BUILDING OF NEW GUARD ROOM AT MIDWAY PERWAY DEPOT.

SECTION C

SCOPE, SPECIFICATIONS AND SCHEDULE OF QUANTITIES

	OCCUPATIONAL HEALTH AND SAFTEY	<u>Unit</u>	<u>QTY</u>	Rate	<u>Amount</u>
	The contractor shall comply with all the requirements set out in the Construction Regulations, issued under The Occupational Health & Safety Act no 85 of 1993.				
	Safety file shall be provided by the contractor prior to commencement of work.				
	The contractor shall carry out the works with as little noise and mess as possible. All rubble shall be taken away from site on a daily basis.				
	Note: All designated items should comply with local content threshold.				
	BILL NO. 1				
	PRELIMINARY AND GENERAL				
	Preliminary and General				
1	All Preliminary and General applicable to this project	Sum	1	R -	R -
	Occupational Health and safety				
2	Compliance with Occupational Health and Safety Act (Act 85 of 1993) and its regulations and with the Employers Health and Safety	Sum	1	R -	R -
	Architectural work				
3	Design, drawing and approval of the building plans from Municipality for 3.5m wide x 3m long x 2.6m high guard room, toilet inclusive with 200mm reinforced concrete roof slab floor plan including elevations	Sum	1	R -	R -
			Carried	to final summary	R -

ANNEXURE B: GB AND CIVIL WORK

	BILL NO 2	<u>Unit</u>	<u>QTY</u>	Rate	Amount
	Earthworks (Provisional)				
	<u>Supplementary Preambles</u>				
	All soil poisoning and insecticide to be applied under a ten year guarantee by an approved firm of specialist				
	<u>General notes</u>				
	Fill material shall be placed in lift of not more than 150mm Compaction density to be controlled using DCP apparatus to a maximum of 30mm/blow 93% MOD AASHTO compaction is to be achieved				
	Where backfill is required on both sides of walls, backfill both sides simultaneously.				
	Where compaction of fill material behind retaining walls is done using mechanical rollers, the rollers must be kept 500mm away from the wall and this 500mm portion must be compacted with hand stampers or wackers.				
	Excavation in earth not exceeding 1m deep				
1	Trenches	m ³	150	R -	R -
	Extra over all excavation for carting away				
2	Surplus material from excavation and/or stock piles on site to a dumping site to be located by the contractor	m^3	20	R -	R -
	Keeping excavation free of water				
3	Keeping excavation free of water	Item		R -	R -
	Earth filling obtain from the excavation and/or prescribed stock piles on site compacted to 93% Mod AASHTO density				

4	Backfilling to trenches, holes, etc	m^3	20	R	-	R	-
	Compaction of surfaces						
5	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m^2	20	R	-	R	-
	Soil poisoning: Soil insecticide						
6	To bottom and sides of trenches	m^2	20	R	-	R	-
		R	-				
	BILL NO 3	<u>Unit</u>	<u>QTY</u>		Rate		<u>Amount</u>
	Concrete, Formwork and Reinforcement						
	Cost of test:						
	The costs of making, storing and testing of concrete test cubes as required under clause 7, "test" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the test to the Architects. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the architect						
	<u>Formwork</u>						
	Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent", for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use.						
	The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until newly constructed work is able to support itself.						
	Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be						

	measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of he sides of the excavation, provision for which is made in "Earthworks".						
	CONCRETE WORK						
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES						
	25MPa/20mm Concrete						
1	Strip footing	m ³	5	R	-	R	-
2	Concrete slab for guard room and standby generator	m^3	15	R	-	R	-
	REINFORCED CONCRETE						
	25MPa/20mm Concrete						
3	200mm concrete roof slab	m ³	10	R	-	R	-
	TEST BLOCKS						
4	Making and testing 150 x 150 x 150mmconcrete strength test cube	No.	1	R	-	R	-
	CONCRETE SUNDRIES						
	Finishing top surface of concrete smooth with a wood float						
5	Surface beds, floor slab, etc	m ²	30	R	-	R	-
	Finishing top surface of concrete smooth with a power float						
6	Surface beds, floor slab, etc	m ²	30	R	-	R	-
	ROUGH FORMWORK (DEGREE OF ACCURACY III)						
	Rough formwork to sides						

