



SCHEDULE OF QUANTITIES
 VHEMBE MUNICIPALITY- OPTIMISATION OF
 EXISTING WATER RETICULATION
 INFRASTRUCTURE IN MAKHUVHA VILLAGE TO
 MAXIMISE WATER DISTRIBUTION TO ALL
 RETICULATED AREAS

PROJECT No.:

SECTION No.:

A1

ITEM No.	DESCRIPTION	UNIT	RATE	QUANTITY	AMOUNTS	
A1	PRELIMINARY AND GENERAL					
1,1	Contractual Requirements:					
1.1.1	Fixed charge contractual requirements.	Sum		1,00	R	-
1.1.2	Value related contractual requirements.	Sum		1,00	R	-



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VHEMBE MUNICIPALITY- OPTIMISATION OF EXISTING WATER RETICULATION INFRASTRUCTURE IN MAKHUVHA VILLAGE TO MAXIMISE WATER DISTRIBUTION TO ALL RETICULATED AREAS			A2

ITEM No.	DESCRIPTION	UNIT	RATE	QUANTITY	AMOUNTS
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A2	PRELIMINARY AND GENERAL - TIME RELATED OBLIGATIONS				
2,1	Contractual Requirements:				
2.1.1	Provision of Sureties	Month		4,00	
2.1.2	Insurance of the works and plant	Month		4,00	
2.1.3	Public Liability Insurance	Month		4,00	
2.1.4	Professional fees	Month		4,00	
2.1.5	Special Risk Insurance	Month		4,00	
2,2	Facilities for Engineer:				
2.2.1	Furnished office - 1 No.	Month		4,00	
2.2.2	Name boards - 2 No.	Month		4,00	
2.2.3	Survey assistants and material.	Month		4,00	
2,3	Facilities for Contractor:				
2.3.1	Offices and storage sheds.	Month		4,00	
2.3.2	Workshops.	Month		4,00	
2.3.3	Laboratories.	Month		4,00	
2.3.4	Living accommodation.	Month		4,00	
2.3.5	Ablution and latrine facilities.	Month		4,00	
2.3.6	Tools and equipment.	Month		4,00	
2.3.7	Water supplies, electric power and communications.	Month		4,00	
2.3.8	Dealing with water.	Month		4,00	
2.3.9	Access.	Month		4,00	
2.3.10	Plant.	Month		4,00	
2,4	Supervision for Duration of the Contract:	Month		4,00	
2,5	Overhead Costs for the Duration of the Contract:	Month		4,00	
2,6	Other Time Related Obligations:	Month		4,00	
2,7	Environmental Management:	Month	65 000,00	4,00	R 260 000,00
2.7.1	Overheads, charges and profit on item 2.7	%			
2,8	Health and safety management	Month	65 000,00	4,00	R 260 000,00
2.8.1	Overheads, charges and profit on item 2.8	%			
2,9	social consultants	months	80 000,00	4,00	R 320 000,00
2.9.1	Overheads, charges and profit on item 2.9	%			

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		VHEMBE MUNICIPALITY- OPTIMISATION OF EXISTING WATER RETICULATION INFRASTRUCTURE IN MAKHUVHA VILLAGE TO MAXIMISE WATER DISTRIBUTION TO ALL RETICULATED AREAS		A3	
ITEM No.	DESCRIPTION	UNIT	RATE	QUANTITY	AMOUNTS
A3	PRELIMINARY AND GENERAL - PROVISIONAL SUMS				
3,1	Community Liaison Officer:				
3.1.1	Provision for the employment of CLO (One CLO per village).	Prov. Sum	5 000,00	4,00	20 000,00
3.1.2	Overheads, charges and profit on item 3.1.1.	%			
3,2	PSC Attendance at Site Meeting:				
3.2.1	Provision for the attendance of PSC members. (Six members)	Prov. Sum	5 000,00	4,00	20 000,00
3.2.2	Overheads, charges and profit on item 3.2.1.	%			
3,3	Basic Skills and Construction Training:				
3.3.1	Provision for basic skills and construction site safety training.	Prov. Sum		1,00	150 000,00
3.3.2	Overheads, charges and profit on item 3.3.1.	%			
3,4	PSC Training:				
3.4.1	Provision for PSC training.	Prov. Sum			90 000,00
3.4.2	Overheads, charges and profit on item 3.3.1.	%			
3,5	Relocation/Protection of Existing Services:				
3.5.1	Provision for relocation/protection of existing services.	Prov. Sum	35 000,00	1,00	35 000,00
3.5.2	Overheads, charges and profit on item 3.4.1.	%			
3,6	Routine Tests required by Engineer:				
3.6.1	Provision for routine tests.	Prov. Sum	20 000,00	1,00	20 000,00
3.6.2	Overheads, charges and profit on item 3.5.1.	%			

