

THE PROPOSED OLYMPIC SIZE SWIMMING POOL AND ASSOCIATED WORKS

PRELIMINARIES

ITEM NO	DESCRIPTION	UNIT	QTY	UNIT RATE	BOQ AMOUNT (SHS)
	PRELIMINARIES				
A	Construction of contractor's and project manager's site office.		ITEM		
B	Site instruction clause.		ITEM		
C	Firm Price contract sum.		ITEM		
D	Prime cost and provisional sum clause (insert profit and attendance which is a percentage of expended PC or extended provisional sum.		ITEM		
E	Performance and bid bond.		ITEM		
F	Government Legislation and Regulations		ITEM		
G	Insurance company fee.		ITEM		
H	Sampling and material generally clause and cost of testing.		ITEM		
I	The scope of this contract shall comprise construction of an Olympic size swimming pool with associated services and external works.		ITEM		
J	<u>DESCRIPTION OF THE WORKS</u> The works comprise the construction of a main pool 50x25m, a baby pool and a hydrotherapy pool. The associated works included a spectator pavilion, auxiliary buildings as well as external works including parking , sewer line, drainage and fencing.		ITEM		
K	<u>SIGN BOARD</u> The Contractor shall allow for providing, erecting and maintaining 1No. standard signboard at site or where shown, the sizes, type of construction and lettering of which shall be to the PROJECT MANAGER'S design. The names of the Client, Client's Representatives, Consultants and necessary approval numbers are to be fixed in lettering 50mm high. The board is to be fixed in an elevated position on the site or where indicated by the PROJECT MANAGER. On completion of the works, the notice board shall be removed and making good shall be carried out as necessary.		ITEM		
L	<u>LABOUR CAMPS</u> The Contractor shall not be allowed to house labour on site. Allow for transporting workers to and from the site during the tenure of the contract.		ITEM		

M	<p><u>OFFICE FOR THE PROJECT MANAGER</u> The Contractor shall be required to provide a site office with all the necessary furniture and sanitary facilities to accommodate 15 people during site meetings and for inspections. The contractor shall also be required to provide stores for his own use and for use by the sub-contractors. The Project Manager will issue the detailed specifications for these buildings, but they will in general be of timber and G.C.J. Sheets construction. The site office will be located as directed on site.</p>		ITEM		
N	<p><u>HOARDING</u> Approximate Length of hoarding 310 m. The Contractor shall provide, erect and maintain throughout the course of the Contract and thereafter clear away and make good temporary hoarding 3000 mm high above ground consisting of; 100 x 50 mm timber posts at 1800 mm centres firmly founded and secured, 75 x 50 mm horizontal timber rails at 900 mm centres, painted GCI sheets, proper timber gates with suitable locks. Defined by the project manager.</p>	M	310		
O	<p><u>SURVEYING EQUIPMENT</u> The Contractor should provide and maintain survey equipment (total station and engineer's level together with tripods staff, batteries, e.t.c.) on site at all times during construction at his own cost.</p>				
P	<p><u>SECURITY OF WORKS ETC.</u> The Contractor shall be entirely responsible for the security of all the works stores, materials, plant, personnel, etc., both his own and sub-contractors' and must provide all necessary watching, lighting and other precautions as necessary to ensure security against theft, loss or damage and the protection of the public.</p>		ITEM		
Q	<p><u>WATER AND ELECTRICITY SUPPLY FOR THE WORKS</u> The Contractor shall provide at his own risk and cost all necessary water, electric light and power required for use in the works. The Contractor must make his own arrangements for connection to the nearest suitable water main and for metering the water used. He must also provide temporary tanks and meters as required at his own cost and clear away when no longer required and make good on completion to the entire satisfaction of the Project Manager. The Contractor shall pay all charges in connection herewith. No guarantee is given or implied that sufficient water will be available from mains and the Contractor must make his own arrangements for augmenting this supply at his own cost.</p>		ITEM		
TOTALS FOR PRELIMINARIES CARIED TO MAIN SUMMARY PAGE					

