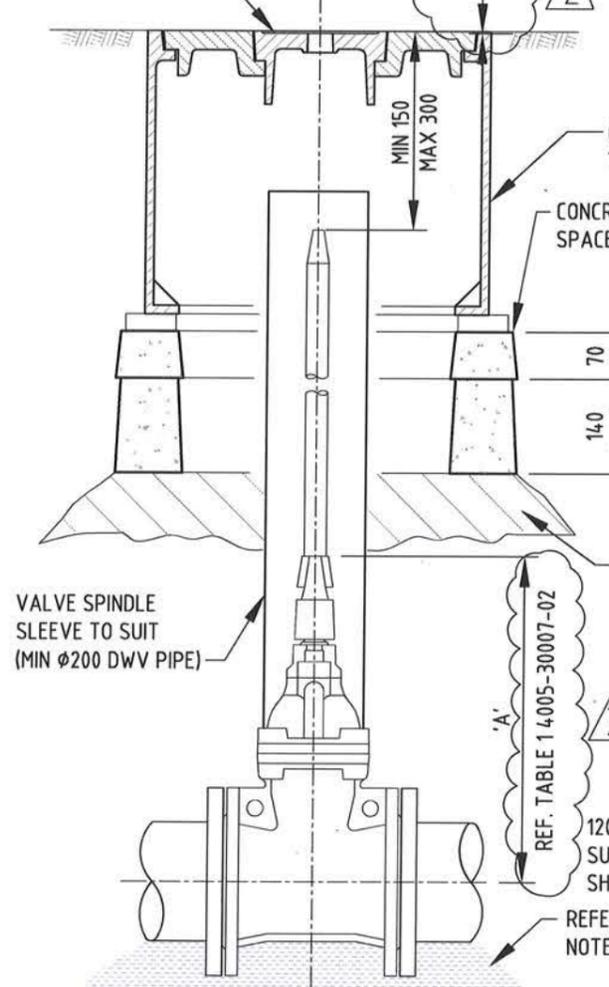
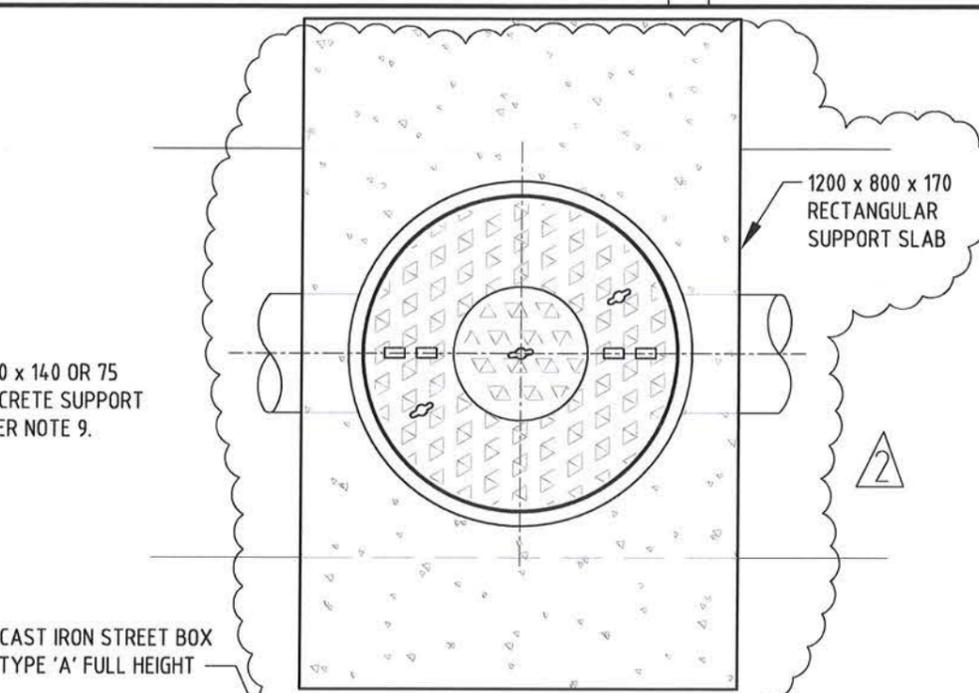


