

NOTES AND SPECIFICATIONS

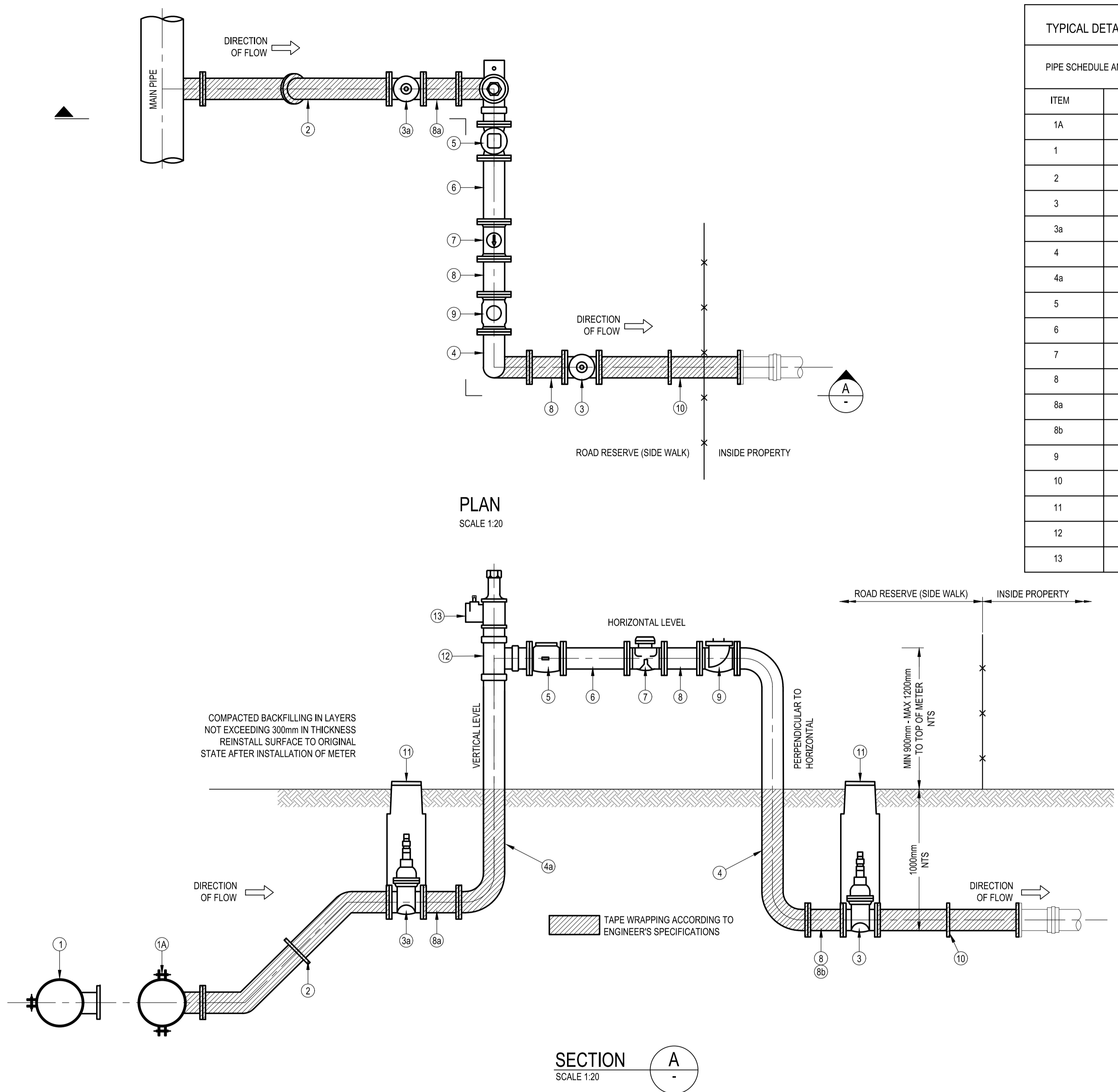
GENERAL

- MINIMUM REQUIREMENTS ARE INDICATED ON THE DRAWING. THE CONSULTANT / DESIGNER IS RESPONSIBLE AND LIABLE FOR FURTHER DETAILS AND TO ENSURE EFFECTIVE OPERATION AND MAINTENANCE OF THE INSTALLATION.
- THE SIGNATURE OR INITIALS ON THIS DRAWING OF COE OFFICIAL DOES NOT REMOVE ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT / DESIGNER.
- THE CONSULTANT / DESIGNER REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE WATER AND SANITATION DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH IN THE DESIGN.
- ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SANS STANDARD.
- FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.
- ALL DIMENSIONS TO BE CHECKED AND APPROVED ON SITE.
- ALL DIMENSIONS ARE IN mm (UNLESS OTHERWISE SPECIFIED).
- DO NOT SCALE FROM THESE DRAWINGS.
- CLASS OF CONCRETE UNLESS OTHERWISE SPECIFIED ON DRAWING DETAILS:
 REINFORCED CLASS 30/19
 THRUST BLOCKS CLASS 20/19
 BLINDING CLASS 15/19
 FLOOR SCREED SAND : CEMENT = 3 : 1
- PRE-CAST CONCRETE RINGS AND COVER SLABS TO COMPLY WITH SANS 1294.
- JOINTS BETWEEN CONCRETE RINGS AND BETWEEN COVER SLABS AND BETWEEN RINGS AND FLOORS TO BE SEALED WITH BITUMEN SEALANT (APPROVED BY THE DESIGNER).
- ALL JOINTS BETWEEN THE PIPE AND THE CHAMBER WALL AND BETWEEN BRICK WALL AND CONCRETE FLOOR TO BE SEALED TO PREVENT WATER LEAKING INTO THE CHAMBER. METHOD OF SEALING TO BE SUBMITTED TO THE DESIGNER FOR APPROVAL.