ITEM NO	ITEM DESCRIPTION	UNIT	BOQ QTY	RATE (KSHS)	BOQ AMOUNT (KSHS)
	BILL NO 1 (GENERAL BUSH CLEARANCE)				
	ELEMENT NO.1: Bush clearance				
	(All Provisional)				
A	Clear bush and vegetation including grabbing of roots	SM	2,800		
ii	Cut, uproot the stumps and cart away trees of girth not exceeding 500mm	NO	4		
	BILL NO 2 (MAIN SWIMMING POOL)				
	Element No.1: Substructure				
	(All Provisional)				
	Excavation and earthworks				
A	Excavate over site average 150mm deep to remove vegetable top soil and cart away to spoil as shall be directed by the Project Manager.	SM	1,850		
B	Excavate to reduced levels for depth not exceeding 1.5m as directed by the Project Manager.	CM	1,500		
C	Ditto 1.5 to 3.5m	CM	3,800		
D	Return fill and ram selected excavated materials around foundations.	CM	1,500		
E	Wheel, deposit, spread and level within compound excess excavation as directed by the Project manager.	CM	5,578		
F	Allow for keeping foundation free of water.	ITEM	1		
G	Allow for keeping clear of fallen materials, maintaining and upholding sides of excavations.	ITEM	1		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Element No.2 Concrete Works:				
	Mass concrete class 20/25 to BS 8100 as described;				
A	50mm thick blinding under swimming pool slab	SM	1,330		
	Vibrated reinforced concrete class 25/20 to BS 8110 as described, using Ordinary Portland Cement (OPC) 42.5N, including all necessary, construction joints, additives, etc, in accordance with specifications and drawings				
B	200mm thick horizontal pool bed slab to level ready to receive tiles(completed without joints)	SM	1,377		
D	200mm thick retaining wall finished fair and to plumb to receive tiles (completed without joints)	SM	390		
	High tensile square twisted bar reinforcement to BS 4461 including cutting, bending, tying and hoisting to position.				
E	8mm diameter	KG	100		
F	Ditto 10mm diameter	KG	8,200		
G	Ditto 12mm diameter	KG	28,900		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	BOQ QTY	RATE (KSH)	BOQ AMOUNT
	Element No 3. Sawn formwork (as marine board or firm steel plates) to:				
A	Vertical sides of Retaining wall	SM	800		
B	Edge of floor bed 200mm	LM	150		
C	Supply and fix V200 rubber water bar 200mm thick - 100mm in the floor slab and 100mm in the wall to Engineer's approval. Include overlaps	LM	155		
	Floor and wall finishes				
D	40mm thick sand/cement (1:3) compacted screed finish semi-rough to receive tiles	SM	1,377		
E	20mm thick wall plaster sand cement(1:3) finish semi rough to receive tiles	SM	390		
	Approved glued Ceramic swimming pool tiles. As "Gres" tiles (or approved equivalent) glued to the bottom and to the walls of the pool. Including water proofing treatment. The floor tiles will alternate in white and blue color to demarcate racing lane as per the drawing. The tiles should be resistant to cleaning products, UV rays and biological agents. Lanes to be marked as attached drawing including				
F	Applied to floors of the swimming pool	SM	1,350		
G	Applied on the walls of the swimming pool	SM	350		
	Total carried to collection				

		UNIT	BOQ QTY	RATE (KSH)	BOQ AMOUNT
	Bill No 1 & 2 Collection				
	Element No 1-Excavation and earth works				
	Element No 2-Reinforced concrete works				
	Element No 3-Formwork and finishes (from above)				
	Total for Bill 1& 2 carried to main summary				

