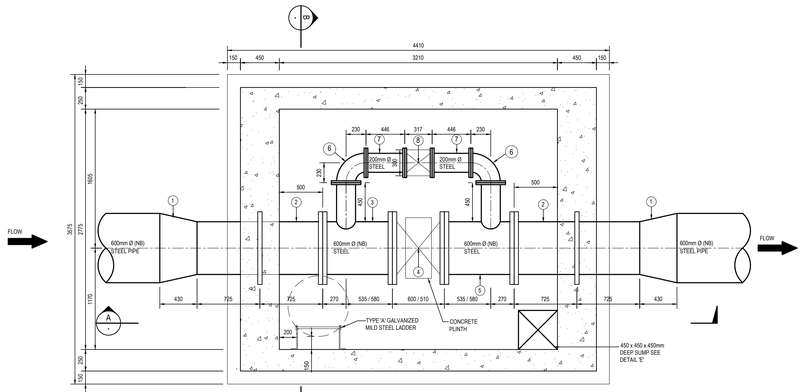
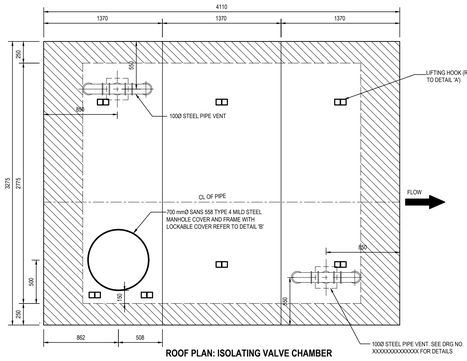
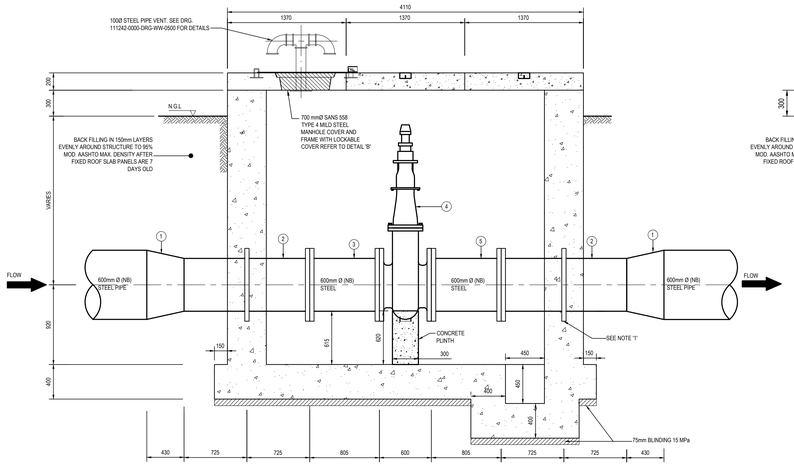


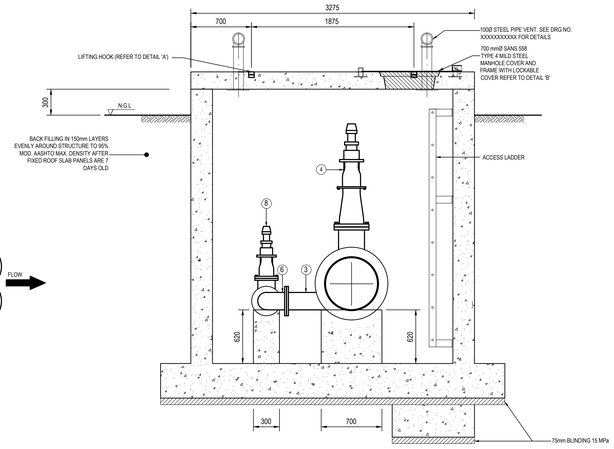
PLAN: ISOLATING VALVE CHAMBER
SCALE 1:20



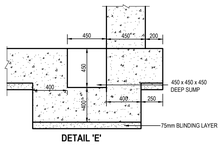
ROOF PLAN: ISOLATING VALVE CHAMBER
SCALE 1:20



