**FLAT SLAB TOP JOINT CONFIGURATIONS**

(Shown at access hole)

**GENERAL NOTES**

Use this standard for water mains ≤ 8 (200).

The manufacturer shall ensure that all precast manhole sections are additionally reinforced where required to resist damage from handling, shipping and installation stresses.

Lifting holes shall be located in the sections as per the manufacturer's recommendations, except as noted.

See Standard 602701 for details of manhole steps.

All dimensions are in inches (millimeters) unless otherwise noted.

**DATE**

2-19

**REVISIONS**

Moved wall reinforcement from inside face to middle.

1-1-19

Expanded / refined reinforcement options. Increased vault depths.

**STANDARD 602501-05**
**PLAN - FLAT SLAB TOP**

(Showing layout of reinforcement bars and c bars)

**BASE SLAB JOINT CONFIGURATIONS**

**SHEAR KEY GEOMETRY**

(Reinforcement not shown for clarity)

**BASE SLAB REINFORCEMENT**

<table>
<thead>
<tr>
<th>Location</th>
<th>Total Weight</th>
<th>WWR or Rebar (each direction)</th>
<th>A&lt;sub&gt;s&lt;/sub&gt; (min.)</th>
<th>Spacing (max.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Mat</td>
<td>≥ 20 ft. (6.10 m)</td>
<td>0.24 sq. in./ft. (508 sq. mm/m)</td>
<td>10 (250)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt; 20 ft. (6.10 m)</td>
<td>0.24 sq. in./ft. (508 sq. mm/m)</td>
<td>10 (250)</td>
<td></td>
</tr>
</tbody>
</table>

**PRECAST VALVE VAULT TYPE A**

4' (1.22 m) DIAMETER

(Sheet 2 of 2)

**STANDARD 602501-05**