CONTRACT NO. :

MARAPONG X6 CRU - BULK WATER SUPPLY AND BULK SEWER TRANSFER

BILL OF QUANTITIES

SCHEDULE 1
PRELIMINARY AND GENERAL

ITEM NO.	*REFE-RENCE*	*DESCRIPTION*	*UNIT*	*QUANT*	*RATE*	*AMOUNT*
					R. c.	*R. c.*
1	**SABS 1200A**	**PRELIMINARY AND GENERAL**				
1.1	**8.3**	**Fixed - Charge Items**				
1.1.1	8.3.1	Contractual Requirements	sum			
1.1.2		Insurances - (Refer to Form of Tender)	sum			
1.1.3		Programming	sum			
1.1.4		Deed of Suretyship (Refer to Form of Tender)	sum			
		Establishment of Facilities on Site				
	8.3.2.1	Facilities for Engineer				
		None				
	8.3.2.2	Facilities for Contractor				
1.1.5		Offices	sum			
1.1.6		Workshops and Storage Sheds	sum			
1.1.7		Living Accommodation	sum			
1.1.8		Ablution and Latrine facilities	sum			
1.1.9		Tools and equipment	sum			
1.1.10		Water Supplies	sum			
1.1.11		Electrical Power	sum			
1.1.12		Telecommunications	sum			
1.1.13		Access	sum			
1.1.14		Testing Equipment	sum			
		Features Requiring Special Attention				
1.1.15		Security	sum			
1.1.16		Safety	sum			
1.1.17		Medical Examinations	sum			
1.1.18		Samples and Certification of Materials	sum			
1.1.19		Site Meetings (2 per month)	sum			
					CARRIED FORWARD	

SCHEDULE 1
PRELIMINARY AND GENERAL

ITEM NO.	*REFE-RENCE*	*DESCRIPTION*	*UNIT*	*QUANT*	*RATE R c*	*AMOUNT R c*
					BROUGHT FORWARD	
1.1.20	8.3.3	Other fixed-charge obligations	sum			
1.1.21	8.3.4	Removal of site establishment and trimming of site	sum			
1.2	**8.4**	**Time Related Items**				
1.2.1	8.4.1	Contractual Requirements	sum			
1.2.2		Insurances - (Refer to Form of Tender)	sum			
1.2.3		Programming	sum			
1.2.4		Deed of Suretyship (Refer to Form of Tender)	sum			
		Establishment of Facilities on Site				
	8.4.2.1	Facilities for Engineer None				
	8.4.2.2	Facilities for Contractor				
1.2.5		Offices	sum			
1.2.6		Workshops and Storage Sheds	sum			
1.2.7		Living Accommodation	sum			
1.2.8		Ablution and Latrine facilities	sum			
1.2.9		Tools and equipment	sum			
1.2.10		Water Supplies	sum			
1.2.11		Electrical Power	sum			
1.2.12		Telecommunications	sum			
1.2.13		Access	sum			
1.2.14		Testing Equipment	sum			
		Features Requiring Special Attention				
1.2.15		Security	sum			
1.2.16		Safety	sum			
1.2.17		Medical Examinations	sum			
1.2.18		Samples and Certification of Materials	sum			
1.2.19		Site Meetings (2 per month)	sum			
1.2.20	8.4.3	Supervision for Duration of Construction	sum			
1.2.21	8.4.4	Company and Head Office overhead cost for the duration of Construction	sum			
	8.4.5	Other obligations (Tenderer must specify :)				
					CARRIED FORWARD	

SCHEDULE 1
PRELIMINARY AND GENERAL

ITEM NO.	REFE-RENCE	DESCRIPTION	UNIT	QUANT	RATE R c	AMOUNT R c
					BROUGHT FORWARD	
1.2.22		a) ……	sum			
1.2.23		b) ……	sum			
1.2.24		c) ……	sum			
1.2.25		d) ……	sum			
1.3		**Accommodation of Traffic next to Relebogile Street**	sum			
1.4		Liaison with ESKOM to cross one overhead powerline with the pipeline	sum			
1.5		Liaison with ESKOM to stay or relocate overhead powerline poles within the pipeline servitude	sum			
1.6		Liaison with Lephalale Local Municipality to cross existing services and their properties	sum			
1.7		Liaison with Lephalale Local Municipality to cross for four road crossings	sum			
1.8		Liaison with Municipality Labour Desk officials for recruitment of labour	sum			
1.9		Guards at gates on working sites	sum			
1.10		Community Liaison Officer	Month	18	R 3 000.00	R 54 000.00
1.11	**SABS 1200 A** 8.7	DAYWORK (Provisional)				
1.11.1		Material to be used during execution of Dayworks	PC Sum			R 50 000.00
1.11.2		Percentage for profit, overhead cost and other related costs for item 1.11.1	%			
		<u>Dayworks - Labour</u>				
1.11.3		Contractor's Representative	hr	40		
1.11.4		Qualified Artisan	hr	40		
1.11.5		Foreman, leader-hand (……hr/workday)	work day	5		
1.11.6		Semi-skilled labourer (……hr/workday)	work day	5		
1.11.7		Labourer (……hr/workday)	work	25		
					CARRIED FORWARD	

