

THEMBISILE HANI LOCAL MUNICIPALITY		
CONTRACT No.:		
APPOINTMENT ON PANEL OF CONTRACTORS FOR REHABILITATION, REFURBISHMENT AND MAINTENANCE OF WATER AND SANITATION INFRASTRUCTURE AS AND WHEN REQUIRED FOR A PERIOD OF 36 MONTHS-MECHANICAL WORKS		
SECTION		AMOUNT
Section 1	PRELIMINARY AND GENERAL	
Section 2	CONTROL TESTING AND DAY WORKS	
Section 3	VALVES AND FLOW METERS	
Section 4	GASKETS AND BOLTS	
Section 5	MECHANICAL	
Section 6	ELECTRICAL	
SUB-TOTAL 1		
10% Contingency		
SUB-TOTAL 2		
10% Escalation		
SUB-TOTAL 3		
15% VAT		
GRAND TOTAL		

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	SECTION 1 : PRELIMINARY & GENERAL				
1,1	FIXED-CHARGES AND VALUE RELATED ITEMS				
	<i>Note: All Fixed Charge Items below is Per Site : (The cost is based on commitment for a full week - Less than 5 days the amount must be allocated proportionally)</i>				
1.1.1	Contractual Requirements:	Sum	1		
1.1.2	Establishment of Facilities on Site				
1.1.2.1	Facilities for the Contractor				
1.1.2.1.1	Offices, storage sheds and fencing (PSA-4.2)	Sum	1		
1.1.2.1.2	Tools and equipment	Sum	1		
1.1.2.1.3	Ablution facilities	Sum	1		
1.1.2.1.4	Water Supply, Electric Power and Communications	Sum	1		
1.1.2.1.5	Dealing with water	Sum	1		
1.1.2.1.6	Removal of Site Establishment	Sum	1		
1.1.3	Occupational Health and Safety				
1.1.4	Compliance with the Occupational Health and Safety Act (Act 85 of 1993) and applicable regulations (Construction Regulations, 2003), and the Employers Health & Safety Specification bound into this document	Sum	1		
1.1.4.1	Risk assessment	Sum	1		
1.1.4.2	Supply of PPE for duration of contract	Sum	1		
1.1.4.3	Maintenance of fences, signs and barricades	Sum	1		
1.1.4.4	Implementation of safety administration	Sum	1		
1,2	TIME-RELATED ITEMS				
	<i>Note: Time Related Items below is Per Site : (The cost is based on the duration of the project for a full month - Less than a month must the amount be allocated proportionally)</i>				
1.2.1	Operation and Maintain of Facilities on site for the Duration of the Construction				
1.2.1.	Facilities for Contractor				
1.2.1.1	Offices, storage sheds and fencing (PSA-4.2)	Mnth	1		
1.2.1.2	Tools and equipment	Mnth	1		
1.2.1.3	Ablution facilities	Mnth	1		
1.2.1.4	Water Supply, Electric Power and Communications	Mnth	1		
1.2.1.5	Dealing with water	Mnth	1		
1.2.1.6	Supervision	Mnth	1		
1.2.1.7	Other Time-related Obligations (Specify)	P/Sum	1		
1.2.2	Occupational Health and Safety				
1.2.2.1	Maintain and comply with the Occupational Health and Safety Act (Act 85 of 1993) and applicable regulations (Construction Regulations, 2003), and the Employers Health & Safety Specification bound into this document	Mnths	1		
1.2.2.2	Part time competent employee of the contract and construction supervisor / assistants as required by law for the duration of the contract	Mnths	1		
1.2.2.3	Maintain of PPE for duration of contract	Mnths	1		
1.2.2.4	Maintenance of fences, signs and barricades	Mnths	1		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	Amount
2	SECTION 2 : CONTROL TESTING AND DAY WORKS				
2.1	Execution and Authorization No work covered by a Sum shall be executed without the prior written instruction of the Engineer/Employer. The scope and extent of such work will be defined by the Engineer/Employer during the course of the Contract. Valuation and Payment The actual value of the work executed under each Sum will be measured and valued as directed and certified by the Engineer/Employer. Payment will be made based on the actual work performed and evidenced by supporting documentation.				
2.1.1	Control test Services				
2.1.1.1	Acceptance control testing on earthworks	Sum	1		
2.1.1.2	Overheads, charges and profits on the above	10%	0		
2.1.1.3	Acceptance control testing on pipework	Sum	1		
2.1.1.4	Overheads, charges and profits on the above	10%	0		
2.1.1.5	Acceptance control testing on concrete work	Sum	1		
2.1.1.6	Overheads, charges and profits on the above	10%	1		
2.2	DAYWORKS (PROVISIONAL)				
2.2.1	Labour				
2.2.1.1	Skilled	hr	1		
2.2.1.2	Semi-skilled	hr	1		
2.2.1.3	Un-skilled	hr	1		
2.2.1.4	Civil Technician	hr	1		
2.2.1.5	Mechanical Technician	hr	1		
2.2.1.6	Electrical Technician	hr	1		
2.2.1.7	Artisan Plumber	hr	1		
2.2.1.8	Boiler Maker	hr	1		
2.2.1.9	Artisan Fitter and Turner	hr	1		
2.2.1.10	Artisan: Electricity	hr	1		
2.2.2	Plant (Dry rate)				
2.2.2.1	Trucks (specify capacity)				
2.2.2.1.1	Small - Tipper truck (...)m3	hr	1		
2.2.2.1.2	Small - Flatbed truck (...) ton	hr	1		
2.2.2.2	LDV (...)	km	1		
2.2.2.3	Water Tankers (specify capacity)				
2.2.2.3.1	Watercart towable 1500 lt	hr	1		
2.2.2.3.2	Watercart tanker 12 000 litres	hr	1		
2.2.2.4	Excavators (specify models,/mass/Kw)				
2.2.2.4.1	Small model (20 ton)	hr	1		
2.2.2.4.2	Medium model (25 ton)	hr	1		
2.2.2.4.3	High model (30 ton)	hr	1		
2.2.2.5	Pecker Excavator				
2.2.2.5.1	Small model (20 ton)	hr	1		
2.2.2.5.2	Medium model (25 ton)	hr	1		
2.2.2.5.3	High model (30 ton)	hr	1		
2.2.2.6	TLB's (specify model)				