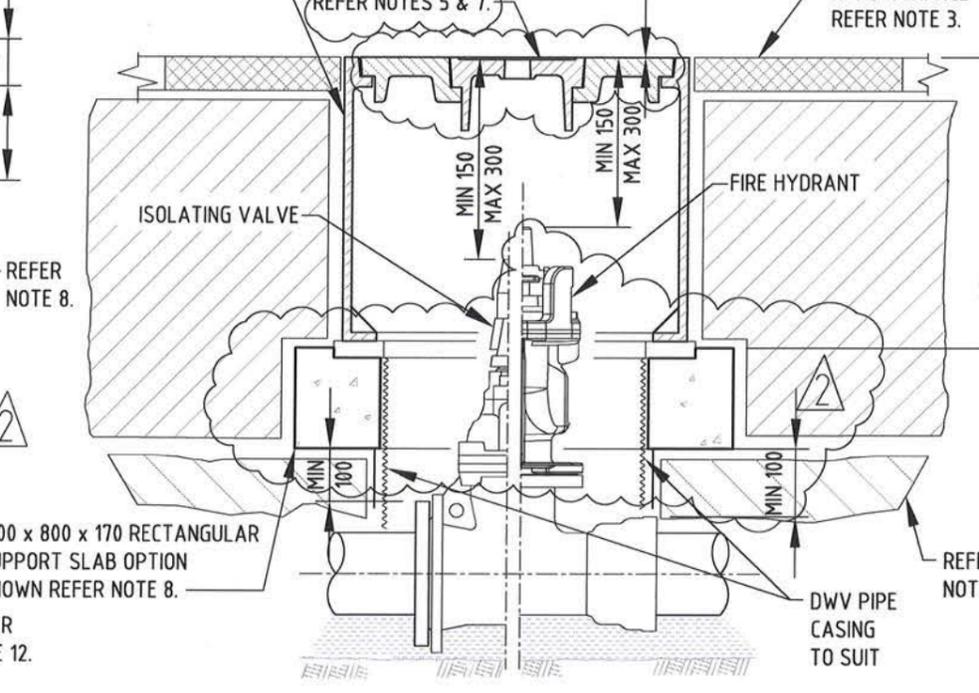
PLAN  
TWO PART LID STREET BOX COVER  
REFER NOTES 5 & 7.



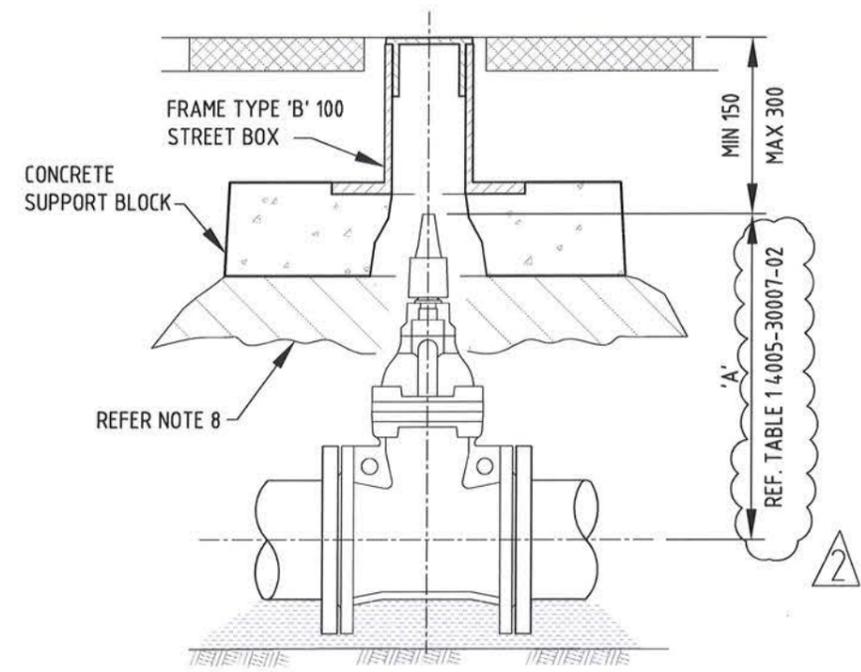
CAST IRON STREET BOX TYPE 'A' IN PAVED ROAD WITH CONCRETE RING SUPPORT



PLAN  
1200 x 800 x 170 RECTANGULAR SUPPORT SLAB  
TWO PART LID STREET BOX COVER REFER NOTES 5 & 7.



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



DUCTILE IRON STREET BOX IN PAVED ROAD  
TYPE B - 100 STREET BOX  
REFER NOTE 6.

- NOTES:**
- REFER 4005-30002-01 & 4005-30002-02 FOR GENERAL NOTES.
  - 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.
  - CAST IRON STREET BOX SHALL BE SET TO THE FINISHED SURFACE LEVEL OR SLOPE OF ROAD (-0/+5).
  - FOR VALVE HEIGHT ('A') REFER 4005-30007-02.
  - THE TYPE 'A' TWO PIECE LID SHALL BE INSTALLED IN THE ADELAIDE METROPOLITAN AREA.
  - 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.
  - 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.
  - COMPACTED MATERIAL FOR SPACER/ SLAB SUPPORT SHALL BE:
    - >100 BELOW VALVE GLAND,
    - >100 ABOVE PIPE,
    - OR AS DIRECTED BY AUTHORITY
    - 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.
  - CONCRETE OR FIBREBOARD PACKING SEGMENTS SHALL NOT BE USED FOR THE ORIGINAL MAINS INSTALLATION. THEY MAY BE USED FOR MAINTENANCE PURPOSES ONLY.
  - VALVE EXTENSION SPINDLES ARE AVAILABLE IN A RANGE OF LENGTHS (150 TO 950). REFER MANUFACTURER'S SPECIFICATIONS FOR AVAILABILITY.
  - REFER SECTION 3 FOR INSTALLATION OF WATER SUPPLY PIPES EMBEDMENT AND BACKFILL.
  - ALL DIMENSIONS IN MILLIMETRES.

