

O.R. TAMBO DISTRICT MUNICIPALITY	
TENDER NUMBER: ORTDM SCMU 45-24/25	
MTHONJENI / eNGXANGXASINI WATER SUPPLY: CONTRACT 2	
SUMMARY OF BILL OF QUANTITIES	
DESCRIPTION	AMOUNT
SECTION A : PRELIMINARY & GENERAL	
SECTION B: MTHONJENI BULK GRAVITY MAIN	
SECTION C: MTHONJENI BULK STORAGE (55 KL STEEL TANK)	
SECTION D: MTHONJENI RETICULATION	
SECTION E: ANCILLARY WORKS	
NETT TOTAL OF TENDER	
ALLOWANCE FOR CONTINGENCIES (10% of Nett Total above) (to be spent as the Engineer may direct and to be deducted in whole or in part if not required) (Note: Do not change %)	
TOTAL INCLUDING CONTINGENCIES	
ALLOWANCE FOR VAT 15%	
GROSS TOTAL CARRIED TO PART C1.1 FORM OF OFFER & ACCEPTANCE	

ITEM NO	PAYMENT REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	SABS 1200A	SECTION A : PRELIMINARY & GENERAL				
1.1	8.3	Schedule Fixed-Charge and Value-Related Items				
1.1.1	8.3.1	Contractual Requirements	Sum	1		
	8.3.2	Establishment of Facilities on Site:				
	8.3.2.1	Facilities for the Engineer:				
1.1.2	(b)	Nameboards (3 No.)	Sum	1		
	8.3.2.2	Facilities for the Contractor:				
1.1.3	a)	Offices and Storage Sheds	Sum	1		
1.1.4	b)	Workshops	Sum	1		
1.1.5	c)	Laboratories	Sum	1		
1.1.6	d)	Living Accommodation	Sum	1		
1.1.7	e)	Ablution and Latrine Activities	Sum	1		
1.1.8	f)	Tools and Equipment	Sum	1		
1.1.9	g)	Water Supplies, Electric Power and Communications	Sum	1		
1.1.10	i)	Access to Contractor Facilities	Sum	1		
1.1.11	j)	Plant	Sum	1		
	8.3.3	Other Fixed-Charge Obligations:				
1.1.12	8.3.3	Health and Safety Obligations	Sum	1		
1.1.13	8.3.3	Risk Assessments	Sum	1		
1.1.14	8.3.3	Preparation of a Project Specific OHS Plan	Sum	1		
1.1.15	8.3.3	Health and Safety File	Sum	1		
1.1.16	8.3.3	Training	Sum	1		
1.1.17	8.3.3	Medical Assessment of Employees	Sum	1		
1.1.18	8.3.3	Operation and maintenance of Quality Assurance System	Sum	1		
1.1.19	8.3.3	General Safety Obligations	Sum	1		
1.1.20	8.3.3	Compliance with Requirements of Environmental Management Plan	Sum	1		
1.1.21	8.3.4	Remove Site Establishment on Completion	Sum	1		
1.2	8.4	Scheduled Time-Related Items				
1.2.1	8.4.1	Contractual Requirements	Sum	1		
	8.4.2	Operation and Maintenance of Facilities on Site, for Duration of Construction:				
	8.4.2.1	Facilities for the Engineer:				
1.2.2	(b)	Nameboards (2 No.)	Sum	1		
	8.4.2.2	Facilities for the Contractor:				
1.2.3	a)	Offices and Storage Sheds	Sum	1		
1.2.4	b)	Workshops	Sum	1		
1.2.5	c)	Laboratories	Sum	1		
1.2.6	d)	Living Accommodation	Sum	1		
Carried Forward						