SCHEDULE OF QUANTITIES		PROJECT No.:		SECTION No.:	
		RFP/NDM/TECH/03/06/2021/01		A4	
VHEMBE MUNICIPALITY- OPTIMISATION OF EXISTING WATER RETICULATION INFRASTRUCTURE IN MAKHUVHA VILLAGE TO MAXIMISE WATER DISTRIBUTION TO ALL RETICULATED AREAS					
ITEM No.	DESCRIPTION	UNIT	RATE	QUANTITY	AMOUNTS
A4	PRELIMINARY AND GENERAL - PROVISIONAL SUMS				
4,1	Phone for Engineer's Site Staff:				
4.1.1	Provision for a phone and call charges.	Prov Sum	5 000,00	4,00	R 20 000,00
4.1.2	Overheads, charges and profit on item 4.1.1.	%			
4,2	Accommodation for Engineer's Site Staff:				
4.2.1	Provision for accommodation.	Prov Sum	8 500,00	4,00	R 34 000,00
4.2.2	Overheads, charges and profit on item 4.4.1.	%			
4,3	Other Fixed Obligations				
4.3.1	Entry and Exit Medicals for Employees	Prov Sum		1,00	
4.2.2	Supply of PPE to all Employees	Prov Sum		1,00	
4.3.2	Re-issue of PPE to all Employees (EPWP)	Prov Sum		1,00	

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VHEMBE MUNICIPALITY- OPTIMISATION OF EXISTING WATER RETICULATION INFRASTRUCTURE IN MAKHUVHA VILLAGE TO MAXIMISE WATER DISTRIBUTION TO ALL RETICULATED AREAS			A5		
ITEM No.	DESCRIPTION	UNIT	RATE	QUANTITY	AMOUNTS
A5	PRELIMINARY AND GENERAL - DAYWORKS				
5,1	Labour - Normal Working Hours: [Provisional]				
5.1.1	Skilled Labour (Artisan).	hr			Rate Only
5.1.2	Semi-skilled Labour.	hr			Rate Only
5.1.3	Unskilled Labour.	hr			Rate Only
5.1.4	Foreman.	hr			Rate Only
5.1.5	Extra-over rate for items 5.1.1 to 5.1.4 for work during non working hours.	%			Rate Only
5,2	Materials: [Provisional]				
5.2.1	Allowance for Materials used under Dayworks.	Sum			Rate Only
5.2.2	Overheads, Handling and all Charges on Item 5.2.1.	%			Rate Only
5,3	Plant - Heavy Equipment: [Provisional]				
	<i>(Plant shall not be more than 3 years old or have more than 3000 hrs logged. Operator to be qualified and competency certified.)</i>				
5.3.1	Excavator - Size Cat 225.	hr			Rate Only
5.3.2	Excavator - TLB.	hr			Rate Only
5.3.3	Grader 140G or similar.	hr			Rate Only
5.3.4	Front end loader - bucket capacity $\leq 1.5 \text{ m}^3$.	hr			Rate Only
5.3.5	Front end loader - bucket capacity $\leq 1.5 \text{ m}^3$.	hr			Rate Only
5.3.6	Tip truck - 5 m^3 capacity.	hr			Rate Only
5.3.7	Tip truck - 10 m^3 capacity.	hr			Rate Only
5.3.8	Vibratory compaction roller - 13.5 ton.	hr			Rate Only
5.3.9	Transport cost per any unit of plant to deliver to site and remove from site for items 5.3.1 to 5.3.8	Sum			Rate Only
5,4	Plant - Small Equipment: [Provisional]				
5.4.1	Pedestrian roller - BW90 or similar.	hr			Rate Only
5.4.2	Vibratory plate compactor.	hr			Rate Only
5.4.3	Vibratory rammer.	hr			Rate Only
5.4.4	Transport cost per any unit of plant to deliver to site and remove from site for items 5.4.1 to 5.4.3.	Sum			Rate Only
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PROJECT No.:

