



**home affairs**

Department:  
Home Affairs  
**REPUBLIC OF SOUTH AFRICA**

## **DEPARTMENT OF HOME AFFAIRS**

### **BILL OF QUANTITIES**

**NAME OF CONTRACTOR**

## **BILL OF QUANTITIES**

### General Notes

Tenderers must complete the Bill of Quantities and detail the unit rate and total amount of each item.

Tenderers are advised to check their item extensions and total additions. Arithmetical errors occurring in the priced Bill of Quantities will be corrected and will have an effect on the tender amount.

No alterations, erasure or addition is to be made in the text of the Bill of Quantities. Should any alteration, erasure or addition be made, it will not be recognised but the original wording of the Bill of Quantities will be adhered to.

The quantities given in the Bill cannot be regarded as exact and are subject to remeasurement on site after completion of the service and adjustments will be made according to the unit rates given in the Bill.

The Bill of Quantities shall not be used for the ordering of material. The contractor shall ascertain the correct quantities before ordering.

The unit prices quoted in the Bill of Quantities must include for such small installation materials as are required for the complete installation in accordance with the Specification.

### RATES SHOULD NOT INCLUDE VAT

All prices given in the Bill of Quantities are for supply, delivery, installation and commissioning.

All labour, supervision, transportation, tools and equipment must be allowed for in the rates

Item No	Description	Quantity	Rate	Amount
<b><u>SECTION 1</u></b>				
<b><u>PRELIMINARIES</u></b>				
<b><u>BILL NO 1</u></b>				
<b><u>LABOUR RATES</u></b>				
Fixed Rates - Artisans, Labours, travelling and accommodation				
<b>Labour Rates</b>				
<b>Normal Hours</b>				
1	Accredited Artisan	p/h	100	-
2	Artisan assistant	p/h	100	-
3	Labour	p/h	100	-
<b>Sundays and Public Holidays</b>				
4	Accredited Artisan	p/h	100	-
5	Artisan assistant	p/h	100	-
6	Labour	p/h	100	-
<b>After Hours and Saturdays</b>				
7	Accredited Artisan	p/h	100	-
8	Artisan assistant	p/h	100	-
9	Labour	p/h	100	-
10	Travelling	km	500	-
11	Accommodation	No	10	-
<b>LABOUR RATES</b>				
Carried Forward to Summary of Section No. 1			<b>R</b>	-

Item No	Description	Quantity	Rate	Amount
Bill No	<b>SECTION 9 SUMMARY - PRELIMINARIES</b>			
		Page No		Amount
	3 LABOUR RATES	1		-
Carried to Final Summary				-
SECTION 1 SUMMARY - PRELIMINARIES				

