ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
1	**SABS 1200AA**	**SECTION 1 : PRELIMINARY AND GENERAL**				
1.1	8.3	**FIXED-CHARGE ITEMS**				
1.1.1	8.3.1	Contractual requirements	Sum	1		
1.1.2	8.3.2	**Establishment of facilities on the site**				
1.1.2.1	8.3.2.1	*Facilities for Engineer:*				
1.1.2.1.1		(a) Furnished offices, including 1 shaded parking space for the Engineer	Sum	1		
1.1.2.1.2		(b) Nameboard as shown on Drawing No PRJ 137A-BWA-STD 001	Sum	1		
1.1.2.2	8.3.2.2	*Facilities for the Contractor:*				
1.1.2.2.1		(a) Offices and storage sheds	Sum	1		
1.1.2.2.2		(b) Workshops	Sum	1		
1.1.2.2.3		(c) Ablutions and latrine facilities	Sum	1		
1.1.2.2.4		(d) Tools and equipment	Sum	1		
1.1.2.2.5		(e) Water supplies, electric power and communications	Sum	1		
1.1.2.2.6		(f) Dealing with water	Sum	1		
1.1.2.2.7		(g) Access	Sum	1		
1.1.3	8.3.3	Other fixed-charge obligations	Sum	1		
1.1.4	8.3.4	Removal of site establishment on completion of the Works	Sum	1		
1.1.5		*OHS ACT Requirements*				
1.1.5.1	PSA 8.1 & PSA 8.2	Preparation of the H&S plan, H&S File, Risk Assessments, the provision of PPE and other H&S matters that the Contractor deems necessary	Sum	1		
1.2	8.4	**TIME-RELATED ITEMS**				
1.2.1	8.4.1	Contractual Requirements	Sum	1		
1.2.2	8.4.2	**Operation and Maintenance of Facilities on Site, for the Duration of Construction**				
	8.4.2.1	*Facilities for Engineer:*				
1.2.2.1		(a) Furnished offices	Sum	1		
1.2.2.2		(b) Nameboard (1 no.)	Sum	1		
1.2.2.3		(c) Telephone costs (airtime and Data)	Sum	1		
	8.4.2.2	*Facilities for Contractor:*				
1.2.2.4		(a) Offices and storage sheds	Sum	1		
1.2.2.5		(b) Workshops	Sum	1		
1.2.2.6		(c) Ablutions and latrine facilities	Sum	1		
1.2.2.7		(d) Tools and equipment	Sum	1		
1.2.2.8		(e) Water supplies, electric power and communications	Sum	1		
1.2.2.9		(f) Dealing with water	Sum	1		
TOTAL CARRIED FORWARD						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
BROUGHT FORWARD						
1.2.2.10		(g) Access	Sum	1		
1.2.3	8.4.3	Supervision for duration of construction	Sum	1		
1.2.4	8.4.5	Other time-related obligations	Sum	1		
1.2.5		*OHS ACT Requirements*				
1.2.5.1	PSA 8.1 & PSA 8.2	Full compliance with all OHS Act 85 of 1993 and Construction Regulations 2014 requirements during the construction of the Works				
1.2.5.2		Provision of Health and Safety Officer, with industry recognized qualifications in Environmental Health, or in Public Health, or in Safety Management, and registered with the South African Council for Project and Construction Management Professions (SACPCMP), as a Registered Occupational Health & Safety Agent.	Sum	1		
1.2.5.3		Comply with project Environmental Management Specification fully	Sum	1		
1.3	8.6	**PRIME COST ITEMS**				
1.3.1		Community Liaison Officer (CLO)	P.C Sum	1	R52 000.00	R52 000.00
1.3.2		Contractor's mark up on above Items 1.3.1.1	%	R52 000.00		
1.3.3		Allow for Airtime to the Engineers site Personnel for the duration of the Contract	Prov. Sum	1	R6 000.00	R6 000.00
1.3.4		Contractor's mark up on above Items 1.3.1.3	%	R6 000.00		
1.3.5		Employent of PSC for the duration of the contract (5No at R200pm each)	Prov. Sum	1	R8 000.00	R8 000.00
1.3.6		Contractor's mark up on above Items 1.3.1.5	%	R8 000.00		
1.3.7		Allowance for Civil Engineering Student / Trainee	Prov. Sum	1	R64 000.00	R64 000.00
1.3.8		Contractors markup on the above 1.3.7	%	R 64 000.00		
1.4	8.8	**TEMPORARY WORKS**				
1.4.1		**Provision of access to the Works:**				
1.4.1.1		Provide access to the Works including all temporary deviation roads, excavations and ramps, etc.	Sum	1		
1.4.2	SANS 1921-2	**Accomodation of traffic**				
1.4.2.1		Accommodation and management of traffic during the Contract	Sum	1		
1.4.2.2		Provide temporary traffic-control facilities, including flagmen and all necessary warning signage	Sum	1		
1.5	8.7	**DAYWORK**				
1.5.1		Unskilled workers	hr	50		
1.5.2		10m³ Tipper Truck	hr	10		
1.5.3		Tractor-loader-backhoe (TLB)	hr	10		
1.5.4		Excavator	hr	10		
1.5.5		Allowance for materials delivered to site	Prov Sum.	1	R5 000.00	R5 000.00
1.5.6		Contractors mark up on above item 1.6.3.1	%	R5 000.00		
SECTION 1 TOTAL CARRIED FORWARD TO SUMMARY						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
2	**SABS 1200 C**	**SECTION 2: SITE CLEARANCE**				
2.1	8.2.1	**Clear and Grub:**				
2.1.1		Clear and grub pipeline route (1 m width)	m	17 250		
2.1.2	8.2.2.a)	Clear and grub trees of girth:				
2.1.2.1		Greater than 1 m but less than 2 m	No	10		
2.1.2.2		Greater than 2 m but less than 5 m	No	1		
2.2		**Remove Topsoil**				
2.2.1	8.3.1(c)	Remove topsoil (1 m width) to a depth of 150 mm, stockpile and maintain for duration of contract, for later use, using mechanical excavation methods only.				