2.2.2.6.1	TLB's	hr	1		
2.2.2.6.2	Delivery to site and removal on completion (Round trip)	km	1		
2.2.2.7	Rollers - walk behind vibrating roller				
2.2.2.7.1	Small model (BW61) - Model	hr	1		
2.2.2.7.2	Small model (BW76) - Model	day	1		
2.2.2.8	Compactors (specify model)				
2.2.2.8.1	Plate compactor - Model	day	1		
2.2.2.8.2	Wacker - Model	day	1		
2.2.2.9	Concrete Mixers (specify capacity)	hr	1		
2.2.2.10	Compressors Mixers (specify capacity)	hr	1		
2.2.2.10.1	Delivery to site and removal on completion (Delivery by LDV)	Km	1		
2.2.2.11	Water pump	hr	1		
2.2.2.12	Generators	hr	1		
2.2.2.13	Cherry Picker	hr	1		
2.2.2.13.1	Delivery to site and removal on completion (Round trip)	km	1		
2.2.2.14	TRANSPORT				
2.2.2.14.1	10 m3Tipper trucks	km	1		
2.2.2.14.2	10 Ton Crane Mounted Truck	km	1		
2.2.2.15	TEMPORARY WORKS				
2.2.2.15.1	Accommodation of traffic along pipe route/road for the duration of the project	Sum	1		
SUB-TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	Amount
3	SCHEDULE 3: VALVES AND FLOW METERS				
NOTE:					
The rates provided in this schedule include all costs for the supply, delivery, storage, protection, handling, and installation of all valves, as well as all associated labor and materials.					
3.1	Wedge Gate Valves (Flanged both sides) Class 16				
3.1.1	Diameter 50 mm	no	1		
3.1.2	Diameter 65 mm	no	1		
3.1.3	Diameter 80 mm	no	1		
3.1.4	Diameter 100 mm	no	1		
3.1.5	Diameter 125 mm	no	1		
3.1.6	Diameter 150 mm	no	1		
3.1.7	Diameter 200 mm	no	1		
3.1.8	Diameter 250 mm	no	1		
3.1.9	Diameter 300 mm	no	1		
3.1.10	Diameter 350 mm	no	1		
3.1.11	Diameter 400 mm	no	1		
3.1.12	Diameter 450 mm	no	1		
3.1.13	Diameter 500 mm	no	1		
3.1.14	Diameter 550 mm	no	1		
3.2	Wedge Gate Valves (Flanged both sides) Class 25				
3.2.1	Diameter 50 mm	no	1		
3.2.2	Diameter 65 mm	no	1		
3.2.3	Diameter 80 mm	no	1		
3.2.4	Diameter 100 mm	no	1		
3.2.5	Diameter 125 mm	no	1		
3.2.6	Diameter 150 mm	no	1		
3.2.7	Diameter 200 mm	no	1		
3.2.8	Diameter 250 mm	no	1		
3.2.9	Diameter 300 mm	no	1		
3.2.10	Diameter 350 mm	no	1		
3.2.11	Diameter 400 mm	no	1		
3.2.12	Diameter 450 mm	no	1		
3.2.13	Diameter 500 mm	no	1		
3.2.14	Diameter 550 mm	no	1		
3.3	Wedge Gate Valves (Flanged both sides) Class 40				
3.3.1	Diameter 50 mm	no	1		
3.3.2	Diameter 65 mm	no	1		
3.3.3	Diameter 80 mm	no	1		
3.3.4	Diameter 100 mm	no	1		
3.3.5	Diameter 125 mm	no	1		
3.3.6	Diameter 150 mm	no	1		
3.3.7	Diameter 200 mm	no	1		
3.3.8	Diameter 250 mm	no	1		
3.3.9	Diameter 300 mm	no	1		
3.3.10	Diameter 350 mm	no	1		
3.3.11	Diameter 400 mm	no	1		
3.3.12	Diameter 450 mm	no	1		
3.3.13	Diameter 500 mm	no	1		
3.3.14	Diameter 550 mm	no	1		
3.4	Wedge Gate Valves (Flanged both sides) Class 64				

3.4.1	Diameter 50 mm	no	1		
3.4.2	Diameter 65 mm	no	1		
3.4.3	Diameter 80 mm	no	1		
3.4.4	Diameter 100 mm	no	1		
3.4.5	Diameter 125 mm	no	1		
3.4.6	Diameter 150 mm	no	1		
3.4.7	Diameter 200 mm	no	1		
3.4.8	Diameter 250 mm	no	1		
3.4.9	Diameter 300 mm	no	1		
3.4.10	Diameter 350 mm	no	1		
3.4.11	Diameter 400 mm	no	1		
3.4.12	Diameter 450 mm	no	1		
3.4.13	Diameter 500 mm	no	1		
3.4.14	Diameter 550 mm	no	1		
3.5	RSV Gate Valves (Flanged both sides) Class 16				
3.5.1	Diameter 50 mm	no	1		
3.5.2	Diameter 65 mm	no	1		
3.5.3	Diameter 80 mm	no	1		
3.5.4	Diameter 100 mm	no	1		
3.5.5	Diameter 125 mm	no	1		
3.5.6	Diameter 150 mm	no	1		
3.5.7	Diameter 200 mm	no	1		
3.5.8	Diameter 250 mm	no	1		
3.5.9	Diameter 300 mm	no	1		
3.5.10	Diameter 350 mm	no	1		
3.5.11	Diameter 400 mm	no	1		
3.5.12	Diameter 450 mm	no	1		
3.5.13	Diameter 500 mm	no	1		
3.5.14	Diameter 550 mm	no	1		
3.6	Metal Seat Gate Valves (Flanged both sides) Class 26				
3.6.1	Diameter 50 mm	no	1		
3.6.2	Diameter 65 mm	no	1		
3.6.3	Diameter 80 mm	no	1		
3.6.4	Diameter 100 mm	no	1		
3.6.5	Diameter 125 mm	no	1		
3.6.6	Diameter 150 mm	no	1		
3.6.7	Diameter 200 mm	no	1		
3.6.8	Diameter 250 mm	no	1		
3.6.9	Diameter 300 mm	no	1		
3.6.10	Diameter 350 mm	no	1		
3.6.11	Diameter 400 mm	no	1		
3.6.12	Diameter 450 mm	no	1		
3.6.13	Diameter 500 mm	no	1		
3.6.14	Diameter 550 mm	no	1		
3.7	Metal Seat Gate Valves (Flanged both sides) Class 40				
3.7.1	Diameter 50 mm	no	1		
3.7.2	Diameter 65 mm	no	1		
3.7.3	Diameter 80 mm	no	1		
3.7.4	Diameter 100 mm	no	1		
3.7.5	Diameter 125 mm	no	1		
3.7.6	Diameter 150 mm	no	1		

3.7.7	Diameter 200 mm	no	1		
3.7.8	Diameter 250 mm	no	1		
3.7.9	Diameter 300 mm	no	1		
3.7.10	Diameter 350 mm	no	1		
3.7.11	Diameter 400 mm	no	1		
3.7.12	Diameter 450 mm	no	1		
3.7.13	Diameter 500 mm	no	1		
3.7.14	Diameter 550 mm	no	1		
3.8	Metal Seat Gate Valves (Flanged both sides) Class 64				
3.8.1	Diameter 50 mm	no	1		
3.8.2	Diameter 65 mm	no	1		
3.8.3	Diameter 80 mm	no	1		
3.8.4	Diameter 100 mm	no	1		
3.8.5	Diameter 125 mm	no	1		
3.8.6	Diameter 150 mm	no	1		
3.8.7	Diameter 200 mm	no	1		
3.8.8	Diameter 250 mm	no	1		
3.8.9	Diameter 300 mm	no	1		
3.8.10	Diameter 350 mm	no	1		
3.8.11	Diameter 400 mm	no	1		
3.8.12	Diameter 450 mm	no	1		
3.8.13	Diameter 500 mm	no	1		
3.8.14	Diameter 550 mm	no	1		
3.9	DI Knife Gate Valves (Flanged both sides) Class 16				
3.9.1	Diameter 50 mm	no	1		
3.9.2	Diameter 65 mm	no	1		
3.9.3	Diameter 80 mm	no	1		
3.9.4	Diameter 100 mm	no	1		
3.9.5	Diameter 125 mm	no	1		
3.9.6	Diameter 150 mm	no	1		
3.9.7	Diameter 200 mm	no	1		
3.9.8	Diameter 250 mm	no	1		
3.9.9	Diameter 300 mm	no	1		
3.9.10	Diameter 350 mm	no	1		
3.9.11	Diameter 400 mm	no	1		
3.9.12	Diameter 450 mm	no	1		
3.9.13	Diameter 500 mm	no	1		
3.9.14	Diameter 550 mm	no	1		
3.10	Wafer Butterfly Valves Class 17				
3.10.1	Diameter 50 mm	no	1		
3.10.2	Diameter 65 mm	no	1		
3.10.3	Diameter 80 mm	no	1		
3.10.4	Diameter 100 mm	no	1		
3.10.5	Diameter 125 mm	no	1		
3.10.6	Diameter 150 mm	no	1		
3.10.7	Diameter 200 mm	no	1		
3.10.8	Diameter 250 mm	no	1		
3.10.9	Diameter 300 mm	no	1		
3.10.10	Diameter 350 mm	no	1		
3.10.11	Diameter 400 mm	no	1		
3.10.12	Diameter 450 mm	no	1		
3.10.13	Diameter 500 mm	no	1		