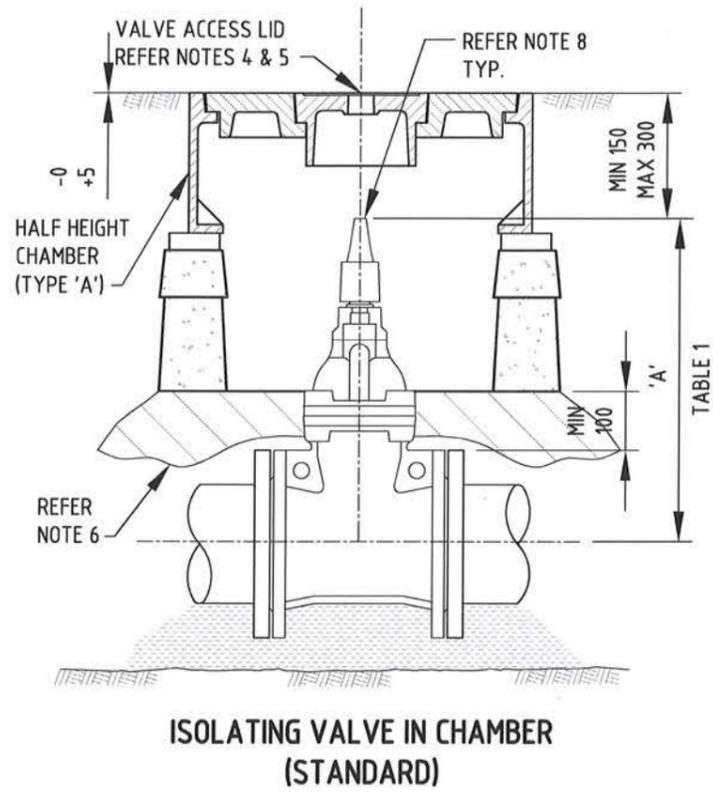
REVISION PANEL				
REV	DATE	DRN	DETAILS	APR
2	20/07/16	PC	SLAB ROTATED. TABLE MOVED. NOTES REVISED.	
1	31/03/16	MS	2016 STANDARDS REVIEW	TG

DESIGN PANEL			
DESIGNED:	28/09/15	AUTHORISED:	31/03/16
RJP		T.GALEK	
DRAWN:	16/11/15	SIGNATURE:	
MS			
REVIEWED:	21/03/16	ORIGINAL SIGNED	
TG			

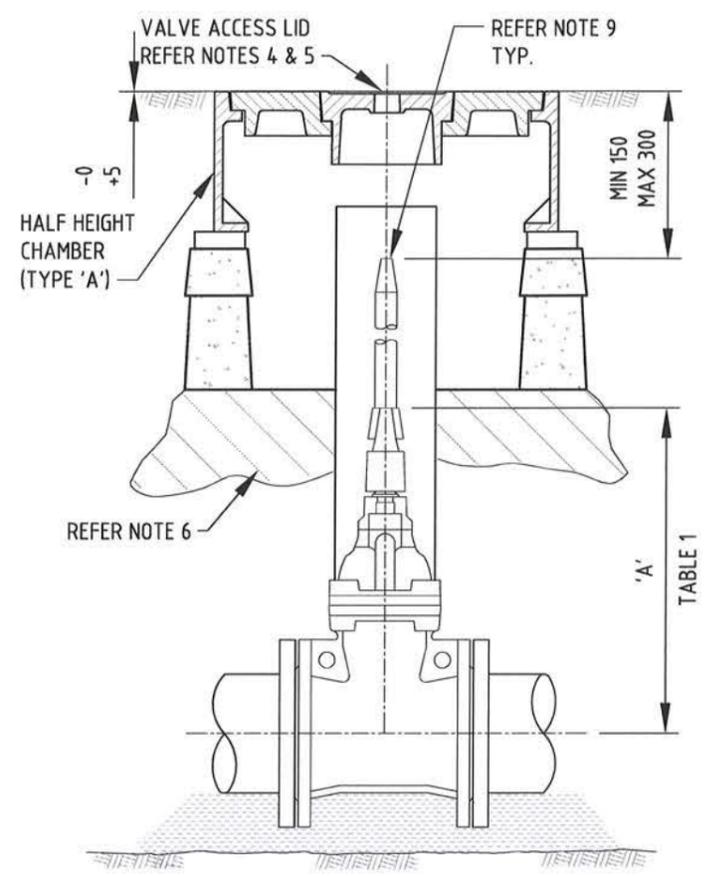
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**SA WATER STANDARD DRAWINGS**  
**WATER SUPPLY CONSTRUCTION MANUAL**  
**CAST IRON STREET BOX FRAME**  
**INSTALLATION IN SEALED ROADS**