2.2.1.1		For pipelines	m	17 250		
SECTION 2 TOTAL CARRIED FORWARD TO SUMMARY						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
3	**SABS 1200 DB**	**SECTION 3: EARTHWORKS (PIPE TRENCHES)**				
3.1	**SABS 1200 DB**	**Pipe Trenches**				
3.1.1	8.3.2 (a)	Excavation in all materials for trenches min. 700 mm wide, 800 mm cover to soffit, backfill, compact and dispose of surplus / unsuitable material, for HDPE pipes smaller than and including 63 mm diameter				
3.1.1.1	8.3.2 (a) (ii)	Over 0.0 m and up to 1.0 m using mechanical excavation methods	m	4 000		
3.1.2	8.3.2 (b)	Excavation in all materials for trenches up to 1000 mm width, with min. 1000 mm cover to soffit, backfill, compact and dispose of surplus/unsuitable material, for all pipes larger than 63 mm up to and including 250 mm diameter				
3.1.2.1	8.3.2 (b) (ii)	Over 0.0 m and up to 1.5 m using mechanical excavation methods	m	17 000		
3.1.2.2	8.3.2 (b) (iii)	Over 1.5 m and up to 2.5 m using mechanical excavation methods	m	250		
3.1.3	8.3.2 (b)	Extra-over item for 3.1.1 to 3.1.2				
3.1.3.1	8.3.2 (b) (i)	Intermediate Excavation	m³	2 000		
3.1.3.2	8.3.2 (b) (ii)	Hard Rock Excavation	m³	50		
3.1.3.3	8.3.2 (b) (ii)	Hard rock excavation near residential buildings (Mounted Hydraualic breaker where directed by the Engineer	m³	10		
3.1.4.4	8.3.2 (c) (ii)	Boulder Excavation	m³	10		
3.1.4		Extra over items 3.1.1 to 4.1.4 for diverting stream flow and excavation through river crossing.	m	10		
3.1.5	8.3.2 (e)	Excavate and dispose of unsuitable material from trench bottom	m³	10		
3.2		**Excavation Ancillaries**				
3.2.1		Supply and install sack breakers (Prov)	No	0		Rate Only
3.2.2		Backfill with 12:1 soil cement mix where ordered (provisional)	m³	0		Rate Only
3.2.3	SABS 1200DA	Construct erosion earth berms	m	20		
3.2.4		Shore both sides of trenches opposite structure or service (Provisional)	m	20		
SECTION 3 TOTAL CARRIED FORWARD TO SUMMARY						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
4	**SABS 1200 DK**	**SECTION 4: GABIONS & PITCHING**				
4.1		**Preparation**				
4.1.1		Restricted excavations for baskets and mattresses	m³	10		
4.1.2	8.2.1	Surface preparation and compaction to 93% Mod AASHTO	m²	20		
4.1.3	8.2.1(a)	Cavities filled with approved excavated material or rock	m²	5		
4.1.4	8.2.1(b)	Cavities filled with 15 MPa concrete (provisional)	m^3	2		
4.1.5		75 mm Thick blinding with 15 Mpa concrete	m^2	10		
4.2		**Gabion Baskets and Reno Mattresses**				
4.2.1	8.2.2	Construct Reno mattresses using double twisted hexagonal Woven Mesh, apature 60 x 80 mm, mesh wire diameter of 2,2 mm and salvage wire diameter of 2,7 mm, in accordance with SANS 1580:2005:				
4.2.1.1	8.2.2	6 m x 2 m x 0,23 Reno mattresses including packing dump rock by hand	m³	3		
4.2.2	8.2.2	Construct Gabions baskets using double twisted hexagonal Woven Mesh, apature 80 x 100 mm, mesh wire diameter of 2,7 mm and salvage wire diameter of 3,4 mm, in accordance with SANS 1580:2005:				
4.2.2.1	8.2.2	2 m x 1 m x 0,5 m Gabion bins including packing dump rock by hand	m³	0		Rate Only
4.2.2.2	8.2.2	2 m x 1 m x 1 m Gabion bins including packing dump rock by hand	m³	2		
4.3	8.2.4	**Geotextile (Type AG 200)membrane**				
4.3.1	8.2.4	Below reno mattresses	m²	20		
4.3.2	8.2.4	On slope behind retaining walls	m²	20		
4.3.3	8.2.4	Around subsoil drains	m²	20		
4.4	8.2.5	**Pitchings**				
4.4.1		Surface preparation and compaction to 93% Mod AASHTO	m²	10		
4.4.2		Supply all labour, plant and material and lay125 mm thick grouted stone pitching where ordered by the Engineer	m²	10		
SECTION 4 TOTAL CARRIED FORWARD TO SUMMARY						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
5	**SABS 1200 LB**	**SECTION 5: BEDDING (PIPES)**				
5.1	8.2.1	**Provision of Bedding From Trench Excavation**				
5.1.1	8.2.1(a)	Selected granular material	m³	2 000		
5.1.2	8.2.1(b)	Selected fill material	m³	9 000		
5.2	8.2.2	**Supply only of Bedding by Importation**				
5.2.1	8.2.2.1	*From other Necessary Excavations*				
5.2.1.1	8.2.2.1(a)	Selected granular material	m³	100		
5.2.1.2	8.2.2.1(b)	Selected fill material	m³	100		
5.2.2	8.2.2.3	*From Commercial Sources*				
5.2.2.1	8.2.2.3(a)	Selected granular material	m³	5		
5.2.2.2	8.2.2.3(b)	Selected fill material	m³	10		
5.2.2.3		River sand (Provisional)	m³	0		Rate Only
5.2.2.4		Supply and place 19mm stone bedding (provisional)	m³	0		Rate Only
5.2.2.5		Supply and install Grade A4 geofabric filter membrane (provisional)	m²	0		Rate Only
5.2.3	8.2.3	*Concrete Bedding Cradle (Provisional)*				
5.2.3.1		15/19 Grade concrete	m³	1		
5.3	8.2.4	**Concrete Encasement**				
5.3.1		Pipe encasement in Grade 25/19 concrete, including for all formwork and reinforcement (100kg steel per m^3 concrete) for stream crossings	m³	0		Rate Only
SECTION 5 TOTAL CARRIED FORWARD TO SUMMARY						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
6	**SABS 1200 L**	**SECTION 6 : MEDIUM PRESSURE PIPELINES**				
6.1	**SABS 1200 L**	**MILD STEEL PIPES AND FITTINGS**				
6.1.1		**Grade X42 Mild Steel Pipes**				
		Supply, handle, lay, bed, joint, test and disinfect the following Grade X42 steel pipes. (Rates are to include for all bolts, nuts, gaskets and jointing material for flanged joints)				