3.10.14	Diameter 550 mm	no	1		
3.10.15	Diameter 700mm	no	1		
3.10.16	Diameter 900 mm	no	1		
3.10.17	Diameter 1000 mm	no	1		
3.11	Flange Butterfly Valves Class 17				
3.11.1	Diameter 50 mm	no	1		
3.11.2	Diameter 65 mm	no	1		
3.11.3	Diameter 80 mm	no	1		
3.11.4	Diameter 100 mm	no	1		
3.11.5	Diameter 125 mm	no	1		
3.11.6	Diameter 150 mm	no	1		
3.11.7	Diameter 200 mm	no	1		
3.11.8	Diameter 250 mm	no	1		
3.11.9	Diameter 300 mm	no	1		
3.11.10	Diameter 350 mm	no	1		
3.11.11	Diameter 400 mm	no	1		
3.11.12	Diameter 450 mm	no	1		
3.11.13	Diameter 500 mm	no	1		
3.11.14	Diameter 550 mm	no	1		
3.11.15	Diameter 700mm	no	1		
3.11.16	Diameter 900 mm	no	1		
3.11.17	Diameter 1000 mm	no	1		
3.12	Eccentric Butterfly Valves Class 16				
3.12.1	Diameter 50 mm	no	1		
3.12.2	Diameter 65 mm	no	1		
3.12.3	Diameter 80 mm	no	1		
3.12.4	Diameter 100 mm	no	1		
3.12.5	Diameter 125 mm	no	1		
3.12.6	Diameter 150 mm	no	1		
3.12.7	Diameter 200 mm	no	1		
3.12.8	Diameter 250 mm	no	1		
3.12.9	Diameter 300 mm	no	1		
3.12.10	Diameter 350 mm	no	1		
3.12.11	Diameter 400 mm	no	1		
3.12.12	Diameter 450 mm	no	1		
3.12.13	Diameter 500 mm	no	1		
3.12.14	Diameter 550 mm	no	1		
3.12.15	Diameter 700mm	no	1		
3.12.16	Diameter 900 mm	no	1		
3.12.17	Diameter 1000 mm	no	1		
3.13	Globe Valves Class 17				
3.13.1	Diameter 15 mm	no	1		
3.13.2	Diameter 50 mm	no	1		
3.13.3	Diameter 65 mm	no	1		
3.13.4	Diameter 80 mm	no	1		
3.13.5	Diameter 100 mm	no	1		
3.13.6	Diameter 125 mm	no	1		
3.13.7	Diameter 150 mm	no	1		
3.13.8	Diameter 250 mm	no	1		
3.14	3pc Type Butt Ball Valve				
3.14.1	Diameter 15 mm	no	1		
3.14.2	Diameter 20 mm	no	1		
3.14.3	Diameter 20 mm	no	1		

3.14.4	Diameter 32 mm	no	1		
3.14.5	Diameter 50 mm	no	1		
3.14.6	Diameter 65 mm	no	1		
3.14.7	Diameter 80 mm	no	1		
3.14.8	Diameter 100 mm	no	1		
3.14.9	Diameter 125 mm	no	1		
3.14.10	Diameter 150 mm	no	1		
3.14.11	Diameter 200 mm	no	1		
3.14.12	Diameter 250 mm	no	1		
3.14.13	Diameter 300 mm	no	1		
3.14.14	Diameter 350 mm	no	1		
3.14.15	Diameter 400 mm	no	1		
3.14.16	Diameter 450 mm	no	1		
3.14.17	Diameter 500 mm	no	1		
3.14.18	Diameter 550 mm	no	1		
3.14.19	Diameter 600 mm	no	1		
3.15	U-PVC Ball Valve				
3.15.1	Diameter 15 mm	no	1		
3.15.2	Diameter 20 mm	no	1		
3.15.3	Diameter 32 mm	no	1		
3.15.4	Diameter 50 mm	no	1		
3.15.5	Diameter 65 mm	no	1		
3.15.6	Diameter 80 mm	no	1		
3.15.7	Diameter 110 mm	no	1		
3.16	2pc Threaded Ball Valve				
3.16.1	Diameter 15 mm	no	1		
3.16.2	Diameter 20 mm	no	1		
3.16.3	Diameter 32 mm	no	1		
3.16.4	Diameter 50 mm	no	1		
3.16.5	Diameter 65 mm	no	1		
3.16.6	Diameter 80 mm	no	1		
3.16.7	Diameter 100 mm	no	1		
3.17	Brass Threaded Ball Valve Class 16				
3.17.1	Diameter 15 mm	no	1		
3.17.2	Diameter 20 mm	no	1		
3.17.3	Diameter 32 mm	no	1		
3.17.4	Diameter 50 mm	no	1		
3.18	Brass Threaded Ball Valve Class 25				
3.18.1	Diameter 15 mm	no	1		
3.18.2	Diameter 20 mm	no	1		
3.18.3	Diameter 32 mm	no	1		
3.18.4	Diameter 50 mm	no	1		
3.19	Flange Motorized V Type Ball Valve Class 16				
3.19.1	Diameter 15 mm	no	1		
3.19.2	Diameter 20 mm	no	1		
3.19.3	Diameter 32 mm	no	1		
3.19.4	Diameter 50 mm	no	1		
3.19.5	Diameter 65 mm	no	1		
3.19.6	Diameter 80 mm	no	1		
3.19.7	Diameter 100 mm	no	1		
3.19.8	Diameter 125 mm	no	1		
3.19.9	Diameter 150 mm	no	1		
3.19.10	Diameter 200 mm	no	1		

3.19.11	Diameter 250 mm	no	1		
3.19.12	Diameter 300 mm	no	1		
3.19.13	Diameter 350 mm	no	1		
3.19.14	Diameter 400 mm	no	1		
3.19.15	Diameter 450 mm	no	1		
3.19.16	Diameter 500 mm	no	1		
3.20	Rotary Halve Ball Valve Class 16				
3.20.1	Diameter 15 mm	no	1		
3.20.2	Diameter 20 mm	no	1		
3.20.3	Diameter 32 mm	no	1		
3.20.4	Diameter 50 mm	no	1		
3.20.5	Diameter 65 mm	no	1		
3.20.6	Diameter 80 mm	no	1		
3.20.7	Diameter 100 mm	no	1		
3.20.8	Diameter 125 mm	no	1		
3.20.9	Diameter 150 mm	no	1		
3.20.10	Diameter 200 mm	no	1		
3.20.11	Diameter 250 mm	no	1		
3.20.12	Diameter 300 mm	no	1		
3.20.13	Diameter 350 mm	no	1		
3.20.14	Diameter 400 mm	no	1		
3.20.15	Diameter 450 mm	no	1		
3.20.16	Diameter 500 mm	no	1		
3.20.17	Diameter 600 mm	no	1		
3.21	Rotary Halve Ball Valve Class 25				
3.21.1	Diameter 15 mm	no	1		
3.21.2	Diameter 20 mm	no	1		
3.21.3	Diameter 32 mm	no	1		
3.21.4	Diameter 50 mm	no	1		
3.21.5	Diameter 65 mm	no	1		
3.21.6	Diameter 80 mm	no	1		
3.21.7	Diameter 100 mm	no	1		
3.21.8	Diameter 125 mm	no	1		
3.21.9	Diameter 150 mm	no	1		
3.21.10	Diameter 200 mm	no	1		
3.21.11	Diameter 250 mm	no	1		
3.21.12	Diameter 300 mm	no	1		
3.21.13	Diameter 350 mm	no	1		
3.21.14	Diameter 400 mm	no	1		
3.21.15	Diameter 450 mm	no	1		
3.21.16	Diameter 500 mm	no	1		
3.21.17	Diameter 600 mm	no	1		
3.22	Rotary Halve Ball Valve Class 40				
3.22.1	Diameter 15 mm	no	1		
3.22.2	Diameter 20 mm	no	1		
3.22.3	Diameter 32 mm	no	1		
3.22.4	Diameter 50 mm	no	1		
3.22.5	Diameter 65 mm	no	1		
3.22.6	Diameter 80 mm	no	1		
3.22.7	Diameter 100 mm	no	1		
3.22.8	Diameter 125 mm	no	1		
3.22.9	Diameter 150 mm	no	1		
3.22.10	Diameter 200 mm	no	1		

