Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
1	SABS 1200 A PSA	**SECTION 1 : PRELIMINARY AND GENERAL**				
1.1	8.3	**FIXED CHARGE AND VALUE RELATED ITEMS:**				
1.1.1	8.3.1	Contractual Requirements	Sum	1	R	R
1.1.2	PSA 8.3.2.1 PSAB	**Facilities for Engineer:** a) Engineer's offices, Office Furniture and Carports as per Specifications for RE and 2 Assistants	Sum	1	R	R
		b) Combination photocopying fax & telephone machine	Sum	1	R	R
		c) Nameboards (2 No)	Sum	1	R	R
		d) Survey assistant and survey materials	Sum	1	R	R
		e) Boardroom for meetings (20 people) including conference table and chairs	Sum	1	R	R
		f) Safety equipment, including hard hats, removable revolving orange light for vehicles & reflective vests for 3	Sum	1	R	R
1.1.3	8.3.2.2	**Facilities for Contractor:**				
		a) Offices and storage sheds	Sum	1	R	R
		b) Workshops	Sum	1	R	R
		c) Living accommodation	Sum	1	R	R
		d) Ablution and latrine facilities	Sum	1	R	R
		e) Tools and equipment	Sum	1	R	R
		f) Water supplies, electric power and communications	Sum	1	R	R
		g) Dealing with water	Sum	1	R	R
		h) Access	Sum	1	R	R
		i) Plant	Sum	1	R	R
1.1.4	8.3.3	Other fixed-charge obligations	Sum	1	R	R
1.1.5	8.3.3	Environmental Specification	Sum	1	R	R
1.1.6	8.3.3	Safety plan	Sum	1	R	R
1.1.7	8.3.4	Removal of site establishment	Sum	1	R	R
1.1.8	PSA 8.3.5	Security of Contractor's plant and personnel	Sum	1	R	R
1.2	**PSA 8.4**	**TIME RELATED ITEMS**				
1.2.1	8.4.1	Contractual Requirements	Month	12	R	R
1.2.2	PSA 8.4.2.1	Facilities for Engineer:				
TOTAL CARRIED FORWARD TO NEXT PAGE						**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
TOTAL CARRIED FORWARD FROM PREVIOUS PAGE						**R**
	PSAB	a) Office and office Furniture for 3	Month	12	R	R
		b) Combination photocopying fax & telephone machine	Month	12	R	R
		c) Nameboards (2 No)	Month	12	R	R
		d) Survey assistant and survey materials	Month	12	R	R
		e) Boardroom for meetings (20 people) including conference table and chairs	Month	12	R	R
		f) Safety equipment, including hard hats, removable revolving orange lights for vehicle & reflective vests for 3	Month	12	R	R
1.2.3	8.4.2.2	**Facilities for Contractor:**				
		a) Offices and storage sheds	Month	12	R	R
		b) Workshops	Month	12	R	R
		c) Living accommodation	Month	12	R	R
		d) Ablution and latrine facilities	Month	12	R	R
		e) Tools and equipment	Month	12	R	R
		f) Water supplies, electric power and communications	Month	12	R	R
		g) Dealing with water	Month	12	R	R
		h) Access	Month	12	R	R
		i) Plant	Month	12	R	R
1.2.4	8.4.3	Supervision for duration of construction	Month	12	R	R
1.2.5	8.4.4	Company and head office overhead costs for the duration of the contract	Month	12	R	R
1.2.6	8.4.5	Other time-related obligations	Month	12	R	R
1.2.7	8.4.5	Environmental specification	Month	12	R	R
1.2.8	8.4.5	Implementation of Safety plan as per OHS Act	Month	12	R	R
1.2.9	8.4.5	Security of Contractor's plant and personnel	Month	12	R	R
1.2.10		Payment of CLO @ 6000.00 per month	Month	12	R	R
TOTAL CARRIED FORWARD TO NEXT PAGE						**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
TOTAL CARRIED FORWARD FROM PREVIOUS PAGE						**R**
1.5	8.5	**Sums stated provisionally by the Engineer**				
		Testing				
		b) Material Testing to check testing done by contractor	Prov sum	1	R 50 000.00	R 50 000.00
1.6		**Other testing requirements**				
		a) Allow for attendance to all factory inspections, such as travel expenses, accommodation and per diem.	Prov Sum	1	R 5 000.00	R 5 000.00
		b) Electrical - Allow to test and commission the complete installation in the presence of the engineer and the client's representative and hand over for commercial use	Prov Sum	1	R 5 000.00	R 5 000.00
1.7		Training of Labourers	Prov Sum	1	R 50 000.00	R 50 000.00
1.8		Provisional Sum for costs hiring training venue and labour payment during training	Prov Sum	1	R 5 000.00	R 5 000.00
1.11		Accomodation for engineer's site personnel	Prov Sum	1	R 120 000.00	R 120 000.00
1.14		Additional Surveys required by Engineer	Prov Sum	1	R 50 000.00	R 50 000.00
1.15		Allow for all additional tests and compliance for registration of plant and WUL	PC Sum	1	R 20 000.00	R 20 000.00
1.16		Handling cost for 1.5 to 1.11 above	%	R 305 000.00	____%	R
TOTAL SECTION 1 CARRIED FORWARD TO SUMMARY OF SCHEDULES						**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
2		**SECTION 2 : NEW DISTRIBUTION BOX**				
2.1	SANS 1200 C	**SITE CLEARANCE**				
2.1.1	8.2.1	Clear site	m²	6.0	R	R
2.1.2		Remove topsoil, as designated by Engineer, to nominal depth of 100mm and stockpile	m³	1.0	R	R
2.2	SANS 1200 D					
		Bulk earthworks for Structures				
	8.3.2 (a)	**Excavate and trim in all materials to the level of blinding layer and spread and compact on site at designated area, unsuitable or excess backfill material from:**				
2.2.1		Cut to stockpile	m³	1.0	R	R
2.2.2	PSD3.3.2	Cut to fill	m³	1.0	R	R
2.2.3		Cut to spoil	m³	10.0	R	R
		Restricted Excavation				
	8.3.2(b)	**Extra -over items 3.2.4 for:**				
2.2.5		Intermediate material	m³	10	R	R
2.2.6		Hard Rock material	m³	5	R	R
		Restricted Backfill				
2.2.7		Extra over items 3.21 to 3.2.4 for backfill with material from stockpile	m³	3.0	R	R
2.3	SANS 1200 G	**CONCRETE (Structural)**				
	8.4.3 PSG3.4.4	**Strength concrete : 30 Mpa/19mm**				
2.3.1		Walls, floor, columns anf floor of reactor. Walls, floor and various structural concrete of SST	m³	11	R	R
2.3.2	PSG8.5.3	Screed	m²	11	R	R
2.3.3	8.4.2 PSG8.1.3.4	Blinding layer 50mm thick in 15 Mpa/19 mm concrete	m²	6	R	R
2.4	8.1.1 PSG4.5	**FORMWORK**				
		Rough				
TOTAL CARRIED FORWARD TO NEXT PAGE						**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
TOTAL CARRIED FORWARD FROM PREVIOUS PAGE						**R**
	8.2.1 PSG4.5.1	**Walls below ground level at:**				
2.4.1	PSG4.5.2	Vertical at 3.8m	m²	30.0	R	R
2.4.2						
	8.2.2	**Smooth**				
		Walls above ground level at:				
2.4.3		Vertical at 2m	m²	18	R	R
2.4.4		Vertical for platform	m²	1	R	R
2.4.5		Vertical internal wall	m²	17	R	R
2.4.6		Soffit of walkway	m²	3	R	R
2.4.7	PSG 8.1.1.2	Small narrow vertical widths 300mm wide	m	1	R	R
	8.2.6 PSG5.4	**Box out holes/form voids**				
2.4.8	PSG 8.1.3.6	Circular up to 1m diameter for depth over and up to 0m to 0.25m deep	No	2	R	R
2.5	PSG5.1 PSG8.1.2	**REINFORCEMENT**				