6.1.1.1		DN100 Grooved end steel pipes	m	6 760		
6.1.1.2		DN100 D/FL GMS pipe, 1300 mm long, Table 1600/3 (Item 04)	No	2		
6.1.1.3		DN100 D/FL GMS puddle pipe, 800 mm long, Table 1600/3 (Item 05)	No	2		
6.1.1.4		DN100 D/FL GMS pipe, 2000 mm long, Table 1600/3 (Item 22)	No	1		
6.1.1.5		DN100 D/FL GMS pipe, 1200 mm long, Table 1600/3 (Item 34)	No	1		
6.1.1.6		DN100 D/FL GMS pipe, 210 mm long, Table 1600/3 (Item 35)	No	1		
6.1.1.7		DN100 PE/FL GMS pipe, 2300 mm long, Table 1600/3 (Item 37)	No	1		
6.1.2		**Mild Steel Fittings**				
6.1.2.1		*Bends*				
6.1.2.1.1		DN100 90° D/FL GMS bend, 130 mm radius, 140 mm c/f both ends, Table 1600/3 (Item 3)	No	3		
6.1.2.1.2		DN100 90° D/FL GMS duckfoot bend, 1300 mm radius, c/f 140 mm both faces Table 1000/3, with 330 mm x 330 mm baseplate 6 mm thick set 235 mm below horizontal pipe centreline and 3 mm thick plate rib between pipe and baseplate, Table 1600/3 (Item 36)	No	1		
6.1.2.1.3		DN100 90° Grooved end bend	No	2		
6.1.2.1.4		DN100 45° Reverse D/FL bend, overall length 154 mm, each bend radius 171 mm, c/f both ends 76 mm, Table 1600/3 (Item 21)	No	2		
6.1.2.1.5		DN100 45° Grooved end bend	No	10		
6.1.2.2		*DN100 Klambon Pipe Clamps*				
6.1.2.2.1		Grooved end Klambon pipe clamps	No	760		
6.1.2.3		*Mild Steel Tees*				
6.1.2.3.1		DN100 x DN50 FL/PE unequal Tee, DN100 D/FL barrel 300 mm long, central DN50 PE branch c/f 250 mm, Table 1600/3 (Item 8)	No	1		
6.1.2.3.2		DN100 x DN50 FL/PE unequal Tee, DN100 D/FL barrel 300 mm long, central DN50 FL branch c/f 250 mm, Table 1600/3 (Item 13)	No	1		
6.1.2.3.3		DN160 x DN75 D/FL Tee, DN160 D/FL barrel 350 mm long, central DN75 FL branch c/f 250 mm, Table 1600/3	No	3		
6.1.2.3.4		DN200 x DN63 D/FL Tee, DN200 D/FL barrel 350 mm long, central DN75 FL branch c/f 200 mm, Table 1600/3	No	1		
TOTAL CARRIED FORWARD						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
BROUGHT FORWARD						
6.1.2.3		*Nipples*				
6.1.2.3.1		20 mm GMS nipples	No	2		
6.2	**SABS 1200 L**	**PVC PIPES AND FITTINGS**				
6.2.1		**PN12 mPVC Pipes**				
	8.2.1	*Supply, handle, lay, bed, joint, test and disinfect the following mPVC Class 12 pipes and fittings with Z Lok joints incuding all cutting required.*				
6.2.1.1		250 mm Diameter mPVC PN12	m	0		Rate Only
6.2.1.2		200 mm Diameter mPVC PN12	m	2 680		
6.2.1.3		160 mm Diameter mPVC PN12	m	1 990		
6.2.1.4		110 mm Diameter mPVC PN12	m	1 800		
6.2.1.5		90 mm Diameter mPVC PN12	m	0		Rate Only
6.2.1.6		75 mm Diameter mPVC PN12	m	4 000		
6.2.2		**PN12 PVC Pipe Fittings**				
	8.2.3	*Supply, Install and test PN12 PVC Bends .*				
6.2.2.1		DN200 Bends				
6.2.2.1.1		11.25° Bend	No	2		
6.2.2.1.2		22.5° Bend	No	2		
6.2.2.1.3		45° Bend	No	1		
6.2.2.1.4		90° Bend	No	1		
6.2.2.2		DN160 Bends				
6.2.2.2.1		11.25° Bend	No	5		
6.2.2.2.2		22.5° Bend	No	5		
6.2.2.2.3		45° Bend	No	4		
6.2.2.2.4		90° Bend	No	1		
6.2.2.3		DN110 Bends				
6.2.2.3.1		11.25° Bend	No	5		
6.2.2.3.2		22.5° Bend	No	4		
6.2.2.3.3		45° Bend	No	1		
6.2.2.3.4		90° Bend	No	1		
6.2.2.4		DN75 Bends				
6.2.2.4.1		11.25° Bend	No	10		
6.2.2.4.2		22.5° Bend	No	5		
6.2.2.4.3		45° Bend	No	5		
6.2.2.4.4		90° Bend	No	5		
TOTAL CARRIED FORWARD						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
BROUGHT FORWARD						
	8.2.3	*Supply, Install and Test PN12 PVC Tees*				
6.2.2.5		PN12 PVC Equal Tees				
6.2.2.5.3		DN110 Tee	No	2		
6.2.2.5.4		DN75 Tee	No	1		
6.2.2.6		PN12 PVC Reducing Tees				
6.2.2.6.1		DN200 x DN160 Tee	No	1		
6.2.2.6.2		DN160 x DN110 Tee	No	2		
6.2.2.6.3		DN110 x DN75 Tee	No	10		
6.2.2.6.4		DN75 x DN63 Tee	No	15		
6.2.2.6.5		DN75 x DN50 Tee	No	1		
6.2.2.7		Supply, Install and Test PN12 PVC Reducers				
6.2.2.7.1		DN200 x DN160	No	1		
6.2.2.7.2		DN160 x DN110	No	3		
6.2.2.7.3		DN110 x DN75	No	5		
6.2.2.7.4		DN75 x DN63	No	10		
6.2.2.8		Supply, Install and Test PN12 PVC Couplings				
6.2.2.8.1		DN200	No	1		
6.2.2.8.2		DN160	No	2		
6.2.2.8.3		DN110	No	5		
6.2.2.8.4		DN75	No	5		
6.2.3		**PN12 Cast Iron/ PVC Pipe Fittings**				
	8.2.3	*Supply, install and test PN12 cast iron/ PVC fittings*				
6.2.3.1		*PN12 Cast iron/ PVC flange adaptors*				
6.2.3.1.1		DN200	No	2		
6.2.3.1.2		DN160	No	2		
6.2.3.1.3		DN110	No	4		
6.2.3.1.4		DN75	No	6		
6.2.3.1.5		DN63	No	1		
6.2.3.1.6		DN50	No	1		
6.2.3.2		*PN12 Cast iron/ PVC Reducers (Provisional)*				
6.2.3.2.1		DN200 x DN160	No	1		
6.2.3.2.2		DN160 x DN110	No	1		
6.2.3.3		*PN12 Cast iron/ PVC Couplings (Provisional)*				
6.2.3.3.1		DN200	No	0		Rate Only
6.2.3.3.2		DN160	No	0		Rate Only
6.2.3.3.3		DN110	No	1		
TOTAL CARRIED FORWARD						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
BROUGHT FORWARD						
6.2.3.4		*PN12 Cast iron/ PVC End Cap (Provisional)*				
6.2.3.4.1		DN160	No	0		Rate Only
6.2.3.4.2		DN110	No	0		Rate Only
6.2.3.4.3		DN75	No	1		
6.2.3.5		*SG Iron Saddles*				
6.2.3.5.1		DN200 SG Iron with DN40 BSP	No	14		
6.2.3.5.2		DN160 SG Iron with DN40 BSP	No	9		
6.2.3.5.3		DN110 SG Iron with DN40 BSP	No	18		
6.2.3.5.4		DN75 SG Iron with DN40 BSP	No	28		
6.2.3.5.5		DN63 SG Iron with DN40 BSP	No	40		
6.3	**SABS 1200 L**	**HDPE PIPES**				