3.22.11	Diameter 250 mm	no	1		
3.22.12	Diameter 300 mm	no	1		
3.22.13	Diameter 350 mm	no	1		
3.22.14	Diameter 400 mm	no	1		
3.22.15	Diameter 450 mm	no	1		
3.22.16	Diameter 500 mm	no	1		
3.22.17	Diameter 600 mm	no	1		
3.23	Anti Water Hammer Check Valve Class 26				
3.23.1	Diameter 15 mm	no	1		
3.23.2	Diameter 20 mm	no	1		
3.23.3	Diameter 32 mm	no	1		
3.23.4	Diameter 50 mm	no	1		
3.23.5	Diameter 65 mm	no	1		
3.23.6	Diameter 80 mm	no	1		
3.23.7	Diameter 100 mm	no	1		
3.23.8	Diameter 125 mm	no	1		
3.23.9	Diameter 150 mm	no	1		
3.23.10	Diameter 200 mm	no	1		
3.23.11	Diameter 250 mm	no	1		
3.23.12	Diameter 300 mm	no	1		
3.23.13	Diameter 350 mm	no	1		
3.23.14	Diameter 400 mm	no	1		
3.23.15	Diameter 450 mm	no	1		
3.23.16	Diameter 500 mm	no	1		
3.24	Anti Water Hammer Check Valve Class 40				
3.24.1	Diameter 15 mm	no	1		
3.24.2	Diameter 20 mm	no	1		
3.24.3	Diameter 32 mm	no	1		
3.24.4	Diameter 50 mm	no	1		
3.24.5	Diameter 65 mm	no	1		
3.24.6	Diameter 80 mm	no	1		
3.24.7	Diameter 100 mm	no	1		
3.24.8	Diameter 125 mm	no	1		
3.24.9	Diameter 150 mm	no	1		
3.24.10	Diameter 200 mm	no	1		
3.24.11	Diameter 250 mm	no	1		
3.24.12	Diameter 300 mm	no	1		
3.24.13	Diameter 350 mm	no	1		
3.24.14	Diameter 400 mm	no	1		
3.24.15	Diameter 450 mm	no	1		
3.24.16	Diameter 500 mm	no	1		
3.25	Swing Check Valve Class 16				
3.25.1	Diameter 50 mm	no	1		
3.25.2	Diameter 65 mm	no	1		
3.25.3	Diameter 80 mm	no	1		
3.25.4	Diameter 100 mm	no	1		
3.25.5	Diameter 125 mm	no	1		
3.25.6	Diameter 150 mm	no	1		
3.25.7	Diameter 200 mm	no	1		
3.25.8	Diameter 250 mm	no	1		
3.25.9	Diameter 300 mm	no	1		
3.25.10	Diameter 350 mm	no	1		
3.25.11	Diameter 400 mm	no	1		

3.25.12	Diameter 450 mm	no	1		
3.25.13	Diameter 500 mm	no	1		
3.26	Tilting Disc Check Valve Class 16				
3.26.1	Diameter 50 mm	no	1		
3.26.2	Diameter 65 mm	no	1		
3.26.3	Diameter 80 mm	no	1		
3.26.4	Diameter 100 mm	no	1		
3.26.5	Diameter 125 mm	no	1		
3.26.6	Diameter 150 mm	no	1		
3.26.7	Diameter 200 mm	no	1		
3.26.8	Diameter 250 mm	no	1		
3.26.9	Diameter 300 mm	no	1		
3.26.10	Diameter 350 mm	no	1		
3.26.11	Diameter 400 mm	no	1		
3.26.12	Diameter 450 mm	no	1		
3.26.13	Diameter 500 mm	no	1		
3.27	Premier Multi Door Check Valve Class 16				
3.27.1	Diameter 50 mm	no	1		
3.27.2	Diameter 65 mm	no	1		
3.27.3	Diameter 80 mm	no	1		
3.27.4	Diameter 100 mm	no	1		
3.27.5	Diameter 125 mm	no	1		
3.27.6	Diameter 150 mm	no	1		
3.27.7	Diameter 200 mm	no	1		
3.27.8	Diameter 250 mm	no	1		
3.27.9	Diameter 300 mm	no	1		
3.27.10	Diameter 350 mm	no	1		
3.27.11	Diameter 400 mm	no	1		
3.27.12	Diameter 450 mm	no	1		
3.27.13	Diameter 500 mm	no	1		
3.28	Control Valves				
	Ring Needle Control Valves Class 16				
3.28.1	Diameter 50 mm	no	1		
3.28.2	Diameter 65 mm	no	1		
3.28.3	Diameter 80 mm	no	1		
3.28.4	Diameter 100 mm	no	1		
3.28.5	Diameter 125 mm	no	1		
3.28.6	Diameter 150 mm	no	1		
3.28.7	Diameter 200 mm	no	1		
3.28.8	Diameter 250 mm	no	1		
3.28.9	Diameter 300 mm	no	1		
3.28.10	Diameter 350 mm	no	1		
3.28.11	Diameter 400 mm	no	1		
3.28.12	Diameter 450 mm	no	1		
3.28.13	Diameter 500 mm	no	1		
3.29	Ring Needle Control Valves Class 25				
3.29.1	Diameter 50 mm	no	1		
3.29.2	Diameter 65 mm	no	1		
3.29.3	Diameter 80 mm	no	1		
3.29.4	Diameter 100 mm	no	1		
3.29.5	Diameter 125 mm	no	1		
3.29.6	Diameter 150 mm	no	1		
3.29.7	Diameter 200 mm	no	1		

3.29.8	Diameter 250 mm	no	1		
3.29.9	Diameter 300 mm	no	1		
3.29.10	Diameter 350 mm	no	1		
3.29.11	Diameter 400 mm	no	1		
3.29.12	Diameter 450 mm	no	1		
3.29.13	Diameter 500 mm	no	1		
3.30	Ring Needle Control Valves Class 40				
3.30.1	Diameter 50 mm	no	1		
3.30.2	Diameter 65 mm	no	1		
3.30.3	Diameter 80 mm	no	1		
3.30.4	Diameter 100 mm	no	1		
3.30.5	Diameter 125 mm	no	1		
3.30.6	Diameter 150 mm	no	1		
3.30.7	Diameter 200 mm	no	1		
3.30.8	Diameter 250 mm	no	1		
3.30.9	Diameter 300 mm	no	1		
3.30.10	Diameter 350 mm	no	1		
3.30.11	Diameter 400 mm	no	1		
3.30.12	Diameter 450 mm	no	1		
3.30.13	Diameter 500 mm	no	1		
3.31	Ring Needle Control Valves Class 60				
3.31.1	Diameter 50 mm	no	1		
3.31.2	Diameter 65 mm	no	1		
3.31.3	Diameter 80 mm	no	1		
3.31.4	Diameter 100 mm	no	1		
3.31.5	Diameter 125 mm	no	1		
3.31.6	Diameter 150 mm	no	1		
3.31.7	Diameter 200 mm	no	1		
3.31.8	Diameter 250 mm	no	1		
3.31.9	Diameter 300 mm	no	1		
3.31.10	Diameter 350 mm	no	1		
3.31.11	Diameter 400 mm	no	1		
3.31.12	Diameter 450 mm	no	1		
3.31.13	Diameter 500 mm	no	1		
3.32	Baker Control Valves Class 16				
3.32.1	Diameter 50 mm	no	1		
3.32.2	Diameter 65 mm	no	1		
3.32.3	Diameter 80 mm	no	1		
3.32.4	Diameter 100 mm	no	1		
3.32.5	Diameter 125 mm	no	1		
3.32.6	Diameter 150 mm	no	1		
3.32.7	Diameter 200 mm	no	1		
3.32.8	Diameter 250 mm	no	1		
3.32.9	Diameter 300 mm	no	1		
3.32.10	Diameter 350 mm	no	1		
3.32.11	Diameter 400 mm	no	1		
3.32.12	Diameter 450 mm	no	1		
3.32.13	Diameter 500 mm	no	1		
3.33	Baker Control Valves Class 25				
3.33.1	Diameter 50 mm	no	1		
3.33.2	Diameter 65 mm	no	1		
3.33.3	Diameter 80 mm	no	1		
3.33.4	Diameter 100 mm	no	1		