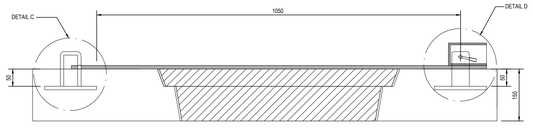
SECTION A
1:20



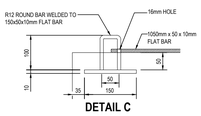
SECTION B
1:20



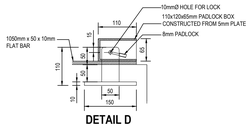
DETAIL 'E'
SCALE 1:20



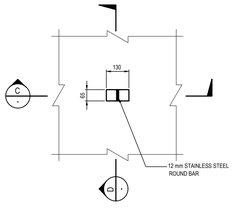
DETAIL B: MANHOLE LOCKING DEVICE
SCALE 1:5



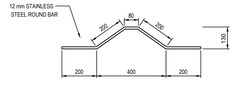
DETAIL C
SCALE 1:5



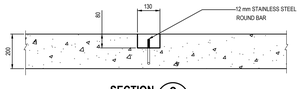
DETAIL D
SCALE 1:5



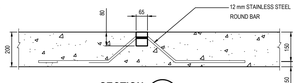
DETAIL 'A'
SCALE 1:10



LIFTING HOOK
SCALE 1:10



SECTION C
1:10



SECTION D
1:10

NOTES:

1. RE-INFORCEMENT STEEL SHALL BE MINIMUM OF 50mm CLEAR OF PUDDLE PIPE AND FLANGES
2. ALL FLANGES TO BE DRILLED OFF-CENTRE TO SANS 1123 TABLE 1600/3 OR 2000/3 AS SPECIFIED IN SCHEDULE OF FITTINGS. PUDDLE FLANGES SIMILAR TO SANS 1123 TABLE 1600/3 OR 2000/3, AS SPECIFIED, BUT UNDRILLED AND SHOP FITTED AND COATED. CONNECTING FLANGE HOLES IN OPPOSITE FLANGES MUST BE IN LINE.
3. ALL STEELWORK TO BE FINISHED ACCORDING TO PROJECT SPECIFICATIONS.
4. ALL VALVES ACCORDING TO PROJECT SPECIFICATIONS.
5. ALL SPECIALS ACCORDING TO PROJECT SPECIFICATIONS.
6. ALL JOINTING BOLTS AND NUTS TO BE HOT-DIP GALVANISED.
7. THE QUANTITIES IN THE PIPE SPECIAL SCHEDULE ARE FOR ONE CHAMBER ONLY.
8. A COMPLETE SET OF DETAILED SHOP DRAWINGS OF ALL FITTINGS MUST BE SUBMITTED FOR THE ENGINEERS APPROVAL PRIOR TO FABRICATION.
9. MILD STEEL PIPES 8mm "TYPE B" WALL THICKNESS CLASS 300WA/ CLASS 16.
10. ALL JOINTS MUST BE EXTERNALLY E128 CORROSION PROTECTED.
11. ALL JOINTS MUST BE DONE BY APPROVED AND CERTIFIED SUBCONTRACTOR A CERTIFICATE OF COMPLIANCE SHALL BE REQUIRED.
12. ALL PIPES TO BE DISINFECTED BEFORE COMMISSIONING.
13. ALL STEEL PIPES MUST BE CATHODIC PROTECTED AS PER SABS 10121 AND IN LINE WITH THE JOHANNESBURG WATER SPECIFICATIONS.
14. ALL CHAMBERS TO BE REINFORCED WITH CONCRETE OF GRADE 25MPa.
15. ALL CHAMBERS TO HAVE ADEQUATE ACCESS POINTS AND APPROPRIATE STEPS.
16. CONCRETE COVERS SHALL BE USED INSTEAD OF STEEL COVERS.
17. ALL CHAMBERS TO BE CONSTRUCTED STRICTLY AS PER THE ENGINEERS DRAWINGS.
18. * ALL VALVES, 300mm DIAMETER AND UPWARDS, MUST BE MULTI STAGE OPEN SPUR GEAR DRIVEN WITH 6:1 MINIMUM GEAR RATIO, HAVING OPERATING SPINDLES ON THE INPUT SPINDLES AND AT A STAGE WHERE THE VALVE CAN BE STROKED WITHOUT EXCEEDING THE MAXIMUM INPUT TORQUE IF NO DIFFERENTIAL PRESSURE IS APPLIED TO THE VALVE.