- FLANGE DRILLING TO BE IN ACCORDANCE WITH SANS 1123. DESIGNER TO SPECIFY FLANGE TABLE.
- ALL BOLTS, WASHERS AND NUTS TO BE HOT DIPPED GALVANISED IN ACCORDANCE WITH SANS 763.
- ALL STEEL PIPE ITEMS TO BE GRIT BLASTED TO SA 3 OF ISO 8501-1 AND PAINTED WITH EPOXY COMPLYING WITH SANS 1217 WITH A MINIMUM DRY FILM THICKNESS OF 500 MICRON (LINING AND COATING). UNDERGROUND STEEL PIPE ITEMS TO BE WRAPPED WITH PETROLATUM TAPE (APPROVED BY DESIGNER) OVER THE EPOXY COATING.
- CONCRETE SUPPORTS ARE REQUIRED UNDERNEATH VALVES AND PIPE WORK WHERE INDICATED BY THE DESIGNER.
- DESIGNER TO SPECIFY STEP IRONS OR LADDER INSIDE CHAMBER. STEP IRONS TO BE SALBERG AND BUILT-IN.
- THERE MUST BE NO CONTACT BETWEEN STEEL PIPE ITEMS AND CONCRETE OR BRICK REINFORCEMENT.

PARTICULAR:

- ALL FLANGES TO BE TABLE 1600/3.
- ALL DIMENSIONS TO BE CHECKED BEFORE MANUFACTURE / FITTING.
- ALL PIPES AND FITTINGS TO HAVE MINIMUM WORKING PRESSURE OF 16 BAR.
- ITEM 9 NOT NEEDED FOR COMPOUND AND COMBINATION METERS TO BE APPROVED BY CoE.
- METER INSTALLATIONS BIGGER THAN 200mm INSTALLATION ON MERIT.
- ALL BURIED MILD STEEL PIPES, FLANGES AND COUPLINGS MUST BE PROTECTED USING APPROPRIATE TAPE WRAPPING.
- ALL PIPES TO BE FUSION BONDED EPOXY POWDER COATED (BLUE) TO SANS 1217:1986 TYPE 2 DRY FILM THICKNESS (DFT) : 300 TO 500 MICRON WITH POLYURETHANE COATING TO SANS 1578 ON G.I. TO DRY FILM THICKNESS OF 50 TO 100 MICRON.