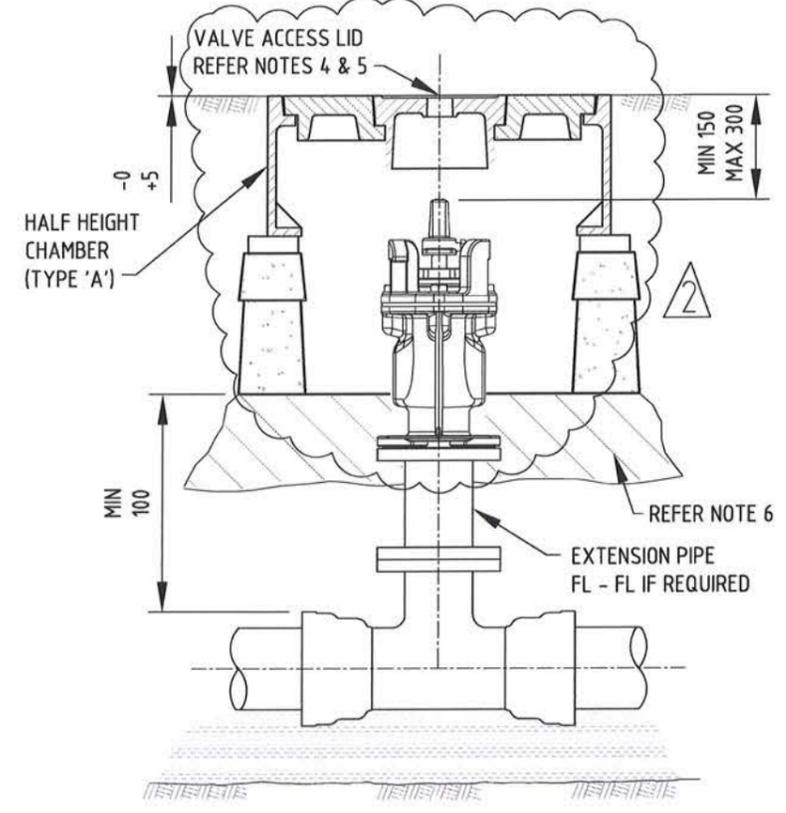
A3	2
SHT SIZE	REVISION
TOTAL SHEETS:	
SUPERSEDES: C11, C11A	
DRAWING NUMBER	
4005-30007-01	
PREFIX	NUMBER SHEET



ISOLATING VALVE IN CHAMBER (STANDARD)



ISOLATING VALVE IN CHAMBER WHERE EXTENSION SPINDLE IS REQUIRED



BELOW GROUND FIRE HYDRANT IN CHAMBER (ALL DEPTHS)

TABLE 1:

ISOLATING VALVES DIMENSIONS							
VALVE DN	80	100	150	200	250	300	375
DIMENSION 'A'*	367	402	502	610	723	810	960

\*DIMENSION 'A' IS MAX HEIGHT IN ACCORDANCE WITH AS 2638.2  
NOTE: DIMENSIONS VARY BETWEEN MANUFACTURERS.  
REFER MANUFACTURER DATA SHEET.

NOTES:

- REFER 4005-30002-01 & 4005-30002-02 FOR GENERAL NOTES.
- CAST IRON STREET BOX, SPINDLE SLEEVE, AND CONCRETE SUPPORT SHALL BE INSTALLED SUCH THAT NO LOADING IS TRANSMITTED TO THE VALVE, HYDRANT OR PIPE.
- CAST IRON STREET BOX SHALL BE SET TO THE FINISHED SURFACE LEVEL AND SLOPE OF ROAD OR FOOTPATH (-0/+5).
- THE TYPE 'A' TWO PIECE LID SHALL BE INSTALLED IN THE ADELAIDE METROPOLITAN AREA.
- THE CONTRACTOR SHALL REMOVE THE LID DURING INSTALLATION TO ENSURE FUTURE CLEAR ACCESS TO THE VALVE SPINDLE/ HYDRANT.
- COMPACTED MATERIAL FOR SPACER /SLAB SUPPORT SHALL BE:
  - >100 BELOW VALVE GLAND,
  - >100 ABOVE FLANGE OR SOCKET,
  - OR AS DIRECTED BY AUTHORITY
  - GENERALLY COMPACTED QUARRY RUBBLE REQUIRED FOR LIGHT TRAFFIC AREAS. REFER 4005-30007-01 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. TO ACHIEVE THE FINISHED LEVEL. ONLY 2 LAYERS OF PACKING SEGMENTS ARE PERMITTED.
- CONCRETE OR FIBREBOARD PACKING SEGMENTS SHALL NOT BE USED FOR THE ORIGINAL MAINS INSTALLATION. THEY MAY BE USED FOR MAINTENANCE PURPOSES ONLY.
- VALVE EXTENSION SPINDLE IS AVAILABLE IN A RANGE OF LENGTHS (150 TO 950). REFER MANUFACTURER'S SPECIFICATIONS FOR AVAILABILITY.
- REFER SECTION 3 FOR INSTALLATION OF WATER SUPPLY PIPES EMBEDMENT AND BACKFILL.
- ALL DIMENSION IN MILLIMETRES.

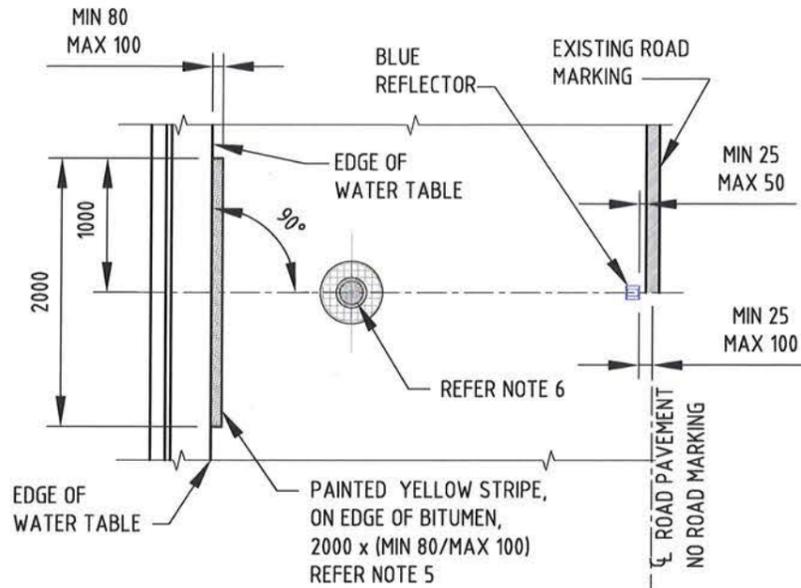
REVISION PANEL			
REV	DATE	DRN	DETAILS
2	26/10/16	RP	TWO PIECE LID FOR HYDRANT. NOTES CHANGED
1	31/03/16	MS	2016 STANDARDS REVIEW

