# BILL OF MATERIALS

<table>
<thead>
<tr>
<th>MK. NO.</th>
<th>QTY. REQ'D</th>
<th>DESCRIPTION</th>
<th>SIZE</th>
<th>MATERIAL</th>
<th>REMARKS</th>
<th>LINE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>OCTAGONAL SECTION SHAFT</td>
<td>127 A/F - 75 A/F x 3.183</td>
<td>CSA C440.1 300M</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>EXTENSION FLANGE PLATE</td>
<td>18 x 228 x 228</td>
<td>CSA C440.1 300M</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>OCTAGONAL HOLES PLATE</td>
<td>140 ODF x 23.5 1/4 Sets</td>
<td>CSA C440.2 300M</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>EXTENSION FLANGE PLATE BOLTS</td>
<td>18 (6/7/2) DIN x 10</td>
<td>ASTM A325</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>SHACK UP STRAP PLATE</td>
<td>4.394 x 40</td>
<td>CSA C440.2 300M</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>PIPE PENETRATION (1 1/2&quot;) L/H PLUG</td>
<td>48 O.D. x 28</td>
<td>ASTM A32 OR 6 PVC, 40</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

APPROXIMATE TOTAL WEIGHT = 46 kg

**NOTES:**

1. All materials, except stainless steel flange bolts, shall be hot dip galvanized in accordance with ASTM A123-88 (plus last revision) with a minimum coating of 625 g/m².
2. Provide name identification number with welding electrode as per specification structure code = C.
3. Ship with nuts and washers installed.
4. Spread all sharp points and edges.
5. Stainless steel welds shall have minimum penetration except within 150 mm of extension flange plate and mass damper plate shall be complete penetration.
6. Exterior steel joining flange to extension flange plate shall be an overlap sec complete penetration weld with the long leg of the weld along the shaft, terminated 250 mm from the shaft's surface.

**REDUCED DRAWING**

**N.T.S:**

**THE CITY OF WINNIPEG**

**VERTICAL EXTENSION TO 10.7 m (35')**

**CONTRACTOR DRAWING NUMBER**

**MATERIALS:**

- **CSA C440.1 300M**
- **CSA C440.2 300M**
- **ASTM A325**
- **ASTM A32 OR 6 PVC, 40**