SCHEDULE 1
PRELIMINARY AND GENERAL

ITEM NO.	REFE-RENCE	DESCRIPTION	UNIT	QUANT	RATE R c	AMOUNT R c
					BROUGHT FORWARD	
		Dayworks - Plant				
1.11.8		Water Tanker (Specify capacity) ……..m³ (small)	hr	8		
1.11.9		Tipper Truck (Specify capacity) ……..m³ (small)	hr	8		
1.11.10		Flat bed truck (Specify capacity) …… Ton (small)	km	300		
1.11.11		LDV	km	300		
1.11.12		T.L.B (Tractor Loader Backhoe)	hr	16		
1.11.13		Excavator …….. Ton	hr	16		
1.11.14		Compactor: …….. (Specify size)	day	2		
1.11.15		Concrete mixer (Specify dry/wet capacity) ……m^3/ ……	day	2		
					SUB-TOTAL CARRIED FORWARD TO SUMMARY	

SCHEDULE 2
SITE CLEARANCE

ITEM NO.	*REFE-RENCE*	*DESCRIPTION*	*UNIT*	*QUANT*	*RATE*	*AMOUNT*
					R. c.	*R. c.*
2	**SABS 1200 C**	**SITE CLEARANCE**				
2.1	8.2.1	Clear and grub pipeline routes to width of 3m	m	375		
2.2	8.2.1	Clear and grub two pump station sites and Elevated Tank site	m^2	90		
2.3	8.2.2	Remove large trees	No	3		
2.4	8.2.5	Dismantle and reinstate or protect existing fences and walls on erf boundaries crossed by pipe trenches or access roads	m	100		
2.5	8.2.9	Transport materials and debris to approved site and dump	m^3.km	150		
					SUB-TOTAL CARRIED FORWARD TO SUMMARY	

SCHEDULE 3
EXISTING 8,5 Mℓ RESERVOIR TO BE SEALED

ITEM NO.	REFE-RENCE	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
					R. c.	R. c.
3		**SEALING OF EXISTING 8,5 Mℓ CONCRETE RESERVOIR**				
3.1		Clean reservoir on inside. The prepared surface should be free of all dust, oils, etc. and should be dampened but surface dry.	m^2	2585		
3.2		Clean reservoir roof outside. The prepared surface should be free of all dust, oils, etc. and should be dampened but surface dry.	m^2	1600		
3.3		**Watertight Finishing**				
3.3.1		36 Columns				
3.3.1.1		Base + 1 metre up Sealed and formed with master seal 750 TPO, 1.2mm thick, with Geotextile 230 gram/m^2 underlay, as per BASF approved method.	m^2	90		
3.3.1.2		Rest of column Coated with Samson P3 primer and Samson P3 coat X as per Samson Technologies approved method.	m^2	252		
3.3.2		Reservoir Floor Sealed and formed with Master Seal 750 TPO, 1.2mm thick, anchored, welded, with Geotextile 230 gram/m^2 underlay, as per BASF approved method.	m^2	1052		
3.3.3		Reservoir Internal Inclined Walls Sealed and formed with Master Seal 750 TPO, 1.2mm thick, anchored, welded, with Geotextile 230 gram/m^2 underlay, as per BASF approved method.	m^2	638		
3.3.4		Reservoir Internal Vertical Walls Sealed and formed with Master Seal 750 TPO, 1.2mm thick, anchored, welded, with Geotextile 230 gram/m^2 underlay, as per BASF approved method.	m^2	592		
3.3.5		Reservoir Roof Outside Sealed and formed with Master Seal 750 TPO, 1.5mm thick, anchored, welded, with Geotextile 230 gram/m^2 underlay and overlay, done as per BASF approved method.	m^2	1640		
3.3.6		Reservoir Roof and Parapet Walls Sealed and formed with Master Seal 750 TPO, 1.5mm thick, anchored, welded, with Geotextile 230 gram/m^2 underlay and overlay, done as per BASF approved method.	m^2	21		
					CARRIED FORWARD	