2.5.1	8.3.1	High-tensile steel bars 10 - 32mm diameter	t	3	R	R
2.6	8.4.4	**UNFORMED SURFACE FINISHES**				
		Wood-floated finish				
2.6.1		Top of walls	m²	3	R	R
2.6.2		Top of walkway	m²	1	R	R
		Steel-floated finish				
2.6.3	PSG7.3.6	Create 45º degree overflow weirs	m²	0.5	R	R
2.8	SANS 1200 HA PSHA 8.1	**STRUCTURAL STEELWORK (Small Works)**				
TOTAL CARRIED FORWARD TO NEXT PAGE						**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
TOTAL CARRIED FORWARD FROM PREVIOUS PAGE						**R**
2.8.1	PSHA 8.2.5	Handrailing, hot dipped galvanised, complete with stainless steel HD bolts.	m	7	R	R
2.10		**MISCELLANEOUS**				
2.10.1		Allow a provisional sum for small items omitted from this section	P.Sum	1	R 20 000.00	R 20 000.00
2.10.2	PSG7.2.6	Watertightness testing	Sum	1	R	R
TOTAL SECTION 2 CARRIED FORWARD TO SUMMARY OF SCHEDULES						**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
3		**SECTION 3: CLARIFIER/SECONDARY SETTLING TANK**				
3.1	SANS 1200 C	**SITE CLEARANCE**				
3.1.1	8.2.1	Clear site	ha	0.05	R	R
3.1.2		Remove topsoil, as designated by Engineer, to nominal depth of 100mm and stockpile	m³	28	R	R
3.2	SABS 1200 D	**EARTHWORKS**				
		Bulk earthworks for Structures				
	8.3.2 (a)	Excavate and trim in all materials to the level of blinding layer and spread and compact on site at designated area, unsuitable or excess backfill material from:				
3.2.1		Cut to stockpile	m³	28	R	R
3.2.2	PSD3.3.2	Cut to fill	m³	57	R	R
3.2.3		Cut to spoil	m³	482	R	R
		Restricted Excavation				
	8.3.2(b)	**Extra -over item 5.2.1 to 5.2.4 for:**				
3.2.5		Intermediate material	m³	350	R	R
3.2.6		Hard Rock material	m³	100	R	R
		Restricted Backfill				
3.2.7		Extra over item 5.2.2 for backfill with material from stockpile	m³	113	R	R
3.3	SABS 1200 G 8.1.3	**CONCRETE (Structural)**				
3.3.1	8.4.2 PSG8.1.3.4	Blinding layer 50mm thick in 15 Mpa/19mm concrete	m²	50	R	R
3.3.2		No fines concrete : 15 MPa/19mm	m³	210	R	R
3.3.3		Mass concrete: 20 MPa/19mm	m³	2	R	R
	8.4.3 PSG3.4.4	**Strength concrete : 35 Mpa/19mm**				
3.3.4		Wall footings and centre column	m³	68	R	R
3.3.5		Walls and effluent launder	m³	83	R	R
3.3.6		Floors	m³	14	R	R
3.3.7		Outlet boxes	m³	15	R	R
TOTAL CARRIED FORWARD TO NEXT PAGE						**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
		TOTAL CARRIED FORWARD FROM PREVIOUS PAGE				**R**
3.3.8	PSG8.5.3	50mm (1:4) Cement mortar screed with steelfloat, shaped with mechanical scrapers	m²	284	R	R
3.3.9	PSG8.5.3	Varying depth (1:4) cement mortar screed in channel and outlet box finished with steelfloat	m³	15	R	R
3.4	8.1.1 PSG4.5	**FORMWORK**				
		Rough				
	8.2.1 PSG4.5.1	**Walls below ground at radii:**				
3.4.1	PSG4.5.2	2.5m and 9.88m	m²	182	R	R
3.4.3		4.5m (circular expansion joint in floor)	m²	20	R	R
3.4.4		In expansion joints - Vertical plane	m²	80	R	R
3.4.5		Vertical at radii of between 1.5m	m²	38	R	R
3.4.6		Vertical at radii of between 9.88m and 10.18m (Above Ground)	m²	151	R	R
3.4.7		Walls vertical plane (boxes)	m²	80	R	R
3.4.8		Soffit to channel (effluent launder)	m²	180	R	R
3.5	8.2.6 PSG5.4	**BOX OUT HOLES/FORM VOIDS**				
3.5.1	PSG 8.1.3.6	Box out holes/form voids, large, other shapes, area 0.1 - 0.36m² for depths over and up to 0m - 0.25m	No	6	R	R
3.6	PSG5.1 PSG8.1.2	**REINFORCEMENT**				
3.6.1	8.3.1	High-tensile steel bars 10 - 32mm diameter	t	13.5	R	R
3.7	8.4.4	**UNFORMED SURFACE FINISHES**				
		Wood floated finish				
3.7.1		To top of walls	m²	30	R	R
		Steel floated finish				
3.7.2		To top of screeds in outlet boxes and overflow channel	m²	50	R	R
3.7.3	PSG7.3.6	Special finish to top of overflow weir	m	50	R	R
3.7.4		Special surface finish to sliding joint areas	m²	30	R	R
3.8	8.5 PSG8.1.3.5	**JOINTS**				
3.8.1		Type 7: Floor expansion joint	m	150	R	R
		TOTAL CARRIED FORWARD TO NEXT PAGE				**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
TOTAL CARRIED FORWARD FROM PREVIOUS PAGE						**R**
3.8.3		Type 1:Horizontal construction joint in walls	m	70	R	R
3.12		**SUB-SOIL DRAINAGE**				
3.12.1		uPVC non-perforated pipes, 110mm diameter, in Class C bedding	m	100	R	R
3.13		**MISCELLANEOUS**				
3.13.1		Allows a provisional sum for small items omitted from this section	PC-Sum	1	R 50 000.00	R 50 000.00
3.13.2	PSG7.2.8	Watertighness testing of unit	Sum	1	R	R
TOTAL SECTION 3 CARRIED FORWARD TO SUMMARY OF SCHEDULES						**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
4		**SECTION 4: ANAEROBIC ZONE REACTOR**				
4.1	SANS 1200 C	**SITE CLEARANCE**				
4.1.1	8.2.1	Clear site	ha	0.04	R	R
4.1.2		Remove topsoil, as designated by Engineer, to nominal depth of 100mm and stockpile	m³	36	R	R
4.2	SABS 1200 D	**EARTHWORKS**				
		Bulk earthworks for Structures				
	8.3.2 (a)	**Excavate and trim in all materials to the level of blinding layer and spread and compact on site at designated area, unsuitable or excess backfill material from:**				
4.2.1		Cut to stockpile	m³	68	R	R
4.2.2	PSD3.3.2	Cut to fill	m³	135	R	R
4.2.3		Cut to spoil	m³	1151	R	R
		Restricted Excavation				
4.2.4		Excavate and trim in all material and place at stockpile on site for reuse and spread excess unused material on site or unused ponds	m³	500	R	R
	8.3.2(b)	**Extra -over item 8.2.1 to 8.2.4 for:**				
4.2.5		Intermediate material	m³	400	R	R
4.2.6		Hard Rock material	m³	200	R	R
		Restricted Backfill				
4.2.7		Extra over item 8.2.4 for backfill with material from stockpile	m³	271	R	R
4.3	SANS 1200G 8.1.3	**CONCRETE (Structural)**				
4.3.1	8.4.2 PSG8.1.3.4	Blinding layer 50mm thick in 15 Mpa/19 mm concrete	m²	450	R	R
	8.4.3 PSG3.4.4	**Strength concrete : 35 Mpa/19mm**				
4.3.3		Floor slab	m³	89	R	R
4.3.4		Stairs and walkway	m³	29	R	R
4.3.5		Walls & Columns	m³	52	R	R
4.3.6		**Mass Concrete in benching** : 15 Mpa/19mm	m³	20	R	R
TOTAL CARRIED FORWARD TO NEXT PAGE						**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
		TOTAL CARRIED FORWARD FROM PREVIOUS PAGE				**R**
4.4	8.1.1 PSG4.5	**FORMWORK**				
		Rough				
4.4.1	8.2.1 PSG4.5.1	Walls below ground level, vertical	m²	278	R	R
4.4.2	PSG4.5.2	Narrow widths up to 300mm wide	m	50	R	R
		Smooth				
4.4.3	8.2.2	Vertical plane to walls	m²	148	R	R
4.4.4	PSG 8.1.1.2	Soffit of walkway and columns	m²	75	R	R
4.5	8.2.6 PSG5.4 PSG 8.1.3.6	**BOX OUT HOLES / FORM VOIDS** **Small, circular up to 1m dia for depth over and up:**				
4.5.1		To 0m to 0.3m	No	3	R	R