6.3.1		**PE100 PN12,5 HDPE Pipes**				
	8.2.1	*Supply, lay, bed and test pipes complete with couplings, PE100 HDPE Pipes Class 12,5 to SABS 533* *Pipes of this material and diameter will undergo compression fitting connections, The rate shall include supply, handeling, connecting as well as cutting and waste fo jointing of ebows, pipes, drilling saddle holes and installing tee pieces. Each roll will be priced with one compression fitting coupling*				
6.3.1.1		DN63 PN12,5	m	1 000		
6.3.1.2		DN50 PN12,5	m	3 000		
6.3.1.3		DN40 PN12,5 (Provisional)	m	0		Rate Only
6.3.2		**HDPE Compression Fittings (PN16)**				
6.3.2.1		*Compression Tees (PN16)*				
6.3.2.1.1		DN63 All equal Tee	No	2		
6.3.2.1.2		DN50 All equal Tee	No	5		
6.3.2.1.3		DN40 All equal Tee (Provisional)	No	0		Rate Only
6.3.2.2		*Compression Reducing Tees (PN16)*				
6.3.2.2.1		63 x 50 x 63 mm ø Compression reducing Tee	No	5		
6.3.2.2.2		63 x 40 x 63 mm ø Compression reducing Tee (Provisional)	No	0		Rate Only
6.3.2.2.3		50 x 22 x 50 mm ø Compression reducing Tee	No	5		
6.3.2.2.4		40 x 22 x 40 mm ø Compression reducing Tee (Provisional)	No	0		Rate Only
6.3.2.3		*Compression Bends (PN16)*				
6.3.2.3.1		DN63 x 90° Bend	No	5		
6.3.2.3.2		DN50 x 90° Bend	No	5		
6.3.2.3.3		DN40 x 90° Bend (Provisional)	No	0		Rate Only
6.3.2.4		*Compression Reducers (PN16)*				
6.3.2.4.1		DN63 to DN50 Reducer	No	1		
TOTAL CARRIED FORWARD						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
BROUGHT FORWARD						
6.3.2.4.2		DN63 to DN40 Reducer (Provisional)	No	0		Rate Only
6.3.2.4.3		DN63 to DN22 Reducer	No	10		
6.3.2.4.4		DN50 to DN22 Reducer	No	10		
6.3.2.5		*Compression Adaptors (PN16)*				
6.3.2.5.1		DN63 x DN50 Male adaptor	No	10		
6.3.2.5.2		DN63 x DN50 Female adaptor	No	10		
6.3.2.5.3		DN50 x DN50 Male adaptor	No	10		
6.3.2.5.4		DN50 x DN50 Female adaptor	No	10		
6.3.2.5.5		DN22 x DN22 Male adaptor	No	10		
6.3.2.5.6		DN22 x DN22 Female adaptor	No	10		
6.3.2.6		*Compression Flange Adaptor (PN16)*				
6.3.2.6.1		75 mm Flange adaptor	No	10		
6.3.2.6.2		63 mm Flange adaptor	No	10		
6.3.2.6.3		50 mm Flange adaptor	No	10		
6.3.2.7		*Compression Couplings (PN16)*				
6.3.2.7.1		DN63	No	20		
6.3.2.7.2		DN50	No	20		
6.3.2.8		*Compression Reducing Couplings (PN16)*				
6.3.2.8.1		DN63 x DN50	No	10		
6.3.2.8.2		DN63 x DN22	No	5		
6.3.2.8.3		DN50 x DN22	No	5		
6.3.2.9		*Compression Saddles (PN10)*				
6.3.2.9.1		DN63 x DN22	No	20		
6.3.2.9.2		DN50 x DN22	No	60		
6.3.2.10		*Compression End Caps (PN16)*				
6.3.2.10.1		DN63	No	1		
6.3.2.10.2		DN50	No	1		
6.3.2.10.3		Allow for investigation and repairs to the existing services including pipes and to make them function properly again	Prov Sum	1	R250 000.00	R250 000.00
6.3.2.10.4		Contractor's mark up on above Items 6.3.2.10.4	%	R250 000.00		
SECTION 6 TOTAL CARRIED FORWARD TO SUMMARY						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
7	**SABS 1200 L**	**SECTION 7 : SUNDRIES**				
7.1	**SABS 1200 L**	**VALVES AND SPECIALS**				
		Spplying, handling, installing, air valve, isolation valves, scour valves and branch chambers as shown on Drawings, including jointing, testing and disinfecting the following fittings and specials. (Rates are to include for all bolts, nuts, gaskets and jointing material for flanged joints, plant . Note: All flanges to be SANS 1123 Table 1600 for all flanges equal to or smaller than DN300)				
7.1.1	**8.2.2, 8.2.3**	**Air Valve Pipework and Specials. Refer to Drawing No. PRJ 137A-RWA-STD 002. All fittings to be rated PN12.**				
7.1.1.1		*DN80 on DN200 PVC pipe*				
7.1.1.1.1		DN80 air valve, PN12	No	1		
7.1.1.1.2		DN80 GMS pipe, 150 mm length, one female threaded end and one male threaded.	No	1		
7.1.1.1.3		DN80 CI Ball valve, female threaded on both ends	No	1		
7.1.1.1.4		DN80 GMS pipe, 700 mm length, welded onto DN80 flange, male threaded on the other end.	No	1		
7.1.1.1.5		DN160 mPVC pipe, 300 mm long	No	1		
7.1.1.1.6		DN200 x DN80 cast iron hydrant tee. DN200 barrel socketed and DN80 FL branch	No	1		
7.1.1.2		*DN50 on DN160/110/75 mPVC Pipe*				
7.1.1.2.1		DN80 air valve, PN12	No	5		
7.1.1.2.2		DN50 air valve, PN12	No	2		
7.1.1.2.3		DN80 GMS pipe, 150 mm length, one female threaded end and one male threaded.	No	5		
7.1.1.2.4		DN50 GMS pipe, 150 mm length, one female threaded end and one male threaded.	No	2		
7.1.1.2.5		DN80 CI Ball valve, female threaded on both ends	No	5		
7.1.1.2.6		DN50 CI Ball valve, female threaded on both ends	No	2		
7.1.1.2.7		DN80 GMS pipe, 700 mm length, welded onto DN80 flange, male threaded on the other end.	No	5		
7.1.1.2.8		DN50 GMS pipe, 700 mm length, welded onto DN50 flange, male threaded on the other end.	No	2		
7.1.1.2.9		DN160 mPVC pipe, 300 mm long	No	7		
7.1.1.2.10		DN160 x DN80 cast iron hydrant tee. DN160 barrel socketed and DN80 FL branch	No	1		
7.1.1.2.11		DN110 x DN80 cast iron hydrant tee. DN110 barrel socketed and DN80 branch flanged	No	5		
7.1.1.2.12		DN75 x DN50 cast iron hydrant tee. DN75 barrel socketed and DN50 FL branch	No	2		
7.1.1.3		*DN25 on DN63/50 HDPE pipe*				
7.1.1.3.1		DN25 Air valve, PN12	No	2		
