



PIPE SUPPORT SCHEDULE (ABOVE GROUND) Ø100-300mm PIPE Ø301-600mm PIPE SUPPORT MEMBER 50X5 SHS 100X5 SHS FOOTING Ø450 x 1000D PIER Ø650 x 1000D PIER MAX_SPACING 3000 4000

GROUND WATER METER ASSEMBLY

NOT TO SCALE

NOTES:

- THE DRAWINGS AND CHECKLISTS ARE GUIDELINES ONLY AND INDICATIVE OF THE RECOMMENDED BEST-PRACTICES THAT SHOULD BE CONSIDERED DURING METER INSTALLATION. THESE DRAWINGS ARE NOT TO SCALE, AND ANY INSTALLATION WILL NEED TO BE MODIFIED TO MEET SITE CONDITIONS.
- ITEMS SHADED GREY ARE INDICATIVE ONLY AND NON-PRESCRIPTIVE
- REFER TO DRAWING 25026-CI01007 FOR LID ASSEMBLY
- STANDARD DRAWINGS APPLICABLE TO DN100 DN600 METERS ONLY. METERS > DN600
- REQUIRE SITE-SPECIFIC ENGINEERED DESIGNS.
 UNITS ARE IN MILLIMETRES U.N.O.
- RECOMMENDED PRINTING SIZE A3

	MATERIALS SCHEDULE TEM NO DESCRIPTION			
ITEM NO.	ITEM	DESCRIPTION		
1	AIR VALVE	SIZED AS REQUIRED FOR DESIGN FLOW RATE, INCLUSIVE OF ISOLATION BALL VALVE. AIR VALVE AND BALL VALVE ASSEMBLY TO BE MOUNTED ATOP A BLANK PLATED EQUAL TEE TO ADVANTAGE AIR CAPTURE.		
2	UPSTREAM ISOLATION VALVE	TYPE (E.G. GATE, BUTTERFLY, BALL, GLOBE, ETC.) AS REQUIRED FOR APPLICATION. THE VALVE MUST LOCKED AT 100% OPEN DURING NORMAL OPERATION, TO MAINTAIN METER ACCURACY.		
3	RUBBER FLEXIBLE JOINT	JOINT TO ELIMINATE THERMAL PIPE MOVEMENT STRESSES AND MINIMISE VIBRATION TRANSFER TO METER BODY. TYPE DETERMINED BY PIPE MATERIAL AND APPLICATION		
4	PIPEWORK	STRAIGHT LENGTH OF PIPE FREE FROM DISTURBANCES (LENGTH AS PER TABLE OF DIMENSIONS). ID OF PIPE MUST EQUAL METER ID. CORROSION-RESISTANT MATERIALS INCLUDE STAINLESS STEEL, ALUMINIUM, COPPER, BRONZE AS PER SPECIFICATIONS OF AS4747.2. FLEXIBLE PIPES MAY BE USED E.G. HDPE, ABS, PVC HOWEVER THE DESIGN IS TO ENSURE THAT THE METER EMPLACEMENT AND METER ACCURACY IS NOT IMPACTED BY THERMAL EFFECTS (TEMPERATURE CHANGES OF PIPEWORK, FITTINGS AND WATER CONVEYED), AND THE METER BODY IS NOT EXPOSED TO STRESSES FROM EXPANSION/CONTRACTION OF THE SURROUNDING PIPEWORK.		
5	METER	PATTERN-APPROVED METER		
6	CHECK VALVE	ONE-WAY CHECK VALVE PREVENTING REVERSE FLOW AND ENSURE METER EMPLACEMENT REMAINS FULL		
7	PRESSURE GAUGE	100MM DIAMETER FACE, LIQUID FILLED ANALOGUE PRESSURE GAUGE, LOCATED DOWNSTREAM OF METER EMPLACEMENT		
8	INSPECTION PORT	DN50 TAPPING AND BALL VALVE INSPECTION PORT, LOCATED DOWNSTREAM OF METER EMPLACEMENT		
9	DOWNSTREAM ISOLATION VALVE	TYPE (E.G. GATE, BUTTERFLY, BALL, GLOBE, ETC.) AS REQUIRED FOR APPLICATION		
10	PIPE SUPPORTS	CORROSION-RESISTANT PIPE SUPPORTS DESIGNED FOR APPLICATION, MOUNTED ON SUITABLE FOOTING. NUMBER AND SPACING AS PER DESIGN		
11	(NOT USED)			
12	MARKER POST	GENERALLY CONSISTENT WITH WSAA DWG WAT-1300, BLUE OR WHITE IN COLOUR, MIN. 900MM HIGH (ABOVE-GROUND) AND CORROSION RESISTANT (350MM MIN. EMBEDMENT IN GROUND)		
13	BOLLARDS	1200MM HIGH, CONCRETE FILLED, DN100 HEAVY WALL HDG STEEL PIPE PAINTED WHITE OR YELLOW. NUMBER AS REQUIRED FOR PROTECTION FROM VEHICLE THOROUGHFARE. Ø450MM, 600MM DEEP MASS CONCRETE (N20, 20MM) FOOTING		
14	THRUST BLOCKS	CONCRETE THRUST BLOCKS AS PER DESIGN IN ACCORDANCE WITH WAT-1205		
15	HARD STAND	200MM DEPTH OF GRAVEL E.G. 20MM FINE CRUSHED ROCK, OR MIN. 20MPa CONCRETE SLAB TO AS 3600, FOR MINIMUM 2M BEYOND METER EMPLACEMENT EXTENTS		
16	MARKING TAPE	DETECTABLE, COMPLYING WITH AS 2648.1, MINIMUM WIDTH OF 100MM WITH INSCRIPTION "DANGER BURIED WATER MAIN BELOW"		