SCHEDULE 3
EXISTING 8,5 Mℓ RESERVOIR TO BE SEALED

ITEM NO.	REFE-RENCE	DESCRIPTION	UNIT	QUANT	RATE R c	AMOUNT R c
					BROUGHT FORWARD	
3.4		Internal 304L Stainless Steel Steps with handrailing	m	8		
3.5		Repair to outer Roof area by using wet/dry primer and water blocking mortar	Prov Sum	1	R 80 000.00	R 80 000.00
3.6		100mm Thick 19mm stone overlay	m^3	164		
					SUB-TOTAL CARRIED FORWARD TO SUMMARY	

SCHEDULE 4
ELEVATED SECTIONAL STEEL TANK

ITEM NO.	REFE-RENCE	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
					R. c.	R. c.
4	**SANS 10329**	**ELEVATED SECTIONAL STEEL TANK**				
4.1		Delivery and Assembly of a 798, 973m^3 galvanised bolted steel tank. Tank details : Length = 13,42m (11 Panels) Width = 12,20m (10 Panels) Depth = 4,88m (4 Panels) Partition = None Capacity = 798,973m^3 Cover Type = Standard Galvanised Steel Roof Panels Finish = Galvanising to SANS 121 and 32 Standard Panels = 1220 x 1220mm All stays, rubber gaskets, sealants, bolts and nuts to be supplied. One internal ladder. One external ladder. One level indicator. One lockable access manhole 450 x 450mm with built-in screened vent. Standard Tubular Handrailing around manhole. Four conection points up to 150NB.				
4.2	SANS 10160 SANS 10162	Delivery and Assembly of Steel Support Structure : Height = 27m Walkway around tank. Access ladder with safety cage and landing platforms. Finish = galvanising to SANS 121 and 32.				
4.3		**Reinforced Concrete Foundation**				
4.3.1	SANS 1200 DA	Earthworks (Small Works)				
4.3.1.1		Restricted Excavation Excavate for footings and existing services in all materials, backfill and compact, including disposal of surplus/unsuitable material within freehaul distance of 5km	m^3	196		
4.3.2	SANS 1200 GA	Concrete (Small Works)				
4.3.2.1		15MPa Blinding layer 50mm thick	m^2	164		
4.3.2.2		25MPa Concrete fotting	m^3	196		
4.3.2.3		Reinforcing steel in footing	t			
4.3.2.4		Holding down bolts	No.	64		
					CARRIED FORWARD	

SCHEDULE 4
ELEVATED SECTIONAL STEEL TANK

ITEM NO.	REFE-RENCE	DESCRIPTION	UNIT	QUANT	RATE R c	AMOUNT R c
					BROUGHT FORWARD	
4.4		Sundries				
4.4.1		Valves				
4.4.1.1		200mm ø VOSA wedge gate valve, right hand closing, non-rising spindle, stainless steel body and gate rings, PN16	No.	4		
4.4.2		Galvanised Steel Pipes				
4.4.2.1		200mm ø galvanised steel pipes, flanged to Table 1600/3. a) 6m lengths	No.	14		
4.4.3		Reducers				
		200 x 150mm ø galvanised steel reducers, flanged to Table 1600/3.	No.	4		
4.4.4		Sterilization of sectional steel tank	Sum			
					SUB-TOTAL CARRIED FORWARD TO SUMMARY	