7.1.1.3.2		DN25 GMS pipe, 150 mm length, one female threaded end and one male threaded.	No	2		
7.1.1.3.3		DN25 brass nickle ball valve, PN12	No	2		
7.1.1.3.4		DN25 GMS pipe, 700 mm length, welded onto DN50 mm flange, male threaded on the other end.	No	2		
TOTAL CARRIED FORWARD						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
BROUGHT FORWARD						
7.1.1.3.5		DN63 x DN50 GMS flanged unequal Tee, DN630 barrel and DN50 branch	No	2		
7.1.1.3.6		DN50 GMS flanged equal Tee	No	2		
7.1.1.3.7		DN63 HDPE compression flange adaptor with backing ring	No	4		
7.1.1.3.8		DN50 HDPE compression flange adaptor with backing ring	No	4		
7.1.2	**8.2.2, 8.2.3**	**Scour Valve Pipework and Specials. Refer to Drawing No. PRJ 137A-RWA-STD 003. All Fittings to be Rated PN12**				
7.1.2.1		*DN100 on DN200 PVC pipe*				
7.1.2.1.1		DN200 x DN100 cast iron scour tee. DN200 barrel socketed and DN100 FL branch	No	1		
7.1.2.1.2		DN100 sluice gate valve, PN12	No	1		
7.1.2.1.3		DN100 D/FL GMS pipe, 1000mm length	No	1		
7.1.2.1.4		DN100 x 45° D/FL GMS bend, 160mm c/f	No	1		
7.1.2.1.5		DN100 flanged and plain ended GMS pipe, ±2000 mm in length (cut to suit) PE side threaded.	No	1		
7.1.2.1.6		DN100 screw on flange	No	1		
7.1.2.1.7		DN100 jet disperser	No	1		
7.1.2.2		*DN80 on DN160/110 mPVC Pipe*				
7.1.2.2.1		DN160 x DN80 cast iron scour tee. DN160 barrel socketed and DN80 FL branch	No	1		
7.1.2.2.2		DN110 x DN80 cast iron scour tee. DN110 barrel socketed and DN80 FL branch	No	4		
7.1.2.2.3		DN80 sluice gate valve, PN12	No	5		
7.1.2.2.4		DN80 D/FL GMS pipe, 1000 mm length	No	5		
7.1.2.2.5		DN80 x 45° D/FL GMS bend, 160 mm c/f	No	5		
7.1.2.2.6		DN80 FL/PE GMS pipe, ±2000 mm in length (cut to suit) PE side threaded.	No	5		
7.1.2.2.7		DN80 screw on flange	No	5		
7.1.2.2.8		DN80 jet disperser	No	5		
7.1.2.3		*DN50 on DN75 mPVC Pipe*				
7.1.2.3.1		DN75 x DN50 cast iron scour tee. DN75 barrel socketed and DN50 FL branch	No	2		
7.1.2.3.2		DN50 sluice gate valve, PN12	No	2		
7.1.2.3.3		DN50 D/FL GMS pipe, 1000 mm length	No	2		
7.1.2.3.4		DN50 x 45° D/FL GMS bend, 160 mm c/f	No	2		
7.1.2.3.5		DN50 FL/PE GMS pipe, ±2000 mm in length (cut to suit) PE side threaded.	No	2		
7.1.2.3.6		DN50 screw on flange	No	2		
7.1.2.3.7		DN50 jet disperser	No	2		
7.1.2.4		*DN50 on 63/50 mm HDPE pipe*				
7.1.2.4.1		DN63 x DN50 GMS unequal tee, barrel DN63 and branch DN50	No	0		Rate Only
7.1.2.4.2		DN50 GMS equal tee	No	0		Rate Only
7.1.2.4.3		DN50 sluice gate valve, PN16	No	0		Rate Only
TOTAL CARRIED FORWARD						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
BROUGHT FORWARD						
7.1.2.4.4		DN50 F/F GMS pipe, 1000 mm length	No	0		Rate Only
7.1.2.4.5		DN50 x 45° F/F GMS bend, 160 mm centre to face	No	0		Rate Only
7.1.2.4.6		DN50 F/PE GMS pipe, ±2000 mm in length (cut to suit) plain ended side threaded	No	0		Rate Only
7.1.2.4.7		DN50 screw on flange	No	0		Rate Only
7.1.2.4.8		DN50 jet disperser	No	0		Rate Only
7.1.2.4.9		DN63 HDPE compression flange adaptor with backing ring	No	0		Rate Only
7.1.2.4.10		DN50 HDPE compression flange adaptor with backing ring	No	0		Rate Only
7.1.3	**8.2.2, 8.2.3**	**Isolation Valve Pipework and Specials. Refer to Drawing No. PRJ 137A-RWA-STD 004**				
7.1.3.1		*DN200 Isolation Valve*				
7.1.3.1.1		DN200 Cast Iron flange adaptor	No	2		
7.1.3.1.2		DN200 D/FL GMS puddle pipe, 1035 mm long, with puddle flange 470 mm from one end.	No	2		
7.1.3.1.3		DN200 D/FL gate valve, PN12	No	1		
7.1.3.1.4		DN200 VJ flange adaptor	No	1		
7.1.3.1.5		DN200 PE/FL GMS pipe, 280 mm long	No	1		
7.1.3.2		*DN160 Isolation Valve*				
7.1.3.2.1		DN160 Cast Iron flange adaptor	No	2		
7.1.3.2.2		DN160 D/FL GMS puddle pipe, 1035 mm long, with puddle flange 470 mm from one end.	No	2		
7.1.3.2.3		DN160 D/FL gate valve, PN12	No	1		
7.1.3.2.4		DN160 VJ flange adaptor	No	1		
7.1.3.2.5		DN160 PE/FL GMS pipe, 280 mm long	No	1		
7.1.3.3		*DN110 Isolation Valve*				
7.1.3.3.1		DN110 Cast Iron flange adaptor	No	4		
7.1.3.3.2		DN110 D/FL GMS puddle pipe, 1035 mm long, with puddle flange 470 mm from one end.	No	4		
7.1.3.3.3		DN110 D/FL gate valve, PN12	No	2		
7.1.3.3.4		DN110 VJ flange adaptor	No	2		
7.1.3.3.5		DN110 PE/FL GMS pipe, 280 mm long	No	2		
7.1.3.4		*DN75 Isolation Valve*				
7.1.3.4.1		DN75 Cast Iron flange adaptor	No	8		
7.1.3.4.2		DN75 D/FL GMS puddle pipe, 1035 mm long, with puddle flange 470 mm from one end.	No	8		
7.1.3.4.3		DN75 D/FL gate valve, PN12	No	4		
7.1.3.4.4		DN75 VJ flange adaptor	No	4		
7.1.3.4.5		DN75 PE/FL GMS pipe, 280 mm long	No	4		
7.1.3.5		*DN63 Isolation Valve*				
7.1.3.5.1		DN63 HDPE compression flange adaptor with backing ring	No	4		
7.1.3.5.2		DN63 D/FL GMS puddle pipe, 1035 mm long, with puddle flange 470 mm from one end.	No	4		
7.1.3.5.3		DN63 D/FL gate valve, PN12	No	2		
7.1.3.5.4		DN63 VJ flange adaptor	No	2		
7.1.3.5.5		DN63 PE/FL GMS pipe, 280 mm long	No	2		
TOTAL CARRIED FORWARD						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
BROUGHT FORWARD						
7.1.3.6		*DN50 Isolation Valve*				
7.1.3.6.1		DN50 HDPE compression flange adaptor with backing ring	No	2		
7.1.3.6.2		DN50 D/FL GMS puddle pipe, 1035 mm long, with puddle flange 470 mm from one end.	No	2		
