CAST IRON STREET BOX TYPE 'A' IN PAVED ROAD
WITH CONCRETE RING SUPPORT

CAST IRON STREET BOX TYPE 'A' IN DPTI ROAD
WITH CONCRETE SLAB SUPPORT

NOTES:

1. REFER 4005-30002-01 & 4005-30002-02 FOR GENERAL NOTES.
2. CAST IRON STREET BOX, SPINDLE SLEEVE, AND BOTTOM CONCRETE SUPPORT SHALL BE INSTALLED SUCH THAT NO LOADING IS TRANSMITTED TO THE VALVE, HYDRANT OR PIPE.
3. CAST IRON STREET BOX SHALL BE SET TO THE FINISHED SURFACE LEVEL OR SLOPE OF ROAD (± ½ - ½).
4. FOR VALVE HEIGHT 'A' REFER 4005-30002-02.
5. THE TYPE 'A' TWO PIECE LID SHALL BE INSTALLED IN THE ADELAIDE METROPOLITAN AREA.
6. THE TYPE B STREET BOX SHALL NOT BE USED WITH THE ADELAIDE METROPOLITAN AREA, WHERE PROPOSED, ITS USE SHALL BE SUBJECT TO APPROVAL OF THE SA WATER REPRESENTATIVE.
7. THE CONTRACTOR SHALL TAKE PARTICULAR CARE TO ENSURE FUTURE CLEAR ACCESS TO THE VALVE SPINDLE/HYDRANT. THE LID SHALL BE REMOVED DURING INSTALLATION FOR CONFIRMATION.
8. COMPACTED MATERIAL FOR SLAB/SUPPORT SLAB SHALL BE:
   a. >100 BELOW VALVE GLAND,
   b. >100 ABOVE PIPE,
   OR AS DIRECTED BY AUTHORITY
   c. GENERALLY COMPACTED QUARRY RUBBLE FOR LIGHT TRAFFIC AREAS AND CEMENT TREATED CRUSHED ROCK FOR HEAVY TRAFFIC ROADS.
   WHERE CONCRETE SPACERS ARE REQUIRED TO ACHIEVE THE FINISHED LEVEL, PLACE THICKEST SPACER IN BOTTOM POSITION PRIOR TO ADDING EXTRA SPACERS IN ORDER OF THICKNESS.
   NOTE: ONLY 2 LAYERS OF PACKING SEGMENTS ARE PERMITTED.
9. CONCRETE OR PIBROUGHD PACKING SEGMENTS SHALL NOT BE USED FOR THE ORIGINAL MAINS INSTALLATION. THEY MAY BE USED FOR MAINTENANCE PURPOSES ONLY.
10. Valve extension spacers are available in a range of lengths 150-250 mm.
11. REFER MANUFACTURER'S SPECIFICATIONS FOR AVAILABILITY.
12. REFER SECTION 3 FOR INSTALLATION OF WATER SUPPLY PIPE, EMBEDMENT AND BACKFILL.
13. ALL DIMENSIONS IN MILLIMETRES.

SA WATER STANDARD DRAWINGS
WATER SUPPLY CONSTRUCTION MANUAL
CAST IRON STREET BOX FRAME
INSTALLATION IN SEALED ROADS

4005-30007-01

SUPERSEDES: C11, C11A
### TABLE 1: ISOLATING VALVES DIMENSIONS

<table>
<thead>
<tr>
<th>VALVE DN</th>
<th>80</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
<th>375</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMENSION A'</td>
<td>367</td>
<td>442</td>
<td>502</td>
<td>610</td>
<td>723</td>
<td>810</td>
<td>960</td>
</tr>
</tbody>
</table>

*DIMENSION A' IS MAX HEIGHT IN ACCORDANCE WITH AS 2638.2

**NOTE:** DIMENSIONS VARY BETWEEN MANUFACTURERS. REFER MANUFACTURER DATA SHEET.

### TABLE 2: CHAMBER FINISHED TOLERANCE

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>TOLERANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WITHIN ROAD RESERVE, SEALED PAVEMENT, VERGE AREAS, DRIVEWAYS, FOOTPATHS ETC.</td>
<td>± 10 HIGH, ± 5 LOW</td>
</tr>
<tr>
<td>SEALED AND TRAFFICABLE AREAS WITHIN PRIVATE PROPERTY (PEDESTRIAN AND/OR VEHICULAR TRAFFIC)</td>
<td>± 15 HIGH, ± 5 LOW</td>
</tr>
<tr>
<td>UNSEALED AREAS, WITHIN PRIVATE PROPERTY (E.G. GARDEN OR OCCASIONAL TRAFFIC)</td>
<td>± 20 HIGH, ± 5 LOW</td>
</tr>
</tbody>
</table>