3.33.5	Diameter 125 mm	no	1		
3.33.6	Diameter 150 mm	no	1		
3.33.7	Diameter 200 mm	no	1		
3.33.8	Diameter 250 mm	no	1		
3.33.9	Diameter 300 mm	no	1		
3.33.10	Diameter 350 mm	no	1		
3.33.11	Diameter 400 mm	no	1		
3.33.12	Diameter 450 mm	no	1		
3.33.13	Diameter 500 mm	no	1		
3.34	Baker Control Valves Class 40				
3.34.1	Diameter 50 mm	no	1		
3.34.2	Diameter 65 mm	no	1		
3.34.3	Diameter 80 mm	no	1		
3.34.4	Diameter 100 mm	no	1		
3.34.5	Diameter 125 mm	no	1		
3.34.6	Diameter 150 mm	no	1		
3.34.7	Diameter 200 mm	no	1		
3.34.8	Diameter 250 mm	no	1		
3.34.9	Diameter 300 mm	no	1		
3.34.10	Diameter 350 mm	no	1		
3.34.11	Diameter 400 mm	no	1		
3.34.12	Diameter 450 mm	no	1		
3.34.13	Diameter 500 mm	no	1		
3.35	Baker Control Valves Class 60				
3.35.1	Diameter 50 mm	no	1		
3.35.2	Diameter 65 mm	no	1		
3.35.3	Diameter 80 mm	no	1		
3.35.4	Diameter 100 mm	no	1		
3.35.5	Diameter 125 mm	no	1		
3.35.6	Diameter 150 mm	no	1		
3.35.7	Diameter 200 mm	no	1		
3.35.8	Diameter 250 mm	no	1		
3.35.9	Diameter 300 mm	no	1		
3.35.10	Diameter 350 mm	no	1		
3.35.11	Diameter 400 mm	no	1		
3.35.12	Diameter 450 mm	no	1		
3.35.13	Diameter 500 mm	no	1		
3.36	Strainer				
	Y Type Flange Strainer Class 16				
3.36.1	Diameter 50 mm	no	1		
3.36.2	Diameter 65 mm	no	1		
3.36.3	Diameter 80 mm	no	1		
3.36.4	Diameter 100 mm	no	1		
3.36.5	Diameter 125 mm	no	1		
3.36.6	Diameter 150 mm	no	1		
3.36.7	Diameter 200 mm	no	1		
3.36.8	Diameter 250 mm	no	1		
3.36.9	Diameter 300 mm	no	1		
3.36.10	Diameter 350 mm	no	1		
3.36.11	Diameter 400 mm	no	1		
3.36.12	Diameter 450 mm	no	1		
3.36.13	Diameter 500 mm	no	1		
3.37	Y Type Flange Strainer Class 25				

3.37.1	Diameter 50 mm	no	1		
3.37.2	Diameter 65 mm	no	1		
3.37.3	Diameter 80 mm	no	1		
3.37.4	Diameter 100 mm	no	1		
3.37.5	Diameter 125 mm	no	1		
3.37.6	Diameter 150 mm	no	1		
3.37.7	Diameter 200 mm	no	1		
3.37.8	Diameter 250 mm	no	1		
3.37.9	Diameter 300 mm	no	1		
3.37.10	Diameter 350 mm	no	1		
3.37.11	Diameter 400 mm	no	1		
3.37.12	Diameter 450 mm	no	1		
3.37.13	Diameter 500 mm	no	1		
3.38	Y Type Flange Strainer Class 40				
3.38.1	Diameter 50 mm	no	1		
3.38.2	Diameter 65 mm	no	1		
3.38.3	Diameter 80 mm	no	1		
3.38.4	Diameter 100 mm	no	1		
3.38.5	Diameter 125 mm	no	1		
3.38.6	Diameter 150 mm	no	1		
3.38.7	Diameter 200 mm	no	1		
3.38.8	Diameter 250 mm	no	1		
3.38.9	Diameter 300 mm	no	1		
3.38.10	Diameter 350 mm	no	1		
3.38.11	Diameter 400 mm	no	1		
3.38.12	Diameter 450 mm	no	1		
3.38.13	Diameter 500 mm	no	1		
	Surge Anticipation Valve				
3.39	Surge Anticipation Valve Class 25				
3.39.1	Diameter 50 mm	no	1		
3.39.2	Diameter 65 mm	no	1		
3.39.3	Diameter 80 mm	no	1		
3.39.4	Diameter 100 mm	no	1		
3.39.5	Diameter 125 mm	no	1		
3.39.6	Diameter 150 mm	no	1		
3.39.7	Diameter 200 mm	no	1		
3.39.8	Diameter 250 mm	no	1		
3.39.9	Diameter 300 mm	no	1		
3.39.10	Diameter 350 mm	no	1		
3.39.11	Diameter 400 mm	no	1		
3.40	Surge Anticipation Valve Class 40				
3.40.1	Diameter 50 mm	no	1		
3.40.2	Diameter 65 mm	no	1		
3.40.3	Diameter 80 mm	no	1		
3.40.4	Diameter 100 mm	no	1		
3.40.5	Diameter 125 mm	no	1		
3.40.6	Diameter 150 mm	no	1		
3.40.7	Diameter 200 mm	no	1		
3.40.8	Diameter 250 mm	no	1		
3.40.9	Diameter 300 mm	no	1		
3.40.10	Diameter 350 mm	no	1		
3.40.11	Diameter 400 mm	no	1		

3.41	Air Release Valve				
	Single Orifice Air Valve Class 16				
3.41.1	Diameter 50 mm	no	1		
3.41.2	Diameter 80 mm	no	1		
3.41.3	Diameter 100 mm	no	1		
3.41.4	Diameter 150 mm	no	1		
3.42	Single Orifice Air Valve Class 25				
3.42.1	Diameter 50 mm	no	1		
3.42.2	Diameter 80 mm	no	1		
3.42.3	Diameter 100 mm	no	1		
3.42.4	Diameter 150 mm	no	1		
3.42.5	Diameter 200 mm	no	1		
3.43	Double Orifice Air Valve Class 16				
3.43.1	Diameter 50 mm	no	1		
3.43.2	Diameter 80 mm	no	1		
3.43.3	Diameter 100 mm	no	1		
3.43.4	Diameter 150 mm	no	1		
3.43.5	Diameter 200 mm	no	1		
3.44	Double Orifice Air Valve Class 25				
3.44.1	Diameter 50 mm	no	1		
3.44.2	Diameter 80 mm	no	1		
3.44.3	Diameter 100 mm	no	1		
3.44.4	Diameter 150 mm	no	1		
3.44.5	Diameter 200 mm	no	1		
3.45	Domestic Flow Meters				
3.45.1	Polymer Piston				
3.45.1.1	Diameter 15 mm	no	1		
3.45.1.2	Diameter 20 mm	no	1		
3.45.2	Brass Piston				
3.45.2.1	Diameter 15 mm	no	1		
3.45.2.2	Diameter 20 mm	no	1		
3.45.2.3	Diameter 25 mm	no	1		
3.46	Brass Cold Water Multi-jet				
3.46.1	Diameter 15 mm	no	1		
3.46.2	Diameter 20 mm	no	1		
3.46.3	Diameter 25 mm	no	1		
3.46.4	Diameter 50 mm	no	1		
3.47	Polymer Multijet Class C				
3.47.1	Diameter 40 mm	no	1		
3.48	An Concave above ground POLymer meterbox (710 mm high)				
3.48.1	Diameter 15 mm	no	1		
7.45.5.2	Diameter 20 mm	no	1		
7.45.5.3	Diameter 25 mm	no	1		
7.46	Bulk Water Meter				
7.46.1.	Precision Water Meters				
3.46.1.1	Diameter 50 mm	no	1		
3.46.1.2	Diameter 65 mm	no	1		
3.46.1.3	Diameter 80 mm	no	1		
3.46.1.4	Diameter 100 mm	no	1		
3.46.1.5	Diameter 125 mm	no	1		
3.46.1.6	Diameter 150 mm	no	1		
3.46.1.7	Diameter 200 mm	no	1		
3.46.1.8	Diameter 250 mm	no	1		