NO	ITEM DESCRIPTION	UNIT	BOQ QTY	RATE (KSH)	BOQ AMOUNT
	BILL NO 3 (BABY POOL)				
	(All Provisional)				
	Element No 1: Excavation and earthworks				
A	Excavate over site average 150mm deep to remove vegetable top soil and cart away to spoil as shall be directed by the Project Manager.	SM	65		
B	Excavate pool for depth not exceeding 1.5m as directed by the Project Manager.	CM	63		
C	Ditto 1.5 to 3m	CM	0		
D	Return fill and ram selected excavated materials around foundations.	CM	20		
E	Wheel, deposit, spread and level within compound excess excavation as directed by the Project manager.	CM	43		
F	Allow for keeping foundation free of water.	ITEM	1		
G	Allow for keeping clear of fallen materials, maintaining and upholding sides of excavations.	ITEM	1		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Element No 2: Concrete Works:				
	Mass concrete class 15/40 to BS 8100 as described;				
A	50mm thick blinding underbaby pool slab	SM	70		
	Vibrated reinforced concrete class 25/20 to BS 8110 as described, using Ordinary Portland Cement (OPC) 42.5 N, including all necessary, construction joints, additives, etc, in accordance with specifications and drawings				
B	150mm thick horizontal floor slab	SM	70		
C	150mm thick retaining wall finished to plumb to receive tiles	SM	30		
	High tensile square twisted bar reinforcement to BS 4461 including cutting, bending, tying and hoisting to position.				
D	8mm diameter	KG	700		
E	Ditto 10mm diameter	KG	1,600		
F	Ditto 12mm diameter	KG	0		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	BOQ QTY	RATE (KSH)	BOQ AMOUNT
	Element No 3: Sawn formwork (as marine board or firm steel plates) to:				
A	Edge of floor bed 200mm	LM	35		
	Vertical sides of the retaining wall	SM	40		
	Supply and fix V200 rubber water bar 200mm thick - 100mm in the floor slab and 100mm in the wall to Engineer's approval. Include overlaps	LM	38		
	Floor and wall finishes				
B	40mm thick sand/cement (1:3) compacted screed finish semi-rough to receive tiles	SM	70		
C	20mm thick wall plaster sand cement (1:3) finish semi rough receive tiles	SM	40		
	Approved glued Ceramic swimming pool tiles. As "Gres" tiles (or approved equivalent) glued to the bottom and to the walls of the pool. Including water proofing treatment. The tiles will alternated in white and blue color to demarcate racing lane as per the drawing. The tiles should be resistant to cleaning products, UV rays and biological agents. Lanes to be marked as attached drawing including				
D	Applied on floors	SM	70		
E	applied on walls	SM	40		
	Total carried to Collection				

		UNIT	BOQ QTY	RATE (KSH)	BOQ AMOUNT
	Bill No 3 (Baby pool) Collection				
	Element No 1: Excavation and earth works				
	Element No 2: Reinforced concrete works				
	Element No 3: Formwork and finishes (from above)				
	Total for Bill 3 carried to main summary				

ITEM NO	ITEM DESCRIPTION	UNIT	BOQ QTY	RATE (KSHS)	BOQ AMOUNT (KSHS)
	BILL NO 4 (HYDROTHERAPY POOL)				
	ELEMENT NO.1: Substructure				
	(All Provisional)				
	Excavation and earthworks				
A	Excavate over site average 150mm deep to remove vegetable top soil and cart away to spoil as shall be directed by the Project Manager.	SM	65		
B	Excavate hydrotherapy pool for depth not exceeding 1.5m as directed by the Project Manager.	CM	55		
C	Ditto 1. 5 to 3m	CM	0		
D	Return fill and ram selected excavated materials around foundations.	CM	20		
E	Wheel, deposit, spread and level within compound excess excavation as directed by the Project manager.	CM	35		
F	Allow for keeping foundation free of water.	ITEM	1		
G	Allow for keeping clear of fallen materials, maintaining and upholding sides of excavations.	ITEM	1		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Element No 2: Concrete Works:				
	Mass concrete class 15/40 to BS 8100 as described;				
A	50mm thick blinding under pool floor slab	SM	54		
	Vibrated reinforced concrete class 25/20 to BS 8110 as described, using Ordinary Portland Cement (OPC) 42.5N, including all necessary, construction joints, additives, etc, in accordance with specifications and drawings				
B	200mm thick horizontal floor slab fair finish to receive tiles	SM	54		
C	150mm thick retaining wall finished to plumb to receive tiles	SM	25		
	High tensile square twisted bar reinforcement to BS 4461 including cutting, bending, tying and hoisting to position.				
D	8mm diameter	KG	700		
E	Ditto 10mm diameter	KG	1,600		
F	Ditto 12mm diameter	KG	0		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	BOQ QTY	RATE (KSH)	BOQ AMOUNT
	Element No 3: Sawn formwork (as marine board or firm steel plates) to:				
A	Edge of floor bed 150mm	LM	30		
B	Sides of the retaining wall	SM	26		
C	Supply and fix V200 rubber water bar 200mm thick - 100mm in the floor slab and 100mm in the wall to Engineer's approval . Include overlaps	LM	28		
	Floor and wall finishes				
D	40mm thick sand/cement (1:3) compacted screed finish semi-rough to receive tiles	SM	54		
E	20mm thick wall plaster sand cement(1:3) finish semi rough receive tiles	SM	25		
	Approved glued Ceramic swimming pool tiles. As "Gres" tiles (or approved equivalent) glued to the bottom and to the walls of the pool. Including water proofing treatment. The tiles will alternated in white and blue color to demarcate racing lane as per the drawing. The tiles should be resistant to cleaning products, UV rays and biological agents. Lanes to be marked as attached drawing including				
F	Applied on pool floor	SM	54		
G	Applied on pool wall	SM	25		
	Total carried to collection				