### NOTES:

1. REFER 4005-30002-01 TO 4005-30002-04 FOR GENERAL NOTES.
2. TOPSTONE AND CONCRETE SUPPORTS SHALL BE INSTALLED SUCH THAT NO LOADING IS TRANSMITTED TO THE VALVE, HYDRANT OR PIPE.
3. THE TOPSTONE SHALL BE SET TO THE FINISHED SURFACE LEVEL AND SLOPE OF ROAD OR FOOTPATH. THE FINISHED TOPSTONE SHOULD BE FLUSH WITH THE FINISHED ROAD OR SURFACE. A TOLERANCE IS PERMITTED IN ACCORDANCE WITH TABLE 2.
4. THE PERMITTED TOLERANCE SHALL NOT BE EXCEEDED (WATER SHALL NOT POOL OVER THE CASTING OR COVER). THE TOPSTONE SHALL BE POSITIONED FOR THE VALVE KEY TO BE CONNECTED THROUGH THE OPENING TO THE VALVE OR HYDRANT WITHOUT FOULING. THE CONTRACTOR SHALL REMOVE THE LD DURING INSTALLATION TO ENSURE FUTURE CLEAR ACCESS TO THE VALVE SPINDLE HYDRANT.
5. COMPACTED MATERIAL FOR SPAVER FLANGE SUPPORT SHALL BE:
   - ± 100 BELOW VALVE GLAND,
   - ± 100 ABOVE PLANGE OR SOCKET,
   - OR AS DIRECTED BY AUTHORITY
   - GENERALLY COMPACTED DURABLE SUBBASE REQUIRED FOR LIGHT TRAFFIC AREAS. REFER 4005-30002-01 FOR HEAVY TRAFFIC ROADS.
6. THE CAST IRON STREET BOX IS AN APPROVED ALTERNATIVE. FOR APPROVAL REFER TO THE SA WATER REPRESENTATIVE.
7. CONCRETE OR FIBREBOARD PACKING SEGMENTS SHALL NOT BE USED FOR THE ORIGINAL MAINS INSTALLATION. THEY MAY BE USED FOR MAINTENANCE PURPOSES ONLY.
8. VALVE EXTENSION SPINDLE IS AVAILABLE IN A RANGE OF LENGTHS (150 TO 950).
9. REFER MANUFACTURER'S SPECIFICATIONS FOR AVAILABILITY.
10. REFER SECTION 3 FOR INSTALLATION OF WATER SUPPLY PIPES EMBRACE AND BACKFILL.
11. ALL DIMENSION IN MILLIMETRES.

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**SA WATER STANDARD DRAWINGS**

**WATER SUPPLY CONSTRUCTION MANUAL**

**INSTALLATION IN UNMADE ROAD, EASEMENT OR TRACK**

**CONCRETE TOPSTONE**

**Drawing Number:** 4005-30007-02

**Prefix:** 91-0900-01

**Revision:** 3

**Total Sheets:** 3

**Supersedes:** 91-0900-01(C10)

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**Signatures:**

- **Designed:** [Signature]
- **Authorised:** [Signature]
- **Revised:** [Signature]
**NOTES:**

1. **ONE BLUE RETRO-REFLECTIVE PAVEMENT MARKER (BRPM) SHALL:**
   - BE USED TO INDICATE THE LOCATION OF A FIRE HYDRANT.
   - NOT BE USED TO INDICATE A STOP VALVE.
   - BE POSITIONED IN ACCORDANCE WITH THIS DRAWING.

2. **PLACEMENT OF THE BRPM:**
   - ONE BRPM SHALL BE PLACED ON THE FIRE HYDRANT SIDE OF THE MEDIAN OR CENTRELINE OF THE ROAD AS ILLUSTRATED ON THIS DRAWING AND IN ACCORDANCE WITH AS1742.2, "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
   - **BRPMs SHALL NOT BE INSTALLED:**
     - WITHIN INTERSECTIONS,
     - WITHIN SLIP LANE OR OVERTAKE LANE,
     - ON UNSEALED ROADS,
     - ON WINDING SECTIONS OF ROADS.
   - **FOR A RIGHT-HAND TURN LANE, THE BRPM SHALL BE PLACED:**
     - FURTHER TO THE CURVATURE OF THE ROAD TO THE RIGHT HAND SIDE OF THE STRAIGHT AHEAD LANE, AND SHOULD BE CLEAR OF THE PAINT.
   - **FOR A DISCONTINUOUS LINE ON THE RIGHT HAND SIDE OF THE STRAIGHT AHEAD LANE, THE BRPM SHALL BE PLACED:**
   - **THE BRPM SHALL FACE THE DIRECTION OF TRAVEL.**