3.46.1.9	Diameter 300 mm	no	1		
3.46.1.10	Diameter 350 mm	no	1		
3.46.1.11	Diameter 400 mm	no	1		
3.46.1.12	Diameter 450 mm	no	1		
3.46.1.13	Diameter 500 mm	no	1		
3.46.1.14	Diameter 550 mm	no	1		
3.46.1.15	Diameter 1000 mm	no	1		
3.46.2	Wotlman Water Meters				
3.46.2.1	Diameter 50 mm	no	1		
3.46.2.2	Diameter 65 mm	no	1		
3.46.2.3	Diameter 80 mm	no	1		
3.46.2.4	Diameter 100 mm	no	1		
3.46.2.5	Diameter 125 mm	no	1		
3.46.2.6	Diameter 150 mm	no	1		
3.46.2.7	Diameter 200 mm	no	1		
3.46.2.8	Diameter 250 mm	no	1		
3.46.2.9	Diameter 300 mm	no	1		
3.46.2.10	Diameter 350 mm	no	1		
3.46.2.11	Diameter 400 mm	no	1		
3.46.2.12	Diameter 450 mm	no	1		
3.46.2.13	Diameter 500 mm	no	1		
3.46.2.14	Diameter 550 mm	no	1		
3.46.2.15	Diameter 1000 mm	no	1		
3.46.3	Elster Kent Water Meters				
3.46.3.1	Diameter 32 mm	no	1		
3.46.3.2	Diameter 40 mm	no	1		
3.46.3.3	Diameter 50 mm	no	1		
3.46.3.4	Diameter 65 mm	no	1		
3.46.3.5	Diameter 80 mm	no	1		
3.46.3.6	Diameter 100 mm	no	1		
3.46.3.7	Diameter 125 mm	no	1		
3.46.3.8	Diameter 150 mm	no	1		
3.46.3.9	Diameter 200 mm	no	1		
3.46.3.10	Diameter 250 mm	no	1		
3.46.3.11	Diameter 300 mm	no	1		
3.46.3.12	Diameter 350 mm	no	1		
3.46.3.13	Diameter 400 mm	no	1		
3.46.3.14	Diameter 450 mm	no	1		
3.46.3.15	Diameter 500 mm	no	1		
3.46.3.16	Diameter 550 mm	no	1		
3.46.3.17	Diameter 1000 mm	no	1		
3.46.3.18	Diameter 110 mm	no	1		
3.46.4	Insertion Electromagnetic Water Meters				
3.46.4.1	Diameter 100 mm	no	1		
3.46.4.2	Diameter 125 mm	no	1		
3.46.4.3	Diameter 150 mm	no	1		
3.46.4.4	Diameter 200 mm	no	1		
3.46.4.5	Diameter 250 mm	no	1		
3.46.4.6	Diameter 300 mm	no	1		
3.46.4.7	Diameter 350 mm	no	1		
3.46.4.8	Diameter 400 mm	no	1		
3.46.4.9	Diameter 450 mm	no	1		
3.46.4.10	Diameter 500 mm	no	1		

3.46.4.11	Diameter 550 mm	no	1		
3.46.4.12	Diameter 1000 mm	no	1		
SUB-TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
4. SCHEDULE 4 - GASKETS, SEALS AND BOLTS					
NOTE:					
The rates provided in this schedule include all costs for the supply, delivery, storage, protection, handling, and installation of all valves, as well as all associated labor and materials.					
4.1	GASKETS				
4.1.1	T16 Rubber Gaskets				
4.1.1.1	Diameter 50 mm	no	1		
4.1.1.2	Diameter 65 mm	no	1		
4.1.1.3	Diameter 80 mm	no	1		
4.1.1.4	Diameter 100 mm	no	1		
4.1.1.5	Diameter 125 mm	no	1		
4.1.1.6	Diameter 150 mm	no	1		
4.1.1.7	Diameter 200 mm	no	1		
4.1.1.8	Diameter 250 mm	no	1		
4.1.1.9	Diameter 300 mm	no	1		
4.1.1.10	Diameter 350 mm	no	1		
4.1.1.11	Diameter 400 mm	no	1		
4.1.1.12	Diameter 450 mm	no	1		
4.1.1.13	Diameter 500 mm	no	1		
4.1.1.14	Diameter 550 mm	no	1		
4.1.1.15	Diameter 700mm	no	1		
4.1.1.16	Diameter 900 mm	no	1		
4.1.1.17	Diameter 1000 mm	no	1		
4.1.2	T40 Rubber Gaskets				
4.1.2.1	Diameter 50 mm		1		
4.1.2.2	Diameter 65 mm	no	1		
4.1.2.3	Diameter 80 mm	no	1		
4.1.2.4	Diameter 100 mm	no	1		
4.1.2.5	Diameter 125 mm	no	1		
4.1.2.6	Diameter 150 mm	no	1		
4.1.2.7	Diameter 200 mm	no	1		
4.1.2.8	Diameter 250 mm	no	1		
4.1.2.9	Diameter 300 mm	no	1		
4.1.2.10	Diameter 350 mm	no	1		
4.1.2.11	Diameter 400 mm	no	1		
4.1.2.12	Diameter 450 mm	no	1		
4.1.2.13	Diameter 500 mm	no	1		
4.1.2.14	Diameter 550 mm	no	1		
4.1.2.15	Diameter 700mm	no	1		
4.1.2.16	Diameter 900 mm	no	1		
4.1.2.17	Diameter 1000 mm	no	1		
4.1.3	T16 Klinger Gaskets				
4.1.3.1	Diameter 50 mm	no	1		
4.1.3.2	Diameter 65 mm	no	1		
4.1.3.3	Diameter 80 mm	no	1		
4.1.3.4	Diameter 100 mm	no	1		
4.1.3.5	Diameter 125 mm	no	1		
4.1.3.6	Diameter 150 mm	no	1		
4.1.3.7	Diameter 200 mm	no	1		
4.1.3.8	Diameter 250 mm	no	1		
4.1.3.9	Diameter 300 mm	no	1		