7	Strip footings	m ²	10	R	-	R	-
	SMOOTH FORMWORK (DEGREE OF ACCURACY III)						
	Smooth formwork to sides						
8	Concrete slab	m ²	5	R	-	R	-
9	Concrete roof slab	m ²	5	R	-	R	-
	Smooth formwork to soffit						
10	Roof concrete slab	m ²	15	R	-	R	-
	MOVEMENT JOINTS ETC						
	Saw cut Joints						
11	20 x 45mm Saw cut joints on top of concrete	m	10	R	-	R	-
	REINFORCEMENT						
	Reinforcement to structural concrete work						
	Calculate, design, Fabrication and placing reinforcement for footings, floor and roof slab. Bending schedule to be			_		_	
12	submitted for approval prior to construction	Sum		R	-	R	-
			Carried	to fina	l summary	R	-
	BILL NO 4	<u>Unit</u>	<u>QTY</u>		Rate		<u>Amount</u>
	MASONRY						
	<u>BRICKWORK</u>						
	FOUNDATIONS (PROVISIONAL)						
	15MPa/20mm concrete						

1	50mm blinding layer	m^3	1	R	-	R	-
	Brickwork of NFP bricks in class II mortar						
2	One brick walls	m ²	15	R	-	R	-
	SUPERSTRUCTURE						
	20-30MPa Silver-gray Travertine or similar approved Imperial FBX clay face brick, size 222 x 106 x 73mm, manufactured in accordance with SANS 227:2007, bedded and jointed in Class I mortar and pointed with flush vertical, flush horizontal joints, with every 6th horizontal joint to be recessed.						
3	One brick walls	m ²	60	R	-	R	-
4	Half brick walls	m^2	10	R	-	R	-
	BRICKWORK SUNDRIES						
	Brick reinforcement						
5	150mm wide reinforcement built in horizontal	m	20	R	-	R	-
6	230mm wide reinforcement built in horizontal	m	50	R	-	R	-
	Pre-stressed fabricated lintels						
7	150 x 70mm lintels in length not exceeding 4m long	m	8	R	-	R	-
	Face brick coping						
8	Coping on top of one brick wall	m	15	R	-	R	-
	Striking and Pointing on face brick work						
9	Striking and pointing on face brick work	m ²	100	R	-	R	-
10	Extra over brick work for brick on edge header course band	m	10	R	-	R -	

			Carried	to final summary	R -
	BILL NO 5	<u>Unit</u>	<u>QTY</u>	<u>Rate</u>	Amount
	WATERPROOFING				
	WATERPROOFING TO ROOFS				
	On flat concrete roofs slab with parapet walls				
1	Surface preparation, Supply and lay 4mm torch on waterproofing system saturated with Bitumen Silver UV protective agent (approved by the Professional Waterproofing Association) applied by means of the torch on fusion/gas weld application method, with 75mm overlaps, 100mm endlaps and 200mm upturns onto parapet walls. laid in strict accordance with Manufacturer's instructions	m^2	0	R -	R -
	DAMP PROOFING OF WALLS AND FLOORS				
	One layer of 375 micron "Plastic Brikgrip DPC" embossed damp proof course				
2	In walls	m	15	R -	R -
	One layer of 250 micron "Consol Plastic Black" waterproof sheeting sealed at laps with Pressure Sensitive Tape"				
3	On earth feeling under slabs	m^2	15	R -	R -
	JOIN SEALANTS, ETC				
	bitumen impregnated foam plastic joint sealing strips				
4	10 x 20 expansion joints	m	10	R -	R -
			Carried	to final summary	R -
	BILL NO 6	<u>Unit</u>	QTY	<u>Rate</u>	<u>Amount</u>
	CARPENTRY AND JOINERY				
	SUPPLEMENTARY PREAMBLES				
	Particle board shall comply with the following specification				

- 1) SABS 1300 Particle board: exterior and flooring type
- 2) SABS 1301 Particle board: interior type

Description of hardwood joinery shall be deemed to include pelleting of bolt holes