VHEMBE MUNICIPALITY- OPTIMISATION OF EXISTING WATER RETICULATION
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RETICULATED AREAS

SECTION REFERENCE	DESCRIPTION	TENDER AMOUNTS
A1	PRELIMINARY AND GENERAL	
A2	PRELIMINARY AND GENERAL - TIME RELATED OBLIGATIONS	
A3	PRELIMINARY AND GENERAL - PROVISIONAL SUMS	
A4	PRELIMINARY AND GENERAL - PRIME COST SUMS	
A5	PRELIMINARY AND GENERAL - DAYWORKS	
TOTAL ESTIMATED VALUE OF P & Gs [Excluding VAT]:		



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SECTION No.:

PROJECT No.:

B1

ITEM No.	DESCRIPTION	UNIT	RATE	QUANTITY	AMOUNTS
B1 EARTHWORKS FOR PIPE TRENCHES					
1,1	Site Clearance:				
1.1.1	Clear vegetation, 800 mm wide.	m		2 500,00	
1.1.2	Clear trees of girth over 1.0 m.	No.		9,00	
1.1.3	Remove 150 mm topsoil, 800 mm wide.	m ²		540,00	
1.1.4	Demolish existing concrete.	m ³		36,00	
PSDB 8.3.2(b)	Extra-over item (a) above for:				
D. 1.1.13	1.Soft excavation	m ³		550,0	
D. 1.1.14	2. Intermediate Excavations	m ³		250,0	
D. 1.1.15	3. Hard Excavations	m ³		120,0	
D. 1.1.16	3. Hand excavation and backfill where ordered by the engineer (LI)	m ³		735,0	
D. 1.1.17	4. Soil Crete backfilling where directed by the engineer (LI)	m ³		610,0	
D. 1.1.18	PSDB 8.3.2(b) Excavate and dispose of unsuitable material from trench bottom (provisional) (LI)	m ³		1 000,0	
1,3	Excavation using Labour Intensive Methods:				
1.3.1	Extra-over Item 1.2.1 for excavation in soft material using labour intensive methods.	m ³		100,00	
1.3.2	Extra-over Item 1.2.2 for excavation in soft material using labour intensive methods.	m ³		60,00	
1.3.3	Extra-over Item 1.2.3 for excavation in soft material using labour intensive methods.	m ³		175,00	
1.3.4	Extra-over Item 1.2.4 for excavation in intermediate material using labour intensive methods.	m ³		225,00	
1.3.5	Extra-over Item 1.2.6 for excavate and dispose of unsuitable material using labour intensive methods.	m ³		75,00	
1,4	Backfill and Compaction:				
1.4.1	Backfill and compact trenches using labour intensive methods.	m ³		1 000,00	
1.4.2	Backfill road crossings using a commercial type G4 material compacted to 98% Mod. AASHTO density.	m ³		Rate only	
1.4.3	Dispose of surplus excavated material.	m ³		120,00	

1,5	Excavation Ancillaries:			
1.5.1	Make up deficiency in backfill material from other excavations.	m ³		450,00
1.5.2	Make up deficiency in backfill material from borrow pits. Free-haul is 5.0 km.	m ³		750,00
1.5.3	Opening and closing designated borrow pits.	Prov. Sum		1,00
1.5.4	Compaction within road reserve to 90 % of Modified AASHTO density clause 5.7.1.	m ³		45,00
1.5.5	Compaction within road reserve to 98 % of Modified AASHTO density, as per clause 5.7.2.	m ³		45,00
1,6	Overhaul:			
1.6.1	Overhaul in excess of the free-haul of 5.0 km.	m ³ -km		700,00
1,7	Existing Services:			
1.7.1	Services that intersect a trench.	No.		15,00
1,8	Finishing:			
1.8.1	Reinstate road surfaces using 40 mm asphalt.	m ²		Rate only
1.8.2	Topsoil trenches. (Provisional)	m ²		850,00



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RETICULATION INFRASTRUCTURE IN MAKHUVHA VILLAGE TO
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PROJECT No.:

SECTION No.:

B2

ITEM No.	DESCRIPTION	UNIT	RATE	QUANTITY	AMOUNTS
B2	PIPE BEDDING				
2,1	Bedding from Trench Excavations: <i>(Bedding to be Class C for flexible pipes as indicated in the contract drawings)</i>				
2.1.1	Provision of bedding from pipe trench excavation within 1.0 km, using selected granular material.	m ³		600,00	
2.1.2	Provision of bedding from pipe trench excavation within 1.0 km, using selected fill material.	m ³		1 194,00	
2,2	Imported Bedding Material: <i>(Bedding to be Class C for flexible pipes as indicated in the contract drawings)</i>				
2.2.1	Provision of bedding imported from designated borrow pit using selected granular material.	m ³		1 800,00	
2.2.2	Provision of bedding imported from designated borrow pit using selected fill material.	m ³		450,00	
2,3	Overhaul:				
2.3.1	Overhaul of material for bedding from trench excavations. Free-haul distance is 1.0 km.	m ³ -km		450,00	
2.3.2	Overhaul of material for bedding from designated borrow pit. Free-haul distance is 5.0 km.	m ³ -km		375,00	

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PROJECT No.:

SECTION No.:

B6

ITEM No.	DESCRIPTION	UNIT	RATE	QUANTITY	AMOUNTS
B3	MEDIUM PRESSURE PIPELINES AND ANCILLARIES -2				
6,1	Supply, Lay and Bed uPVC Pipes Complete: <i>(The rates shall include disinfecting of pipes after completion of hydraulic pipe test.)</i>				
6.1.1	(a) 75mm uPVC medium pressure pipes - Class 12	m		2 140,00	
	(b) 110mm uPVC medium pressure pipes - Class 12	m		360,00	
6,2	Fittings and Specials - 75mm Class 12: <i>(Extra-over rate to Items 6.1.1)</i>				
6.2.1	75mm class 12 :				
6.2.1.1	uPVC bends less than 25 degree angle.	No.		11,00	
6.2.1.2	uPVC bends with 45 degree angle.	No.		8,00	
6.2.1.3	uPVC bends with 90 degree angle.	No.		5,00	
	110mm class 12 :				
	uPVC bends less than 25 degree angle.	No.		12,00	
	uPVC bends with 45 degree angle.	No.		12,00	
	uPVC bends with 90 degree angle.	No.		12,00	
6,14	Valve Chambers:				
6.14.1	Valve chamber - 1200 mm x 1400 mm x 1000 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings.	No.		3,00	
6.14.2	Extra-over Item 6.14.1 for depth increments of 250 mm.	No.		3,00	
6,15	Hydraulic Pipe Testing:				
6.15.1	(a) 75mm uPVC medium pressure pipes - Class 12	m		2 140,00	
6.15.2	(b) 110mm uPVC medium pressure pipes - Class 12	m		360,00	
6.15.3	Pipe specials and fittings for testing.	Sum		1,00	

6,16	Disinfecting Pipe Works.				
6.16.1	(a) 75mm uPVC medium pressure pipes - Class 12	m		2 140,00	
6.16.2	(b) 110mm uPVC medium pressure pipes - Class 12	m		360,00	
6,17	Thrust Blocks:				
6.17.1	Excavation.	m ³		115,00	
6.17.2	Formwork.	m ²		135,00	
6.17.3	Concrete. [Class 20/19 MPa]	m ³		20,00	
6,18	Pipe Works Ancillaries:				
6.18.1	550 mm x 550 mm Fabricated manhole cover with frame, galvanised.	No.		3,00	
6.18.2	Access ladder - 304 SS, galvanised.	No.		3,00	
6.18.3	Concrete pipe line markers as per details.	No.		13,00	



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SECTION REFERENCE	DESCRIPTION	TOTALS ESTIMATED
A	PRELIMINARY AND GENERAL	
B1	EARTHWORKS FOR PIPE TRENCHES	
B2	PIPE BEDDING	
B3	MEDIUM PRESSURE PIPELINES AND ANCILLARIES -2	
TOTAL ESTIMATED VALUE OFCONSTRUCTION WORK [Excluding VAT]:		
CONTINGENCIES AMOUNT [5.00%]:		
SUB-TOTAL OF THE ESTIMATED CONSTRUCTION AMOUNT [Excluding VAT]:		
VALUE ADDED TAX [15.00%]:		
TOTAL ESTIMATED CONSTRUCTION AMOUNT [Including VAT]:		