4.1.3.10	Diameter 350 mm	no	1		
4.1.3.11	Diameter 400 mm	no	1		
4.1.3.12	Diameter 450 mm	no	1		
4.1.3.13	Diameter 500 mm	no	1		
4.1.3.14	Diameter 550 mm	no	1		
4.1.3.15	Diameter 700mm	no	1		
4.1.3.16	Diameter 900 mm	no	1		
4.1.3.17	Diameter 1000 mm	no	1		
4.1.4	T40 Klinger Gaskets				
4.1.4.1	Diameter 50 mm	no	1		
4.1.4.2	Diameter 65 mm	no	1		
4.1.4.3	Diameter 80 mm	no	1		
4.1.4.4	Diameter 100 mm	no	1		
4.1.4.5	Diameter 125 mm	no	1		
4.1.4.6	Diameter 150 mm	no	1		
4.1.4.7	Diameter 200 mm	no	1		
4.1.4.8	Diameter 250 mm	no	1		
4.1.4.9	Diameter 300 mm	no	1		
4.1.4.10	Diameter 350 mm	no	1		
4.1.4.11	Diameter 400 mm	no	1		
4.1.4.12	Diameter 450 mm	no	1		
4.1.4.13	Diameter 500 mm	no	1		
4.1.4.14	Diameter 550 mm	no	1		
4.1.4.15	Diameter 700mm	no	1		
4.1.4.16	Diameter 900 mm	no	1		
4.1.4.17	Diameter 1000 mm	no	1		
4.2	SEALS				
4.2.1	Rubber Seals Class 16				
4.2.1.1	Diameter 50 mm	no	1		
4.2.1.2	Diameter 65 mm	no	1		
4.2.1.3	Diameter 80 mm	no	1		
4.2.1.4	Diameter 100 mm	no	1		
4.2.1.5	Diameter 125 mm	no	1		
4.2.1.6	Diameter 150 mm	no	1		
4.2.1.7	Diameter 200 mm	no	1		
4.2.1.8	Diameter 250 mm	no	1		
4.2.1.9	Diameter 300 mm	no	1		
4.2.1.10	Diameter 350 mm	no	1		
4.2.1.11	Diameter 400 mm	no	1		
4.2.1.12	Diameter 450 mm	no	1		
4.2.1.13	Diameter 500 mm	no	1		
4.2.1.14	Diameter 550 mm	no	1		
4.2.1.15	Diameter 700mm	no	1		
4.2.1.16	Diameter 900 mm	no	1		
4.2.1.17	Diameter 1000 mm	no	1		
4.2.2	Rubber Seals Class 25				
4.2.2.1	Diameter 50 mm	no	1		
4.2.2.2	Diameter 65 mm	no	1		
4.2.2.3	Diameter 80 mm	no	1		
4.2.2.4	Diameter 100 mm	no	1		
4.2.2.5	Diameter 125 mm	no	1		
4.2.2.6	Diameter 150 mm	no	1		
4.2.2.7	Diameter 200 mm	no	1		

4.2.2.8	Diameter 250 mm	no	1		
4.2.2.9	Diameter 300 mm	no	1		
4.2.2.10	Diameter 350 mm	no	1		
4.2.2.11	Diameter 400 mm	no	1		
4.2.2.12	Diameter 450 mm	no	1		
4.2.2.13	Diameter 500 mm	no	1		
4.2.2.14	Diameter 550 mm	no	1		
4.2.2.15	Diameter 700mm	no	1		
4.2.2.16	Diameter 900 mm	no	1		
4.2.2.17	Diameter 1000 mm	no	1		
4.2.3	Rubber Seals Class 40				
4.2.3.1	Diameter 50 mm	no	1		
4.2.3.2	Diameter 65 mm	no	1		
4.2.3.3	Diameter 80 mm	no	1		
4.2.3.4	Diameter 100 mm	no	1		
4.2.3.5	Diameter 125 mm	no	1		
4.2.3.6	Diameter 150 mm	no	1		
4.2.3.7	Diameter 200 mm	no	1		
4.2.3.8	Diameter 250 mm	no	1		
4.2.3.9	Diameter 300 mm	no	1		
4.2.3.10	Diameter 350 mm	no	1		
4.2.3.11	Diameter 400 mm	no	1		
4.2.3.12	Diameter 450 mm	no	1		
4.2.3.13	Diameter 500 mm	no	1		
4.2.3.14	Diameter 550 mm	no	1		
4.2.3.15	Diameter 700mm	no	1		
4.2.3.16	Diameter 900 mm	no	1		
4.2.3.17	Diameter 1000 mm	no	1		
4.3	Bolts and Nuts				
4.3.1	M16 x 75 mm Bolts and nuts	no	1		
4.3.2	M18 x 75 mm Bolts and nuts	no	1		
4.3.3	M18 x 90 mm Bolts and nuts	no	1		
4.3.4	M20 x 75 mm Bolts and nuts	no	1		
4.3.5	M20 x 90 mm Bolts and nuts	no	1		
4.3.6	M24 x 75 mm Bolts and nuts	no	1		
4.3.7	M24 x 90 mm Bolts and nuts	no	1		
4.3.8	M24 x 120 mm Bolts and nuts	no	1		
4.3.9	M30 x 150mm Bolts and nuts	no	1		
4.3.10	M36 x 170mm Bolts and nuts	no	1		
4.3.11	M39 x 170mm Bolts and nuts	no	1		
SUB-TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5. SCHEDULE 5 - MECHANICAL					
NOTE:					
The rates provided in this schedule include all costs for the supply, delivery, storage, protection, handling, and installation of all valves, as well as all associated labor and materials.					
5.1	Pumps				
5.1.1	Submersible Pumps and motor (Single Phase)				
5.1.1.1	Borehole pump + Motor 0.37 kW	no	1		
5.1.1.2	Borehole pump +Motor 0.55 kW	no	1		
5.1.1.3	Borehole pump +Motor 0.75 kW	no	1		
5.1.1.4	Borehole pump + Motor 1.1 kW	no	1		
5.1.1.5	Borehole pump + Motor 1.5 kW	no	1		
5.1.1.6	Borehole pump +Motor 2.2 kW	no	1		
5.1.1.7	Borehole pump + Motor 3 kW	no	1		
5.1.1.8	Borehole pump + Motor 3.7 kW	no	1		
5.1.1.9	Borehole pump + Motor 4 kW	no	1		
5.1.1.10	Borehole pump + Motor 5.5 kW	no	1		
5.1.1.11	Borehole pump + Motor 7.5 kW	no	1		
5.1.1.12	Borehole pump + Motor 11 kW	no			
5.1.1.13	Amarex 0.37 kW to 7.5 kW	no	1		
5.1.1.14	Amarex NS 0.37 kW to 7.5 kW	no	1		
5.1.1.15	Amarex KRT 0.37 kW to 7.5 kW	no	1		
5.1.2	Submersible Pumps (3 Phase)				
5.1.2.1	Borehole pump + Motor 0.37 kW	no	1		
5.1.2.2	Borehole pump +Motor 0.55 kW	no	1		
5.1.2.3	Borehole pump +Motor 0.75 kW	no	1		
5.1.2.4	Borehole pump + Motor 1.1 kW	no	1		
5.1.2.5	Borehole pump + Motor 1.5 kW	no	1		
5.1.2.6	Borehole pump +Motor 2.2 kW	no	1		
5.1.2.7	Borehole pump + Motor 3 kW	no	1		
5.1.2.8	Borehole pump + Motor 3.7 kW	no	1		
5.1.2.9	Borehole pump + Motor 4 kW	no	1		
5.1.2.10	Borehole pump + Motor 5.5 kW	no	1		
5.1.2.11	Borehole pump + Motor 7.5 kW	no	1		
5.1.2.12	Borehole pump + Motor 11 kW	no	1		
5.1.2.13	Amarex NS 0.37 kW to 7.5 kW	no	1		
5.1.2.14	Amarex KRT 0.37 kW to 7.5 kW	no	1		
5.1.3	Multistage pumps				
5.1.3.1	Vertical multistage pump 0.37 - 0.7 kw	no	1		
5.1.3.2	Vertical multistage pump 1.1 -2.2 kw	no	1		
5.1.3.3	Vertical multistage pump 3.0 -7.5 kw	no	1		
5.1.3.4	Vertical multistage pump 11-18,5 kw	no	1		
5.1.3.5	Vertical multistage pump 22 - 45 kw	no	1		
5.1.3.6	Vertical multistage pump 47 - 50 kw	no	1		
5.1.4	Centrifugal Pumps				
5.1.4.1	Multi-stage Pump 0.65 kW	no	1		
5.1.4.2	Multi-stage Pump 0.94 kW	no	1		
5.1.4.3	Multi-stage Pump 2.2 kW	no	1		
5.1.4.4	Multi-stage Pump 2.85 kW	no	1		
5.1.4.5	Multi-stage Pump 5.5 kW	no	1		
5.1.4.6	Multi-stage Pump 10 kW	no	1		
5.1.4.7	Multi-stage Pump 20 kW	no	1		
5.1.4.8	Multi-stage Pump 25 kW	no	1		