7.1.3.6.3		DN50 D/FL gate valve, PN12	No	1		
7.1.3.6.4		DN50 VJ flange adaptor	No	1		
7.1.3.6.5		DN50 PE/FL GMS pipe, 280 mm long	No	1		
7.1.3.7		*DN20 Ball Valve*				
7.1.3.7.1		DN20 Female threaded brass ball valve	No	80		
7.1.4	8.2.2, 8.2.3	**Surge Anticipating Valve Pipework and Specials**				
7.1.4.1		DN50 Surge Anticipating Valve, PN16	No	1		
7.1.4.2		DN50 D/FL gate valve, PN16	No	2		
7.1.4.3		DN100 D/FL check valve, PN16	No	1		
7.1.4.4		DN50 strainer, PN16	No	1		
7.1.4.5		DN50 VJ flange adaptor	No	3		
7.1.4.7		DN50 PE/FL GMS puddle pipe, 1000 mm long, cut to suit on site, puddle flange centrally located, Table 1600/3 (Item 20).	No	1		
7.1.4.8		DN50 D/FL GMS pipe, 1000 mm long, Table 1600/3 (Item 22).	No	1		
7.1.4.9		DN50 PE/FL GMS pipe, 200 mm long, cut to suit on site, Table 1600/3 (Item 22)	No	1		
7.1.5	8.2.2, 8.2.3	**Meter Chamber Pipework and Specials. Refer to Drawing No.xxxx**				
7.1.5.1		DN100 x 400 mm long D/FL pipe	No	1		
7.1.5.2		DN100 x 800 mm long PE pipe	No	1		
7.1.5.3		DN200 x 1550 mm D/FL puddle pipe with collar 580 mm from one end	No	2		
7.1.5.4		DN200 x 100 mm D/FL steel reducer	No	2		
7.1.5.5		DN100. D/FL gate valve, PN16	No	1		
7.1.5.6		DN100 D/FL strainer, PN16	No	1		
7.1.5.7		DN100 D/FL meter. (WPD sensus or similar approved), PN16	No	1		
7.1.5.8		DN100 VJ flanged adaptor, PN16	No	1		
7.1.5.9		DN200 GMS socketed flange adaptor	No	2		
7.2.1		**Break-Pressure Tank**				
7.2.1.1		Supply and installation of 1 kl steel ground level LW systems Break-pressure tank model 04LW10 or similar approved, including all pipework and valves : Refer to Drawing No. PRJ 137A-RWA-STD 009	No	2		
7.2		**VALVE CHAMBERS**				
		Note: The following rates are to include for the construction of all brickwork, concrete work as detailed on drawings and installation of all ladders, step irons, sealing joints, air vents, handrails, access manholes & frames, GRP landings & plastic gratings. All in situ and pre cast concrete, shuttering, surface finishing, curing of concrete, brickwork and ancillaries to be included and rate supplied to be for full functional unit				
7.2.1		**Supply and install units complete with related items for the construction of chambers:**				
TOTAL CARRIED FORWARD						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
BROUGHT FORWARD						
7.2.1.1		Air Valve Chamber for depths : Refer to Drawing No. PRJ 137A-RWA-STD 002				
7.2.1.1.1		Up to 2,0 m	No.	10		
7.2.1.2		Scour Valve Chamber for Depths : Refer to Drawing No. PRJ 137A-RWA-STD 003				
7.2.1.2.1		Up to 2,0 m	No.	8		
7.2.1.3		Isolation Valve Chamber for Depths : Refer to Drawing No. PRJ 137A-RWA-STD 003				
7.2.1.3.1		Up to 2,0 m	No.	10		
7.2.1.4		Isolation valve box for 20 mm HDPE ballstop valve : Refer to Drawing No. PRJ 137A-RWA-STD 003				
7.2.1.4.1		Complete polygon valve box type 3B beltoby 10 mm above slab. Rate to include for 15/19 mpa concrete anchor block, and concrete collar slab all as shown on the detailed drawing.	No.	80		
7.2.1.5		Borehole chamber : Refer to Drawing No. PRJ 137B-DW 700	No.	1		
7.2.1.6		Inlet valve chamber : Refer to Drawing No. PRJ 137B-DW 800	No.	1		
7.2.1.7		Outlet valve and meter chamber: Refer to Drawing No. PRJ 137B-DW 800. Rate to include for concrete works including shuttering and reinforcing, brickwork, access manholes & cover frames, ladders and airvents	No.	1		
7.3		**ANCILLARIES**				
7.3.1		**Marker Beacons**				
7.3.1.1		Supply and install precast concrete pipe route marker as per detail on Drawing No. PRJ 137A-RWA-STD 006. Painted yellow. Rate to include concrete support and excavation.	No.	150		
7.3.1.2		Supply and install AV, IV, SV, FH, M precast concrete marker posts as per Drawing No. PRJ 137A-RWA-STD 006. Painted yellow. Rate to include concrete support and excavation	No.	30		
7.3.2		**Protection Works**				
7.3.2.1		Supply all materials, plant, labour and field wrap all bolted, flanged and flexible joints and buried valve bodies with "Denso" tape (or similar approved) including for 250 mm on either side of fitting concerned as per detail, for flanges up to DN250	No.	100		
7.3.3		**Anchor Blocks**				
7.3.3.1		Anchor blocks in Grade 25 MPa/19mm concrete as per Drawing No. PRJ 137A-RWA-STD 005 (including rough shuttering)	m^3	15		
7.3.4		**Padlocks for Chambers**				
7.3.4.1		Provisional Sum for the supply of padlocks for access lids as per Employer's requirements.	Prov Sum	1	R 10 000.00	R 10 000.00
7.3.4.2		Contractors mark-up on item 7.3.4.1 above	%	R 10 000.00		
SECTION 7 TOTAL CARRIED FORWARD TO SUMMARY						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
8		**SECTION 8: SMALL WORKS (PUMP HOUSE)**				
8.1	**SABS 1200 C**	**SITE CLEARANCE**				
8.1.1	**8.2.1**	**Clear and Grub:**				
8.1.1.1	8.2.1	Clear and grub pump house site and dispose of surplus material approved waste dump site.	m^2	20		
8.1.1.2	8.2.2.a)	Clear and grub trees of girth:				
8.1.1.2.1		Greater than 1 m but less than 2 m	No	1		
8.1.2		**Remove Topsoil**				
8.1.2.1	8.3.1(c)	Remove topsoil to a depth of 150mm, stockpile and maintain for duration of contract, for later use, using mechanical excavation methods only.				