	UNIT	BOQ QTY	RATE (KSH)	AMOUNT
Bill No 4 (Hydrotherapy pool) Collection				
Element No 1: Excavation and earth works				
Element No 2: Reinforced concrete works				
Element No 3: Formwork and finishes (from above)				
Total for Bill 4 carried to main summary				

ITEM NO	ITEM DESCRIPTION	UNIT	BOQ QTY	RATE (KSHS)	BOQ AMOUNT (KSHS)
	BILL NO 5 (PAVILLION)				
	ELEMENT NO.1: Substructure (All Provisional)				
	Excavation and earthworks				
A	Excavate over site average 150mm deep to remove vegetable top soil and cart away to spoil as shall be directed by the Project Manager.	SM	450		
B	Excavate to reduced levels for depth not exceeding 1.5m as directed by the Project Manager.	CM	45		
C	Ditto 1. 5 to 4.5m	CM	200		
D	Excavate foundation trench not exceeding 1.50metres deep starting from stripped level.	CM	110		
E	Ditto Column bases	CM	80		
F	Ditto Column bases exceeding 1.5metres but not exceeding 3.0 meters deep.	CM	10		
G	Return fill and ram selected excavated materials around foundations.	CM	150		
H	Wheel, deposit, spread and level within compound excess excavation as directed by the Project manager.	CM	400		
I	Allow for keeping foundation free of water.	ITEM	1		
I	Allow for keeping clear of fallen materials, maintaining and upholding sides of excavations.	ITEM	1		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	AMOUNT
	Filling				
J	Approved imported hardcore filling rolled and consolidated in layers not exceeding 200mm thick to make up levels.	CM	200		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
K	50mm thick stone dust or approved equivalent blinding on hardcore.	SM	450		
L	Insecticide treatment as described; 'TERMIDOR' or other equal and approved on blinded hardcore and bottom of foundations to manufactures specification: Provide 10 years written performance guarantee certificate to approval.	SM	650		
N	Damp proof membrane as described: 1000 gauge polythene sheeting on blinded hardcore including all necessary overlaps.	SM	450		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Concrete Works:				
	Mass concrete class 15/40 to BS 8110 as described;				
A	50mm thick blinding under foundation strip footing	SM	260		
B	Ditto 50mm thick to column bases	SM	50		
	Vibrated reinforced concrete class 20/20 to BS 8110 as described in:-				
C	Foundation strip footing.	CM	40		
D	Column bases	CM	30		
E	Column	CM	20		
F	200mm thick retaining wall	CM	20		
G	100mm thick floor slab	SM	650		
	High tensile square twisted bar reinforcement to BS 4461 including cutting, bending, tying and hoisting to position.				
H	8mm diameter	KG	900		
I	Ditto 10mm diameter	KG	900		
J	Ditto 12mm diameter	KG	900		
K	Ditto 16mm diameter	KG	900		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	BOQ QTY	RATE (KSH)	BOQ AMOUNT
	Sawn formwork to:				
L	Vertical sides of strip footing	LM	600		
M	Vertical sides for column bases	LM	240		
N	Vertical sides of column	SM	60		
O	Edge of floor bed 150mm	LM	240		
P	Asphalt waterproofing 3 layer 25mm thick asphalt tanking to wall	SM	45		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Sub-structure walling Natural stone wall to BS 5390 bedded and jointed in cement/sand (1:3) mortar including 25mm x 18 gauge hoop iron reinforced in every alternate course				