GENERAL NOTES:

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DETAILS

FITTING SCHEDULE

ITEM No.	QTY	DESCRIPTION	PRESSURE RATING	WALL THICKNESS	PROTECTION		FLANGE DRILLING	DIMENSIONS (mm)
					LINING	COATING		
1	2	700mm Ø x 600mm Ø x 430mm INTEGRAL STRAIGHT PIPE	16 BAR	8.0	SINGLE COAT SOLVENT FREE LIQUID EPOXY	RIGID POLYURETHANE	SANS 1123 T1600/3	700/Ø, 910/Ø, 1500
	2	600mm Ø INTEGRAL STRAIGHT PIPE L = 1500 mm						600/Ø, 660/Ø, 1500
2	2	600mm x 1450mm STEEL PUDDLE PIPE FLANGED ONE END	16 BAR	8.0	SINGLE COAT SOLVENT FREE LIQUID EPOXY	RIGID POLYURETHANE	SANS 1123 T1600/3	225, 225, 1450
3	1	600mm x 200mm Ø STEEL TEE	16 BAR	8.0	SINGLE COAT SOLVENT FREE LIQUID EPOXY	RIGID POLYURETHANE	SANS 1123 T1600/3	810, 270, 535, 270
4	1	600mm Ø VOSA, NON-RISING SPINDLE WEDGE GATE OR APPROVED EQUIVALENT (MECH)	16 BAR		AS SPECIFIED	AS SPECIFIED	SANS 1123 T1600/3	770, 600
5	1	600mm x 200mm Ø STEEL TEE	16 BAR	8.0	SINGLE COAT SOLVENT FREE LIQUID EPOXY	RIGID POLYURETHANE	SANS 1123 T1600/3	810, 535, 270
6	2	200mm x 90° STEEL BEND	16 BAR	8.0	SINGLE COAT SOLVENT FREE LIQUID EPOXY	RIGID POLYURETHANE	SANS 1123 T1600/3	270, 270
7	2	200mm Ø X 446 mm STEEL STRAIGHT PIPE, FLANGED BOTH SIDES	16 BAR	8.0	SINGLE COAT SOLVENT FREE LIQUID EPOXY	RIGID POLYURETHANE	SANS 1123 T1600/3	200/Ø, 446
8	1	200mmØ VOSA NON-RISING WEDGE GATE OR APPROVED EQUIVALENT (MECH)	16 BAR	-	AS SPECIFIED	AS SPECIFIED	SANS 1123 T1600/3	340, 317

STEEL FLANGES TO: SANS 1123

PIPE SIZE	ITEM DESCRIPTION	PRESSURE RATING	FLANGE DIAMETER	THICKNESS	PCD	No. OF BOLTS.
200mmØ	FLANGE	16 BAR	340mm	22mm	295mm	12 x M20
500mmØ	FLANGE	16 BAR	715mm	40mm	650mm	16 x M30
600mmØ	FLANGE	16 BAR	840mm	50mm	770mm	20 x M30
700mmØ	FLANGE	16 BAR	910mm	55mm	840mm	24 x M30

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DRAWING No.	REFERENCE DRAWINGS :

NO.	DATE	REVISION	DRAWN
0	NOV 2025	ISSUED FOR TENDER	B.S.

FOR TENDER

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PROJECT

KWAJOBE COMMUNITY WATER SUPPLY SCHEME: PHASE 1

DRAWING TITLE

ISOLATING VALVE CHAMBER DETAIL

	SIGNATURE FOR FLUX/SDM	DATE	PR.No.	SHEET SIZE
DESIGNED	B.S	SEP 2025		A1
DRAWN	B.S	SEP 2025		SCALE
CHECKED	N.N	SEP 2025		AS SHOWN
APPROVED	N.N	SEP 2025		DWG STATUS P
CO-ORDINATOR				P = PRELIMINARY C = CONSTRUCTION

FLUX/S.D.M. DRAWING NUMBER

UKDM/STD/418

REVISION No 0

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