SCHEDULE 5
BOOSTER PUMP STATION

ITEM NO.	*REFE-RENCE*	*DESCRIPTION*	*UNIT*	*QUANT*	*RATE*	*AMOUNT*
					R. c.	*R. c.*
5		**BOOSTER PUMP STATION**				
5.1	SABS 1200DB	**Pipe Trenches**				
5.1.1	8.3.1	Site Clearance				
5.1.1.1	8.3.1(a)	Clear vegetation and trees of girth up to 1m for 3m wide strip	m	71		
5.1.1.2	8.3.1(b)	Removal and backfill of 150mm layer of topsoil over the width of trench.	m^2	184		
5.1.2	8.3.2(a)	Excavation Excavation in all materials for trenches, backfill and compact, including disposal of surplus/ unsuitable material for pipes: Up to 200 mm diameter for depths **OVER AND UP TO**				
5.1.2.1		0,0m 1,5m	m	60		
5.1.2.2		1,5m 2,5m	m	11		
5.1.3	8.3.2(b)	Extra over item 5.1.2 above for: Hard Rock excavation	m^3	10		
5.1.4	8.3.5	Existing Services				
	8.3.5(a)	Dealing with existing Services that intersect a trench. The rate shall include the additional cost to care for during the excavation, protecting and maintaining the service, delays and disruption of progress and repairs necessitated by damage caused by the Contractor.				
5.1.4.1		Electrical Cables (Provisional)	No	r/o		
5.1.4.2		Water pipes with ø exeeding 25mm up to 450 mm (Provisional)	No	r/o		
5.1.5		Tie-in to Existing 8,5Mℓ Reservoir Outlet Open existing outlet pipe of 8,5Mℓ Reservoir. Measure pipework and fittings to complete the tie-in. Once design is done complete tie-in and close excavation.	Prov. Sum	1	R 150 000.00	R 150 000.00
5.2	SABS 1200GA	**Concrete : Small Works**				
5.2.1		Mass Concrete				
5.2.1.1	8.4.3	15 MPa concrete to thrust blocks and the like, including shuttering. Excavation measured elsewhere	m^3	5		
					CARRIED FORWARD	

SCHEDULE 5
BOOSTER PUMP STATION

ITEM NO.	*REFE-RENCE*	*DESCRIPTION*	*UNIT*	*QUANT*	*RATE R c*	*AMOUNT R c*
					BROUGHT FORWARD	
5.3	SABS 1200G	**Booster Pump Station**				
5.3.1		Reinforcement				
5.3.1.1	8.3.1	Reinforcement, high tensile steel dia.: a) 8mm and up to 12mm	t	0.173		
5.3.1.2	8.3.2	Welded mesh Ref 193 for floor	m^2	23.0		
5.3.2		Concrete				
5.3.2.1		Strip foundation: Class 20MPa/19mm	m^3	3.20		
5.3.2.2		Floor slab: Class 25MPa/19mm	m^3	3.44		
5.3.2.3		Apron concrete: Class 20MPa/19mm in max. lengths of 1.5m	m^3	2.53		
5.3.2.4		Pump bases: Class 25MPa/19mm	m^3	0.76		
5.3.2.5		Supply and install 150 micron thick polythene sheeting under floor slab	m^2	34		
5.3.3		Unformed Surface Finishes				
5.3.3.1		a) Wood-floated - Floor	m^2	23.0		
5.3.3.2		b) Wood-floated - Apron	m^2	25.3		
5.3.4		Booster Pump Station Pipework and Fittings Supply, handle and install, test and disinfect, galvanised steel pipework for pumping station, flanged to to SABS 1123-1977, Table 1600/3, inclusive of all bolts and gaskets as per drwg no. 1225/BW/03 and 04				
5.3.4.1		Item 1	No	2		
5.3.4.2		Item 2	No	1		
5.3.4.3		Item 3	No	2		
5.3.4.4		Item 4	No	2		
5.3.4.5		Item 5	No	1		
5.3.4.6		Item 6	No	2		
5.3.4.7		Item 7	No	1		
5.3.4.8		Item 8	No	4		
5.3.4.9		Item 9	No	2		
5.3.4.10		Item 10	No	2		
5.3.4.11		Item 11	No	2		
5.3.4.12		Item 12	No	2		
5.3.4.13		Item 13	No	4		
5.3.4.14		Item 14	No	4		
					CARRIED FORWARD	