Brought Forward						
1.2.7	e)	Ablution and Latrine Activities	Sum	1		
1.2.8	f)	Tools and Equipment	Sum	1		
1.2.9	g)	Water Supplies, Electric Power and Communications	Sum	1		
1.2.10	i)	Access to Contractor Facilities	Sum	1		
1.2.11	j)	Plant	Sum	1		
1.2.12	8.4.3	Supervision for the Duration of Construction	Sum	1		
1.2.13	8.4.4	Company and Head Office Overhead costs for Duration of Contract	Sum	1		
1.2.14	8.4.5	Quality Control and Quality Assurance System for the Duration of the Contract	Sum	1		
1.2.15	8.4.5	Maintain Health and Safety Plan	Sum	1		
1.3	8.5	Sums Stated Provisionally by Engineer				
1.3.1	a)	Miscellaneous Items as required by the Employer / Engineer	Prov Sum	1	R 25 000,00	R 25 000,00
1.3.2	b) 1)	Additional Testing required by the Engineer	Prov Sum	1	R 25 000,00	R 25 000,00
1.3.3	b) 2)	Overhead, Charges, Profit etc. on Item 1.3.1	%		R 25 000,00	
1.4	8.6	Prime Cost Items				
1.4.1	a)	Community Liaison Officer (CLO) Remuneration	PC Sum	1	R 47 700,00	R 47 700,00
1.4.2	b)	Overhead, Charges, Profit etc. on Item 1.4.1	%		R 47 700,00	
1.4.3	a)	Remuneration of PSC Members for attending Monthly Meetings (6 No. at R500 per Member)	PC Sum	1	R 27 000,00	R 27 000,00
1.4.4	b)	Overhead, Charges, Profit etc. on Item 1.4.3	%		R 27 000,00	
1.5	8.7	Daywork				
1.5.1		TLB	hour	1		RATE ONLY
1.5.2		6m³ Tipper Truck	hour	1		RATE ONLY
1.5.3		Roller Compactor	hour	1		RATE ONLY
1.5.4		Rammer Compactor	hour	1		RATE ONLY
1.5.5		Storage Shed / Hut	hour	1		RATE ONLY
1.5.6		Portable Ablution	hour	1		RATE ONLY
1.5.7		Generator	hour	1		RATE ONLY
1.5.8		Water Pump	hour	1		RATE ONLY
1.5.9		Survey Equipment e.g. Dumpy Level	hour	1		RATE ONLY
1.6	8.8	Temporary Works				
1.6.1	8.8.1	Provide , maintain, scarify as necessary access road and / or track to provide access to all sections of the pipeline route	Sum	1		
1.6.2	8.8.2	Traffic Accommodation for Pipeline Construction within the Road Reserve	Sum	1		
1.6.3	8.8.4	Supply, Detect, Expose and Protect Existing Services Intersecting and Adjoining Pipeline Route	Sum	1		
Total Section A Carried to Summary						

ITEM NO	PAYMENT REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2	SABS 1200 C	SECTION B: MTHONJENI BULK GRAVITY MAIN				
		SITE CLEARANCE				
2.1 LI	8.2.7	Dismantle and remove existing 40mm HDPE Pipeline	m	1361		
3	SABS 1200 DB	EARTHWORKS (PIPE TRENCHES)				
		8.3.1 Site Clearance and Removal of Topsoil:				
3.1 LI	a)	Clear Vegetation and Trees of girth up to 1 m	m	1361		
3.2 LI	c)	Remove Topsoil to a depth of 200mm below Natural Ground Level	m²	885		
	8.3.2	Excavation				
	a)	Excavate in all Materials for Trenches, Backfill, Compact and Dispose of Surplus Material:				
		Over: Up to and Including:				
3.3 LI	1)	0.0m 1.5m	m	1361		
	b)	Extra-over Item 3.3 LI above for:				
3.4	1)	Intermediate Excavation	m³	88		
3.5	2)	Hard Rock Excavation	m³	44		
	8.3.3.1	Make up deficiency in Backfill Material (Provisional)				
3.6 LI	a)	from other necessary Excavations on Site	m³	133		RATE ONLY
3.7	b)	by Importation from designated Borrow Pits	m³	133		RATE ONLY
3.8	c)	by Importation from Commercial or Off-Site Sources selected by the Contractor	m³	133		RATE ONLY
3.9	8.3.3.2	Opening up and closing down of designated Borrow Pit	Sum	1		RATE ONLY
	8.3.5	Existing Services that Intersect or Adjoin a Pipe Trench:				
3.10	a)	Services that Intersect a Trench	No	1		
4	SABS 1200 L	MEDIUM-PRESSURE PIPELINES				
		Supply, Lay, and Bed HDPE Pipes Complete with Couplings:				
4.1 LI	8.2.1	50mm PN12.5 HDPE	m	1361		
		Extra-over Item 4.1 LI for Supplying, Fixing, and Bedding of HDPE Specials Complete with Couplings:				
		Bends (Horizontal and Vertical):				
4.2 LI	8.2.2	90° 50mm PN16 HDPE	No	3		
		Flanged Adaptor:				
4.3 LI	8.2.2	50mm PN16 HDPE to Steel	No	24		
		Extra-over Item 4.1 LI for Supplying, Fixing, and Bedding of Valves as shown on DWG PRC-027-07-076-04-10 and PRC-027-07-076-04-11:				
4.4	8.2.3	50mm PN16 Double Action Air Valve	No	5		
4.5	8.2.3	80mm PN16 Scour Valve	No	7		
4.6	8.2.3	50mm PN16 Isolation Valve	No	2		
Carried Forward						