3. **BLUE REFLECTORS (BRPM) USED SHALL:**
   - **COMPLY WITH AS 1966.3 "RETROREFLECTIVE MATERIALS AND DEVICES FOR ROAD TRAFFIC CONTROL PURPOSES - RAISED PAVEMENT MARKERS"**
   - **BE APPROVED BY DPTI OR SA WATER.**

4. **ADHESIVES:**
   - SHALL BE **TWO PART EPOXY OR HOT MELT BITUMINOUS USED IN ACCORDANCE WITH THE MANUFACTURER’S INSTRUCTIONS**.
   - **SHALL COMPLY WITH AS 3594 “EPOXY – FOR RAISED PAVEMENT MARKER INSTALLATION”**.
   - **PRIOR TO APPLICATION ALL SURFACES SHALL BE CLEAN, DRY AND FREE FROM FOREIGN MATTER (E.G., LOOSE MATERIAL, SEALING, AGGREGATE ETC.)**.

5. **PAINT AND PAINTING:**
   - **PAINT SHALL BE ‘DPTI APPROVED WATERBORNE LINE MARKING PAINT WITH QUARTZ NON-SLIP ADDITIVE’**
   - **THE QUARTZ NON-SLIP ADDITIVE SHALL COMPLY WITH DPTI AND AUSTRALIAN STANDARDS**.
   - **PAINT SHALL BE GOLDEN YELLOW COLOUR, NO. Y 1% AS DEFINED IN AS2700 “COLOUR STANDARD FOR GENERAL PURPOSES”**.
   - **ALL SURFACES SHALL BE DRY AND FREE FROM FOREIGN MATTER (E.G., LOOSE MATERIAL SEALING AGGREGATE ETC.)**.
   - **APPLICATION SHALL BE WHEN AIR TEMPERATURE IS >10°C, APPLICATES WHEN RELATIVE HUMIDITY IS <85%**.
   - **PAINTED "NO PARKING" LINES SHALL NOT BE PAINTED IN ANY AREA WHERE IT IS ILLEGAL TO PARK EG ON ROAD CORNERS OR IN FRONT OF DRIVEWAYS.**

6. **STREET BOX LIDS:** **ONLY THE INNER LID (OF THE 2 PIECE LD) SHALL BE PAINTED.**

7. **FOR EXISTING INSTALLATIONS THE CONTRACTOR SHALL LIFT THE CASTING LID FOR CONFIRMATION OF THE PRESENCE OF A FIRE HYDRANT.**

8. **ALL DIMENSIONS IN MILLIMETRES.**
FORMED STEEL POST FIRE PLUG INDICATOR
PREFERRED OPTION IN RURAL AREAS AND ON NON
PAVED ROADWAYS. SIGN ONLY ST. NO. 9905-0311

INDICATOR SIGN - RURAL AREAS
SIGN WITH GALVANISED MS POST;
REFER SIGNS FOR APPROPRIATE STOCK NUMBERS.

PAINTING COLOUR CODE FOR INDICATOR SIGNS
NOTE: INSTALLED TO PAINT SIGN AND POST, IF PAINTING REQUIRED.

BLUE RED BLACK UNPAINTED WHITE

SA WATER STANDARD DRAWINGS
WATER SUPPLY CONSTRUCTION MANUAL
RURAL INDICATOR POSTS & SIGNS

NOTES:
1. REFER 4005-30002-01 & 4005-30002-02 FOR GENERAL NOTES.
2. FORMED STEEL POST FIRE PLUG INDICATOR IS PREFERRED OPTION IN RURAL AREAS AND ON NON PAVED ROADWAYS.
3. SIGNS SHALL BE LOCATED AT RIGHT ANGLES TO THE WATER MAIN.
4. ALL SIGNS SHALL BE PLACED ADJACENT THE FENCELINE WHERE SIGNS ARE NOT VISIBLE FROM THE ROAD, THEY SHALL BE PLACED IN AN APPROPRIATE ALTERNATIVE LOCATION.
5. INSTALLER SHALL PAINT SIGN AND POST, IF PAINTING REQUIRED.
6. ONLY ONE SIGN IS REQUIRED PER VALVE SET PAINTED AS INDICATED.
7. ALL DIMENSIONS IN MILLIMETRES.

SA WATER STANDARD DRAWINGS
WATER SUPPLY CONSTRUCTION MANUAL
RURAL INDICATOR POSTS & SIGNS

NOTES:
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