SCHEDULE 5
BOOSTER PUMP STATION

ITEM NO.	*REFE-RENCE*	*DESCRIPTION*	*UNIT*	*QUANT*	*RATE R c*	*AMOUNT R c*
					BROUGHT FORWARD	
5.3.4.15		Item 15	No	2		
5.3.4.16		Item 16	No	1		
5.3.4.17		Item 17	No	1		
5.3.4.18		Item 18	No	1		
5.3.4.19		Item 19	No	1		
5.3.4.20	8.2.3	Item 20	No	2		
5.3.4.21		Item 21	No	1		
5.3.5		Building Work				
5.3.5.1		Construct complete pumping station building super structure brickwork, flashings, air bricks, electrical sleeves and painting as per drwg no. 1225/BW/02	Sum	1		
5.3.5.2		Supply and install IPE 200 x 100 x 22kg/m crane girder complete with end stops, support brackets complete as per drwg no. 1225/BW/02	Sum	1		
5.3.5.3		Supply, handle and install pipe supports complete as per drwg. no. 1225/BW/03 a) 400mm size- floor mounted concrete supports	No	3		
5.3.5.4		b) 50mm size- floor mounted steel supports	No	3		
5.3.5.5		Paint pipework, valves, pumps, motors and structural steelwork with a final layer of gloss enamel paint to colour codes approved by Enginee	Sum	1		
5.3.5.6		Supply and install chainblock trolley and chainblock rated 500kg	No	1		
5.3.5.7		Standard Transformer door, 1,525 x 2,440 cut to suit overhead crawl beam, with doorframe	No	1		
5.3.5.8		350mm Tornado Turbine roof ventilator, ridge mounted	No	2		
5.3.5.9		New T-connection for Tank-M4 overflow	No	1		
5.3.5.10		Galvanised Steel Pipes, 200mm ø, flanged to Table 1600/3, 6m lengths	No	12		
					SUB-TOTAL CARRIED FORWARD TO SUMMARY	

SCHEDULE 6
BULK SEWER RISING MAIN

ITEM NO.	*REFE-RENCE*	*DESCRIPTION*	*UNIT*	*QUANT*	*RATE*	*AMOUNT*
					R. c.	*R. c.*
6		**BULK SEWER RISING MAIN**				
6.1	**SABS 1200DA**	**EARTHWORKS(Small Works)**				
	8.3.1	**Excavation**				
6.1.1	8.3.1(a)	Remove topsoil to nominal depth 150mm over pipelines 1m wide, stockpile and maintain	m^2	365		
	8.3.2	**Restricted Excavation**				
	8.3.2(a)	Excavate for manholes to a maximum depth of 3.0m in all materials, backfill and compact and dispose of surplus/unsuitable material to approved dumping site				
6.1.2		Depth : 0 - 2.0m	m^3	4,5		
6.1.3		Depth : 2.0 - 3.0m	m^3	2,3		
	8.3.2(b)	Extra over item 6.1.2 + 6.1.3 for :				
6.1.4		1) Hard rock excavation	m^3	2,3		
6.2	SABS 1200 DB	**EARTHWORKS (Pipe Trenches)**				
	8.3.2(a)	**Excavation**				
		Excavate in all materials for trenches, backfill and compact and dispose of surplus/unsuitable material to approved dumping site for pipes up to 200mm ø for depths				
6.2.1		Between : 0 - 2.0m	m	300		
6.2.2		Between : 2.0 - 3.0m	m	65		
6.2.3		Shoring where instructed	m	100		
	8.3.2(b)	Extra over item 6.2.1 + 6.2.2 for :				
6.2.4		1) Hard rock excavation	m^3	102		
6.2.5	8.3.3.3	Backfill with soilcrete (4% cement) and compaction in road reserves	m^3	42		
6.2.6	8.3.3.4	Overhaul (Freehaul distance = 5km)	$m^3.km$	1000		
	8.3.5	**Existing Services**				
6.2.7		Unknown service that intersect the pipe trench to be repaired and protected after damage	No	8		
	8.3.6	**Finishing**				
6.2.8	PSDB2	Compaction tests where directed by engineer over and above tests for contractor's quality control	Prov. Sum	1	R 10 000.00	R 10 000.00
					CARRIED FORWARD	

SCHEDULE 6
BULK SEWER RISING MAIN

ITEM NO.	REFE-RENCE	DESCRIPTION	UNIT	QUANT	RATE R c	AMOUNT R c
					BROUGHT FORWARD	
6.3	SABS 1200LB	**BEDDING(Pipes)**				
		Provision of Bedding				
	8.2.1	**From trench excavation**				
6.3.1		a) Selected plain bedding	m^3	6		
6.3.2		b) Selected fill blanket	m^3	25		
	8.2.2	**From Commercial sources**				
6.3.3		a) Selected plain bedding	m^3	20		
6.3.4		b) Selected fill blanket	m^3	74		
6.4	SABS 1200LD	**SEWERS** (See drwg. no.1225/BS/01 & 1225/BS/02)				
	8.2.1	Supply, handle, bed, lay and test Ultraflow PVC-M Class 12 (SANS 966-2)				
6.4.1		110mm diam.	m	365		
	8.2.3	**Manholes**				
6.4.2		Construct manholes up to maximum depth of 3.0m complete as detailed on drwg. 1225/BS/07 i) Depth : 0 - 2.0m	No	1		
6.4.3		Connect to existing manhole onto existing sewer lin as per drwg. no. 1225/BS/07	No	1		
6.4.4		Construct road crossings as per detail on drwg. no. 1225/BS/07	No	4		
					SUB-TOTAL CARRIED FORWARD TO SUMMARY	