Item No	Description	Quantity	Rate	Amount
	<b>SECTION 2</b>			
	<b>ELECTRICAL (NEW INSTALLATION)</b>			
	<b>BILL NO 1</b>			
2.1	<b>WIRE WAYS, CONDUITS AND ACCESSORIES</b>			
2.1.1	Supply and install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	-
	b) 25 mm dia PVC	m	30	-
	c) 20 mm dia galvanised steel	m	30	-
	d) 25 mm dia galvanised steel	m	30	-
2.1.2	Supply and Install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	30	-
	b) Basket joiner clips	No	5	-
	c) Clip on support with thread rod & drop-in anchors ( 2 / 3m length )	No	5	-
	d) 300x50mm Horizontal 90 bend	No	5	-
	e) 300x50mm Tee	No	5	-
	f) 300x50mm Dropper	No	5	-
2.1.3	Supply and Install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	30	-
	b) End plate	No	5	-
	c) External bend	No	5	-
	d) Internal bend	No	5	-
	e) Flat Elbow	No	5	-
	f) Flat Tee	No	5	-
2.1.4	Supply and Install wiring channel:			
	a) P 9000 galvanized steel channel	m	30	-
	b) Splice + sundries	No	5	-
	c) Clip on support with thread rod & drop-in anchors ( 2 / 3m length )	No	5	-
	d) End cap P9000	No	5	-
	e) Tee P9000	No	5	-
	f) Ext elbow P9000	No	5	-
2.2	<b>WIRING</b>			
2.2.1	Supply, delivery and installation of the following cables:			
	a) 120 mm <sup>2</sup> x 4-core PVC/SWA/PVC CU	m	50	-
	b) 95 mm <sup>2</sup> x 4-core PVC/SWA/PVC CU	m	50	-
	c) 70 mm <sup>2</sup> x 4-core PVC/SWA/PVC CU	m	50	-
	d) 50 mm <sup>2</sup> x 4-core PVC/SWA/PVC CU	m	50	-
	e) 25 mm <sup>2</sup> x 4-core PVC/SWA/PVC CU	m	50	-
	f) 16 mm <sup>2</sup> x 4-core PVC/SWA/PVC CU	m	50	-
	g) 16 mm <sup>2</sup> x 3-core PVC/SWA/PVC CU	m	50	-
	h) 10 mm <sup>2</sup> x 4-core PVC/SWA/PVC CU	m	50	-
	i) 10 mm <sup>2</sup> x 3-core PVC/SWA/PVC CU	m	50	-
	j) 6 mm <sup>2</sup> x 3-core PVC/SWA/PVC CU	m	50	-
	k) 4 mm <sup>2</sup> x 3-core PVC/SWA/PVC CU	m	50	-
	l) 120 mm <sup>2</sup> x 4-core PVC/ECC/PVC CU	m	50	-
	m) 95 mm <sup>2</sup> x 4-core PVC/ECC/PVC CU	m	50	-
	n) 70 mm <sup>2</sup> x 4-core PVC/ECC/PVC CU	m	50	-
	o) 50 mm <sup>2</sup> x 4-core PVC/ECC/PVC CU	m	50	-
	p) 25 mm <sup>2</sup> x 4-core PVC/ECC/PVC CU	m	50	-
	q) 16 mm <sup>2</sup> x 4-core PVC/ECC/PVC CU	m	50	-
	r) 16 mm <sup>2</sup> x 3-core PVC/ECC/PVC CU	m	50	-
	s) 10 mm <sup>2</sup> x 4-core PVC/ECC/PVC CU	m	50	-
	t) 10 mm <sup>2</sup> x 3-core PVC/ECC/PVC CU	m	50	-
	u) 6 mm <sup>2</sup> x 3-core PVC/ECC/PVC CU	m	50	-
	v) 4 mm <sup>2</sup> x 3-core PVC/ECC/PVC CU	m	50	-
	w) 4 mm <sup>2</sup> x 4-core Cu PVC Nitrile Orange	m	50	-
	x) 6 mm <sup>2</sup> x 4-core Cu PVC Nitrile Orange	m	50	-
	y) 10 mm <sup>2</sup> x 4-core Cu PVC Nitrile Orange	m	50	-
	z) 16 mm <sup>2</sup> x 4-core Cu PVC Nitrile Orange	m	50	-
	Carried Forward		R	-
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	-
2.2.2	Termination of Cables			
	a) 120 mm <sup>2</sup> x 4-core PVC/SWA/PVC CU	No 5		-
	b) 95 mm <sup>2</sup> x 4-core PVC/SWA/PVC CU	No 5		-
	c) 70 mm <sup>2</sup> x 4-core PVC/SWA/PVC CU	No 5		-
	d) 50 mm <sup>2</sup> x 4-core PVC/SWA/PVC CU	No 5		-
	e) 25 mm <sup>2</sup> x 4-core PVC/SWA/PVC CU	No 5		-
	f) 16 mm <sup>2</sup> x 4-core PVC/SWA/PVC CU	No 5		-
	g) 16 mm <sup>2</sup> x 3-core PVC/SWA/PVC CU	No 5		-
	h) 10 mm <sup>2</sup> x 4-core PVC/SWA/PVC CU	No 5		-
	i) 10 mm <sup>2</sup> x 3-core PVC/SWA/PVC CU	No 5		-
	j) 6 mm <sup>2</sup> x 3-core PVC/SWA/PVC CU	No 5		-
	k) 4 mm <sup>2</sup> x 3-core PVC/SWA/PVC CU	No 5		-
	l) 120 mm <sup>2</sup> x 4-core PVC/ECC/PVC CU	No 5		-
	m) 95 mm <sup>2</sup> x 4-core PVC/ECC/PVC CU	No 5		-
	n) 70 mm <sup>2</sup> x 4-core PVC/ECC/PVC CU	No 5		-
	o) 50 mm <sup>2</sup> x 4-core PVC/ECC/PVC CU	No 5		-
	p) 25 mm <sup>2</sup> x 4-core PVC/ECC/PVC CU	No 5		-
	q) 16 mm <sup>2</sup> x 4-core PVC/ECC/PVC CU	No 5		-
	r) 16 mm <sup>2</sup> x 3-core PVC/ECC/PVC CU	No 5		-
	s) 10 mm <sup>2</sup> x 4-core PVC/ECC/PVC CU	No 5		-
	t) 10 mm <sup>2</sup> x 3-core PVC/ECC/PVC CU	No 5		-
	u) 6 mm <sup>2</sup> x 3-core PVC/ECC/PVC CU	No 5		-
	v) 4 mm <sup>2</sup> x 3-core PVC/ECC/PVC CU	No 5		-
	w) 4 mm <sup>2</sup> x 4-core Cu PVC Nitrile Orange	No 5		-
	x) 6 mm <sup>2</sup> x 4-core Cu PVC Nitrile Orange	No 5		-
	y) 10 mm <sup>2</sup> x 4-core Cu PVC Nitrile Orange	No 5		-
	z) 16 mm <sup>2</sup> x 4-core Cu PVC Nitrile Orange	No 5		-
2.2.3	Supply, install and terminate General Purpose Copper Wire PVC Insulated in Trunking and Conduits (Conduits and Trunking measured elsewhere)			
	a) 70 mm <sup>2</sup>	m 50		-
	b) 50 mm <sup>2</sup>	m 50		-
	c) 35 mm <sup>2</sup>	m 50		-
	d) 25 mm <sup>2</sup>	m 50		-
	e) 16 mm <sup>2</sup>	m 50		-
	f) 10 mm <sup>2</sup>	m 50		-
	g) 6 mm <sup>2</sup>	m 50		-
	h) 4 mm <sup>2</sup>	m 50		-
	i) 2.5 mm <sup>2</sup>	m 50		-
2.2.4	Supply, install and terminate earth continuity conductor			
	a) 70 mm <sup>2</sup> BCEW	m 50		-
	b) 50 mm <sup>2</sup> BCEW	m 50		-
	c) 35 mm <sup>2</sup> BCEW	m 50		-
	d) 25 mm <sup>2</sup> BCEW	m 50		-
	e) 16 mm <sup>2</sup> BCEW	m 50		-
	f) 10 mm <sup>2</sup> BCEW	m 50		-
	g) 6 mm <sup>2</sup> BCEW	m 50		-
	h) 4 mm <sup>2</sup> BCEW	m 50		-
	i) 2.5 mm <sup>2</sup> BCEW	m 50		-
	Carried Forward		R	-
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	-
2.2.5	Supply, install and terminate the following cables			
	a) 1.5mm <sup>2</sup> x 2 core + Earth Flat Twin	m 50		-
	b) 2.5mm <sup>2</sup> x 2 core + Earth Flat Twin	m 50		-
	c) 4.0mm <sup>2</sup> x 2 core + Earth Flat Twin	m 50		-
	d) 6.0mm <sup>2</sup> x 2 core + Earth Flat Twin	m 50		-
	e) 10mm <sup>2</sup> x 2 core + Earth Flat Twin	m 50		-
	f) 1.5mm <sup>2</sup> x 2 core + Earth Surfix	m 50		-
	g) 1.5mm <sup>2</sup> x 4 core + Earth Surfix	m 50		-
	h) 2.5mm <sup>2</sup> x 2 core + Earth Surfix	m 50		-
	i) 2.5mm <sup>2</sup> x 4 core + Earth Surfix	m 50		-
	j) 4.0mm <sup>2</sup> x 2 core + Earth Surfix	m 50		-
	k) 4.0mm <sup>2</sup> x 4 core + Earth Surfix	m 50		-
	l) 6.0mm <sup>2</sup> x 2 core + Earth Surfix	m 50		-
	m) 6.0mm <sup>2</sup> x 4 core + Earth Surfix	m 50		-
	n) 10mm <sup>2</sup> x 2 core + Earth Surfix	m 50		-
	o) 10mm <sup>2</sup> x 4 core + Earth Surfix	m 50		-
2.2.6	Supply and installation of circuit breakers (SABS approved):			
	a) 45-63A, 5kA single pole, curve 1	No 10		-
	b) 10-40A, 5kA single pole	No 10		-
	c) 45-63A, 5kA triple pole, curve 1	No 10		-
	d) 10-40A, 5kA triple pole	No 10		-
	e) 45-63A, 5kA triple pole	No 10		-
	f) 80-125A, 5kA triple pole	No 10		-
	g) 150-200A, 10kA triple pole	No 10		-
	h) 40-60A, 35kA triple pole	No 10		-
	i) 80-125A, 25kA triple pole	No 10		-
2.2.7	Supply and install contactors (SABS)			
	a) 0-30A, 3 pole	No 10		-
	b) 40-63A, 3 pole	No 10		-
	c) 63-150A, 3 pole	No 10		-
2.2.8	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):			
	a) 63A double pole	No 5		-
2.2.9	Install socket outlet (SABS) on Power Skirting:			
	a) 16A, single SSO, WHITE	No 15		-
	b) 16A, single SSO Dedicated outlet, shaved, RED	No 15		-
	c) 16A, single SSO Dedicated outlet, shaved, BLUE	No 15		-
	d) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No 15		-
	e) Network point including 30m of cat 5 cable	No 15		-
2.2.10	Install socket outlet (SABS) Flush or Surface mount.			
	a) 16A, Double SSO, WHITE	No 15		-
	b) 16A, Double SSO Dedicated outlet, shaved, RED	No 15		-
	c) 16A, Double SSO Dedicated outlet, shaved, BLUE	No 15		-
	d) Network point including 30m of cat 5 cable	No 15		-
	e) 30 Amp Double pole Industrial Isolator	No 15		-
	f) 60 Amp Triple pole isolator including York box	No 15		-
	g) 1 Lever 1Way light Switch	No 15		-
	h) Day/Night Sensor	No 15		-
	Carried Forward		R	-
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	-
2.3	<b>POWER POLES</b>			
	a) 3500mm round power pole	No 15		-
	b) Blue 16 amp single socket on pole	No 15		-
	c) Red 16 amp single socket on pole	No 15		-
	d) Normal 16 amp single sockets on pole	No 15		-
	e) Blank data box	No 15		-
	f) Blank tel box	No 15		-
	g) Red socket in roof with plug top and cable	No 15		-
	h) Normal socket in roof with plug top and cable	No 15		-
2.4	<b>ISOLATORS</b>			
	a) 30 Amp Double Industrial pole Isolator	No 15		-
	b) 60 Amp Triple pole isolator including York box	No 15		-
2.5	<b>SERVICE EXISTING BUILDING DB:</b>			
	Existing Building DB's	No 5		-
2.6	<b>DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING:</b>			
	Two compartment 2 Door DB			
	a) 2 x 24 way	No 5		-
	b) 2 x 36 way	No 5		-
	c) 2 x 48 way	No 5		-
2.7	<b>SUPPLY AND INSTALL DB ACCESSORIES</b>			
2.7.1	Circuit breaker blank covers	No 15		-
2.7.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No 5		-
2.8	<b>CORE DRILLING</b>			
	Drilling positions shall be verified on site and/or as per layout as shown in the documents.			
	Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc.			
	1) through brick walls - 110 to 230mm thickness			
	2) through re-inforced concrete - 110 to 330mm thickness			
2.8.1	a) Up to 75mm diameter holes	No 2		-
2.8.2	b) 75mm to 100mm diameter holes	No 2		-
2.8.3	c) 100mm to 150mm diameter holes	No 2		-
2.9	<b>LIGHTING INSTALLATION</b>			
2.9.1	Re-lamp luminaire:			
	a) 5FT LED Tubes	No 50		-
	b) 4FT LED Tubes	No 50		-
	c) 2FT LED Tubes	No 50		-
	d) 7W LED ES/BC Lamps	No 50		-
2.9.2	Replace diffuser or lens	No 20		-
2.9.3	Supply and install new luminaire:			
	a) 4FT Double LED Open Chanel Fitting	No 20		-
	b) 4FT Double Weather Proof LED Fitting	No 20		-
	c) 5FT Double LED Open Chanel Fitting	No 20		-
	d) 5FT Double LED Weather Proof LED Fitting	No 20		-
	e) Recessed 600x600 LED Panel light	No 20		-
	f) Recessed 1200x600 LED Panel light	No 20		-
	Carried Forward		R	-
	Section No. 2			
	Bill No. 1			



Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	-
2.10	<b>SERVER ROOM FLOOR</b>			
	a) Remove existing floor covering	m <sup>2</sup> 50		-
	b) Prepare floor to receive new vinyl tiles	m <sup>2</sup> 50		-
	c) Supply and install anti-static vinyl tiles	m <sup>2</sup> 50		-
2.11	<b>FIRE SUPPRESSION</b>			
	a) Supply and install fire extinguishers (4.5 kg STP) with wooden backing board and signage	No 10		-
	b) Blank off and remove water sprinklers in ceiling of Server Room	No 10		-
2.12	<b>TELKOM EARTH BAR</b>			
	a) Supply and install Telkom Earth Bar as per specification	No 10		-
2.13	<b>GENERAL ELECTRICAL</b>			
2.13.1	<b>TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK</b>			
	Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No 1		-
2.13.2	<b>TESTS AND INSPECTIONS ON COMPLETION OF THE WORK</b>			
	Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of:	No 1		-
	a) Certificates of Compliance - original plus two certified copies each			
	b) Up-to-date single line diagrams + two copies each			
	c) Legend cards + two copies each			
	d) Reticulation drawings + two copies each			
	e) Labelling of circuit nodes and switches			
	<b>Carried Forward to Final Summary</b>		R	-
	<b>SECTION 2 - ELECTRICAL (NEW INSTALLATION)</b>			

Item No	Description	Quantity	Rate	Amount
	<b>SECTION 3</b>			
	<b>BUILDING WORKS (NEW INSTALLATION)</b>			
	<b>BILL NO 1</b>			
3.1.	<b>PAINTING</b>			
	One coat primer and two coats Dulux Caramel Sand 5 Double velvet (or similar as per engineer approved or to match existing)			
	a) On external walls	m <sup>2</sup>	150	-
	b) On internal walls	m <sup>2</sup>	150	-
	c) On ceilings	m <sup>2</sup>	150	-
	d) On drywalls	m <sup>2</sup>	150	-
3.2	<b>ALTERATIONS</b>			
3.2.1	<b>Break down and remove brickwork, etc.</b>			
	Half brick wall	m <sup>2</sup>	50	-
	One brick wall	m <sup>2</sup>	50	-
	Drywall partitioning 3,0m high including doors, ironmongery and glazing	m <sup>3</sup>	50	-
3.2.2	<b>Take out and remove doors, windows, etc. including thresholds, sills, etc. and brick up openings including making good plaster finish on both sides and into reveals (making good finishes elsewhere)</b>			
	Timber door with steel frame size 813 x 2032mm high in half brick wall	No	5	-
	Timber door with steel frame size 813 x 2032mm high in one brick wall	No	5	-
	Glazed steel window size 1022 x 1254mm high from one brick wall	No	5	-
	Glazed aluminium window size 1200 x 1200mm high from half brick wall	No	5	-
3.2.3	<b>Supply and installation</b>			
	Drywall partitioning 3,0m high including doors, ironmongery, glazing.	m	20	-
3.2.4	<b>Take up and remove vinyl floor coverings, carpeting, etc.</b>			
	Vinyl tile floor covering including preparing screed for new anti-static tiles	m <sup>2</sup>	50	-
	Carpet tile floor covering including preparing screed for new carpet tiles	m <sup>2</sup>	50	-
3.2.5	<b>OPENINGS THROUGH EXISTING WALLS ETC</b>			
	<b>Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere)</b>			
	Opening for cashier window size 600 x 800mm high through half brick wall	No	2	-
	Opening for door with steel frame size 813 x 2032mm high through half brick wall	No	2	-
	Opening for door with steel frame size 813 x 2032mm high through one brick wall	No	2	-
	Opening for window size 1200 x 1200mm high through half brick wall	No	2	-
	Opening for window size 1200 x 1200mm high through one brick wall	No	2	-
3.3	<b>MASONRY</b>			
	<b>SUPPLEMENTARY PREAMBLES</b>			
	<b>Sizes in descriptions</b>			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
3.3.1	<b>Brickwork of clay bricks in 6:1 cement mortar</b>			
	Half brick walls	m <sup>2</sup>	60	-
	One brick walls	m <sup>2</sup>	60	-
3.3.2	<b>Brickwork Sundries</b>			
	Cutting toothings and bonding new brickwork to existing	m <sup>2</sup>	5	-
3.3.3	<b>Approved prestressed fabricated lintels</b>			
	110 x 75mm Lintels in lengths not exceeding 1,5m	m	15	-
	Carried Forward		<b>R</b>	-
	Section No. 3			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	-
3.4	<b>FLOORING</b>			
3.4.1	<b>Supply and installation of new floor covering</b>			
	Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive	m2	20	-
	Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2	20	-
3.5	<b>METALWORK</b>			
	Prices shall include manufacturing-, delivery- and installation costs.			
3.5.1	<b>"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete</b>			
	Standard security gate for door size 813mm x 2032mm high	No	5	-
3.6	<b>PLASTERING AND FLOOR SCREEDS</b>			
	<b>INTERNAL PLASTER</b>			
3.6.1	<b>One coat 1:5 cement plaster on brickwork</b>			
	On walls	m2	150	-
3.6.2	<b>Screeds steel floated, on concrete</b>			
	35mm Thick screeds	m2	50	-
3.7	<b>EARTHWORKS</b>			
3.7.1	<b>EXCAVATION, FILLING, ETC</b>			
	Excavation in earth not exceeding 2m deep	m3	20	-
3.8	<b>REINFORCED CONCRETE</b>			
3.8.1	<b>20MPa/19mm concrete</b>			
	Bases	m3	10	-
	Strip footings	m3	10	-
	Surface beds on waterproofing	m2	50	-
	Ramps	m2	50	-
3.8.2	<b>Fabric reinforcement</b>			
	Ref 245 fabric reinforcement in concrete surface beds, slabs, etc	m2	50	-
3.9	<b>ROOF COVERINGS, ETC</b>			
3.9.1	<b>PROFILED METAL SHEETING AND ACCESSORIES</b>			
	0,8mm "IBR" AZ150" 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2	50	-
	Ridge covering with serrated closer 550mm girth	m	15	-
	Hip covering with serrated closer 550mm girth	m	15	-
	Gutters and downpipe installation	m	15	-
	Carried Forward		R	-
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	-
3.10	<b>STRUCTURAL STEELWORK</b>			
	<b>Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork</b>			
3.10.1	Under cover parking	t	0.5	-
3.10.2	Under cover canopy (Generator)	t	0.5	-
3.11	<b>FENCING</b>			
	<b>CLEARVU FENCING</b>			
	High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,2mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2.4m high including locking recess mechanism at 3.382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdig. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
3.11.1	1.2mm clearvu fence	m	50	-
3.11.2	1.8mm clearvu fence	m	50	-
3.11.3	2.4mm clearvu fence	m	50	-
3.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	2	-
3.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	2	-
	<b>PALISADE FENCING</b>			
	Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
3.11.6	3000 x 1800mm Panel	No	5	-
3.11.7	3000 x 2000mm Panel	No	5	-
3.11.8	3000 x 2400mm Panel	No	5	-
3.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	10	-
3.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	10	-
3.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	10	-
3.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	2	-
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)			
3.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	2	-
3.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	2	-
	Carried Forward		R	-
	Section No. 2			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	-
	Flat wrap 500mm diameter razor wire with and including 25 x 25 x 2 x 600mm Angle section Galvanised mild steel bracket at 2600mm centres				
3.11.15	Flat wrap 500mm diameter razor wire to top of walls	m	50		-
3.11.16	Flat wrap 500mm diameter razor wire fixed to fencing	m	50		-
3.11.17	25 x 25 x 2mm Angle section post x 600mm long	No	5		-
3.11.18	Approved 500mm diameter flat wrap of galvanised razor barbed tape wire fixed vertically and secured to straining wires with and including 2.5mm diameter galvanised binding wire at 300mm centres	m	50		-
Carried Forward to Final Summary					
SECTION 3 - BUILDING WORKS (NEW INSTALLATION)					-