Joinery

Description of frames shall be deemed to include frames, transoms, mullions, rails, etc

Fixing

Items described as "nailed" shall be deemed to be fixed with hardened steel nails or short pims to brickwork or concrete

Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere

Decorative

Decorative laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish

ROOFS ETC

Plate nailed timber roof truss construction

The following is applicable in respect of roof trusses:

Trusses are at maximum 1000mm centres and with a pitch of

The roof to have 600mm overhang on both sides (along lengths), eaves cladded with 4mm fibre cement ceiling

Roof to have vertical cladded gable end projecting 150mm at ends of the building.

The first set of dimensions given with the descriptions are the external dimensions of the building, the second set of

	dimensions (in brackets) are the external dimensions of the roofs which include the dimensions of the overhangs along lengths and at ends						
	All trusses are to be fabricated in a factory by specialist approved by the Architect						
	All trusses shall be designed by a registered Professional Engineer (in accordance with the draft SABS Code of Practice for the Design of Timber Structures)						
	The Manufacture of the trusses shall supply a written guarantee that the trusses are design, manufactured and erected to support the roof covering specified. The guarantee shall be valid for a period of 10 (ten) years						
	Sawn softwood						
	Roof construction to double pitched roof with two gable ends over rectangular shaped building erected in position complete including all trusses, jack rafters, permanent bracing, gang nail plates (wall plates and purlins measured elsewhere)						
1	Building size 6500 x 15000mm long overall on plan	No.	1	R	-	R	-
	Wrought softwood						
2	50 x 75mm purlins at 900mm centre's to sides of trusses	m	150	R	-	R	-
3	38mm x 114mm wall plates	m	50	R	-	R	-
4	38mm x 100mm Grade M4 ridge beam	m	30	R	-	R	-
	<u>Sundries</u>						
5	Two coats creosote on sawn timbers	m ²	20	R	-	R	-
	<u>Fascia Board</u>						
6	250mm wide x 38mm thick timber fascia boards	m	30	R	-	R	-
7	250mm wide x 38mm thick timber barge boards	m	20	R	-	R	-
	DOORS						

	External Doors 813 x 2032 x 44mm Single leaf semi solid door with						
8	3.2mm hardwood veneer covering on both sides and concealed hardwood vertical edge strip hung to steel door frame	No.	1	R	-	R	-
	<u>Internal Doors</u>						
9	813 x 2032 x 44mm single leaf semi solid door with 3.2mm hardwood veneer covering on both sides and concealed hardwood vertical edge strip hung to steel door frame	No.	2	R	-	R	-
	<u>FITTINGS</u>						
	Built in cupboards fittings						
	The following in modular timber cupboards, counters, duty stations, desk etc. as per Cupboard Connections Specification						
	Carcasses of 16mm thick particle board with both faces white melamine with white Masonite backs. Shelving of 16mm particle board, both faces white						
	melamine and front edge in white PVC. Doors of 16mm particle board with post formed vertical edges and laminated in Renolit. Tops of 32mm particle board with post formed leading edges and laminated						
	board with post formed leading edges and laminated in high pressure decorative laminate. All butt edges and edges against walls to be sealed with silicon						
	sealant. Hinges to be "Hettich". Drawer runners to be metal 500mm series with nylon runners or similar. All units complete with door, handles, hinges, cupboards,						
	door, locks, barrel bolts and shelves. Floor unit complete with kick plates. (Formica tops measured elsewhere)						
10	32mm office work top 450mm wide post formed one side only	m	3	R	-	R	-
	<u>Furniture</u>						
	Black with square tube steel frame, chip foam seat, medium back density foam with fabric covering						
11	825 (h) x 450 (w) x 560 (d) black office chairs	No.	2	R	-	R	-

