREMENTS OF CMS 706.13. THE BASES SHALL BE PRECAST OR CAST-IN-PLACE.

2. PRECAST MANHOLES SHALL BE IN ACCORDANCE WITH ASTM C478. PRECAST BASES ON SEWERS 42" AND UNDER SHALL HAVE SUFFICIENT STEEL REINFORCEMENT TO PERMIT SHIPMENT AND PLACEMENT WITHOUT DAMAGE TO THE BASE.

3. STEPS SHALL COMPLY WITH REQUIREMENTS SET FORTH ON CMS 711.31 AND STANDARD DRAWING AA–S119.

4. t = WALL THICKNESS OF INTERCEPTING SEWER.

5. ALL REINFORCING STEEL SHALL MEET CMS 709.2 SPECIFICATIONS.

6. 2" MINIMUM COVER ON ALL REINFORCEMENT STEEL.

FOR SEWERS 42" DIA. & UNDER

CITY OF COLUMBUS, OHIO
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