4.6	PSG5.1 PSG8.1.2	**REINFORCEMENT**				
4.6.1	8.1.2	Mild steel bars 10mm diameter	t	0.5	R	R
4.6.2	8.3.2	Mesh ref 617	m²	10	R	R
4.6.3	8.3.1	High-tensile steel bars 10 - 32mm diameter	t	19	R	R
4.7	8.4.4	**UNFORMED SURFACE FINISHES**				
		Wood-floated finish				
4.7.1		Top of walls and walkway	m²	89	R	R
		Steel-floated finish				
4.7.2		Floors	m²	19	R	R
4.7.3		Benching and screeds in boxes	m²	6	R	R
4.7.4	PSG7.3.6	Special finish to top of overflow weir	m	20	R	R
4.8	8.7 PSG5.5.13.4	**GROUTING**				
4.8.1	PSG8.1.3.6	300mm diameter puddle pipe (AR1)	No	1	R	R
4.8.2	PSG8.1.3.6	400mm diameter puddle pipe (AR2)	No	2	R	R
4.9	PSB 1.19	**PIPEWORK**				
4.9.1		Supply and install (Including lay and bed) the subsoil-drainage pipe, consisting of 110mm perforated pipe in position as indicated on the drawings	m	150	R	R
4.1	SANS 1200 HA PSHA 8.1	**STRUCTURAL STEELWORK (Small Works)**				
4.10.1	PSHA 8.2.5	Handrailings as specified	m	89	R	R
		TOTAL CARRIED FORWARD TO NEXT PAGE				**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R	Rate c	Amount R	Amount c
TOTAL CARRIED FORWARD FROM PREVIOUS PAGE							**R**	
4.11	PSG8.1.3.5 8.5	**JOINTS**						
4.11.1		Isolation joint (As per structural drawings)	m	200	R		R	
4.12		**MISCELLANEOUS**						
4.12.1		Allow a provisional sum for small items omitted from this section	P.Sum	1	R	50 000.00	R	50 000.00
4.12.2	PSG7.2.6, PSG 8.5.4	Watertightness testing	Sum	1	R		R	
TOTAL SECTION 4 CARRIED FORWARD TO SUMMARY OF SCHEDULES							**R**	

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
	SANS 1200 DB, L, LB	**SECTION 5 : INTERCONNECTING PIPEWORK**				
5.1		**EXCAVATION**				
	8.3.2(a)	**Excavate in all materials for trenches backfill, compact, and dispose of surplus/unsuitable material, for pipes:**				
		From 40 up to 200mm Diameter for total trench depth (trench width 600mm)				
5.1.1		0.0 - 1.0m	m	220	R	R
5.1.2		1.0 - 2.0m	m	80	R	R
		From 250mm up to 450mm diameter for total trench depth (trench width 900mm) :				
5.1.3		0.0 - 1.0m	m	100	R	R
	8.3.2(b)	**Extra-over items 5.1.1 to 5.1.3 incl. for:**				
5.1.4		Intermediate excavation	m³	20	R	R
5.1.5		Hard rock excavation	m³	10	R	R
5.2	SABS 1200 LB 8.2.1	**PROVISION OF BEDDING** **Available from trench or within 2.0km freehaul**				
5.2.1		Selected granular material	m³	36	R	R
5.2.2		Selected fill material	m³	20	R	R
5.3	SABS 1200L	**MEDIUM PRESSURE PIPELINE**				
		Supply, handle, lay and bed and test with uPVC couplings:				
5.3.1		250mm diameter uPVC Class 9	m	80	R	R
5.3.2		200mm diameter uPVC Class 9	m	70	R	R
5.3.3		200mm diameter uPVC Class 6	m	150	R	R
5.3.4		110mm diameter uPVC Class 6	m	80	R	R
5.3.5		300mm diameter uPVC Class 6 (pipe 4)	m	20	R	R
TOTAL CARRIED FORWARD TO NEXT PAGE						**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
TOTAL CARRIED FORWARD FROM PREVIOUS PAGE						**R**
5.4.6		250mm Sch40 STD flanged galvanized steel pipe (Including flanges and flange adaptor as per drawings)	m	15	R	R
5.4.7		200mm Sch40 STD flanged galvanized steel pipe (Including flanges and flange adaptor as per drawings)	m	10	R	R
		110mm Diameter uPVC fittings (pipe 12):				
5.4.8		45 degree bend	No	2	R	R
		200mm dia uPVC/cast iron fittings (pipe 11)				
5.4.9		45 degree bend	No	5	R	R
5.4.10		90 degree bend	No	1	R	R
		Sch40 STD fittings custom made:				
		250mm Sch40 STD pipe	No.	2	R	R
		ANCILLARIES				
5.5.28	8.2.11	Anchor/thrust blocks and pedestals including class 20/19 Mpa concrete and formwork	m^3	10	R	R
TOTAL SECTION 5 CARRIED FORWARD TO SUMMARY OF SCHEDULES						**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
6	**PSB2.5**	**SECTION 6: MIXERS (STIRRERS)**				
6.1		**SUPPLY**				
		Supply of the following plant, including the storage, quality assurance and painting where applicable:				
	PSB2.5.1	**Biological Reactor: Vertical shaft mixers on platforms:**				
6.1.1		Anaerobic Basin (proposed new reactor)	No	4	R	R
6.2		**INSTALLATION AND COMMISSIONING**				
6.2.1		Produce mechanical drawings for all plant supplied under items 6.1.1	Sum	1	R	R
6.2.2		Erection & installation of plant & materials supplied under items 6.1.1	Sum	1	R	R
6.2.3		Commissioning of plant & equipment supplied under items 6.1.1	Sum	1	R	R
6.2.4		Allow for the cost of returning to site if necessary and if ordered, in order to carry out tests on the plant.	PC Sum	1	R 50 000.00	R 50 000.00
		Period for complete delivery of all plant and material from date of order.....weeks				
		Period in which complete erection will be affected and plant handed over to the satisfaction of the Engineer, from the date of delivery or receipt of order with erection, whichever is later.....weeks				
TOTAL SECTION 6 CARRIED FORWARD TO SUMMARY OF SCHEDULES						**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
7	**PSB2.6**	**SECTION 7: SURFACE AERATORS (Existing Aerobic Reactor)** **Refurbish existing plant, including the all the plant and equipment required to remove, handle, storage, quality assurance and painting where applicable:**				
7.1		**MOTORS AND GEARBOXES**				
7.1.1	PSB2.6	For Aerators (45kW)	No	4	R	R
7.2		**INSTALLATION AND COMMISSIONING**				
7.2.1		Erection & re-installation of plant & materials refurbished under items 7.1.1	No	4	R	R
7.2.3		Commissioning of plant & equipment under items 7.1.1	Sum	1	R	R
7.2.4		Allow for the cost of returning to site if necessary and if ordered, in order to carry out tests on the plant.	PC Sum	1	R 20 000.00	R 20 000.00
		Period for complete delivery of all plant and material from date of order.....weeks **Period in which complete erection will be affected and plant handed over to the satisfaction of the Engineer, from the date of delivery or receipt of order with erection, whichever is later.....weeks**				
TOTAL SECTION 7 CARRIED FORWARD TO SUMMARY OF SCHEDULES						**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
8	**PSB2.16**	**SECTION8: CLARIFIER ROTATING BRIDGES**				
		Supply of the following plant, including the storage, quality assurance and painting where applicable:				
8.1		**CLARIFIER EQUIPMENT**				
8.1.1	PSB2.16.3	Rotating bridge, handrailings, sludge scraper equipment mounted to bridge, corrosion protection, driving motor,bridge wheel and electrical connections as specified.	No	1	R	R
8.1.2	PSB2.16.5	Weir plate each 60m long	No	1	R	R