Item No	Description	Quantity	Rate	Amount
	<b>SECTION 4</b> <b>GENERATORS (NEW INSTALLATION)</b> <b>BILL NO 1</b>  <p>The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description</p> <p>Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements</p>			
4.1	<b>GENERATOR SETS</b>			
	<u>Single Phase 20 kVA Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
4.1.1	Supply cost only	No	5	-
4.1.2	Delivery, installation and commissioning	No	5	-
	<u>Three Phase 40 kVA Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
4.1.3	Supply cost only	No	5	-
4.1.4	Delivery, installation and commissioning	No	5	-
	<u>Three Phase 60 kVA Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
4.1.5	Supply cost only	No	5	-
4.1.6	Delivery, installation and commissioning	No	5	-
	<u>Three Phase 80 kVA Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
4.1.7	Supply cost only	No	5	-
4.1.8	Delivery, installation and commissioning	No	5	-
	<u>Three Phase 100 kVA Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
4.1.9	Supply cost only	No	5	-
4.1.10	Delivery, installation and commissioning	No	5	-
	<u>Three Phase 150 kVA Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
4.1.11	Supply cost only	No	5	-
4.1.12	Delivery, installation and commissioning	No	5	-
	Carried Forward		R	-
	Section No. 4			
	Bill No. 1			
	GENERATORS			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	-
	<u>Three Phase 250 kVA Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
4.1.13	Supply cost only	No	5		-
4.1.14	Delivery, installation and commissioning	No	5		-
	<u>Three Phase 500 kVA Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
4.1.15	Supply cost only	No	5		-
4.1.16	Delivery, installation and commissioning	No	5		-
4.2	<b>GENERAL</b>				
4.2.1	Load test Gen set	No	5		-
4.2.2	Connect Genset to main Emergency DB on approval of Engineer	No	5		-
4.2.3	Inspect Electrical integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report.	No	5		-
4.2.4	Exhaust System - Extend exhaust system to expell outside of plant room.	No	5		-
4.2.5	Replace motorised change-over switch	No	5		-
4.2.6	Supply and install low fuel alarm and shut off system	No	5		-
4.2.7	Supply and install lockable Emergency stop system that trips the genset and fuel supply in an Emergency	No	5		-
4.2.8	Replace SmartGen Controller	No	5		-
4.2.9	Supply diesel fuel	Liter	20 000		-
4.2.10	Supply and install starter battery	No	5		-
4.2.11	Supply and install padlocks	No	5		-
	Carried Forward			R	-
	Section No. 4				
	Bill No. 1				
	GENERATORS				