			Carried	to final summary	R -
	BILL NO 7	<u>Unit</u>	<u>QTY</u>	<u>Rate</u>	Amount
	TILING				
	Prices:				
	Prices are to include for all square cutting and waste, cleaning off on completion and protection from injury. Areas are measured net to face of brickwork and concrete. Any additional area caused by the thickness of tiling and screed are to be allowed for in prices				
	FLOOR TILING				
	600x600mm Full Bodied polished Porcelain tiles with 3mm grouting lines				
1	On floors	m^2	15	R -	R -
	WALL TILING				
	Matt Full Bodied Porcelain tiles, size 600 x 300mm x 12mm fixed to internal wall plaster backing with TAL tile adhesive mixed with TAL bonding liquid in lieu of water with joints continuous in both directions and grouted with TAL tile grout, excess grout on the surface to be cleaned with water as work proceeds.				
2	On walls	m^2	1	R -	R -
	SKIRTING				
	Meranti skirting				
3	20 x 120mm solid meranti skirting	m	10	R -	R -
			Carried	to final summary	R -
	BILL NO 8	<u>Unit</u>	QTY	Rate	Amount
	IRONMONGERY				
	HINGES, BOLTS, ETC				
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	Supply and install						
1	Heavy duty steel hinges for steel door frames	No.	6	R	-	R	-
2	Grade 304 Stainless Steel floor mounted door stop, plugged and screwed to floor with matching stainless steel screws.	No.	2	R	-	R	-
	LOCKS						
	Supply and install						
3	Ultra-security heavy duty lock	No.	1	R	-	R	-
4	3 lever lock with handles	No.	2	R	-	R	-
5	Grade 304Stainless Steel indicator bolt (code: fixed to surface with matching stainless steel screws.	No.	1	R	-	R	-
	Bathroom accessories						
6	Satin stainless steel toilet roll holders for 2 rolls with central shaft system and cylinder lock, plugged and screwed to the wall with stainless steel screws. (vandal resistant)	No.	1	R	_	R	_
	Tesistanty	110.					
	BILL NO 9	<u>Unit</u>	Carried QTY	to fin	al summary Rate	R	- Amount
	PLUMBING WORK						
	SANITARY FITTINGS						
	Supply and install						
1	Water close coupled suite colour White, comprising 90° outlet open rim pan with matching 9 litre front single flush cistern including lid and fitments and Thermoset seat.	No.	1	R	-	R	-
2	Basin colour White, size 510 x 405mm with two tap hole including integrated overflow and chain stay hole bolted to wall with two x 10mm bolts and including Classic floor mounted pedestal and sealed with silicone sealant where basin meets wall.	No.	1	R	-	R	-
	WASTE UNION ETC						
1		l	1	I			

	Supply and install						
3	Basin waste, plug, chain, stay and backnut	No.	1	R	-	R	-
	SOIL DRAINAGE						
	Upvc class 34 pipes including excavation, bedding, backfilling and compaction and disposal of surplus material						
4	110mm pipes vertical or ramped to cleaning eyes etc (no excavation)	m	10	R	-	R	-
5	110mm pipes laid in and including trenches not exceeding 1m deep	m	100	R	-	R	-
6	110mm pipes laid in and including trenches exceeding 1m and not exceeding 2m deep	m	50	R	-	R	-
7	50mm pipes with all connection and make good	m	5	R	-	R	-
8	50mm pipes chased into brick walls with all connection and make good	m	5	R	-	R	-
	Extra over Upvc class 34 pipes for fittings						
9	110 Bend	No.	2	R	-	R	-
10	110mm junction	No.	2	R	-	R	-
11	110mm Access bend	No.	2	R	-	R	-
	Upvc Gulley						
12	110mm Gulley not exceeding 1m deep formed of trap, vertical pipe and gully head with loose grating, encased in 15MPa unreinforced concrete, with top of gully 50mm above surrounding finished surfaces, top surface of concrete splayed and with 1:3 cement plaster on exposed surfaces	No.	1	R	-	R	-
	Sundries						
13	110mm Upvc cleaning eye to end of 110 Upvc pipe	No.	3	R	-	R	-
14	350 x 350 x 50mm thick precast concrete inspection eye marker slab finished smooth on exposed surfaces with letters "I.E" or "I.O" on top and placed flush in ground or paving	No.	3	R	-	R	-
15	Testing soil drainage system	Item		R	-	R	-