8.1.3	PSB2.16.4	Stilling chambers	No	1	R	R
8.2		**INSTALLATION AND COMMISSIONING**				
8.2.1		Design, and submit for approval and produce mechanical drawings for all plant supplied under items 8.1.	Sum	1	R	R
8.2.2		Erection & installation of plant & materials supplied under items 8.1.	Sum	1	R	R
8.2.3		Commissioning of plant & equipment supplied under items 8.1.	Sum	1	R	R
8.2.4		Allow for the cost of returning to site if necessary and if ordered, in order to carry out tests on the plant.	PC Sum	1	R 50 000.00	R 50 000.00
		Period for complete delivery of all plant and material from date of order.....weeks				
		Period in which complete erection will be affected and plant handed over to the satisfaction of the Engineer, from the date of delivery or receipt of order with erection, whichever is later.....weeks				
TOTAL SECTION 8 CARRIED FORWARD TO SUMMARY OF SCHEDULES						**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
9	**PSB2.8**	**SECTION 9: PUMPS AND ASSOCIATED PIPEWORK** **Supply of the following pumps (belt driven) and motors with pump stand, mounting plates and bolts as specified, including the storage, quality assurance and painting where applicable:**				
9.1		**RAS PUMPS c/w ultrasonic level switch**				
9.1.1	PSB2.8.4	Pump Gorman Rupp or Cornell or simililar	No	1	R	R
9.2		**DESIGN STEEL PIPE WORK AND SPECIALS** Design and produce mechanical drawings for pump set with pipework as specified as well as provision and installation of all pipework as per design:				
9.2.1		All pipework, couplings and valves to add new pump and motor to existing RAS P/S	PC Sum	1	R 100 000.00	R 100 000.00
9.3		**INSTALLATION AND COMMISSIONING**				
9.3.1		Erection & installation of plant & materials supplied under items 9.1 to 9.2	Sum	1	R	R
9.3.2		Commissioning of plant & equipment supplied under items 9.1 to 9.2	Sum	1	R	R
9.3.3		Allow for the cost of returning to site if necessary and if ordered, in order to carry out tests on the plant.	PC Sum	1	R 50 000.00	R 50 000.00
		Period for complete delivery of all plant and material from date of order.....weeks **Period in which complete erection will be affected and plant handed over to the satisfaction of the Engineer, from the date of delivery or receipt of order with erection, whichever is later.....weeks**				
TOTAL SECTION 9 CARRIED FORWARD TO SUMMARY OF SCHEDULES						**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
10	**PSB2.9**	**SECTION 10: WEIRS AND PENSTOCKS** **Supply of the following plant, including the storage, quality assurance and painting where applicable:**				
10.1		**PENSTOCKS AT ANAEROBIC REACTOR**				
10.2.1	PSB2.9	Rising sluice gate with extended spindles and flush invert	No	3	R	R
10.3	PSB2.9.1	**WEIRS IN STAINLESS STEEL**				
		Flow Division Box				
10.3.1	PSB2.9.1	1000mm Long rectangular	No	1	R	R
10.4		**INSTALLATION AND COMMISSIONING**				
10.4.1		Design and produce mechanical drawings for all plant supplied under items 10.1 to 10.3	Sum	1	R	R
TOTAL CARRIED FORWARD TO NEXT PAGE						**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
TOTAL CARRIED FORWARD FROM PREVIOUS PAGE						**R**
10.4.2		Erection & installation of plant & materials supplied under items 10.1 to 10.3	Sum	1	R	R
10.4.3		Commissioning of plant & equipment supplied under items 10.1 to 10.3	Sum	1	R	R
10.5		**GATE VALVES (SLUICE VALVES)**				
10.5.1		Construction of gate valve chamber, including valve, pipework and fittings and flange adaptors. Includes all jointing, cutting, supply, delivery & installation. All items to comply with SABS 664 & fitted with resiliant seal seats.	No.	1	R	R
		Period for complete delivery of all plant and material from date of order.....weeks **Period in which complete erection will be affected and plant handed over to the satisfaction of the Engineer, from the date of delivery or receipt of order with erection, whichever is later.....weeks**				
TOTAL SECTION 10 CARRIED FORWARD TO SUMMARY OF SCHEDULES						**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
11		**SECTION 11: TRAINING OF PROCESS CONTROLLERS**				
11.1		**OPERATION AND MAINTENANCE**				
11.1.1		Allowance for effluent compliance monitoring and performance of water quality test if required	Prov Sum	1	R 96 000.00	R 96 000.00
11.2		**TRAINING OF OPERATORS**				
11.2.1		Intensive training of Process Controllers for first ten days	Sum	1	R	R
TOTAL SECTION 11 CARRIED FORWARD TO SUMMARY OF SCHEDULES						**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
		SECTION 12: MISCELLANEOUS ITEMS				
12.1		Upgrade access road to the Lethabong WWTW	Prov Sum	1	R 1 350 000.00	R 1 350 000.00
12.2		Relocation and/or protection of existing services to allow uninterrupted operation of the plant	Prov Sum	1	R 300 000.00	R 300 000.00
12.3		Reimbursement for any other specialist work required by the Employer identified during construction	Prov Sum	1	R 200 000.00	R 200 000.00
12.4		Spares and Tools: Supply specified spares not itemised elsewhere in this Schedule of Quantities	Prov Sum	1	R 20 000.00	R 20 000.00
12.5		Recommended spares and tools as per Returnable Technical Data Sheets	Prov sum	1	R 20 000.00	R 20 000.00
12.6		Providing 2 draft copies of the Installation, Operation and Maintenance Manual prior to commissioning of the Works.	Sum	1	R	R
12.7		Providing 6 final copies of the Installation, Operation and Maintenance Manual prior to commissioning of the Works.	Sum	1	R	R
12.8		Provision of all Test Certificates and Certificate of Compliance in terms of the Code of Practice for Wiring of Premises.	Sum	1	R	R
12.9		Supply and install Air-conditioning Unit in MCC Room (24000BTU Air-conditioning Unit)	Sum	1	R	R
12.1		Modification to existing control room to allow for the installation of new MCC panel	Prov. Sum	1	R 50 000.00	R 50 000.00
TOTAL SECTION 12 CARRIED FORWARD TO SUMMARY OF SCHEDULES						**R**

Item No	Payment Clause	Short Description	Unit	Quantity	Rate R c	Amount R c
		SECTION: E1 **LV Switchgear and Control Assemblies**				
		Switchgear Assemblies				
		New Reactor Mixer, RAS, Clarifier Bridge Motor Control Centre complete. Factory acceptance testing.				
E1.1		Supply	Sum	1	R	R
E1.2		Install	Sum	1	R	R
E1.3		Testing and Commissioning	Sum	1	R	R
		New RAS Pump Station Motor Control Centre complete. Factory acceptance testing.				