ITEM NO	PAYMENT REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Brought Forward						
		Supply and Place Pipes, Valves, and Specials (Short Pipe runs) as shown on DWG PRC-027-07-076-04-10 and PRC-027-07-076-04-11:				
4.7	8.2.5	50mm PN16 Double Action Air Valve	No	5		
4.8	8.2.5	80mm PN16 Scour Valve	No	7		
4.9	8.2.5	50mm PN16 Isolation Valve	No	2		
4.10 LI	8.2.13	Refurbish Spring Box Chamber (NO-SP3) as shown on DWG PRC-027-07-076-04-06	No	1		
4.11 LI	8.2.13	Valve Chambers as shown on DWG PRC-027-07-076-04-10 and PRC-027-07-076-04-11	No	12		
4.12 LI	8.2.13	Pipeline Route Markers as shown on DWG PRC-027-07-076-04-14	No	15		
4.13 LI	8.2.13	Valve Markers as shown on DWG PRC-027-07-076-04-14	No	12		
5	SABS 1200LB	<u>BEDDING (PIPES)</u>				
	8.2.2	Provision of Flexible Bedding by Importation:				
	8.2.2.2	From Borrow Pits:				
5.1 LI	a)	Selected Granular Material	m³	218		
5.2 LI	b)	Selected Fill Material	m³	177		
	8.2.2.3	From Commercial Sources:				
5.3 LI	a)	Selected Granular Material	m³	218		RATE ONLY
5.4 LI	b)	Selected Fill Material	m³	177		RATE ONLY
Total Section B Carried to Summary						

ITEM NO	PAYMENT REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
6	SABS 1200 D	SECTION C: MTHONJENI BULK STORAGE (55 KL STEEL TANK)				
		EARTHWORKS				
		8.3.1 Site Preparation				
		6.1 LI 8.3.1.1 Clear and Strip Site	m ²	62		
		6.2 LI 8.3.1.2 Remove Topsoil to Nominal Depth of 200mm, Stockpile and Maintain	m ²	62		
		8.3.3 Restricted Excavation				
		6.3 LI a) Excavate for restricted Foundations in all Materials and dispose	m ³	4		
		8.3.4 Importing of Materials				
		6.4 a) Extra-over for Importation of Materials from Commercial Sources	m ³	4		
		6.5 LI 8.3.10 Topsoiling	m ²	25		
		6.6 LI 8.3.11 Grassing or other Vegetation Cover	m ²	25		
7	SABS 1200 DK	GABIONS AND PITCHING				
		7.1 LI 8.2.5 Plain Pitching	m ²	10		
8	SABS 1200 GA	CONCRETE (SMALL WORKS)				
		8.1 8.2.2 Smooth Formwork	m ²	12		
		8.2 8.3.1 Y12 High Yield Steel Bars	kg	89		
		8.3 8.3.1 R10 Mild Steel Bars	kg	29		
		8.4 8.4.3 Strength Concrete, Grade 25 MPa	m ³	3		
		8.4.4 Unformed Surface Finishes				
		8.5 b) Steel-floated Finish	m ²	10		
9	SABS 1200 H	STRUCTURAL STEELWORK				
		8.3.1 Supply and Fabrication				
		9.1 8.3.1.1 Preparation of Shop Detail Drawings for Reservoir as shown on DWG PRC-027-07-076-04-08 and PRC-027-07-076-04-09	Sum	1		
		9.2 8.3.1.1 Preparation of Shop Detail Drawings for Fencing and Access Gate as shown on DWG PRC-027-07-076-04-13	Sum	1		
		9.3 PSH 8.3.1.2 Supply and Fabrication of Steelwork for Reservoir as shown on DWG PRC-027-07-076-04-08 and PRC-027-07-076-04-09	Sum	1		
		9.4 PSH 8.3.1.2 Supply and Fabrication of Steelwork for Fencing and Access Gate as shown on DWG PRC-027-07-076-04-13	Sum	1		
		8.3.2 Delivery to Site				
		9.5 PSH 8.3.2.1 Normal Delivery for Reservoir	Sum	1		
		9.6 PSH 8.3.2.1 Normal Delivery for Fencing and Access Gate	Sum	1		
		9.7 8.3.3 Erection on Site for Reservoir	No	1		
		9.8 LI PSH 8.3.3 Erection on Site for Fencing and Access Gate	m	60		
9.9	8.3.10	Non-destructive Testing (Water Tightness Test) for Reservoir	No	1		
Carried Forward						