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	Manhole covers						
	Precast concrete manholes with medium duty concrete manhole cover and frame bedded in 1:3 cement mortar, spacers bedded in 1:6 cement mortar and precast concrete slab including excavation, backfilling, compaction, risk of collapse, cartaway surplus material, 300mm thick unreinforced 20MPa/19mm concrete base projection75mm wide from walls, benching, junctions, channeling and step irons						
16	980mm diameter (internally) Precast concrete manhole not exceeding 1m deep	No.	3	R	-	R	-
17	980mm diameter (internally) Precast concrete manhole exceeding 1m deep and not exceeding 2m deep	No.	3	R	-	R	-
	Sewer connection						
18	Cutting into sides of existing manhole chamber for and connecting 110mm pipe including inserting 110mm channel junction and making good concrete benching	No.	1	R	-	R	-
	WATER RETICULATION						
	PREAMBLES						
	The contractor is referred to the General Preambles for trades 2017 published by the Association of South Africa Quantity Surveyors before pricing						
	WATER PIPEWORK						
	HDPE PE 100PN 12.5 pipes including excavation, bedding, backfilling, and compaction and disposal of surplus material						
19	25mm pipes laid in and including trenches not exceeding 1m deep	m	150	R	-	R	-
	Extra over HDPE						
20	25mm elbow	No.	3	R	-	R	-
21	25mm equal tee	No.	3	R	-	R	-
	TRAPS ETC						
	Supply and install						

22	38mm wash hand basin "P" trap	No.	3	R	-	R	-	
	TAPS, VALVES, ETC							
	Supply and install							
23	15mm Push button pillar tap.	No.	1	R	-	R	-	
24	Flexi connector	No.	3	R	-	R	-	
25	15 Brass Gate Valve	No.	2	R	-	R	-	
26	Mini Ball Valve	No.	3	R	-	R	-	
27	22mm Brass Gate Valve including cast iron valve box	No.	1	R	-	R	-	
	Extra over PVC pipes for fittings							
28	110mm pan connector completely	No.	2	R	-	R	-	
29	110 PVC pipes 87.5 degree soil and vent horn access heel bend	No.	2	R	-	R	-	
30	110 PVC pipe with all the fittings	m	5	R	-	R	-	
	WATER SUPPLIERS							
	Class "O" copper pipe							
31	15mm pipes	m	20	R	-	R	-	
32	15mm pipes chased into brick walls and make good	m	50	R	-	R	-	
	Extra over class "O" copper pipes for capillary fittings							
33	15mm fitting	No.	20	R	-	R	-	
34	15mm Tee	No.	15	R	-	R	-	
	RAINWATER DISPOSAL SYSTEMS							
	0.8mm galvanized sheet iron including painting to Prasa colours							
35	150 x 150mm eaves gutter with bracket at every 1m intervals	m	30	R	-	R	-	
36	Extra over 150 x 150mm eaves gutter for stopped end	No.	4	R	-	R	-	

37	Extra over 150 x 150mm eaves gutter for outlet for 0.15mm pipe	No.	4	R	-	R	-
38	0.15mm rainwater pipes	m	15	R	-	R	-
39	Extra over 0.15mm rainwater pipe for shoe	No.	4	R	-	R	-
			Carried	to fin	al summary	R	-
	BILL NO.10	<u>Unit</u>	<u>QTY</u>		Rate		Amount
	METAL WORK						
	SECURITY GATES						
	Supply and install Burglar door						
1	900 x 2100mm high Heavy duty Burglar door and frame with 16mm steel round bar and 40 x 40 x 2.5mm square tubing as per attached drawing for single door	No.	1	R	-	R	-
	Supply and install Burglar window						
2	1m W x 1m H Box windows guard constructed with 5mm of expanded metal and 50 x 50 x 6mm equal angles. To be briefly explain during the briefing session.	No.	1	R	-	R	-
	ALUMINIUM WINDOWS						
	Standard residential window						
3	Window type PT66 Bronze 600 x 600mm high	No.	1	R	-	R	-
4	Horizontal bronze sliding window 1790w x 890h opening right and left	No.	2	R	-	R	-
			Carried	to fin	al summary	R	-
	BILL NO.11	<u>Unit</u>	<u>QTY</u>		Rate		Amount
	ROOF COVERING ETC						
	PROFILED METAL SHEETING AND ACCESSORIES						
	Roof sheeting to be Concealed Fix interlocking "KLIP-LOK 700", 0,58mm thick heavy industrial Z275						