E1.4		Supply	Sum	1	R	R
E1.5		Install	Sum	1	R	R
E1.6		Testing and Commissioning	Sum	1	R	R
		Field Control Stations				
E1.7		Supply	Sum	6	R	R
E1.8		Install	Sum	6	R	R
E1.9		Testing and Commissioning	Sum	6	R	R
E1.10		**Allow for all costs and expenses in connection with the Site Delivery of items in this section**	Sum	1	R	R
E1.11		Supply	No	8	R	R
E1.12		Modification of existing control panels	Sum	1	R	R
		All other items not included above but which are nevertheless necessary to meet the Scope of Work and/or are required for the proper, safe and effective operation of the plant (Specify):-				
E1.13		……..			R	R
E1.14		……..			R	R
E1.15		……..			R	R
		TOTAL SECTION: E1 **Carried to Summary**				**R**

Item No	Payment Clause	Short Description	Unit	Quantity	Rate R c	Amount R c
		SECTION E2 **Area Lighting**				
		Allow for all the costs and expenses in connection with the following:				
		High mast light fitting				
E2..1		Supply	No	1	R	R
E2..2		Install	No	1	R	R
E2..3		Testing and Commissioning	No	1	R	R
		Photometric Cell				
E2..4		Supply	No	1	R	R
E2..5		Installation	No	1	R	R
E2..6		All other items not included above but which are nevertheless necessary to meet the Scope of Work and/or are required for the proper, safe and effective operation of the plant (Specify)	Sum	1	R	R
		……..			R	R
		……..			R	R
		……..			R	R
		……..			R	R
		……..			R	R
		……..			R	R
		TOTAL SECTION: E2 **Carried to Summary**				**R**

Item No	Payment Clause	Short Description	Unit	Quantity	Rate R c	Amount R c
		SECTION E3 **Cable Supports** **Allow for all costs and expenses in connection with design, manufacture, routine testing, factory acceptance testing (if indicated), supply, delivery, offloading and storage of the following materials and equipment:** Cable Ladder - Stainless steel welded cable ladder, 3mm thick side rails, channel cross rungs at 300mm centres, complete with couplers, clamps, threaded rods, hangers, cantilevers, brackets etc. to fix to trusses, walls. **100 x 100mm (W x H)**				
E3.1		Straight length	m	-	R	Rate only
E3.2		Bends for cable ladder above	No	-	R	Rate only
		200 x 100mm (W x H)				
E3.3		Straight length	m	-	R	Rate only
E3.4		Bends for cable ladder above	No	-	R	Rate only
		300 x 100mm (W x H)				
E3.5		Straight length	m	-	R	Rate only
E3.6		Bends for cable ladder above	No	-	R	Rate only
		600 x 100mm (W x H)				
E3.7		Straight length	m	-	R	Rate only
E3.8		Bends for cable ladder above	No	-	R	Rate only
		800 x 100mm (W x H)				
E3.9		Straight length	m	-	R	Rate only
E3.10		Bends for cable ladder above	No	-	R	Rate only
		1000 x 100mm (W x H)				
		Carried forward / …				**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
		TOTAL CARRIED FORWARD FROM PREVIOUS PAGE				**R**
E3.11		Straight length	m	-	R	Rate only
E3.12		Bends for cable ladder above	No	-	R	Rate only
		Wire Mesh Tray - Stainless steel welded Wire Mesh Cable Tray, 50 x 50mm Base Aperture, 25 x 50mm Side Aperture, complete with splices, couplers, clamps, threaded rods, hangers, brackets etc to fix to trusses, walls etc				
		100 x 50mm (W x H), Ø 4mm Wire				
E3.13		Straight length	m	-	R	Rate only
		200 x 50mm (W x H), Ø 4mm Wire				
E3.14		Straight length	m	-	R	Rate only
		300 x 50mm (W x H), Ø 4mm Wire				
E3.15		Straight length	m	-	R	Rate only
		400 x 50mm (W x H), Ø 4mm Wire				
E3.16		Straight length	m	-	R	Rate only
		Supply hot dipped galvanized steel conduit				
E3.17		20 Ø mm	m	-	R	Rate only
E3.18		25 Ø mm	m	-	R	Rate only
		Allow for all costs and expenses in connection with the Site installation of the following:				
		Cable Ladder - Stainless steel welded cable ladder, 3mm thick side rails, channel cross rungs at 300mm centres, complete with couplers, clamps, threaded rods, hangers, cantilevers, brackets etc. to fix to trusses, walls.				
		100 x 100mm (W x H)				
E3.19		Straight length	m	-	R	Rate only
E3.20		Bends for cable ladder above	No	-	R	Rate only
		Carried forward / …				**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
		TOTAL CARRIED FORWARD FROM PREVIOUS PAGE				**R**
		200 x 100mm (W x H)				
E3.21		Straight length	m	-	R	Rate only
E3.22		Bends for cable ladder above	No	-	R	Rate only
		300 x 100mm (W x H)				
E3.23		Straight length	m	-	R	Rate only
E3.24		Bends for cable ladder above	No	-	R	Rate only
		600 x 100mm (W x H)				
E3.25		Straight length	m	-	R	Rate only
E3.26		Bends for cable ladder above	No	-	R	Rate only
		800 x 100mm (W x H)				
E3.27		Straight length	m	-	R	Rate only
E3.28		Bends for cable ladder above	No	-	R	Rate only
		1000 x 100mm (W x H)				
E3.29		Straight length	m	-	R	Rate only
E3.30		Bends for cable ladder above	No	-	R	Rate only
		Wire Mesh Tray - Stainless steel welded Wire Mesh Cable Tray, 50 x 50mm Base Aperture, 25 x 50mm Side Aperture, complete with splices, couplers, clamps, threaded rods, hangers, brackets etc to fix to trusses, walls etc				
		100 x 50mm (W x H), Ø 4mm Wire				
E3.31		Straight length	m	-	R	Rate only
		200 x 50mm (W x H), Ø 4mm Wire				
E3.32		Straight length	m	-	R	Rate only
		300 x 50mm (W x H), Ø 4mm Wire				
E3.33		Straight length	m	-	R	Rate only
		400 x 50mm (W x H), Ø 4mm Wire				
E3.34		Straight length	m	-	R	Rate only
		Carried forward / …				**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
		TOTAL CARRIED FORWARD FROM PREVIOUS PAGE				**R**
		Supply Stainless steel conduit				
E3.35		20 Ø mm	m	-	R	Rate only
E3.36		25 Ø mm	m	-	R	Rate only
E3.37		Provisional Sum for cable supports	Prov Sum	1	R 20 000.00	R 20 000.00
		Percentage mark up on above item for contractor's overheads and profit (State in % and extend as an amount)	%	R 20 000.00	____ %	R
		All other items not included above but which are nevertheless necessary to meet the Scope of Work and/or are required for the proper, safe and effective operation of the plant (Specify):-	Sum			
		……..			R	R
		……..			R	R
		……..			R	R
		……..			R	R
		……..			R	R
		……..			R	R
		TOTAL SECTION: E3 Carried to Summary				**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
		SECTION: E4 **LV Cables** **Allow for all the costs and expenses in connection with the design, manufacture, routine testing, factory acceptance testing (if indicated), supply, delivery, offloading and storage of the following materials and equipment:** Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore cable with stranded conductors.				
E4.1		2.5mm² x 4 core	m	100	R	R
E4.2		4.0mm² x 4 core	m	100	R	R
E4.3		6mm² x 4 core	m	400	R	R
E4.4		10mm² x 4 core	m	100	R	R
E4.5		16mm² x 4 core	m	-	R	Rate only
E4.6		25mm² x 4 core	m	100	R	R
E4.7		35mm² x 4 core	m	100	R	R
E4.8		50mm² x 4 core	m	-	R	Rate only
E4.9		70mm² x 4 core	m	-	R	Rate only
E4.10		95mm² x 4 core	m	-	R	Rate only
E4.11		120mm² x 4 core	m	-	R	Rate only
E4.12		150mm² x 4 core	m	-	R	Rate only
E4.13		185mm² x 4 core	m	-	R	Rate only
E4.14		240mm² x 4 core	m	-	R	Rate only
E4.15		300mm² x 4 core	m	-	R	Rate only
E4.16		400mm² x 4 core	m	-	R	Rate only
		Carried forward / …				**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
		TOTAL CARRIED FORWARD FROM PREVIOUS PAGE				**R**
		Cable terminations for Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore cables, complete, including gland shroud, lugs, number tags, etc and connection.				