SCHEDULE 7
BULK SEWER PUMP STATION

ITEM NO.	*REFE-RENCE*	*DESCRIPTION*	*UNIT*	*QUANT*	*RATE*	*AMOUNT*
					R. c.	*R. c.*
7		**BULK SEWER PUMP STATION**				
7.1	SABS 1200DB	**Pipe Trenches**				
7.1.1	8.3.1	Site Clearance				
7.1.1.1	8.3.1(a)	Clear vegetation and trees of girth up to 1m for 3m wide strip	m	15		
7.1.1.2	8.3.1(b)	Removal and backfill of 150mm layer of topsoil over the width of trench.	m^2	45		
7.1.2	8.3.2(a)	Excavation Excavation in all materials for trenches, backfill and compact, including disposal of surplus/ unsuitable material for pipes: Up to 200 mm diameter for depths **OVER AND UP TO**				
7.1.2.1		0,0m 1,5m	m	12		
7.1.2.2		1,5m 2,5m	m	3		
7.1.3	8.3.2(b)	Extra over item 7.1.2 above for: Hard Rock excavation	m^3	3		
7.1.4	8.3.5 8.3.5(a)	Existing Services Dealing with existing Services that intersect a trench. The rate shall include the additional cost to care for during the excavation, protecting and maintaining the service, delays and disruption of progress and repairs necessitated by damage caused by the Contractor.				
7.1.4.1		Electrical Cables (Provisional)	No	r/o		
7.1.4.2		Water pipes with ø exeeding 25mm up to 450 mm (Provisional)	No	r/o		
7.2	SABS 1200GA	**Concrete : Small Works**				
7.2.1		Mass Concrete				
7.2.1.1	8.4.3	15 MPa concrete to thrust blocks and the like, including shuttering. Excavation measured elsewhere	m^3	5		
7.3	SABS 1200G	**Bulk Sewer Pump Station**				
7.3.1		Reinforcement				
7.3.1.1	8.3.1	Reinforcement, high tensile steel dia.: a) 8mm and up to 16mm	t	1.4		
7.3.1.2	8.3.2	Welded mesh Ref 193 for floor	m^2	44		
7.3.2		Concrete				
7.3.2.1		Strip foundation: Class 20MPa/19mm	m^3	3.0		
7.3.2.2		Floor slab: Class 25MPa/19mm	m^3	3.2		
7.3.2.3		Apron concrete: Class 20MPa/19mm in max. lengths of 1.5m	m^3	2.6		
					CARRIED FORWARD	

SCHEDULE 7
BULK SEWER PUMP STATION

ITEM NO.	*REFE-RENCE*	*DESCRIPTION*	*UNIT*	*QUANT*	*RATE R c*	*AMOUNT R c*
					BROUGHT FORWARD	
7.3.2.4		Pump bases: Class 25MPa/19mm	m^3	0.9		
7.3.2.5		Supply and install 150 micron thick polythene sheeting under floor slab	m^2	15		
7.3.3		Unformed Surface Finishes				
7.3.3.1		a) Wood-floated - Floor	m^2	24.7		
7.3.3.2		b) Wood-floated - Apron	m^2	24.0		
7.3.4		Booster Pump Station Pipework and Fittings Supply, handle and install, test and disinfect, stainless steel pipework for pumping station, flanged to to SABS 1123-1977, Table 1600/3, inclusive of all bolts and gaskets as per drwg no. 1225/BS/04, 05 and 06				
7.3.4.1		Item 1	No	3		
7.3.4.2		Item 2	No	1		
7.3.4.3		Item 3	No	3		
7.3.4.4		Item 4	No	3		
7.3.4.5		Item 5	No	3		
7.3.4.6		Item 6	No	3		
7.3.4.7		Item 7	No	2		
7.3.4.8		Item 8	No	1		
7.3.4.9		Item 9	No	2		
7.3.4.10		Item 10	No	1		
7.3.4.11		Item 11	No	1		
7.3.4.12		Item 12	No	1		
7.3.4.13		Item 13	No	1		
7.3.4.14		Item 14	No	1		
7.3.4.15		Item 15	No	1		
7.3.4.16		Item 16	No	1		
7.3.4.17		Item 17	No	3		
7.3.4.18		Item 18	No	3		
7.3.4.19		Item 19	No	3		
7.3.4.20	8.2.3	Item 20	No	5		
7.3.4.21		Item 21	No	3		
7.3.4.22		Item 22	No	3		
7.3.4.23		Item 23	No	1		
					CARRIED FORWARD	