Brought Forward					
9.10	8.3.11	Commissioning (Turnkey Projects) of Reservoir	Sum	1	
10	SABS 1200 L	<u>MEDIUM-PRESSURE PIPELINES</u>			
10.1	8.2.5	Supply, Place and Fix Pipes, Pump, Valves, and Specials (Short Pipe runs) as shown on DWG PRC-027-07-076-04-07	No	2	
10.2	8.2.11	Anchor / Thrust Blocks and Pedestals and shown on DWG PRC-027-07-076-04-07	Sum	1	
10.3	8.2.13	Valve Chambers as shown on DWG PRC-027-07-076-04-07	No	2	
Total Section C Carried to Summary					

ITEM NO	PAYMENT REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
11	SABS 1200 DB	<u>SECTION D: MTHONJENI RETICULATION</u>					
		<u>EARTHWORKS (PIPE TRENCHES)</u>					
		8.3.1	Site Clearance and Removal of Topsoil:				
		11.1 LI	a)	Clear Vegetation and Trees of girth up to 1 m	m	9485	
		11.2 LI	c)	Remove Topsoil to a depth of 200mm below Natural Ground Level	m²	6165	
		8.3.2	Excavation				
		a)	Excavate in all Materials for Trenches, Backfill, Compact and Dispose of Surplus Material:				
			<u>Over:</u>	<u>Up to and Including:</u>			
		11.3 LI	1)	0.0m1.5m	m	9485	
			(b)	Extra-over Item 5.3 LI above for:			
		11.4	1)	Intermediate Excavation	m³	617	
		11.5	2)	Hard Rock Excavation	m³	308	
		8.3.3.1	Make up deficiency in Backfill Material (Provisional):				
		11.6 LI	a)	from other necessary Excavations on Site	m³	925	RATE ONLY
		11.7	b)	by Importation from designated Borrow Pits	m³	925	RATE ONLY
		11.8	c)	by Importation from Commercial or Off-Site Sources selected by the Contractor	m³	925	RATE ONLY
		11.9	8.3.3.2	Opening up and closing down of designated Borrow Pit	Sum	1	RATE ONLY
		11.10	8.3.3.3	Compaction in Road Reserves	m³	226	
		8.3.4	Particular Items:				
		11.11	a)	Shore Trench opposite Structure or Service	m	2314	
		8.3.5	Existing Services that Intersect or Adjoin a Pipe Trench:				
		11.12	a)	Services that Intersect a Trench	No	24	RATE ONLY
12	SABS 1200 L	<u>MEDIUM-PRESSURE PIPELINES</u>					
		Supply, Lay, and Bed HDPE Pipes Complete with Couplings:					
		12.1 LI	8.2.1	50mm PN10 HDPE	m	9485	
				Extra-over Item 12.1 LI for Supplying, Fixing, and Bedding of HDPE Specials Complete with Couplings:			
				Tees (Equal):			
		12.2 LI	8.2.2	50mm × 50mm PN12.5 HDPE	No	17	
				Bends (Horizontal and Vertical):			
		12.3 LI	8.2.2	90° 50mm PN12.5 HDPE	No	3	
				Flanged Adaptor:			
		12.4 LI	8.2.2	50mm PN16 HDPE to Steel	No	40	
				End Cap:			
		12.5 LI	8.2.2	50mm PN12.5 HDPE	No	17	
Carried Forward							

ITEM NO	PAYMENT REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Brought Forward						
12.6	8.2.3	Extra-over Item 12.1 LI for Supplying, Fixing, and Bedding of Valves as shown on DWG PRC-027-07-076-04-11: 50mm PN16 Isolation Valve	No	7		
12.7	8.2.3	50mm PN25 Pressure Reducing Valve	No	13		
12.8	8.2.5	Supply and Place Pipe, Valves, and Specials (Short Pipe runs) as shown on DWG PRC-027-07-076-04-11 50mm PN16 Isolation Valve	No	7		
12.9	8.2.5	50mm PN25 Pressure Reducing Valve	No	13		
12.10 LI	8.2.5	Supply and Place Pipe, Valves, and Specials (Short Pipe runs) for Municipal Standpipes as shown on DWG PRC-027-07-076-04-12	No	60		
12.11 LI	8.2.13	Valve Chambers as shown on DWG PRC-027-07-076-04-11	No	20		
12.12 LI	8.2.13	Valve Markers as shown on DWG PRC-027-07-076-04-14	No	20		
13	SABS 1200LB	<u>BEDDING (PIPES)</u>				
	8.2.2	Provision of Flexible Bedding by Importation:				
	8.2.2.2	From Borrow Pits:				
13.1 LI	a)	Selected Granular Material	m³	1523		
13.2 LI	b)	Selected Fill Material	m³	1233		
	8.2.2.3	From Commercial Sources:				
13.3 LI	a)	Selected Granular Material	m³	1523		RATE ONLY
13.4 LI	b)	Selected Fill Material	m³	1233		RATE ONLY
Total Section D Carried to Summary						