DESIGN PANEL			
DESIGNED:	28/09/15	AUTHORISED:	31/03/16
RJP		T.GALEK	
DRAWN:	16/11/15	SIGNATURE:	
MS			
REVIEWED:	21/03/16	ORIGINAL SIGNED	
TG			

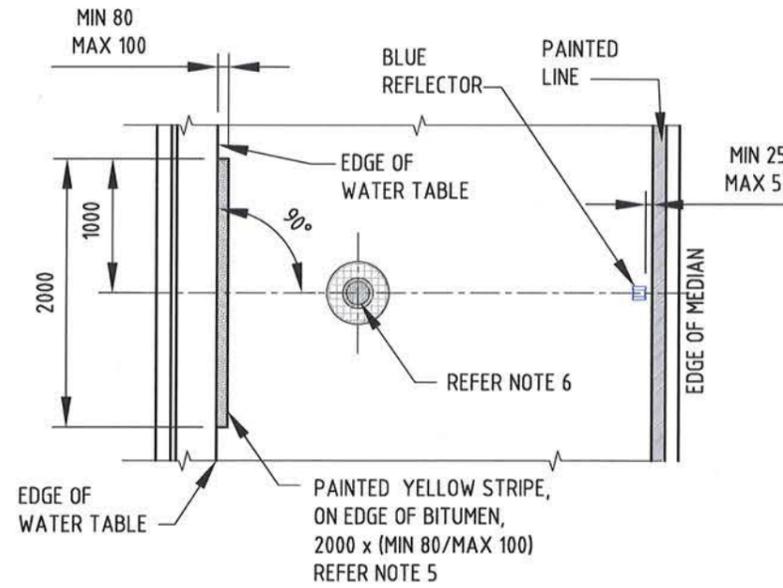
  
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SA WATER STANDARD DRAWINGS  
 WATER SUPPLY CONSTRUCTION MANUAL  
 CAST IRON STREETBOX  
 INSTALLATION IN UNMADE ROAD

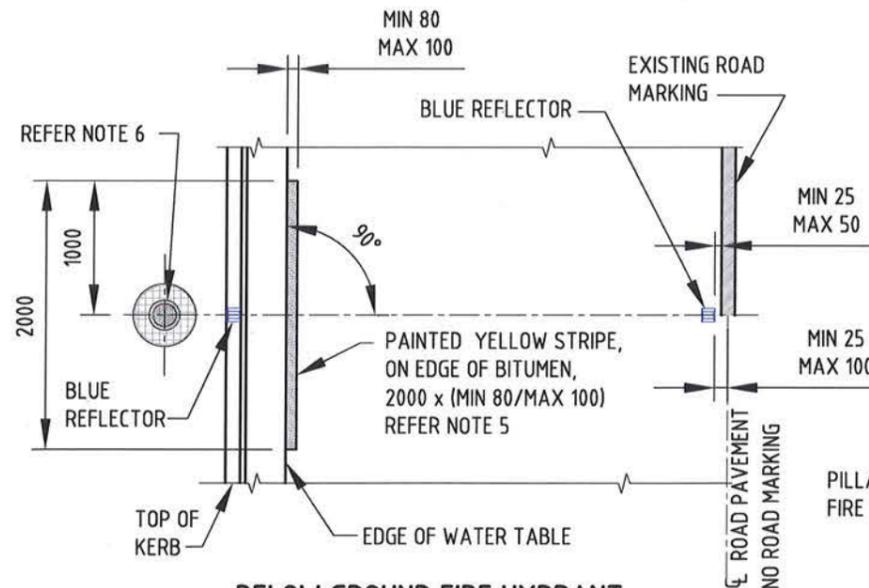
A3	2
SHT SIZE	REVISION
TOTAL SHEETS:	
SUPERSEDES: 91-0090-01 (C10)	
DRAWING NUMBER	
4005-30007-02	
PREFIX	NUMBER SHEET