8.1.2.1.1		For pipelines	m	10		
8.1.2.1.2		For small works	m^2	20		
8.2	**SABS 1200 DA**	**EARTHWORKS (SMALL WORKS)**				
8.2.1		**Bulk Excavation**				
8.2.1.1		Excavation in earth to depths not exceeding 2 m deep, compacted to 95% MOD AASHTO and temporary stockpiling on site for re-use later	m^3	2		
8.2.1.2		Cut to fill, compact to 95% MOD AASHTO	m^3	2		
8.2.2		**Restricted Excavation**				
8.2.2.1		Restricted excavation in earth not exceeding 1 m depth				
8.2.2.1.1		For foundations	m^3	10		
8.2.2.2		Extra-over for excavation in:				
8.2.2.2.1		Intermediate material	m^3	2		
8.2.2.2.2		Hard rock	m^3	1		
8.2.3		**Earthfilling**				
8.2.3.1		Backfilling with material from the excavations compacted to density of at least 98% Mod. AASHTO density				
8.2.3.1.1		Under floors, pavings, etc.	m^3	5		
8.2.3.1.2		Backfilling to trenches, foundations, etc	m^3	2		
8.2.3.2		Filling with 150 mm thick G7 material imported from commercial source compacted to 95% Mod. AASHTO maximum density.				
8.2.3.2.1		Under floors and foundations	m^3	3		
8.2.4		**Soil Poisoning**				
8.2.4.1		With insecticides under floors, etc.	m^2	16		
8.2.5		**Finishings**				
8.2.5.1	SABS 1200 DA	Spread topsoil from stockpile to a depth of 100 mm	m^2	20		
8.2.5.2	8.3.6 (a)	Grassing by hydroseeding	m^2	20		
8.3	**SABS 1200 GB**	**CONCRETE (ORDINARY BUILDINGS)**				
8.3.1		**Unreinforced Concrete**				
8.3.1.1		15 Mpa/19mm Concrete (Provisional)	m^3	2		
8.3.2		**Reinforced Concrete**				
8.3.2.1		25 MPa/19mm Concrete for:				
8.3.2.1.1		Foundations and footings	m^3	3		
8.3.2.1.2		Surface beds, ramps, steps, aprons, e.t.c	m^3	3		
8.3.2.2		30 MPa/19mm Concrete for:				
8.3.2.2.1		Roof slabs	m^3	3		
8.3.2.2.2		Walls, columns, beams, e.t.c	m^3	1		
TOTAL CARRIED FORWARD						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
BROUGHT FORWARD						
8.3.3		**Concrete Tests**				
8.3.3.1		Making and testing of a set of three 150 x 150 x 150 mm concrete specimens	No.	9		
8.3.4		**Concrete Finishes**				
8.3.4.1		*Unformed surface finishes*				
8.3.4.1.1		Smooth finish with steel float to surface beds, etc.	m²	16		
8.3.4.1.2		Rough finish with wood float to surface beds, etc.	m²	30		
8.3.5		**Formwork**				
		Rough vertical to concealed surfaces:				
8.3.5.1		Rough vertical to narrow widths to edges:				
8.3.5.2		Edges up to 250 mm high	m	1		
		Smooth vertical to exposed surfaces:				
8.3.5.3		Wall, columns, beams, e.t.c	m²	5		
		Smooth vertical to narrow widths to edges:				
8.3.5.4		Edges up to 250 mm high	m	16		
		Smooth horizontal to exposed surfaces:				
8.3.5.5		Roof slabs	m²	16		
8.3.5.6		Forming 20 mm half-round drip around the roof slab	m	20		
8.3.6		**Reinforcement**				
8.3.6.1		Ref. 245 welded mesh reinforcement in concrete surface beds, slabs, aprons, e.t.c.	m²	20		
8.3.6.2		Ref. 888 welded mesh reinforcement in concrete surface beds, slabs, aprons, e.t.c.	m²	20		
8.3.6.3		HT mild steel reinforcement to structural concrete members in bars of all diameters in ring beams, strip footings, etc.	kg	20		
8.3.7		**Joints**				
8.3.7.1		*Expansion joints*				
8.3.7.1.1		Expansion joints with 10mm polystyrene including 10x10mm polysulphide bead between vertical brick and/or concrete surfaces	m	16		
8.3.7.1		*Construction Joints*				
8.3.7.2		Construction joint between the walls and roof slab, with 2-ply malthoid layer	m	16		
8.4		**MASONRY**				
8.4.1		**Brickwork in Foundations**				
8.4.1.1		NFX brickwork (14MPa nominal compressive strength) in Class I mortar				
8.4.1.1.1		Half-brick walls (Prov)	m²	0		Rate Only
8.4.1.1.2		One-brick walls	m²	10		
8.4.2		**Brickwork in Superstructure**				
8.4.2.1		"Corobrik Firelight Travertine FBX" face bricks pointed with recessed horizontal and vertical joints in Class 1 mortar				
8.4.2.1.1		One-brick walls	m²	40		
8.4.2.1.2		Brick-on-edge header course copings, sills, etc.	m	2		
8.4.3		**Damp-proofing of Walls and Floors**				
8.4.3.1		One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course				
8.4.3.1.1		In walls	m	15		
8.4.3.2		One layer of 250 micron "Consol Plastics Gunplas USB Green" waterproof sheeting				
TOTAL CARRIED FORWARD						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
BROUGHT FORWARD						
8.4.3.2.1		Under surface beds	m²	16		
8.4.5		**Doors, Frames, e.t.c**				
8.4.5.1		Manufacturing and installation of 2134 mm x 1100mm "Type C" transformer room door and frame, including hinges and locksets.	No	1		
8.4.6		**Ventilation**				
8.4.6.1		229 x 152mm Clay vermin proof air bricks	No	8		
8.5		**FENCING**				
8.5.1		**Precast Concrete Fencing**				
8.5.1.1		Supply and installation of 2.4 m high concrete precast paling with concrete overhang and a 500 mm strip of Ripper Flat Wrap	m	0		Rate Only
8.5.2		**Gates**				
8.5.2.1		Supply and install 3 m x 2,4 m heavy duty, Galvanized Mild Steel, double leaf vehicular gate	No	0		Rate Only
SECTION 8 TOTAL CARRIED FORWARD TO SUMMARY						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
9		**SECTION 9: SMALL WORKS (300 KL STEEL RESERVOIR)**				
9.1	**SABS 1200 C**	**SITE CLEARANCE**				
9.1.1	**8.2.1**	**Clear and Grub:**				
9.1.1.1	8.2.1	Clear and grub reservoir site and dispose of surplus material approved waste dump site.	m^2	250		
9.1.1.2	8.2.2.a)	Clear and grub trees of girth:				
9.1.1.2.1		Greater than 1 m but less than 2 m	No	1		
9.1.1.2.2		Greater than 2 m but less than 5 m	No	0		Rate Only
9.1.2	**8.3.1**	**Remove Topsoil**				
9.1.2.1	8.3.1(c)	Remove topsoil to a depth of 150mm, stockpile and maintain for duration of contract, for later use, using mechanical excavation methods only.				