E4.17		2.5mm² x 4 core	No	8	R	R
E4.18		4.0mm² x 4 core	No	8	R	R
E4.19		6mm² x 4 core	No	8	R	R
E4.20		10mm² x 4 core	No	2	R	R
E4.21		16mm² x 4 core	No	-	R	Rate only
E4.22		25mm² x 4 core	No	2	R	R
E4.23		35mm² x 4 core	No	2	R	R
E4.24		50mm² x 4 core	No	-	R	Rate only
E4.25		70mm² x 4 core	No	-	R	Rate only
E4.26		95mm² x 4 core	No	-	R	Rate only
E4.27		120mm² x 4 core	No	-	R	Rate only
E4.28		150mm² x 4 core	No	-	R	Rate only
E4.29		185mm² x 4 core	No	-	R	Rate only
E4.30		240mm² x 4 core	No	-	R	Rate only
E4.31		300mm² x 4 core	No	-	R	Rate only
E4.32		400mm² x 4 core	No	-	R	Rate only
		Cu/PVC Insulated/PVC Bedded/AWA/PVC Sheathed 600/1000V single core cable with stranded conductors. Cable fixed to cable tray, drawn into sleeves or laid into trenches.				
E4.33		150mm² x 1 core	m	-	R	Rate only
E4.34		185mm² x 1 core	m	-	R	Rate only
		Carried forward / …				**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
		TOTAL CARRIED FORWARD FROM PREVIOUS PAGE				**R**
E4.35		240mm² x 1 core	m	-	R	Rate only
E4.36		300mm² x 1 core	m	-	R	Rate only
E4.37		400mm² x 1 core	m	-	R	Rate only
E4.38		500mm² x 1 core	m	-	R	Rate only
		Cable terminations for Cu/PVC Insulated/PVC Bedded/AWA/PVC Sheathed 600/1000V single core cables, complete, including gland shroud, lugs, number tags, etc and connection.				
E4.39		150mm² x 1 core	No	-	R	Rate only
E4.40		185mm² x 1 core	No	-	R	Rate only
E4.41		240mm² x 1 core	No	-	R	Rate only
E4.42		300mm² x 1 core	No	-	R	Rate only
E4.43		400mm² x 1 core	No	-	R	Rate only
E4.44		500mm² x 1 core	No	-	R	Rate only
		Bare Copper Earth cable with stranded conductors.				
E4.45		2.5mm²	m	100	R	R
E4.46		4mm²	m	100	R	R
E4.47		6mm²	m	100	R	R
E4.48		10mm²	m	-	R	Rate only
E4.49		16mm²	m	-	R	Rate only
E4.50		25mm²	m	100	R	R
E4.51		35mm²	m	-	R	Rate only
E4.52		50mm²	m	-	R	Rate only
E4.53		70mm²	m	-	R	Rate only
E4.54		95mm²	m	-	R	Rate only
		Carried forward / …				**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
		TOTAL CARRIED FORWARD FROM PREVIOUS PAGE				**R**
E4.55		120mm²	m	-	R	Rate only
E4.56		150mm²	m	-	R	Rate only
E4.57		240mm²	m	-	R	Rate only
		Cable terminations for bare copper earth cables, complete, including gland shroud, lugs, number tags, etc and connection.				
E4.58		2.5mm²	No	10	R	R
E4.59		4mm²	No	10	R	R
E4.60		6mm²	No	10	R	R
E4.61		10mm²	No	-	R	Rate only
E4.62		16mm²	No	-	R	Rate only
E4.63		25mm²	No	2	R	R
E4.64		35mm²	No	-	R	Rate only
E4.65		50mm²	No	-	R	Rate only
E4.66		70mm²	No	-	R	Rate only
E4.67		95mm²	No	-	R	Rate only
E4.68		120mm²	No	-	R	Rate only
E4.69		150mm²	No	-	R	Rate only
E4.70		240mm²	No	-	R	Rate only
		Allow for all costs and expenses in connection with the Site installation of the following:				
		Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore cable with stranded conductors.				
E4.71		2.5mm² x 4 core	m	100	R	R
E4.72		4.0mm² x 4 core	m	100	R	R
E4.73		6mm² x 4 core	m	400	R	R
E4.74		10mm² x 4 core	m	100	R	R
		Carried forward / …				**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
		TOTAL CARRIED FORWARD FROM PREVIOUS PAGE				**R**
E4.75		16mm² x 4 core	m	-	R	Rate only
E4.76		25mm² x 4 core	m	100	R	R
E4.77		35mm² x 4 core	m	100	R	R
E4.78		50mm² x 4 core	m	-	R	Rate only
E4.79		70mm² x 4 core	m	-	R	Rate only
E4.80		95mm² x 4 core	m	-	R	Rate only
E4.81		120mm² x 4 core	m	-	R	Rate only
E4.82		150mm² x 4 core	m	-	R	Rate only
E4.83		185mm² x 4 core	m	-	R	Rate only
E4.84		240mm² x 4 core	m	-	R	Rate only
E4.85		300mm² x 4 core	m	-	R	Rate only
E4.86		400mm² x 4 core	m	-	R	Rate only
		Cable terminations for Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore cables, complete, including gland shroud, lugs, number tags, etc and connection.				
E4.87		2.5mm² x 4 core	No	8	R	R
E4.88		4.0mm² x 4 core	No	8	R	R
E4.89		6mm² x 4 core	No	8	R	R
E4.90		10mm² x 4 core	No	2	R	R
E4.91		16mm² x 4 core	No	-	R	Rate only
E4.92		25mm² x 4 core	No	2	R	R
E4.93		35mm² x 4 core	No	2	R	R
E4.94		50mm² x 4 core	No	-	R	Rate only
E4.95		70mm² x 4 core	No	-	R	Rate only
E4.96		95mm² x 4 core	No	-	R	Rate only
E4.97		120mm² x 4 core	No	-	R	Rate only
		Carried forward / …				**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
		TOTAL CARRIED FORWARD FROM PREVIOUS PAGE				**R**
E4.98		150mm² x 4 core	No	-	R	Rate only
E4.99		185mm² x 4 core	No	-	R	Rate only
E4.100		240mm² x 4 core	No	-	R	Rate only
E4.101		300mm² x 4 core	No	-	R	Rate only
E4.102		400mm² x 4 core	No	-	R	Rate only
		Cu/PVC Insulated/PVC Bedded/AWA/PVC Sheathed 600/1000V single core cable with stranded conductors. Cable fixed to cable tray, drawn into sleeves or laid into trenches.				
E4.103		150mm² x 1 core	m	-	R	Rate only
E4.104		185mm² x 1 core	m	-	R	Rate only
E4.105		240mm² x 1 core	m	-	R	Rate only
E4.106		300mm² x 1 core	m	-	R	Rate only
E4.107		400mm² x 1 core	m	-	R	Rate only
E4.108		500mm² x 1 core	m	-	R	Rate only
		Cable terminations for Cu/PVC Insulated/PVC Bedded/AWA/PVC Sheathed 600/1000V single core cables, complete, including gland shroud, lugs, number tags, etc and connection.				
E4.109		150mm² x 1 core	No	-	R	Rate only
E4.110		185mm² x 1 core	No	-	R	Rate only
E4.111		240mm² x 1 core	No	-	R	Rate only
E4.112		300mm² x 1 core	No	-	R	Rate only
E4.113		400mm² x 1 core	No	-	R	Rate only
E4.114		500mm² x 1 core	No	-	R	Rate only
		Bare Copper Earth cable with stranded conductors.				
E4.115		2.5mm²	m	100	R	R
		Carried forward / …				**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
		TOTAL CARRIED FORWARD FROM PREVIOUS PAGE				**R**
E4.116		4mm²	m	100	R	R
E4.117		6mm²	m	100	R	R
E4.118		10mm²	m	-	R	Rate only
E4.119		16mm²	m	-	R	Rate only
E4.120		25mm²	m	100	R	R
E4.121		35mm²	m	-	R	Rate only
E4.122		50mm²	m	-	R	Rate only
E4.123		70mm²	m	-	R	Rate only
E4.124		95mm²	m	-	R	Rate only
E4.125		120mm²	m	-	R	Rate only
E4.126		150mm²	m	-	R	Rate only
E4.127		240mm²	m	-	R	Rate only
		Cable terminations for bare copper earth cables, complete, including gland shroud, lugs, number tags, etc and connection.				