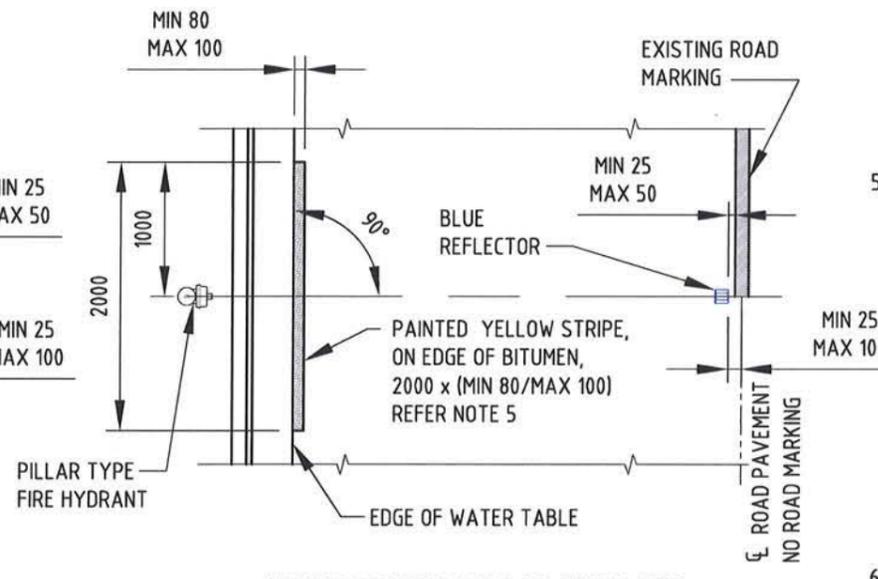
**BELOW GROUND FIRE HYDRANT  
BITUMEN ROAD WITHOUT MEDIAN STRIP**



**BELOW GROUND FIRE HYDRANT  
BITUMEN ROAD WITH MEDIAN STRIP**



**BELOW GROUND FIRE HYDRANT,  
IN FOOTPATH OFF BITUMEN ROAD**



**ABOVE GROUND PILLAR HYDRANT  
IN FOOTPATH OFF BITUMEN ROAD**

**NOTES:**

- ONE BLUE RETRO-REFLECTIVE PAVEMENT MARKER (RRPM) 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.
- PLACEMENT OF THE RRPM:
  - ONE RRPM 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".
  - RRPMS SHALL NOT BE INSTALLED:
    - WITHIN INTERSECTIONS,
    - WITHIN SLIP LANES OR BICYCLE LANES,
    - ON UNSEALED ROADS,
    - ON WINDING SECTIONS OF ROADS.
  - FOR A RIGHT-HAND TURN LANE, THE RRPM SHALL BE PLACED:
    - FOR A CONTINUOUS LINE ON THE RIGHT HAND SIDE OF THE STRAIGHT AHEAD LANE, AND SHOULD BE CLEAR OF THE PAINT.
    - FOR A DISCONTINUOUS LINE THE RRPM SHALL BE PLACED EITHER IN A GAP OR BETWEEN 25 - 50 MM SPACING FROM THE LINE.
  - THE RRPM SHALL FACE THE DIRECTION OF TRAVEL.
- BLUE REFLECTORS (RRPM) USED SHALL:
  - COMPLY WITH AS 1906.3 "RETROREFLECTIVE MATERIALS AND DEVICES FOR ROAD TRAFFIC CONTROL PURPOSES - RAISED PAVEMENT MARKERS"
  - BE APPROVED BY DPTI OR SA WATER.
- ADHESIVES:
  - SHALL BE TWO PART EPOXY OR HOT MELT BITUMEN USED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
  - SHALL COMPLY WITH AS 3554 "EPOXY - FOR RAISED PAVEMENT MARKER INSTALLATION".
  - PRIOR TO APPLICATION ALL SURFACES SHALL BE CLEAN, DRY AND FREE FROM FOREIGN MATTER (E.G. OIL, LOOSE MATERIAL, SEALING, AGGREGATE ETC).
- 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. Y14 AS DEFINED IN AS2700 "COLOUR STANDARD FOR GENERAL PURPOSES".
  - ALL SURFACES SHALL BE DRY AND FREE FROM FOREIGN MATTER (E.G. OIL, LOOSE MATERIAL SEALING AGGREGATE ETC).
  - APPLICATION SHALL BE WHEN AIR TEMPERATURE IS >10°C. APPLY WHEN RELATIVE HUMIDITY IS <85%.
  - PAINTED "NO PARKING" LINES SHALL NOT PLACED IN ANY AREA WHERE IT IS ILLEGAL TO PARK EG ON ROAD CORNERS OR IN FRONT OF DRIVEWAYS.
- STREET BOX LIDS: **ONLY THE INNER LID (OF THE 2 PIECE LID) SHALL BE PAINTED.**
- FOR EXISTING INSTALLATIONS THE CONTRACTOR SHALL LIFT THE CASTING LID FOR CONFIRMATION OF THE PRESENCE OF A FIRE HYDRANT.
- ALL DIMENSIONS IN MILLIMETRES.