ITEM NO.	REFE-RENCE	DESCRIPTION	UNIT	QUANT	RATE R c	AMOUNT R c
					BROUGHT FORWARD	
7.3.4.24		Item 24	No	1		
7.3.4.25		Item 25	No	1		
7.3.4.26		Item 26	No	1		
7.3.4.27		Item 27	No	1		
7.3.4.28		Item 28	No	1		
7.3.4.29		Item 29	No	1		
7.3.4.30		Item 30	No	2		
7.3.4.31		Item 31	No	1		
7.3.4.32		Item 33	No	1		
7.3.5		Building Work				
7.3.5.1		Construct complete pumping station building super structure brickwork, flashings, air bricks, electrical sleeves and painting as per drwg no. 1225/BS/03 and 04	Sum	1		
7.3.5.2		Supply and install IPE 200 x 100 x 22kg/m crane girder complete with end stops, support brackets complete as per drwg no. 1225/BS/03	Sum	1		
7.3.5.3		Supply, handle and install pipe supports complete as per drwg. no. 1225/BS/04 a) 50mm size- floor mounted steel supports	No	3		
7.3.5.4		Paint pipework, valves, pumps, motors and structural steelwork with a final layer of gloss enamel paint to colour codes approved by Engineer	Sum	1		
7.3.5.5		Supply and install chainblock trolley and chainblock rated 500kg	No	1		
7.3.5.6		Standard Transformer door, 1,525 x 2,440 cut to suit overhead crawl beam, with doorframe	No	1		
7.3.5.7		350mm Tornado Turbine roof ventilator, ridge mounted	No	2		
7.3.5.8		Construct complete pumping station trench-type suction pit of reinforced concrete, concrete staircase, ogee ramp, pockets for 2 vanes and 1 cone, fixing of sluice gate and anti-rotation baffle	sum	1		
7.3.5.9		Supply and install top mounted 1,0m high Stainless Steel handrailing, comprising a handrail and a knee rail supported on standards with maximum span of 1,4m between standards. Size of tube to be 34,0mm OD with 2,65mm wall thickness	m	4.25		
					SUB-TOTAL CARRIED FORWARD TO SUMMARY	

CONTRACT NO. :

MARAPONG X6 CRU - BULK WATER SUPPLY AND BULK SEWER TRANSFER

BILL OF QUANTITIES

S U M M A R Y

SECTION NO.	*DESCRIPTION*	*AMOUNT*
1	Preliminary and General	R .....
2	Site Clearance	R .....
3	Sealing of Existing 8,5 Mℓ Reservoir	R .....
4	Elevated Sectional Steel Tank	R .....
5	Booster Pump Station	R .....
6	Bulk Sewer Rising Main	R .....
7	Bulk Sewer Pump Station	R .....
TOTAL FOR SECTIONS 1 TO 7	**SUB-TOTAL "X"**	**R .....**
CONTINGENCIES : ADD : 10 % of the above Sub-Total "X" as a Provisional Sum to cove the cost of Contingencies and to be expended only as the Engineer may direct		R .....
	SUB-TOTAL "Y"	**R .....**
CONTRACT PRICE ADJUSTMENT ADD : 0,23 % x …….. *WEEKS = ……. % of the above Sub-Total "Y" being a Provisional Sum to provide for Adjustment of Price		R .....
	NETT TENDER AMOUNT "T"	**R .....**
ADD : 15 % of Nett Tender Amount "T" for VALUE ADDED TAX (VAT)		R .....
GROSS TENDER TOTAL (Carried to FORM OF OFFER)		**R .....**

NOTE : *The Tenderer must enter the Time for Completion in weeks in accordance with the Contract Data and calculate the applicable percentage and amount for c.p.a.