Item No	Description	Quantity	Rate	Amount
	<b>SECTION 5</b> <b>STANDBY POWER (NEW INSTALLATION)</b> <b>BILL NO 1</b>  The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description  Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements			
5.1	<b>UPS</b>			
	<u>Single Phase 5 kVA UPS as per technical and specific specifications</u>			
5.1.1	Supply cost only - including batteries and cell connectors	No	No	
5.1.2	Delivery, installation and commissioning	5	5	
	<u>Single Phase 10 kVA UPS as per technical and specific specifications</u>			
5.1.3	Supply cost only - including batteries and cell connectors	No	5	-
5.1.4	Delivery, installation and commissioning	No	5	-
	<u>Single Phase 15 kVA UPS as per technical and specific specifications</u>			
5.1.5	Supply cost only - including batteries and cell connectors	No	5	
5.1.6	Delivery, installation and commissioning	No	5	
	<u>Single Phase 20 kVA UPS as per technical and specific specifications</u>			
5.1.7	Supply cost only - including batteries and cell connectors	No	5	-
5.1.8	Delivery, installation and commissioning	No	5	-
	<u>Three Phase 5 kVA UPS as per technical and specific specifications</u>			
5.1.9	Supply cost only - including batteries and cell connectors	No	5	
5.1.10	Delivery, installation and commissioning	No	5	
	<u>Three Phase 10 kVA UPS as per technical and specific specifications</u>			
5.1.11	Supply cost only - including batteries and cell connectors	No	5	-
5.1.12	Delivery, installation and commissioning	No	5	-
	<u>Three Phase 15 kVA UPS as per technical and specific specifications</u>			
5.1.13	Supply cost only - including batteries and cell connectors	No	5	
5.1.14	Delivery, installation and commissioning	No	5	
	<u>Three Phase 20 kVA UPS as per technical and specific specifications</u>			
5.1.15	Supply cost only - including batteries and cell connectors	No	5	-
5.1.16	Delivery, installation and commissioning	No	5	-
	<u>Three Phase 40 kVA UPS as per technical and specific specifications</u>			
5.1.17	Supply cost only - including batteries and cell connectors	No	5	-
5.1.18	Delivery, installation and commissioning	No	5	-
	<u>Three Phase 60 kVA UPS as per technical and specific specifications</u>			
5.1.19	Supply cost only - including batteries and cell connectors	No	5	-
5.1.20	Delivery, installation and commissioning	No	5	-
	<u>Three Phase 80 kVA UPS as per technical and specific specifications</u>			
5.1.21	Supply cost only - including batteries and cell connectors	No	5	-
5.1.22	Delivery, installation and commissioning	No	5	-
	<u>Three Phase 100 kVA UPS as per technical and specific specifications</u>			
5.1.23	Supply cost only - including batteries and cell connectors	No	5	-
5.1.24	Delivery, installation and commissioning	No	5	-
5.1.25	Supply and install UPS Network Management Card	No	5	-
5.1.26	AC Input / Output Distribution Board	No	5	-
	Carried Forward		<b>R</b>	-
	Section No. 5			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	-
5.2	<b>INVERTERS</b>			
	Hybrid inverters			
5.2.1	<u>3KW Single Phase Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% Cont. output power at 25CVA-300 25C-2400W, 40C-2200, 65C-1700W -Peak power output; 6000W -Maximum efficiency; 94% -Maximum feed through current; 2x50A - 2 x AC inputs -DC input range - 24V	No	15	-
5.2.2	<u>5KW Single Phase Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-500VA, 25C-4000W, 40C-370065C-3000W -Peak power output; 10000W -Maximum efficiency; 95% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V	No	15	-
5.2.3	<u>8KW Single Phase Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-8000VA 25C-6500W, 40C-5500,65C-3600W -Peak power output; 16000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V	No	5	-
5.2.4	<u>10KW Single Phase Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-10000VA 25C-8000W, 40C-6500,65C-4500W -Peak power output; 20000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V	No	5	-
	Carried Forward		R	-
	Section No. 5			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	-
5.2.5	<u>15KW Single Phase Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-15000VA 25C-12000W, 40C-10000,65C-7000W -Peak power output; 25000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V	No	5	-
5.3	<b>LITHIUM ION BATTERIES</b> <u>LITHIUM ION BATTERY - supply, delivery and installation included</u>			
5.3.1	<u>48V/5kWh Li-ion battery</u> -Total energy capacity; 5kWh -Energy, 80% DoD (kWh) - 4 -Energy, 90% DoD (kWh) - 4.5 -Current capacity; 100Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	15	-
5.3.2	<u>48V/10kWh Li-ion battery</u> -Total energy capacity; 10kWh -Energy, 80% DoD (kWh) - 8 -Energy, 90% DoD (kWh) - 9 -Current capacity; 200Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	5	-
5.3.3	<u>48V/15kWh Li-ion battery</u> -Total energy capacity;15kWh -Energy, 80% DoD (kWh) - 12 -Energy, 90% DoD (kWh) - 13.5 -Current capacity; 300Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	5	-
5.3.4	<u>48V/20kWh Li-ion battery</u> -Total energy capacity;20kWh -Energy, 80% DoD (kWh) - 16 -Energy, 90% DoD (kWh) - 18 -Current capacity; 400Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	5	-
5.3.5	<u>48V/30kWh Li-ion battery</u> -Total energy capacity;30kWh -Energy, 80% DoD (kWh) - 24 -Energy, 90% DoD (kWh) - 27 -Current capacity; 600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	5	-
	Carried Forward		R	-
	Section No. 5			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	-
5.3.6	<u>48V/40kWh Li-ion battery</u> -Total energy capacity;40kWh -Energy, 80% DoD (kWh) - 32 -Energy, 90% DoD (kWh) - 36 -Current capacity; 800Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	2		-
5.3.7	<u>48V/80kWh Li-ion battery</u> -Total energy capacity;80kWh -Energy, 80% DoD (kWh) - 64 -Energy, 90% DoD (kWh) - 72 -Current capacity; 1600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	2		-
5.4	<b>CABLING, CONNECTORS AND FUSES</b>				
5.4.1	2 Pole fuse holders (Push-in type)	No	60		-
5.4.2	AC cable between inverters and emergency DB	m	50		-
5.4.3	35mm <sup>2</sup> single core HV DC cable - Black	m	50		-
5.4.4	35mm <sup>2</sup> single core HV DC cable - Red	m	50		-
5.4.5	35mm <sup>2</sup> M8 Ring Terminal Lugs	No	60		-
5.4.6	70mm <sup>2</sup> single core 1000V HV DC cable - Black	m	50		-
5.4.7	70mm <sup>2</sup> single core 1000V HV DC cable - Red	m	50		-
5.4.8	70mm <sup>2</sup> M8 Ring Terminal Lugs	No	60		-
5.4.9	120mm <sup>2</sup> single core 1000V HV DC cable - Black	m	50		-
5.4.10	120mm <sup>2</sup> single core 1000V HV DC cable - Red	m	50		-
5.4.11	120mm <sup>2</sup> M8 Ring Terminal Lugs	No	60		-
5.4.12	160A 48V Fuses	No	60		-
5.4.13	DC Battery Busbar Combiner Box complete	No	60		-
	<b>Carried Forward to Final Summary</b>			R	-
	<b>SECTION 4 - UPS (NEW INSTALLATION)</b>				

Item No	Description	Quantity	Rate	Amount
<b>SECTION 6</b> <b>SOLAR INSTALLATIONS (NEW INSTALLATION)</b> <b>BILL NO 1</b>  The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description  Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements				
<b>6.1 MPPT SOLAR CHARGE CONTROLLERS</b>				
<u>MPPT SOLAR CHARGERS - supply, delivery and installation included</u>				
6.1.1	MPPT 250/70 with the following specs: -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 70A -Nominal PV power; 48V - 4000W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No 10		-
6.1.2	MPPT 250/85 with the following specs: -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 85A -Nominal PV power; 48V - 4900W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No 10		-
6.1.3	MPPT 250/100 with the following specs: -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 100A -Nominal PV power; 48V - 5800W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No 10		-
<b>6.2 SOLAR PANELS</b>				
<u>SOLAR PANNELS - supply, delivery and installation included</u>				
6.2.1	300W - 400W Solar panels -Maximum efficiency; 19.3% Operating temp; -40 to 80C	No 50		-
6.2.2	400W - 500W Solar panels -Maximum efficiency; 19.6% Operating temp; -40 to 80C	No 50		-
6.2.2	500W+ Solar panels -Maximum efficiency; 19.6% Operating temp; -40 to 80C	No 50		-
<b>6.3 MOUNTING STRUCTURES</b>				
6.3.1	4.7m long mounting rails	No 50		-
6.3.2	Stainless Steel self bonding mid-clamp with push clip	No 50		-
6.3.3	Stainless Steel self bonding adjustable end-clamp	No 50		-
6.3.4	IBR Roof mounting brackets for long rail solutions	No 50		-
6.3.5	Clip lock roof mounting brackets for long rail solutions	No 50		-
6.3.6	Tile roof mounting brackets for long rail solutions	No 50		-
6.3.7	Earthing clamps	No 50		-
6.3.8	Triangle structure to fit 4 solar panels	No 5		-
6.3.8	Triangle structure to fit 8 solar panels	No 5		-
Carried Forward			R	-
Section No. 5				
Bill No. 1				
Item No	Description	Quantity	Rate	Amount