ITEM NO	PAYMENT REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
14	SABS 1200 DK	SECTION E: ANCILLARY WORKS				
		GABIONS AND PITCHING				
		8.2.1 Surface preparation for bedding of Retaining Walls				
		14.1 a) Cavities filled with approved excavated Material or Rock	m ²	1100		
		14.2 8.2.4 Grade A4 Geotextile Membrane	m ²	1100		
		14.3 8.2.5 1 m wide Stone-pitched Grouted Channel, complete with Stone-pitched Grouted Energy Dissipator	m ²	13		
14.4	8.2.7	170mm × 170mm × 15mm Stone Weephole at 1.5m Centres Horizontal Wrapped in Grade A4 Geotextile Membrane	No	90		
15	SABS 1200 GA	CONCRETE (SMALL WORKS)				
15.1 LI	8.2.2	Rough Formwork	m ²	33		
15.2 LI	8.3.2	Mesh Ref. 395	m ²	33		
15.3 LI	8.4.3	Strength Concrete, Grade 20 MPa	m ³	1		
15.4 LI	8.4.3	Strength Concrete, Grade 25 MPa	m ³	2		
	8.4.4	Unformed Surface Finishes				
15.5 LI	a)	Wood-floated Finish	m ²	115		
16	SABS 1200 GB	CONCRETE (ORDINARY BUILDINGS)				
	8.2.5	Concrete				
	8.2.5.1	Items				
	f)	Provision and Erection of Precast (or prestressed) Units as per DWG PRC-027-07-076-04-14				
16.1	1)	Provision of Block Concrete M6 140B × 390L × 190H, or similar approved	m ²	1100		
16.2	2)	Erection of Block Concrete M6 140B × 390L × 190H, or similar approved	Sum	1		
17	SABS 1200 H	STRUCTURAL STEELWORK				
	8.3.1	Supply and Fabrication				
17.1	8.3.1.1	Preparation of Shop Detail Drawings for Fencing and Access Gates as shown on DWG PRC-027-07-076-04-13	Sum	1		
17.2	PSH 8.3.1.2	Supply and Fabrication of Steelwork for Fencing and Access Gates as shown on DWG PRC-027-07-076-04-13	Sum	1		
	8.3.2	Delivery to Site				
17.2	PSH 8.3.2.1	Normal Delivery for Fencing	Sum	1		
17.3 LI	PSH 8.3.3	Erection on Site for Fencing	m	140		
18	SABS 1200 L	MEDIUM-PRESSURE PIPELINES				
		Extra-over existing Reticulation Network for Supplying, Fixing, and Bedding of Valves as shown on DWG PRC-027-07-076-04-11:				
18.1	8.2.3	50mm PN16 Isolation Valve	No	7		
18.2	8.2.3	50mm PN25 Pressure Reducing Valve	No	10		
Carried Forward						

Brought Forward						
		Supply and Place Pipe, Valves, and Specials (Short Pipe runs) as shown on DWG PRC-027-07-076-04-11				
18.3	8.2.5	50mm PN16 Isolation Valve	No	7		
18.4	8.2.5	50mm PN25 Pressure Reducing Valve	No	10		
18.5 LI	8.2.5	Supply and Place Pipe, Valves, and Specials (Short Pipe runs) for Municipal Standpipes as shown on DWG PRC-027-07-076-04-12	No	49		
18.6 LI	8.2.13	Valve Chambers as shown on DWG PRC-027-07-076-04-11	No	17		
18.7 LI	8.2.13	Pipeline Route Markers as shown on DWG PRC-027-07-076-04-14	No	131		
18.8 LI	8.2.13	Valve Markers as shown on DWG PRC-027-07-076-04-14	No	30		
Total Section E Carried to Summary						