E4.128		2.5mm²	No	10	R	R
E4.129		4mm²	No	10	R	R
E4.130		6mm²	No	10	R	R
E4.131		10mm²	No	-	R	Rate only
E4.132		16mm²	No	-	R	Rate only
E4.133		25mm²	No	2	R	R
E4.134		35mm²	No	-	R	Rate only
E4.135		50mm²	No	-	R	Rate only
E4.136		70mm²	No	-	R	Rate only
E4.137		95mm²	No	-	R	Rate only
E4.138		120mm²	No	-	R	Rate only
		Carried forward / …				**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
		TOTAL CARRIED FORWARD FROM PREVIOUS PAGE				**R**
E4.139		150mm²	No	-	R	Rate only
E4.140		240mm²	No	-	R	Rate only
E4.141		**Allow for all costs and expenses in connection with the Site Delivery of items in this section**	Sum	1	R	R
E4.142		**Trenching and backfiling:** Excavate and set excavated material aside for re-use as filling for cable or sleeve trench not exceeding 1m deep:				
		In earth	m3	135	R	R
		In soft rock	m3	55	R	R
		In rock	m3	15	R	R
		Bedding material imported from off-site sources (provisional)	m3	205	R	R
		Danger Tape 400mm overlapping	m	500	R	R
		Cable Marker with engraved steel plate	No	15	R	R
E4.143		All other items not included above, but which are nevertheless necessary to meet the Specification and/or required for the proper, safe and effective operation of the plant (Specify)				
		……..				
		……..				
		TOTAL SECTION: E4 Carried to Summary				**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
		SECTION: I1 **Instrumentation, Control and Data Cables**				
		Allow for all the costs and expenses in connection with the design, manufacture, routine testing, factory acceptance testing (if indicated), supply, delivery, offloading and storage of the following materials and equipment:				
		Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore control cables with stranded conductors. Cable fixed to cable tray, drawn into sleeves or laid into trenches.				
I1..1		2.5mm² x 4 core	m	200	R	R
I1..2		2.5mm² x 7 core	m	200	R	R
I1..3		1.5mm² x 12 core	m	100	R	R
I1..4		1.5mm² x 19 core	m	-	R	Rate only
I1..5		1.5mm² x 24 core	m	-	R	Rate only
I1..6		1.5mm² x 30 core	m	-	R	Rate only
I1..7		1.5mm² x 37 core	m	-	R	Rate only
I1..8		CAT6 Cable	m	-	R	Rate only
I1..9		Armoured Multimode Fibre optic Cable (8C)	m	100	R	R
I1..10		Fieldbus Cables	m	-	R	Rate only
		Cable terminations for multicore control cable complete, including gland shroud, lugs, number tags, etc and connection.				
I1..11		2.5mm² x 4 core	No	16	R	R
I1..12		2.5mm² x 7 core	No	16	R	R
I1..13		1.5mm² x 12 core	No	8	R	R
		Carried forward / …				**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
		TOTAL CARRIED FORWARD FROM PREVIOUS PAGE				**R**
I1..14		1.5mm² x 19 core	No	-	R	Rate only
I1..15		1.5mm² x 24 core	No	-	R	Rate only
I1..16		1.5mm² x 30 core	No	-	R	Rate only
I1..17		1.5mm² x 37 core	No	-	R	Rate only
I1..18		CAT6 Cable	No	-	R	Rate only
I1..19		Armoured Multimode Fibre optic Cable (8C) including splicing	No	4	R	R
I1..20		Fieldbus Cables	No	-	R	Rate only
		Extra low voltage instrumentation cable fixed to cable tray, drawn into sleeves or power skirting.				
I1..21		1.5mm² 1-pair	m	100	R	R
I1..22		1.5mm² 2-pair	m	100	R	R
I1..23		1.5mm² 4-pair	m	-	R	Rate only
I1..24		1.5mm² 12-pair	m	-	R	Rate only
I1..25		1.5mm² 19-pair	m	-	R	Rate only
I1..26		1.5mm² 30-pair	m	-	R	Rate only
I1..27		1.5mm² 1-triad	m	-	R	Rate only
I1..28		1.5mm² 2-triad	m	-	R	Rate only
		Terminations for Extra low voltage instrumentation cable				
I1..29		1.5mm² 1-pair	No	10	R	R
I1..30		1.5mm² 2-pair	No	10	R	R
I1..31		1.5mm² 4-pair	No	-	R	Rate only
I1..32		1.5mm² 12-pair	No	-	R	Rate only
I1..33		1.5mm² 19-pair	No	-	R	Rate only
I1..34		1.5mm² 30-pair	No	-	R	Rate only
		Carried forward / …				**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
		TOTAL CARRIED FORWARD FROM PREVIOUS PAGE				**R**
I1..35		1.5mm² 1-triad	No	-	R	Rate only
I1..36		1.5mm² 2-triad	No	-	R	Rate only
		Instrumentation Power cable Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore with stranded conductors. Cable fixed to cable tray, drawn into sleeves or laid into trenches.				
I1..37		2.5mm² x 3 core	m	-	R	Rate only
I1..38		2.5mm² x 4 core	m	-	R	Rate only
		Terminations for Instrumentation Power cable Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore with stranded conductors.				
I1..39		2.5mm² x 3 core	No	-	R	Rate only
I1..40		2.5mm² x 4 core	No	-	R	Rate only
I1..41		Allow for all costs and expenses in connection with the Site Delivery of items in this section	Sum	1	R	R
		Trenching and backfilling				
		Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore control cables with stranded conductors. Cable fixed to cable tray, drawn into sleeves or laid into trenches.				
I1.42		2.5mm² x 4 core	m	200	R	R
I1.43		2.5mm² x 7 core	m	200	R	R
I1.44		1.5mm² x 12 core	m	100	R	R
I1.45		1.5mm² x 19 core	m	-	R	Rate only
I1.46		1.5mm² x 24 core	m	-	R	Rate only
I1.47		1.5mm² x 30 core	m	-	R	Rate only
I1.48		1.5mm² x 37 core	m	-	R	Rate only
I1.49		CAT6 Cable	m	-	R	Rate only
I1.50		Armoured Multimode Fibre optic Cable (8C)	m	100	R	R
I1.51		Fieldbus Cables	m	-	R	Rate only
		Cable terminations for multicore control cable complete, including gland shroud, lugs, number tags, etc and connection.				
I1.52		2.5mm² x 4 core	No	16	R	R
I1.53		2.5mm² x 7 core	No	16	R	R
I1.54		1.5mm² x 12 core	No	8	R	R
I1.55		1.5mm² x 19 core	No	-	R	Rate only
I1.56		1.5mm² x 24 core	No	-	R	Rate only
I1.57		1.5mm² x 30 core	No	-	R	Rate only
I1.58		1.5mm² x 37 core	No	-	R	Rate only
I1.59		CAT6 Cable	No	-	R	Rate only
		Armoured Multimode Fibre optic Cable (8C) including splicing	No	4	R	R
I1.60		Fieldbus Cables	No	-	R	Rate only
I1.61		Extra low voltage instrumentation cable fixed to cable tray, drawn into sleeves or power skirting.				
I1.62		1.5mm² 1-pair	m	100	R	R
I1.63		1.5mm² 2-pair	m	100	R	R
I1.64		1.5mm² 4-pair	m	-	R	Rate only
I1.65		1.5mm² 12-pair	m	-	R	Rate only
		Carried forward / …				**R**

Item No	Payment Ref	Description	Unit	Qty	Rate R c	Amount R c
		TOTAL CARRIED FORWARD FROM PREVIOUS PAGE				**R**
I1.66		1.5mm² 19-pair	m	-	R	Rate only
I1.67		1.5mm² 30-pair	m	-	R	Rate only
I1.68		1.5mm² 1-triad	m	-	R	Rate only

I1.69		1.5mm² 2-triad	m	-	R		Rate only
		Terminations for Extra low voltage instrumentation cable					
I1.70		1.5mm² 1-pair	No	10	R	R	
I1.71		1.5mm² 2-pair	No	10	R	R	
I1.72		1.5mm² 4-pair	No	-	R		Rate only
I1.73		1.5mm² 12-pair	No	-	R		Rate only
I1.74		1.5mm² 19-pair	No	-	R		Rate only
I1.75		1.5mm² 30-pair	No	-	R		Rate only
I1.76		1.5mm² 1-triad	No	-	R		Rate only
I1.77		1.5mm² 2-triad	No	-	R		Rate only
		Instrumentation Power cable Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore with stranded conductors. Cable fixed to cable tray, drawn into sleeves or laid into trenches.					