	Brought Forward			<b>R</b>	-
6.4	<b>CABLING AND CONNECTORS</b>				
6.4.1	Cable - DB+ (triple certified SN50618) Black 6mm	m	200		-
6.4.2	Cable - DB+ (triple certified SN50618) Red 6mm	m	200		-
6.4.3	Earth wire	m	200		-
6.5	<b>ISOLATORS AND FUSES</b>				
6.5.1	K&N Dual string DC Switch Disconnecter 25A 330V - 18A 600V (per string)	No	15		-
6.5.2	Combiner box 2 In / 2 Out 550V	No	15		-
6.6	<b>DESIGN, SPECIFICATION AND SIGNOFF</b>				
6.6.1	Allow for professional fees to include design, supervision, quality control and certification by registered professional engineer (per installation)	Sum	1		-
6.7	<b>ROOF INSPECTIONS AND REPAIRS</b>				
6.7.1	Allow for professional fees to include inspect, recommend repair work required, specification and sign-off roof structures by registered professional engineer (per installation)	Sum	1		-
6.7.2	Allow for repair work to the roof - provisional amount	Sum	1		-
6.6	<b>TESTS AND INSPECTIONS ON COMPLETION OF THE WORK</b>				
	Test, inspect and provide a comprehensive report on the complete solar installation including handing over of:	No	1		-
	a) Certificates of Compliance - original plus two certified copies each				
	b) Up-to-date single line diagrams + two copies each				
	c) Labelling				
	<b>Carried Forward to Final Summary</b>			<b>R</b>	-
	<b>SECTION 6 - SOLAR (NEW INSTALLATION)</b>				

Item No	Description	Quantity	Rate	Amount
	<b><u>SECTION 7</u></b> <b><u>AIRCONDITIONING (NEW INSTALLATION)</u></b> <b><u>BILL NO 1</u></b>  The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description  Routine services of air conditioning units refers to the servicing of the units after the 12 months' free maintenance period. May include servicing of existing units installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements  <b>7.1 AIR CONDITIONING</b>  Supply, deliver, install and commission the following HVAC equipment including fixing of hardwired remote against walls, wiring from isolators to outdoor and indoor units, glands, shrouds, monthly maintenance for the guarantee/warranty period, pumps, temperature indicator, on console, quiet running, energy efficient, etc.  <b>CEILING CASSETTE UNITS</b>  <u>18000 BTU Ceiling Cassette AC Unit</u> 7.1.1 Supply cost only No 15 - 7.1.2 Delivery, installation and commissioning No 15 -  <u>24000 BTU Ceiling Cassette AC Unit</u> 7.1.3 Supply cost only No 15 - 7.1.4 Delivery, installation and commissioning No 15 -  <u>36000 BTU Ceiling Cassette AC Unit</u> 7.1.5 Supply cost only No 15 - 7.1.6 Delivery, installation and commissioning No 15 -  <u>48000 BTU Ceiling Cassette AC Unit</u> 7.1.7 Supply cost only No 15 - 7.1.8 Delivery, installation and commissioning No 15 -  <b>MIDWALL SPLIT UNITS</b>  <u>9000 BTU Midwall Split AC Unit</u> 7.1.9 Supply cost only No 15 - 7.1.10 Delivery, installation and commissioning No 15 -  <u>12000 BTU Midwall Split AC Unit</u> 7.1.11 Supply cost only No 15 - 7.1.12 Delivery, installation and commissioning No 15 -  Carried Forward Section No. 7 Bill No. 1			
			R	-

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	-
	<u>18000 BTU Midwall Split AC Unit</u>				
7.1.13	Supply cost only	No	15		-
3.1.14	Delivery, installation and commissioning	No	15		-
	<u>24000 BTU Midwall Split AC Unit</u>				
7.1.15	Supply cost only	No	15		-
7.1.16	Delivery, installation and commissioning	No	15		-
	<u>36000 BTU Midwall Split AC Unit</u>				
7.1.17	Supply cost only	No	15		-
7.1.18	Delivery, installation and commissioning	No	15		-
	<u>48000 BTU Midwall Split AC Unit</u>				
7.1.19	Supply cost only	No	15		-
7.1.20	Delivery, installation and commissioning	No	15		-
	<b>UNDER CEILING SPLIT UNITS</b>				
	<u>48000 BTU Under ceiling Split AC Unit</u>				
7.1.21	Supply cost only	No	15		-
7.1.22	Delivery, installation and commissioning	No	15		-
	<u>60000 BTU Underceiling Split AC Unit</u>				
7.1.23	Supply cost only	No	15		-
7.1.24	Delivery, installation and commissioning	No	15		-
7.2	<b>CONDENSATE DRAINS</b>				
7.2.1	32mm OD Thick wall PVC pipe c/w fittings and connections	m	50		-
7.3	<b>FANS</b> Supply, deliver, install and commission extractor fans connected to luminaires complete with wiring, fixing materials, monthly maintenance for the guarantee/warranty period. Extractor fans to be installed in ceiling panels				
	<u>300 l/s in line extractor fan</u>				
7.3.1	Supply cost only	No	15		-
7.3.2	Delivery, installation and commissioning	No	15		-
7.4	<b>GENERAL</b>				
7.4.1	Supply and install galvanised steel cages for the A/C compressors	No	15		-
7.4.2	Additional pipe run including trunking and amouflex	m	20		-
7.4.3	Electrical (connect to isolators provided by others)				
	2.5mm Twin and Earth	m	20		-
7.5	<b>MAINTENANCE</b>				
7.5.1	Call out fee	No	1		-
	<b>Carried Forward to Final Summary</b>			R	-
	SECTION 7 - AIRCONDITIONING (NEW INSTALLATION)				



Item No	Description	Quantity	Rate	Amount
	<u>SECTION 8</u> <b>WATER TANK (NEW INSTALLATION)</b> <u>BILL NO 1</u>  <b>8.1 WATER TANK INSTALLATION</b>  The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description  <u>5 000 LT WATER TANK</u> 8.1.1 Supply, delivery and installation No 5 -  <u>10 000 LT WATER TANK</u> 8.1.2 Supply, delivery and installation No 5 -  <u>.75 kw PRESSURE PUMP</u> 8.1.3 Supply, delivery and installation No 5 -  <u>.75 kw PRESSURE PUMP (VSD)</u> 8.1.4 Supply, delivery and installation No 5 -  <u>PLUMBING INSTALLATION</u> 8.1.5 Plumbing installation for the connection of water tank, pressure pump and building related repairs No 5 -			
	Carried Forward to Final Summary		R	-
	SECTION 8 - WATER TANK (NEW INSTALLATION)			

Item No	Description	Quantity	Rate	Amount
<b><u>SECTION 9</u></b>				
<b><u>PRELIMINARIES</u></b>				
<b><u>BILL NO 1</u></b>				
<b><u>CALL OUTS AND EMERGENCY WORKS</u></b>				
Call outs are for unquoted emergency works either during normal or after hours not applicable to planned services. Fixed Rates - Artisans and Labours to attend to Emergency Works				
<b>Labour Rates</b>				
<b>Normal Hours</b>				
1	Accredited Artisan p/h	100		-
2	Artisan assistant p/h	100		-
3	Labour p/h	100		-
<b>Sundays and Public Holidays</b>				
4	Accredited Artisan p/h	100		-
5	Artisan assistant p/h	100		-
6	Labour p/h	100		-
<b>After Hours and Saturdays</b>				
7	Accredited Artisan p/h	100		-
8	Artisan assistant p/h	100		-
9	Labour p/h	100		-
10	Travelling km	500		-
11	Accommodation No	10		-
			R	-
<b>CALL OUTS AND EMERGENCY WORKS</b>				-
<b>Carried Forward to Summary of Section No. 9</b>				-