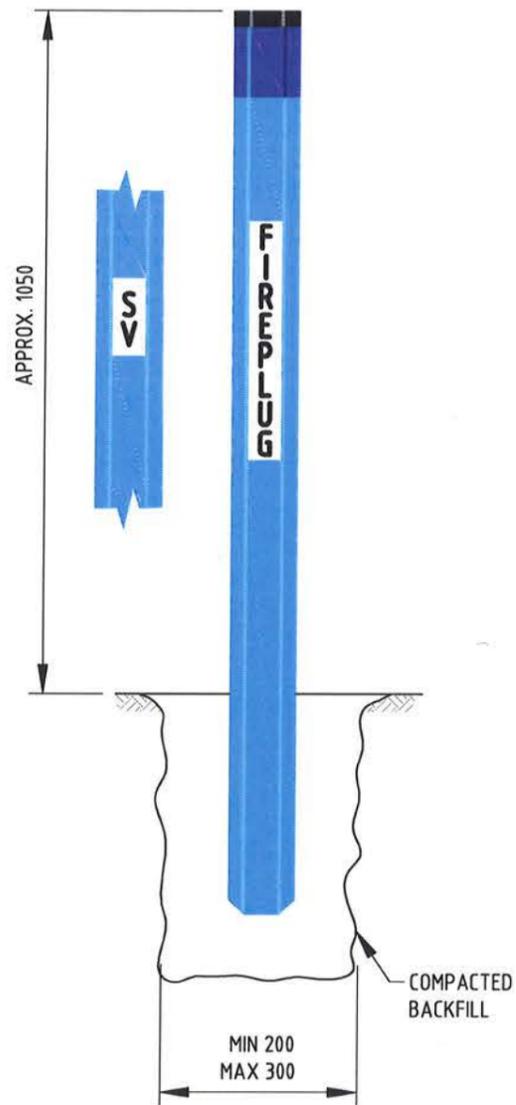
REVISION PANEL			
REV	DATE	DRN	DETAILS
2	28/11/16	RP	NOTES CHANGED, INNER LID TO BE PAINTED
1	31/03/16	MS	2016 STANDARDS REVIEW

DESIGN PANEL			
DESIGNED:	03/08/15	AUTHORISED:	31/03/16
RJP		T.GALEK	
DRAWN:	16/11/15	SIGNATURE:	
MS			
REVIEWED:	21/03/16	ORIGINAL SIGNED	
TG			

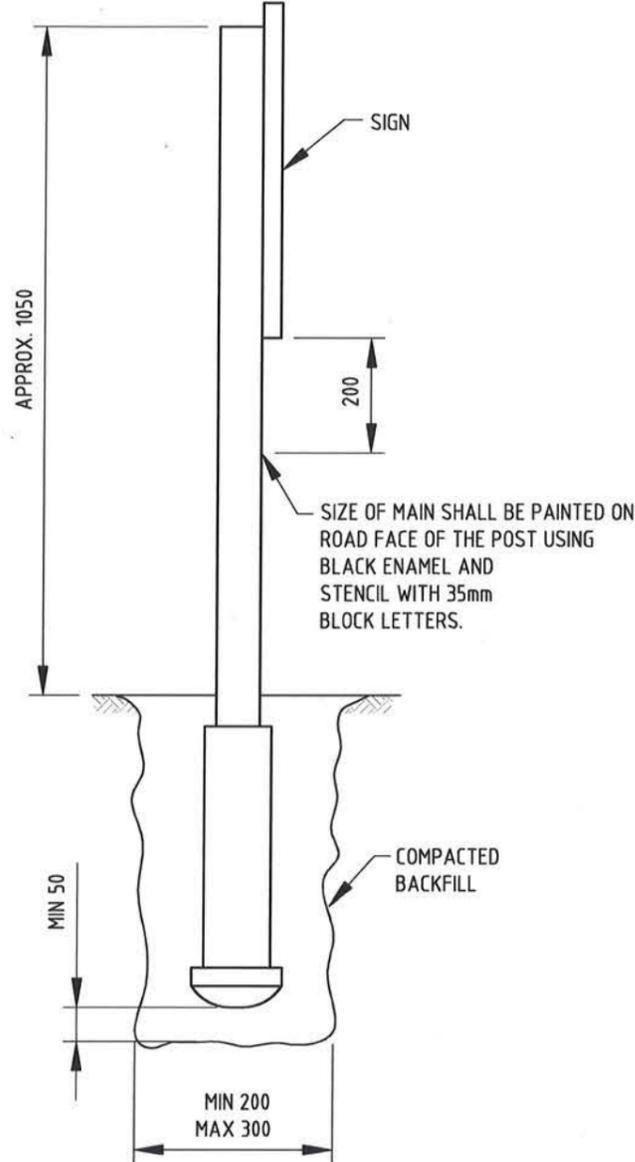

  
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**SA WATER STANDARD DRAWINGS**  
**WATER SUPPLY CONSTRUCTION MANUAL**  
**FIRE HYDRANT LOCATING**  
**BY MEANS OF BLUE REFLECTOR**  
**TOGETHER WITH BITUMEN MARKINGS**