I1.78		2.5mm² x 3 core	m	-	R		Rate only
I1.79		2.5mm² x 4 core	m	-	R		Rate only
		Terminations for Instrumentation Power cable Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore with stranded conductors.					
I1.80		2.5mm² x 3 core	No	-			Rate only
I1.81		2.5mm² x 4 core	No	-	R		Rate only
I1.82		Allow for all costs and expenses in connection with the Site Delivery of items in this section	Sum	1	R	R	
		All other items not included above, but which are nevertheless necessary to meet the Specification and/or required for the proper, safe and effective operation of the plant *(Specify)*					
		……..			R	R	
		……..			R	R	
		……..			R	R	
		……..			R	R	
		TOTAL SECTION: I1: Carried to Summary				**R**	

Item No	Payment Clause	Short Description	Unit	Quantity	Rate R c	Amount R c
		SECTION: I2 **Remote I/O** **RAS Pump Station Remote IO**				
I2..1		Supply	Sum	1	R	R
I2..2		Install	Sum	1	R	R
I2..3		Testing and Commissioning	Sum	1	R	R
I2..4		**Allow for all costs and expenses in connection with the Site Delivery of items in this section**	Sum	1	R	R
I2..5		All other items not included above, but which are nevertheless necessary to meet the Specification and/or required for the proper, safe and effective operation of the plant *(Specify)*				
		……..			R	R
		……..			R	R
		……..			R	R
		……..			R	R
		……..			R	R
		……..			R	R
		TOTAL SECTION: I2: **Carried to Summary**				**R**

Item No	Payment Clause	Short Description	Unit	Quantity	Rate R c	Amount R c
		SECTION: I3 **Industrial Network**				
		Functional Design Specification				
I3..1		Compile control system FDS as per specfications. Allow for 5 iterations	Sum	1	R	R
I3..2		**Allow for all costs and expenses in connection with the Site Delivery of items in this section**	Sum	1	R	R
I3..3		All other items not included above, but which are nevertheless necessary to meet the Specification and/or required for the proper, safe and effective operation of the plant *(Specify)*	Sum	1	R	R
		……..			R	R
		……..			R	R
		……..			R	R
		……..			R	R
		……..				
		……..				
		TOTAL SECTION: I3 **Carried to Summary**				**R -**

Item No	Payment Clause	Short Description	Unit	Quantity	Rate R c	Amount R c
		SECTION: I4 **Instrumentation**				
		Allow for all the costs and expenses in connection with the design, manufacture, painting, supplying, delivery, offloading and storage of the following materials and equipment:				
		Refered to as "Supply" in this schedule				
		Allow for all costs and expenses in connection with the Site installation in terms of in terms of FIDIC and Part C3: Scope of Work (excluding pre-commissioning) for the following:				
		Refered to as "Install" in this schedule				
		Dissolved Oxygen Meter complete.				
I4..1		Supply	No	1	R	R
I4..2		Install	No	1	R	R
		pH Meter complete, integrated with Electrical Conductivity				
I4..3		Supply	No	1	R	R
I4..4		Install	No	1	R	R
		Free Chlorine Meter complete.				
I4..5		Supply	No	1	R	R
I4..6		Install	No	1	R	R
		Suspended Solids Meter complete.				
I4..7		Supply	No	1	R	R
I4..8		Install	No	1	R	R
		No Flow switch complete.				
I4..9		Supply	No	2	R	R
I4..10		Install	No	2	R	R
I4..11		All other items not included above, but which are nevertheless necessary to meet the Specification and/or required for the proper, safe and effective operation of the plant *(Specify)*				
		……..			R	R
		……..			R	R
		……..				
		……..			R	R
		TOTAL SECTION: I4 **Carried to Summary**				**R**

Item No	Payment Clause	Short Description	Unit	Quantity	Rate R c	Amount R c
211		**SECTION 36: DAYWORKS (Contingencies) According to the Preamble to the Daywork Schedule:**				
21.1		**LABOUR**				
		a) Artisan	h	1	R	Rate only
		b) Charge-hand Artisan	h	1	R	Rate only
		c) Skilled labourer	h	1	R	Rate only
		d) Unskilled labourer	h	1	R	Rate only
		e) Watching, etc. necessitated by day work (workmen only)	h	1	R	Rate only
21.2		**PLANT**				
		a) Crawler Tractor: 100 kW to 120 kW	h	1	R	Rate only
		b) Front-end Loader, pneumatic tyred or crawler type: Min. 60 kw	h	1	R	Rate only
		c) Flat bed truck 5T	h	1	R	Rate only
		d) Trench Excavator, pneumatic tyred or crawler type:				
		(i) Min. 60 kw	h	1	R	Rate only
		(ii) Min. 200 kw	h	1	R	Rate only
		e) Mobile crane: min 10 t	h	1	R	Rate only
		f) Tip Truck				
		(i) Min. 5 m3	h	1	R	Rate only
		(ii) Min. 10 m3	h	1	R	Rate only
		g) Compactor, vibrating plate type: Min. 100 kg	h	1	R	Rate only
		h) Pump for dewatering, nom. 75 mm to 100 mm:				
		(i) Centrifugal	h	30	R	Rate only
Item No	**Payment Ref**	**Description**	**Unit**	**Quantity**	**Rate R c**	**Amount R c**
		(ii) Submersible	h	1	R	Rate only
		(iii) Well-point pump	h	1	R	Rate only
		i) Diesel generator : 15 to 20 kVA, 380V	h	1	R	Rate only
21.3		**HAND TOOLS : (Tenderer must complete rate and quantity)**				
		a) Wheelbarrow	Day	1	R	Rate only
		b) Shovels	Day	1	R	Rate only
		c) Picks	Day	1	R	Rate only
		d) Rakes	Day	1	R	Rate only
		e) Handtampers	Day	1	R	Rate only
21.4		**Mark up on materials for dayworks**	%			Rate only

SUMMARY OF SECTIONS
BROUGHT FORWARD FROM SECTION TOTALS

Section no	Description	
	CIVIL WORKS	**R**
1	SECTION 1 : PRELIMINARY AND GENERAL	R
2	SECTION 2 : NEW DISTRIBUTION BOX	R
3	SECTION 3: CLARIFIER/SECONDARY SETTLING TANK	R
4	SECTION 4: ANAEROBIC ZONE REACTOR	R
5	SECTION 5 : INTERCONNECTING PIPEWORK	R
	MECHANICAL WORKS	**R**
6	SECTION 6: MIXERS (STIRRERS)	R
7	SECTION 7: SURFACE AERATORS (Existing Aerobic Reactor)	R
8	SECTION8: CLARIFIER ROTATING BRIDGES	R
9	SECTION 9: PUMPS AND ASSOCIATED PIPEWORK	R
10	SECTION 10: WEIRS AND PENSTOCKS	R
11	SECTION 11: TRAINING OF PROCESS CONTROLLERS	R
12	SECTION 12: MISCELLANEOUS ITEMS	R
	ELECTRICAL WORKS	**R**
E1	LV Switchgear and Control Assemblies	R
E2	Area Lighting	R
E3	Cable Supports	R
E4	LV Cables	R
	SUB-TOTAL 3: INSTRUMENTATION	**R**
I1	Instrumentation, Control and Data Cables	R
I2	Remote I/O	R
I3	Functional Design Specification	R
I4	Instrumentation	R
	DAY WORKS	**R**
	SUB-TOTAL 4: RATES ONLY	
	TOTAL 1 (SUB TOTAL 1 + SUB TOTAL 2 + SUB TOTAL 3+ SUB TOTAL 4)	**R**
	10% CONTIGENCIES	R
	TOTAL 2 (Total 1 + Contingencies)	**R**
	VAT	R
	GRAND TOTAL (VAT INCL) CARRIED TO THE FORM OF OFFER	**R**