9.1.2.1.1		For pipelines	m	10		
9.1.2.1.2		For small works	m^2	225		
9.2	**SABS 1200 DA**	**EARTHWORKS (SMALL WORKS)**				
9.2.1		**Bulk Excavation**				
9.2.1.1		Excavation in earth to depths not exceeding 2 m deep, compacted to 95% MOD AASHTO and temporary stockpiling on site for re-use later	m^3	10		
9.2.1.2		Cut to fill, compact to 95% MOD AASHTO	m^3	5		
9.2.2		**Restricted Excavation**				
9.2.2.1		Restricted excavation in earth not exceeding 1 m depth				
9.2.2.1.1		For foundations	m^3	5		
9.2.2.2		Extra-over for excavation in:				
9.2.2.2.1		Intermediate material	m^3	5		
9.2.2.2.2		Hard rock	m^3	1		
9.2.3		**Earthfilling**				
9.2.3.1		Backfilling with material from the excavations compacted to density of at least 98% Mod. AASHTO density				
9.2.3.1.1		Under floors, pavings, etc.	m^3	5		
9.2.3.1.2		Backfilling to trenches, foundations, etc	m^3	2		
9.2.3.2		Filling with 150 mm thick G7 material imported from commercial source compacted to 95% Mod. AASHTO maximum density.				
9.2.3.2.1		Under floors and foundations	m^3	16		
9.2.3.2		Filling with 150 mm thick G5 material imported from commercial source compacted to 95% Mod. AASHTO maximum density.				
9.2.3.2.1		Under floors and foundations	m^3	16		
9.2.3.2		Filling with 100 mm thick river sand material imported from commercial source compacted to 98% Mod. AASHTO maximum density.				
9.2.3.2.1		Under floors and foundations	m^3	12		
9.2.4		**Soil Poisoning**				
9.2.4.1		With insecticides under floors, etc.	m^2	100		
TOTAL CARRIED FORWARD						

BROUGHT FORWARD						
9.2.5		**Finishings**				
9.2.5.1	SABS 1200 DA	Spread topsoil from stockpile to a depth of 100 mm	m²	100		
9.2.5.2	8.3.6 (a)	Grassing by hydroseeding	m²	100		
9.3	**SABS 1200 GA**	**CONCRETE (SMALL WORKS)**				
9.3.1		**Unreinforced Concrete**				
9.3.1.1		15 Mpa/19mm Concrete (Provisional)	m^3	1		
9.3.2		**Reinforced Concrete**				
9.3.2.1		30 MPa/19mm Concrete for:				
9.3.2.1.1		Foundations and footings	m³	6		
9.3.3		**Concrete Tests**				
9.3.3.1		Making and testing of a set of three 150 x 150 x 150mm concrete strength test cubes	No.	3		
9.3.4		**Concrete Finishes**				
9.3.4.1		*Unformed surface finishes*				
9.3.4.1.1		Smooth finish with steel float to surface beds, slabs, etc.	m²	20		
9.3.4.1.2		Rough finish with wood float to surface beds, slabs, etc.	m²	20		
9.3.5		**Formwork**				
		Rough vertical to concealed surfaces:				
9.3.5.1		Rough vertical to narrow widths to edges:				
9.3.5.2		Edges up to 300 mm high	m	80		
9.3.5.3		Forming 25 mm circular chamfer on foundations	m	80		
9.3.6		**Reinforcement**				
9.3.6.1		HT mild steel reinforcement to structural concrete members in bars of all diameters in ring beams, strip footings, etc.	t	0.5		
9.4	**SABS 1200 HA**	**STRUCTURAL STEELWORK (SMALL WORKS)**				
		Supply and erect a prefabricated steel reservoir complete. Rate to include for all inlet and outlet pipes, overflow pipe, access lid, ladders, air vents, disinfecting, testing, etc.				
9.4.1		300 Kl steel reservoir	Prov-Sum	1	R 600 000.00	R600 000.00
9.4.2		Contractors mark-up on item 9.4.1 above	%	R 600 000.00		
9.5		**FENCING**				
9.5.1		**Precast Concrete Fencing**				
9.5.1.1		Supply and installation of 2.4 m high concrete precast paling with concrete overhang and a 500 mm strip of Ripper Flat Wrap	m	0		Rate Only
9.5.2		**Gates**				
9.5.2.1		Supply and install 4 m x 2,4 m heavy duty, Galvanized Mild Steel, double leaf vehicular gate	No	0		Rate Only
SECTION 9 TOTAL CARRIED FORWARD TO SUMMARY						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
10	**SABS 1200L**	**SECTION 10 : STANDPIPES**				
10.1		**Standpipes**				
10.2.1		Supply and install standpipe complete, as per Drawing No. PRJ 137A-RWA-STD 008, including HDPE saddle, 40 mm HDPE pipe (20 m), tap and galvanised riser pipe, concrete work including shuttering, elbows, nipples, stopcock valve etc.	Prov-Sum	1	R 175 000.00	R 175 000.00
10.2.2		Contractor's mark up on above Items 10.2.1	%	R175 000.00		
SECTION 10 TOTAL CARRIED FORWARD TO SUMMARY						

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
11		**SECTION 11 : MECHANICAL AND ELECTRICAL WORKS**				
11.1		**Borehole Pump Installation**				
11.1.1		Supply and Install, by an approved specialist, 2,5 kW borehole pump and all necessary pipework and fittings as per specifications, including power supply with 10 kW 3-phase generator, factory testing, on-site testing and commissioning, training of the Employer's staff and preparation and submission of Operation and Maintenance manuals	Prov. Sum	1	R 550 000.00	R 550 000.00
11.1.2		Contractor's charges, overheads and profit on above item 11.1.1	%	R 550 000.00		
SECTION 10 TOTAL CARRIED FORWARD TO SUMMARY						

OR TAMBO DISTRICT MUNICIPALITY

KSD LOCAL MUNICIPALITY

TOLENI WATER SUPPLY

Contract No. ORTDM SCMU 21-25/26

SUMMARY OF SECTIONS

SECTION	DESCRIPTION	AMOUNT (R)
1	PRELIMINARY AND GENERAL	
2	SITE CLEARANCE	
3	EARTHWORKS (PIPE TRENCHES)	
4	GABIONS AND PITCHING	
5	BEDDING (PIPES)	
6	PRESSURE PIPELINES	
7	SUNDRIES	
8	SMALL WORKS (PUMP HOUSE)	
9	SMALL WORKS (300 KL STEEL RESERVOIR)	
10	STANDPIPES	
11	MECHANICAL AND ELECTRICAL WORKS	
SUB-TOTAL FROM THE SCHEDULE OF QUANTITIES		
ADD: 5% FOR CONTINGENCIES		
SUB-TOTAL		
ADD: VAT @ 15%		
TOTAL CARRIED FORWARD TO FORM OF OFFER (INCL. VAT)		