Item No	Description	Quantity	Rate	Amount
Bill No	<b>SECTION 9 SUMMARY - PRELIMINARIES</b>			
		Page No		Amount
1	CALL OUTS AND EMERGENCY WORKS	2		-
Carried to Final Summary				-
SECTION 9 SUMMARY - PRELIMINARIES (MAINTENANCE)				

Item No	Description		Quantity	Rate	Amount
	<b>SECTION 10</b>				
	<b>ELECTRICAL (MAINTENANCE)</b>				
	<b>BILL NO 1</b>				
	<b>SERVICE EXISTING BUILDING DB:</b>				
10.1.1	Existing Building DB's	No	15		-
	<b>GENERAL ELECTRICAL REPAIRS</b>				
10.2.1	Replace Faulty photo cell	No	15		-
10.2.2	Replace fuses in switch board	No	15		-
10.2.3	Replace faulty WHITE plugs on power skirting complete with covers	No	15		-
10.2.4	Replace faulty RED plugs on power skirting complete with covers	No	15		-
10.2.5	Ecoskirt C/Trrre 16A White Cover and cradle	No	15		-
	Supply and installation of circuit breakers (SABS approved):				
10.2.7	a) 45-63A, 5kA single pole, curve 1	No	10		-
10.2.8	b) 10-40A, 5kA single pole	No	10		-
10.2.9	c) 45-63A, 5kA triple pole, curve 1	No	10		-
10.2.10	d) 10-40A, 5kA triple pole	No	10		-
10.2.11	e) 45-63A, 5kA triple pole	No	10		-
10.2.12	f) 80-125A, 5kA triple pole	No	10		-
10.2.13	g) 150-200A, 10kA triple pole	No	10		-
10.2.14	h) 40-60A, 35kA triple pole	No	10		-
10.2.15	i) 80-125A, 25kA triple pole	No	10		-
	Supply and install contactors (SABS)				
10.2.16	a) 0-30A, 3 pole	No	10		-
10.2.17	b) 40-63A, 3 pole	No	10		-
10.2.18	c) 63-150A, 3 pole	No	10		-
	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):				
10.2.19	a) 63A double pole				
	<b>LIGHTING INSTALLATION</b>				
	Re-lamp luminaire:				
10.2.20	a) 5FT LED Tubes	No	200		-
10.2.21	b) 4FT LED Tubes	No	200		-
10.2.22	c) 2FT LED Tubes	No	200		-
10.2.23	d) 7W LED ES/BC Lamps	No	200		-
10.2.24	Replace diffuser or lens	No	50		-
10.3	<b>MAINTENANCE</b>				
10.3.1	Call out fee	No	1		-
	<b>Carried Forward to Final Summary</b>			R	-
	<b>SECTION 10 - ELECTRICAL (MAINTENANCE)</b>				

Item No	Description	Quantity	Rate	Amount
	<b>SECTION 11</b> <b>BUILDING WORKS (MAINTENANCE)</b> <b>BILL NO 1</b>  <b>PAINTING</b> One coat primer and two coats Dulux Caramel Sand 5 Double velvet (or similar as per engineer approved or to match existing)			
11.1.1	a) On external walls	m <sup>2</sup> 150		-
11.1.2	b) On internal walls	m <sup>2</sup> 150		-
11.1.3	c) On ceilings	m <sup>2</sup> 150		-
11.1.4	d) On drywalls	m <sup>2</sup> 150		-
	<b>FLOORING</b> <b>Supply and installation of new floor covering</b>			
11.2.1	Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive	m2 20		-
11.2.2	Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 20		-
	<b>PALISADE FENCING</b> Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
11.3.1	3000 x 1800mm Panel	No 5		-
11.3.2	3000 x 2000mm Panel	No 5		-
11.3.3	3000 x 2400mm Panel	No 5		-
11.3.4	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No 10		-
11.3.5	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No 10		-
11.3.6	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No 10		-
11.3.7	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No 2		-
11.3.8	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)			
11.3.9	Sliding gate, size 4000mm wide x 2400mm high, ditto	No 2		-
11.3.10	Sliding gate, size 6000mm wide x 2400mm high, ditto	No 2		-
	<b>Carried Forward to Final Summary</b> SECTION 11 - BUILDING (MAINTENANCE)		R	-

Item No	Description		Quantity	Rate	Amount
	<b>SECTION 12</b>				
	<b>GENERATORS (MAINTENANCE)</b>				
	<b>BILL NO 1</b>				
12.1	<b>GENERATOR SETS</b>				
	<u>Single Phase 20 kW Genset</u>				
12.1.1	Minor Service (6 Months / 250 Hours)	No	5		-
12.1.2	Major Service (12 Months / 500 Hours)	No	5		-
	<u>Single Phase 30 kW Genset</u>				
12.1.3	Minor Service (6 Months / 250 Hours)	No	5		-
12.1.4	Major Service (12 Months / 500 Hours)	No	5		-
	<u>Three Phase 30 kW Genset</u>				
12.1.5	Minor Service (6 Months / 250 Hours)	No	5		-
12.1.6	Major Service (12 Months / 500 Hours)	No	5		-
	<u>Three Phase 40 kW</u>				
12.1.7	Minor Service (6 Months / 250 Hours)	No	5		-
12.1.8	Major Service (12 Months / 500 Hours)	No	5		-
	<u>Three Phase 60 kW</u>				
12.1.9	Minor Service (6 Months / 250 Hours)	No	5		-
12.1.10	Major Service (12 Months / 500 Hours)	No	5		-
	<u>Three Phase 80 kW Genset</u>				
12.1.11	Minor Service (6 Months / 250 Hours)	No	5		-
12.1.12	Major Service (12 Months / 500 Hours)	No	5		-
	<u>Three Phase 100 kW Genset</u>				
12.1.13	Minor Service (6 Months / 250 Hours)	No	5		-
12.1.14	Major Service (12 Months / 500 Hours)	No	5		-
	<u>Three Phase 150 kW Genset</u>				
12.1.15	Minor Service (6 Months / 250 Hours)	No	5		-
12.1.16	Major Service (12 Months / 500 Hours)	No	5		-
12.1.17	Load test Gen set	No	1		-
12.1.18	Replace Alternator AVR	Sum	1		-
12.1.19	Replace motorised change-over switch	No	5		-
12.1.20	Replace Oil Pressure sensor	No	5		-
12.1.21	Replace Water Pressure sensor				
12.1.22	Replace SmartGen Controller	No	5		-
12.1.23	Supply diesel fuel	Liter	20 000		-
12.1.24	Supply and install starter battery	No	5		-
12.1.24	Replace generator starter	No	1		-
12.1.25	Repair existing generator canopy	No	1		-
12.2	<b>MAINTENANCE</b>				
12.2.1	Call out fee	No	1		-
	<b>Carried Forward to Final Summary</b>			R	-
	<b>SECTION 12 - GENERATORS (MAINTENANCE)</b>				-

