5' (1.52 m) DIAMETER

PRECAST VALVE VAULT TYPE A

30'-0" (9.15 m) max.

SECTION THRU VALVE VAULT

(Without conical top)

Valve

SECTION THRU VALVE VAULT

(With conical top)

Valve

SECTION THRU VALVE VAULT

(With concentric conical top)

GENERAL NOTES

Use this standard for water mains ≥ 10 (250).

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

REVISIONS

2-1-19
Moved wall reinforcement from inside face to midplane.

1-1-19
Expanded / refined reinforcement options, increased vault depths.

STANDARD 602506-02
**FLAT SLAB TOP REINFORCEMENT**

<table>
<thead>
<tr>
<th>Location</th>
<th>WWI (each direction)</th>
<th>Rebar (each direction unless noted)</th>
<th>A_v (min)</th>
<th>Spacing (max)</th>
<th>A_v (min)</th>
<th>Spacing (max)</th>
<th>Bar Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top</td>
<td>0.15 sq. in./ft.</td>
<td>18</td>
<td>0.15 sq. in./ft.</td>
<td>18</td>
<td>#3 or #4</td>
<td>(450)</td>
<td>(508 sq. mm/m)</td>
</tr>
<tr>
<td>Bottom</td>
<td>0.40 sq. in./ft.</td>
<td>8</td>
<td>0.40 sq. in./ft.</td>
<td>8</td>
<td>#3 (3)</td>
<td>(150)</td>
<td>(233 sq. mm/m)</td>
</tr>
</tbody>
</table>

* Only one layer of WWI permitted to avoid congestion.

**WALL REINFORCEMENT**

<table>
<thead>
<tr>
<th>Orientation</th>
<th>WWI or Rebar</th>
<th>A_v (min)</th>
<th>Spacing (max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circumferential</td>
<td>WWI or Rebar</td>
<td>6</td>
<td>6 (150)</td>
</tr>
<tr>
<td>Vertical</td>
<td>WWI or Rebar</td>
<td>8</td>
<td>8 (200)</td>
</tr>
</tbody>
</table>

**BASE SLAB REINFORCEMENT**

<table>
<thead>
<tr>
<th>Location</th>
<th>Total Height</th>
<th>WWI or Rebar (each direction)</th>
<th>A_v (min)</th>
<th>Spacing (max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top</td>
<td>≤ 20 ft. (6.10 m)</td>
<td>0.24 sq. in./ft.</td>
<td>10</td>
<td>10 (508 sq. mm/m)</td>
</tr>
<tr>
<td></td>
<td>&gt; 20 ft. (6.10 m)</td>
<td>0.28 sq. in./ft.</td>
<td>8</td>
<td>8 (593 sq. mm/m)</td>
</tr>
<tr>
<td>Bottom</td>
<td>≤ 20 ft. (6.10 m)</td>
<td>0.33 sq. in./ft.</td>
<td>18</td>
<td>18 (450)</td>
</tr>
</tbody>
</table>

**BASE SLAB JOINT CONFIGURATIONS**

- **Single-element shear key at center of slab**
- **Optional Joint**

**PRECAST VALVE VAULT TYPE A**

5' (1.52 m) DIAMETER

**SHEAR KEY GEOMETRY**

(Reinforcement not shown for clarity)