TYPICAL DETAIL FOR METER INSTALLATIONS FOR EKURHULENI METROPOLITAN MUNICIPALITY			
PIPE SCHEDULE AND FITTINGS - 40mm - 80mm DIA. WATER METER INSTALLATION			
ITEM	DIA	No. OFF	DESCRIPTION
1A	80	1	EPOXY COATED SADDLE TYPE WITH SEALS AND SIX BOLTS FOR EXISTING STEEL AND ASBESTOS PIPES UP TO 150mm
1	80	1	STAINLESS STEEL SADDLE TYPE WITH RUBBER SEALS AND BOLTS FOR EXISTING PVC PIPES UP TO 150mm
2	80	1	FLANGED STEEL PIPE AT 45 DEG. 1000mm LONG WITH CENTRAL PUDDLE FLANGE (THRUST BLOCK AFTER INSPECTION)
3	40-80	1	RESILIENT SEAL NON RISING SPINDLE GATE VALVE, FLANGED BOTH ENDS.
3a	80	1	RESILIENT SEAL NON RISING SPINDLE GATE VALVE, FLANGED BOTH ENDS.
4	40-80	1	2000mm LONG FLANGED STEEL PIPE, WITH LONG 90 DEG BENDS BEFORE FLANGES (POWDER COATED)
4a	80	1	±2000mm LONG STEEL PIPE, WITH LONG 90 DEG BEND BEFORE FLANGE, OTHER END TREADED (POWDER COATED)
5	40-80	1	IN LINE STRAINER, FLANGED BOTH ENDS, FACING SIDEWAY
6	40-80	1	3 x DIA. LONG STEEL FLANGED DISTANCE PIECE, 50mm: 5 x DIA STEEL FLANGED DISTANCE PIECE MIN 250mm
7	40-80	1	SENSUS MEISTREAM (SINGLE ELEMENT) WATER METER, FLANGED BOTH ENDS FOR 50mm, 80mm AND 100mm
8	40-80	2	250mm STEEL FLANGED DISTANCE PIECE
8a	80	1	250mm STEEL FLANGED DISTANCE PIECE
8b	40-50	1	G.I. FEMALE REDUCER BSP THREADED WITH NIPPLES AND BSP SCREW ON FLANGES (ONLY REQUIRED IF ITEM 4 IS 40mm DIA.)
9	40-80	1	SWING CHECK VALVE, FLANGED BOTH ENDS
10	40-80	1	FLANGED STEEL PIPE 1000mm LONG WITH CENTRAL PUDDLE FLANGE (THRUST BLOCK AFTER INSPECTION)
11	40-80	2	EKURHULENI VALVE BOXES WITH BLUE LID, WITH 160mm uPVC PIPE OVER VALVE
12	40-80	1	REDUCING OR EQUAL TEE BSP THREADED WITH SCREW ON FLANGE FOR STRAINER (POWDER COATED)
13	80	1	80mm X 65mm RIGHT ANGLE HYDRANT TAMPERPROOF SINGLE LUG



SECTION A
SCALE 1:20

PLAN
SCALE 1:20

COMPACTED BACKFILLING IN LAYERS NOT EXCEEDING 300mm IN THICKNESS REINSTALL SURFACE TO ORIGINAL STATE AFTER INSTALLATION OF METER

TAPE WRAPPING ACCORDING TO ENGINEER'S SPECIFICATIONS

CONSULTANT DETAILS TO BE PLACED HERE



AMENDMENTS			
NR	DATE	APPROVED	DESCRIPTION

WATER AND SANITATION
APPROVED ON BEHALF OF:
OPERATIONS DIVISION

NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PROJECTS DIVISION

NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PLANNING DIVISION

NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

DESIGNED

NAME:.....
SIGNATURE:..... DATE:.....

DRAWN

NAME:.....
SIGNATURE:..... DATE:.....

APPROVED

NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

CONSULTANT DRAWING NUMBER

CONTRACT No.

PROJECT No.

SHEET No.

PAPER SIZE
A1

SCALE

PROJECT TITLE

STANDARD GUIDELINE DRAWINGS

DRAWING TITLE

**STANDARD DRAWING: WATER RETICULATION
COMBINATION FIRE HYDRANT AND WATER METER
INSTALLATION FOR COMMERCIAL AND GROUP
HOUSING DEVELOPMENTS**

CoE DRAWING NUMBER

STD-WR-009