5.1.4.9	Multi-stage Pump 50 kW	no	1		
5.1.4.10	Multi-stage Pump 75 kW	no	1		
5.1.4.11	Multi-stage Pump 100 kW	no	1		
5.1.4.12	Multi-stage Pump 220 kW	no	1		
5.1.4.13	DL-DB End Suction Range 0.65 kW - 25 kW	no	1		
5.1.4.14	NF End Suction Pumps 0.65 kW - 25 kW	no	1		
5.1.4.15	Chemical Pump DL-DB Range 0.65 kW - 25 kW	no	1		
5.1.5	Mono pumps				
5.1.5.1	Mono pumps 2.2 - 7.5 kw	no	1		
5.1.5.2	Mono pumps 11.- 22 Kw	no	1		
5.1.5.3	Mono pumps 30 - 90 Kw	no	1		
5.2	Flow metre Calibration	no	1		
5.3	Testing and issue certificate	no	1		
5.4	Lab instrument Calibration	no	1		
5.5	Testing and issue certificate	no	1		
5.6	mechemical investigation and survey	sum	1		
5.7	Dosing, filtration and chlorination system	no	1		
5.8	Replacement of ultraviolet system	no	1		
5.9	Replacement of ultraviolet Membrane	no	1		
5.10	Clear Water Pump				
5.10.1	Remove, transport and service the existing pumps and re-install after pumps has been serviced in the pumpstation.	sum	1		
5.10.2	Replace Impellers	no	1		
5.10.3	Replace Mechanical Seals	no	1		
5.10.4	Revarnish and bake windings	no	1		
5.10.5	Repalcement of motor coupling	no	1		
5.10.6	Pump Alignment	sum	1		
5.10.7	Pump Bearings	no	1		
5.10.8	Shaft protecting sleeve	no	1		
5.10.9	Motor bearing replacement	no	1		
5.10.10	Commisioning of Pump	sum	1		
5.10.11	Service of motor shaft	no	1		
5.10.12	Replacement of motor shaft	no	1		
5.11	Pump Station Mechanicals				
5.11.1	Wastewater Pump Station				
5.11.1.1	Service of self priming pumps	sum	1		
5.11.1.2	Service Pumps and pump house	Sum	1		
5.12	Waste Water Screens				
5.12.1	Drum Screen	no	1		
5.12.2	Step Screen	no	1		
5.12.3	Static Wedge Screen	no	1		
5.12.4	Mechanical bar screen	no	1		
5.13	Air Blower Aeration				
5.13.1	Positive Displacement Blowers	no	1		
5.13.2	Multistage Centrifugal Blower	no	1		
5.13.3	High Speed Blower	no	1		
5.13.4	Regenerative Blower	no	1		
5.14	Autonomous Gravity sand Filter				
5.14.1	Filters underdrain nozzles	no	1		
5.14.2	Filter sand graded	no	1		
5.14.3	AGF Venturi	no	1		
5.14.4	Manual backwashing valve	no	1		
5.14.5	Manual Air Agitation Drain Butterfly Valve	no	1		

5.14.6	Manual filter Drain Valve	no	1		
5.14.7	Manhole Gaskets	no	1		
5.15	Waste Water Screens				
5.15.1	Drum Screen	no	1		
5.15.2	Step Screen	no	1		
5.15.3	Static Wedge Screen	no	1		
5.16	Air Blower Aeration				
5.16.1	Positive Displacement Blowers	no	1		
5.16.2	Multistage Centrifugal Blower	no	1		
5.16.3	High Speed Blower	no	1		
5.16.4	Regenerative Blower	no	1		
SUB-TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
6. SCHEDULE 6 - ELECTRICAL					
NOTE:					
The rates provided in this schedule include all costs for the supply, delivery, storage, protection, handling, and installation of all valves, as well as all associated labor and materials.					
6.1	Power supply connection (Eskom)	Sum	1		
6.2	Power supply connection (Solar)	Sum	1		
6.3	Earthing and lightning protection	No	1		
6.4	Electrical control panel (starter, overload, protection)	No.	1		
6.5	Electrical cabling	m			
6.6	Cable trays and conduits	m	1		
6.7	Backup generator	No.	1		
6.8	Security lighting				
6.9	Control Box Single phase				
6.9.1	Control box 0.37 kW	No	1		
6.9.2	Control box 0.75 kW	No	1		
6.9.3	Control box 1.1 kW	No	1		
6.9.4	Control box 1.5 kW	No	1		
6.9.5	Control box 2.2 kW	No	1		
6.9.6	Control box 3 kW	No	1		
6.9.7	Control box 4 kW	No	1		
6.9.8	Control box 5.5 kW	No	1		
6.9.9	Control box 7.5 kW	No	1		
6.10	Control Box 3 Phase				
6.10.1	Control box 0.37 kW	No	1		
6.10.2	Control box 0.75 kW	No	1		
6.10.3	Control box 1.1 kW	No	1		
6.10.4	Control box 1.5 kW	No	1		
6.10.5	Control box 2.2 kW	No	1		
6.10.6	Control box 3 kW	No	1		
6.10.7	Control box 4 kW	No	1		
6.10.8	Control box 5.5 kW	No	1		
6.10.9	Control box 7.5 kW	No	1		
6.10.10	Control box 11 Kw	No	1		
6.10.11	Control box 15 kw	No	1		
6.11	electrical Change over switch	No	1		
6.12	PLC analog card	No	1		
6.13	Electromagnetic Flow Indicator	No	1		
6.14	RCT UPS	No	1		
6.15	Programming	Sum	1		
6.16	Diesel Generator Configuration	Sum	1		
6.17	Rewiring and re-programming of existing VSD	Sum	1		
6.18	Electronics(MCC)				
6.18.1	Fault finding	Sum	1		
6.18.2	Pumps sequency relay	No	1		
6.18.3	Desisn and Engineering	Sum	1		
6.18.4	VSD Software update	Sum	1		
6.18.5	MCC Wiring	Sum	1		
6.18.6	Programming	Sum	1		
6.18.7	Supply and install fibre communcation cable	m	1		
6.18.8	Supply and install HDMI	No	1		
6.18.9	Supply and install level sensor	Sum	1		

6.18.10	Supply and install commercial monitor scheider	Sum	1		
6.18.11	Supply and Install UPS	Sum	1		
Should any work, materials, or services not included in the original Bill of Quantities or Scope of Work be required during the execution of the contract, the rates for such additional items shall be based on mutually agreed-upon prices. Where such rates cannot be determined, the cost of such items shall be calculated based on actual cost plus a markup of 15% for profit and overhead. Should any work, materials, or services not specified in the original Bill of Quantities or Scope of Work be required during the contract period, the Contractor shall obtain three (3) written quotations from reputable suppliers or subcontractors for the required items. The Employer will evaluate the quotations and approve the most reasonable and cost-effective option. Upon approval, a 15% markup for profit and overhead shall be applied to the accepted quotation price. No additional work shall commence until the Employer has provided written authorization for both the selected quotation and the application of the markup. This markup shall apply only to non-included items specifically authorized in writing by the Employer or their representative.					
SUB-TOTAL CARRIED FORWARD TO SUMMARY					