Item No	Description	Quantity	Rate	Amount
	<b>SECTION 13</b> <b>STANDBY POWER (MAINTENANCE)</b> <b>BILL NO 1</b>  The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description  Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements			
13.1	<b>UPS</b>			
	<u>Single Phase 5 kVA UPS as per technical and specific specifications</u>			
13.1.1	Routine servicing of UPS	No	50	
13.1.2	Replacement battery - For replacing defective batteries of the same duty	Sum	1	
	<u>Single Phase 10 kVA UPS as per technical and specific specifications</u>			
13.1.1	Routine servicing of UPS	No	50	-
13.1.2	Replacement battery - For replacing defective batteries of the same duty	Sum	1	-
	<u>Single Phase 15 kVA UPS as per technical and specific specifications</u>			
13.1.3	Routine servicing of UPS	No	50	
13.1.4	Replacement battery - For replacing defective batteries of the same duty	Sum	1	
	<u>Single Phase 20 kVA UPS as per technical and specific specifications</u>			
13.1.3	Routine servicing of UPS	No	50	-
13.1.4	Replacement battery - For replacing defective batteries of the same duty	Sum	1	-
	<u>Three Phase 5 kVA UPS as per technical and specific specifications</u>			
13.1.5	Routine servicing of UPS	No	50	
13.1.6	Replacement battery - For replacing defective batteries of the same duty	Sum	1	
	<u>Three Phase 10 kVA UPS as per technical and specific specifications</u>			
13.1.5	Routine servicing of UPS	No	50	-
13.1.6	Replacement battery - For replacing defective batteries of the same duty	Sum	1	-
	<u>Three Phase 15 kVA UPS as per technical and specific specifications</u>			
13.1.7	Routine servicing of UPS	No	50	
13.1.8	Replacement battery - For replacing defective batteries of the same duty	Sum	1	
	<u>Three Phase 20 kVA UPS as per technical and specific specifications</u>			
13.1.7	Routine servicing of UPS	No	50	-
13.1.8	Replacement battery - For replacing defective batteries of the same duty	Sum	1	-
	<u>Three Phase 40 kVA UPS as per technical and specific specifications</u>			
13.1.9	Routine servicing of UPS	No	50	-
13.1.10	Replacement battery - For replacing defective batteries of the same duty	Sum	1	-
	<u>Three Phase 60 kVA UPS as per technical and specific specifications</u>			
13.1.11	Routine servicing of UPS	No	50	-
13.1.12	Replacement battery - For replacing defective batteries of the same duty	Sum	1	-
	<u>Three Phase 80 kVA UPS as per technical and specific specifications</u>			
13.1.13	Routine servicing of UPS	No	50	-
13.1.14	Replacement battery - For replacing defective batteries of the same duty	Sum	1	-
	Carried Forward		R	-
	Section No. 4			
	Bill No. 1			
Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	-

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Item No	Description		Quantity	Rate	Amount
	<p><b>SECTION 14</b></p> <p><b>SOLAR INSTALLATIONS (MAINTENANCE)</b></p> <p><b>BILL NO 1</b></p> <p>The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description</p> <p>Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumeables. Excludes travel and disbursements</p>				
14.1	<b>SOLAR PANELS</b>				
14.1.1	Routine servicing and cleaning of solar panels as per manufacturers instructions	No	50		-
	Carried Forward to Final Summary SECTION 14 - SOLAR INSTALLATIONS (MAINTENANCE)			R	-

Item No	Description	Quantity	Rate	Amount
	<p><b>SECTION 15</b>  <b>AIRCONDITIONING (MAINTENANCE)</b>  <b>BILL NO 1</b></p> <p>The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description</p> <p>Routine services of air conditioning units refers to the servicing of the units after the 12 months' free maintenance period. May include servicing of existing units installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements</p>			
15.1	<b>AIR CONDITIONING</b>			
	AC Ceiling Cassette Units			
	Supply, deliver, install and commission the following HVAC equipment including fixing of hardwired remote against walls, wiring from isolators to outdoor and indoor units, glands, shrouds, monthly maintenance for the guarantee/warranty period, pumps, temperature indicator, on console, quiet running, energy efficient, etc.			
15.1.1	<u>18000 BTU Ceiling Cassette AC Unit</u> Routine servicing of AC Unit	No	150	-
15.1.2	<u>24000 BTU Ceiling Cassette AC Unit</u> Routine servicing of AC Unit	No	150	-
15.1.3	<u>36000 BTU Ceiling Cassette AC Unit</u> Routine servicing of AC Unit	No	150	-
15.1.4	<u>48000 BTU Ceiling Cassette AC Unit</u> Routine servicing of AC Unit	No	150	-
15.1.5	<u>9000 BTU Midwall Split AC Unit</u> Routine servicing of AC Unit	No	150	-
15.1.6	<u>12000 BTU Midwall Split AC Unit</u> Routine servicing of AC Unit	No	150	-
15.1.7	<u>18000 BTU Midwall Split AC Unit</u> Routine servicing of AC Unit	No	150	-
15.1.8	<u>24000 BTU Midwall Split AC Unit</u> Routine servicing of AC Unit	No	150	-
15.1.9	<u>36000 BTU Midwall Split AC Unit</u> Routine servicing of AC Unit	No	150	-
15.1.10	<u>48000 BTU Midwall Split AC Unit</u> Routine servicing of AC Unit	No	150	-
15.1.11	AC Drainage Pump	No	10	-
15.1.12	AC Universal Remotes	No	10	-
15.1.13	Call out fee	No	1	-
	<b>Carried Forward to Final Summary</b>			-
	<b>SECTION 15 - AIRCONDITIONING (MAINTENANCE)</b>			

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 16</u> <b>WATER TANK (MAINTENANCE)</b> <u>BILL NO 1</u>			
16.1	<u>WATER TANK INSTALLATION</u>  The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description			
16.1.1	<u>5000LT WATER TANK</u> Replace damaged tank	No	5	-
16.1.2	<u>.75 kw PRESSURE PUMP</u> Supply, delivery and installation	No	5	-
16.1.3	<u>.75 kw PRESSURE PUMP (VSD)</u> Supply, delivery and installation	No	5	-
16.1.4	<u>PLUMBING INSTALLATION</u> Plumbing installation for the connection of water tank, pressure pump and building related repairs	No	5	-
Carried Forward to Final Summary			R	-
SECTION 16 - WATER TANK (MAINTENANCE)				

<b><u>FINAL SUMMARY</u></b>				<b><u>AMOUNT</u></b>
<b><u>NEW INSTALLATIONS</u></b>				
SECTION 1 - SUMMARY PRELIMINARIES		R	-	
SECTION 2 - SUMMARY ELECTRICAL		R	-	
SECTION 3 - SUMMARY BUILDING WORKS		R	-	
SECTION 4 - SUMMARY GENERATORS		R	-	
SECTION 5 - SUMMARY STANDBY POWER		R	-	
SECTION 6 - SUMMARY SOLAR INSTALLATIONS		R	-	
SECTION 7 - SUMMARY AIRCONDITIONING		R	-	
SECTION 8 - SUMMARY WATER TANK INSTALLATION		R	-	
<b><u>MAINTENANCE</u></b>				
SECTION 9 - SUMMARY PRELIMINARIES		R	-	
SECTION 10 - SUMMARY ELECTRICAL		R	-	
SECTION 11 - SUMMARY BUILDING WORKS		R	-	
SECTION 12 - SUMMARY GENERATORS		R	-	
SECTION 13 - SUMMARY STANDBY POWER		R	-	
SECTION 14 - SUMMARY SOLAR INSTALLATIONS		R	-	
SECTION 15 - SUMMARY AIRCONDITIONING		R	-	
SECTION 16 - SUMMARY WATER TANK INSTALLATION			-	
<b>SUB TOTAL</b>		R	-	
Add: 10% (Ten percent) Contingency, to be deducted if not utilised.		R	-	
<b>TOTAL</b>		R	-	
Add: VAT @ 15%		R	-	
<b>TOTAL BID PRICE OFFERED</b>		R	-	