NOT TO SCALE

DESCRIPTION PIPE LENGTH OF UNIFORM CIRCULAR CROSS SECTION, FREE FROM FLOW DISTURBANCES* - OF METER	APPLICATION AS LONG AS PRACTICABLE BEFORE METER UNIT, IN EXCESS OF (BY APPLICATION): MINIMUM METER EMPLACEMENT DIAMETER SMALLER THAN SURROUNDING PIPEWORK METER EMPLACEMENT DIAMETER LARGER THAN SURROUNDING PIPEWORK PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S ON SAME PLANE PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S OUT OF PLANE	10 X METER II 10 X METER II 20 X METER II 15 X METER II 40 X METER I
·	MINIMUM METER EMPLACEMENT DIAMETER SMALLER THAN SURROUNDING PIPEWORK METER EMPLACEMENT DIAMETER LARGER THAN SURROUNDING PIPEWORK PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S ON SAME PLANE PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S OUT OF PLANE	10 X METER II 20 X METER I 15 X METER II
	METER EMPLACEMENT DIAMETER SMALLER THAN SURROUNDING PIPEWORK METER EMPLACEMENT DIAMETER LARGER THAN SURROUNDING PIPEWORK PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S ON SAME PLANE PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S OUT OF PLANE	10 X METER II 20 X METER I 15 X METER II
	METER EMPLACEMENT DIAMETER LARGER THAN SURROUNDING PIPEWORK PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S ON SAME PLANE PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S OUT OF PLANE	20 X METER I
	PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S ON SAME PLANE PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S OUT OF PLANE	15 X METER II
	PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S OUT OF PLANE	
		AO Y METED I
		40 A WILTERT
	METER EMPLACEMENT AFTER PUMP	30 X METER I
PIPE LENGTH OF UNIFORM CIRCULAR CROSS SECTION, FREE FROM FLOW DISTURBANCES* - AM OF METER	AS LONG AS PRACTICABLE AFTER METER UNIT, IN EXCESS OF (BY APPLICATION):	
	MINIMUM	5 X METER II
	METER EMPLACEMENT DIAMETER SMALLER THAN SURROUNDING PIPEWORK	5 X METER II
	METER EMPLACEMENT DIAMETER LARGER THAN SURROUNDING PIPEWORK	5 X METER II
	PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S ON SAME PLANE	5 X METER II
	PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S OUT OF PLANE	5 X METER II
	METER EMPLACEMENT AFTER PUMP	5 X METER II
LACEMENT CLEARANCE	MINIMUM CLEARANCE FROM GROUND LEVEL TO UNDERSIDE OF PIPE	MIN. 600MM
LACEMENT DEPTH OF COVER	DEPTH OF COVER TO TOP OF METER EMPLACEMENT PIPE & METER	MIN. 600MM
L	ACEMENT DEPTH OF COVER CES INCLUDE: VALVES, VALVES PARTIALLY OPENED, THROTTLING DEVICES, FLOW STRAIGHTENI	METER EMPLACEMENT DIAMETER LARGER THAN SURROUNDING PIPEWORK PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S ON SAME PLANE PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S OUT OF PLANE METER EMPLACEMENT AFTER PUMP ACEMENT CLEARANCE MINIMUM CLEARANCE FROM GROUND LEVEL TO UNDERSIDE OF PIPE

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DEPARTMENT OF CLIMATE CHANGE, ENERGY, THE ENVIRONMENT & WATER

Project NON-URBAN WATER METERING - STANDARD DESIGNS

GROUNDWATER METER ASSEMBLY
ABOVE GROUND PUB25/510

AN INSTALLATION GUIDE FOR DEMONSTRATION PURPOSES

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