	spelter galvanised steel sheeting with Chromadek, ColorPlus, Colourbond or Globalcoat finish to one side							
	and Grey other side and accessories, fixed to steel purlins using SL 700 approved clips and fasteners.							
	Cover width 700mm. High wind - 120km/h plus - loading to be considered with installation and fixing							
	must be in accordance with manufacturer's recommendations and specifications.							
	recommendations and specifications.							
1	Roof covering with pitch not exceeding 25 degrees	m^2	120	R	-	R		-
2	450mm galvanized steel roll top ridge	m	15	R	-	R		-
			Carried	to fin	al summary	R		-
	<u>BILL NO. 12</u>	<u>Unit</u>	<u>QTY</u>		Rate		<u>Amount</u>	
	<u>GLAZING</u>							
	GLAZING TO STEEL WITH PUTTY							
	4mm obscure glass							
1	Panes exceeding 0.1m ² and 0.5 m ²	m ²	1	R	-	R		-
	6.38mm white arctic snow obscure safety glass							
2	Panes exceeding 0.1m ² and 0.5 m ²	m^2	10	R	-	R		-
			Carried	to fin	al summary	R	_	
	BILL NO. 13	Unit	QTY		Rate		Amount	
	<u>PAINTWORK</u>							
	For preambles see "Model Preambles for Trades" 2008 edition published by the Association of South African Quantity Surveyors							
	SUPPLEMENTARY PREAMBLES							
	Paint:							
	All paint, complete with undercoat, primer, etc. to be used strictly in accordance with the manufactures specification.							

	Only paint which bears the described trade names will be permitted onsite. No Substitution will be allowed						
	Previously painted metal surfaces						
	Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal						
	Previously painted wood surfaces						
	Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with a suitable filler and finished smooth						
	PAINTWORK, ETC TO NEW WORK						
	One coat professional plaster primer and two coats contractors White Gloss Enamel						
1	On gutters and downpipes	m^2	25	R	-	R	-
2	On fascia and barge boards	m^2	25	R	-	R	-
	One coat professional plaster primer and two coats contractors Brick and Slasto Dressing/Brick seal						
3	On internal and external face brick walls	m^2		R	-	R	-
	ON WOOD						
	One coat wood primer, one Universal Undercoat and two coats PRASA Brown						
4	On Doors	m^2	30	R	-	R	-
	ON METAL						
	One coat zinc chromate primer, one Undercoat and two coats Professional Gloss Enamel						
5	On rails, bars, window frames, door frames, burglar gates, gates, gutters and down pipes	m^2	20	R	-	R	-

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	PAINTWORK, ETC TO PREVIOUSLY PAINTED WORK				
	ON FLOATED PLASTER				
	Wash with polycell sugar soap and rinse with clean water to remove all traces of soap, remove all loose flaking paint and repair any cracks and defects, spot prime bare and repaired areas with bonding liquid and apply one coat sealer and two coats of interior quality nonconductive floor epoxy paint				
6	On floors	m ²	0	R -	R -
			Carried	to final summary	R -
	<u>BILL NO. 15</u>	<u>Unit</u>	QTY	Rate	Amount
	PAVING WORK				
	Earthworks				
	Supplementary and preambles				
	Excavation:				
	No claim for rock excavation will be entertain unless the contractor has timeously notified the project manager thereof prior to backfilling				
	Laying, backfilling, bedding, etc				
	Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instruction				
	Where no manufacturers' instruction exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of SABS 1200 L				
	Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7, and 7 of SABS 1200 DB Earthworks (Pipe trenches)				

	Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes)							
	Leave site in good condition							
	The contractor shall leave the site where plumbing was executed, clean and neat at completion.							
	Cut and borrow to fill including all material, site to be located by the contractor							
1	G5 Material in compacted layer thickness 200mm less compacted to 90% modified AASHTO density	m ³	600	R	-	R	-	
	Extra over for excavation and breaking down material in:							
2	Soft rock	m ³	120	R	-	R	-	
3	Hard rock	m^3	40	R	-	R	-	
	Cut to spoil or stockpile, site to be located by the contractor							
	Material obtained from							
4	Soft excavation	m ³	40	R	-	R	-	
5	Hard excavation	m^3	40	R	-	R	-	
6	Rip to 450mm of all previous compacted areas	m ³	300	R	-	R	-	
	EXCAVATION, FILLING, ETC							
	Excavation in earth not exceeding 1m deep							
7	Trenches for kerbs and kerbing support	m ³	100	R	-	R	-	
8	Holes for catchpits	m ³	40	R	-	R	-	
	Cut and borrow to fill including all material, site to be located by the contractor							

9	Material in compacted layer thickness 200mm and less, compacted to 90% Mod AASHTO density	m^3	00	R -	R -
	Earth filling obtain from the excavation and/or prescribed stock piles on site compacted to 93% Mod AASHTO density				
10	Backfilling to trenches	m ³	120	R -	R -
	Compaction of surfaces				
11	Remove all unwanted vegetation, level ground and create a natural fall for drainage, Compaction of ground surface under floors etc	m ²	600	R -	R -
			Carried	to final summary	R -

SUMMARY TO FINAL – SECTION C

MIDWAY PERWAY GUARD ROOM

	STATION NAME	PAGE	AMOUNT
1	Alterations	3 to 4	R -
2	Earthworks	4 to 5	R -
3	Concrete work	5 to 7	R -
4	Masonry	7 to 9	R -
5	Waterproofing	9	R -
6	Carpentry and Joinery	9 to 12	R -
7	Tiling work	12 to 13	R -
8	Ironmongery	13 to 14	R -
9	Plumbing work	14 to 18	R -
10	Metal work	18 to 19	R -
11	Roof covering	19	R -
12	Glazing	19	R -
13	Painting	19 to 21	R -
14	Fencing and gates	21 to 22	R -
15	Paving work	22 to 25	R -
		SUB TOTAL	R -
		ADD VAT @ 15%	R -
		TOTAL FINAL SUMMARY	R -

ELECTRICAL WORK AT NANCEFIELD SIGNAL RELAY ROOM

	ELECTRICAL WORK AT NANCEFIELD SIGNAL RI	CLAIN	OOM				
	OCCUPATIONAL HEALTH AND SAFETY	<u>Unit</u>	<u>QTY</u>		Rate		Amount
	The contractor shall comply with all the requirements set out in the Construction Regulations, issued under The Occupational Health & Safety Act no 85 of 1993.						
	Safety file shall be provided by the contractor prior to commencement of work.						
	The contractor shall carry out the works with as little noise and mess as possible. All rubble shall be taken away from site on a daily basis.						
	Note: All designated items should comply with local content threshold.						
	BILL NO.1	<u>Unit</u>	QTY		Rate		Amount
	ELECTRICAL WORK						
	LED Light fittings						
1	1500m (5 foot) 58w Open channel LED Fluorescent fittings double tubes for ticket office building	No.	12	R	-	R	-
2	150w Flood LED luminaire manufactured from high pressure unpainted die - cast aluminium housing complying with SANS 605885. Both LED engine and power supply	No.	8	R	-	R	-
3	7w LED bulk head fittings completely with bulbs	No.	1	R	-	R	-
	PLUGS						
4	4 X 4 Double plug	No.	5	R	-	R	-
5	4 X 4 Single plugs	No.	5	R	-	R	-
	Electrical casing						