A3	2
SHT SIZE	REVISION
TOTAL SHEETS:	
SUPERSEDES: 2006-00467 (F6)	
DRAWING NUMBER	
4005-30007-03	
PREFIX	NUMBER SHEET



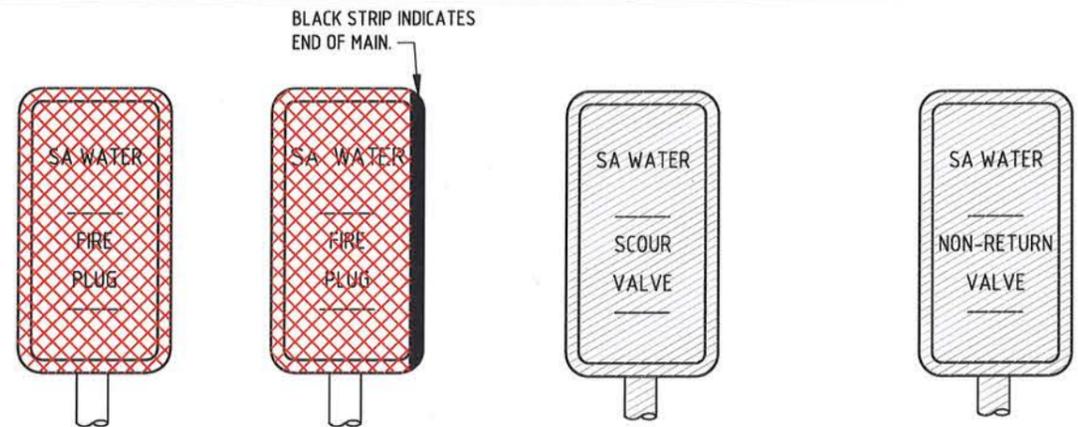
**FORMED STEEL POST FIRE PLUG INDICATOR**  
PREFERRED OPTION IN RURAL AREAS AND ON NON PAVED ROADWAYS. SIGN ONLY ST. NO. 9905-0311



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



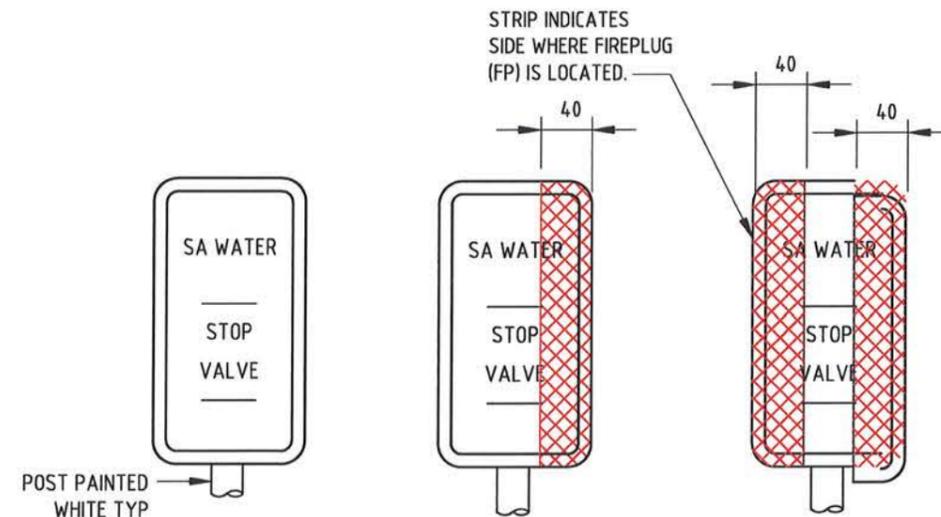
**PAINTING COLOUR CODE FOR INDICATOR SIGNS**  
NOTE: INSTALLER TO PAINT SIGN AND POST, IF PAINTING REQUIRED.



**FP**  
POST & SIGN ST. NO. 9905-0103,  
SIGN ONLY ST. NO. 9905-0109

**SCOUR VALVE**  
(URBAN & RURAL AREAS)  
POST & SIGN ST. NO. 9905-0104  
SIGN ONLY ST. NO. 9905-0110

**NON-RETURN VALVE**  
(URBAN & RURAL AREAS)  
POST & SIGN ST. NO. NOT ISSUED  
SIGN ONLY ST. NO. NOT ISSUED



**STOP VALVE**

**FP - STOP VALVE**

**VALVE SET**

POST & SIGN ST. NO. 9905-0105, SIGN ONLY ST. NO. 9905-0111

**NOTES:**

- REFER 4005-30002-01 & 4005-30002-02 FOR GENERAL NOTES.
- FORMED STEEL POST FIRE PLUG INDICATOR IS PREFERRED OPTION IN RURAL AREAS AND ON NON PAVED ROADWAYS.
- SIGNS SHALL BE LOCATED AT RIGHT ANGLES TO THE WATER MAIN.
- 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.
- INSTALLER SHALL PAINT SIGN AND POST, IF PAINTING REQUIRED.
- ONLY ONE SIGN IS REQUIRED PER VALVE SET PAINTED AS INDICATED.
- ALL DIMENSIONS IN MILLIMETRES.

REVISION PANEL					DESIGN PANEL			<b>SA WATER STANDARD DRAWINGS</b> <b>WATER SUPPLY CONSTRUCTION MANUAL</b>  <b>RURAL INDICATOR POSTS &amp; SIGNS</b>	A3 SHT SIZE TOTAL SHEETS: SUPERSEDES: 91-0061-01 (C17) DRAWING NUMBER <b>4005-30007-04</b> PREFIX NUMBER SHEET	1 REVISION
REV	DATE	DRN	DETAILS	APR	CURRENT REV AUTHORISED:	DESIGNED: 03/08/15				
1	31/03/16	MS	2016 STANDARDS REVIEW	TG		DESIGNED: RJP	AUTHORISED: T.GALEK	This drawing is the property of the SOUTH AUSTRALIAN WATER CORPORATION and shall not be copied or modified in part or in whole without authorization.		
					SIGNATURE:	DRAWN: MS	SIGNATURE: <i>T. Galek</i>			
						REVIEWED: TG				