6	25 x 40mm PVC trunking	m	30	R	-	R	-
7	20mm PVC SABS conduit completely with all the couplings, saddle, spacer bar assembly and heavy duty U clamps	m	50	R	-	R	-
8	20mm galvanized SABS conduit completely with all the couplings and heavy duty U clamps	m	20	R	-	R	-
9	40mm PVC SABS conduit completely with all the couplings, saddle, spacer bar assembly and heavy duty U clamps	m	50	R	-	R	-
	<u>SWITCHES</u>						
10	White 1 lever 2 way switch	No.	2	R	-	R	-
11	White 2 lever 1 way switch	No.	5	R	-	R	-
	Electrical cables						
12	35mm2 PVC 4 core cable 600/1000V main supply on earth not exceeding 1m deep covered with concrete and re-surfacing after cable has been laid	m	150	R	-	R	-
13	2.5mm ² suffix cable or GP wire for plugs	m	100	R	-	R	-
14	1.5mm ² suffix cable or GP wire for lights	m	100	R	-	R	-
	Circuit breakers						
15	40 Amp circuit breaker	No.	3	R	-	R	-
16	20 Amp circuit breaker	No.	6	R	-	R	-
17	63 A Main circuit breaker	No.	3	R	-	R	-
18	63 A earth leakage	No.	2	R	-	R	-
19	100 Amp main circuit breaker	No.	1	R	-	R	-
20	Wall mounted 40A isolator	No.	2	R	-	R	-

	<u>Distribution board</u>						
21	Supply, install and commission new Single phase indoor 13mm IP 40 white wall mounted DB board completely supplied with adjustable galvanized wall tray, c/w earth, neutral bars with all circuit breakers mounted on wall and make good	No.	2	R	-	R	-
	HVAC Systems						
22	Supply, install and commission new 24000 BTU split unit, inverter technology air conditioner completely with all accessories (drain pipe, amorflex, copper pipe, refrigerant, cable, communication wire, brackets, circuit breaker, isolator, etc)	No.	2	R	-	R	-
	Motor gate						
23	Supply, install and commission new 24Vdc electromechanical Heavy Duty gear motor with built in control unit battery charger, base plate, 2 batteries 12v, limit switch cams, 4m rack, 2 remotes, anti-theft brackets and to be equipped with power pack, external receiver and wall mounted console system controlled from the guard room 40m away from the motor gate, etc completely installed and working for gates up to 1200 kg's.	No.	1	R	_	R	-
	<u>SWITCHES</u>						
24	Daylight switches	No.	2	R	-	R	-
	STANDBY GENERATOR						
25	Supply, install and commission new 41KVA diesel Generator including canopy, 38kva prime power, maximum 41kva standby, 380v, 1500 RPM 75 liter tank: 13 hours runtime @ 75% load built in AVR delivers non fluctuating power starter motor 4.5kw 24v electric starter 4 cylinder 4 stroke powerful diesel engine 3 phase out put 38Kva prime silent diesel generator with 100A three phase automatic transfer switch	No.	1	R	-	R	-
	EAR THING						

26	Earth bonding for all the buildings as per SANS 10142 and the specification.	No.	1	R	-	R	-
	ELECTRICAL COMPLIANCE						
	All work to comply to SANS 10142 Compliance certificate to be provided on completion Pricing to include all necessary complete connection						
27	Certificate of compliance and all other testing required including 12 month guarantee	Item	1	R	-	R	-
Carried to final summary					R	-	

ELECTRICAL WORK FINAL SUMMARY

ELECTRICAL WORK AT THE GUARD ROOM

	STATION NAME	PAGE	AMOUNT
1	Electrical work	27 to 30	R -
SU		SUB TOTAL	R -
		ADD VAT @ 15%	R -
	TOTAL		R -

MIDWAY PERWAY GUARD ROOM FINAL SUMMARY

SECTION C

	STATION NAME	PAGE	AMOUNT
1	Annexure A: Preliminary and General	3	R -
2	Annexure B : General building works	3 to 26	R -
3	Annexure C Electrical work	27 to 30	R -
		SUB TOTAL	R -

ADD VAT @ 15%	R	-
TOTAL AMOUNT TO SECTION C	R	-

FINAL SUMMARY OF MIDWAY SIGNAL AND PERWAY UPGRADE

FINAL SUMMARY SECTION A UPGRADE OF MIDWAY SIGNAL DEPOT.	R
FINAL SUMMARY SECTION B UPGRADE OF MIDWAY PERWAY DEPOT.	R
FINAL SUMMARY SECTION C BUILDING OF GUARD ROOM AT MIDWAY PERWAY DEPOT.	R
TOTAL SUMMARY	R