Q	200mm thick	SM	360		
	Three ply hessian based bituminous felt horizontal damp proof course to BS 743 type A weighing 3.8				
R	150mm wide	LM	160		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
				(KSH)	
	Element No 2: Super Structure (All Provisional)				
	Concrete class 20/20 to BS 8110;				
A	Columns	CM	16		
B	Beams	CM	35		
C	150mm Suspended sloping slab	SM	240		
	High tensile steel reinforcement to BS 4461 including cutting, bending, tying and hoisting to position;				
D	8mm diameter	KG	3,200		
E	10mm diameter	KG	1,200		
F	12mm diameter	KG	1,600		
G	16mm diameter	KG	2,400		
h	20mm diameter	KG	3,000		
	Sawn formwork to:-				
J	Vertical sides of columns	SM	140		
K	Sides and soffits of beam	SM	250		
L	Soffits of suspended slabs	SM	260		
M	Edges of suspended slabs 150mm thick	LM	240		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Approved uncoursed squared rubble fine chisel dressed natural stone bedded and jointed in cement and sand (1:4) mortar reinforced with 25mmx18 gauge hoop iron every alternate course as described in:				
N	150mm thick walling	SM	500		
	Solid concrete blocks bedded and jointed in cement sand (1:4) mortar including 25mmx18				
O	150mm thick walling	SM	250		
	100mm thick walling	SM	250		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	ELEMENT NO.3: Roof: Pitched roof covering. (All Provisional)				
A	26 gauge TT5' box profile pre-painted galvanized iron sheets on 100mmx50mm purlins including nailing and approved rubbers.	SM	400		
B	26 gauge x 380mm wide overall pre-painted plain sheet galvanized iron ridge or hip capping, once bent and dressed over roof covering including all necessary end laps.	LM	20		
	<u>Framed mild steel including all necessary cutting, bolting, welding, grinding and applying two coats calcium plumbate primer before fixing as described and two coats of 1st grade polyurethane paint after fixing.</u>				
C	Truss type T1 size 4500mm clear span x 1000mm high overall comprising 75 x 50 x 3mm rectangular hollow section rafters, joists, intermediate joists 50x50x3mm ties, struts and braces (11N0) all as detailed.	KG	740		
D	Truss type T2 size 1200mm clear span x 600mm high overall comprising 75x50x3mm RHS rafter, joist, intermediate joist 50x50x3mm ties, struts and braces (11No) all as detailed.	KG	330		
E	150X2 mm Zed-purlins (5.7kg/lm)	KG	1430		
F	R16 sag rods bolted mid span of Zed purlins.	KG	119		
G	CHS Black pipe class B(medium), Diameter 6" (19.26 kg/LM) 11No	KG	1060		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	
	Element No 4: Rain Water Disposal				
	Rain Water Disposal: (All Provisional)				
	Supply and fix the following UPVC rain water goods from 'Terrain 2100 half round system' or equal and approved manufacturer (s):				
A	100mm diameter PVC gutter complete with necessary fastening accessories and openings for rainwater downpipes	LM	100		
B	Domed roof outlet No. 2171.40 complete with removable grid, screws and polypropylene washer.	NO	8		
C	110mm diameter rainwater down pipe No. 2100.4.40 cast in concrete.	LM	24		
D	Extra over ditto for spigot socket bend as No. 107.4.135	NO	16		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE	
				(KSH)	
	FITTINGS				
	Element No.5: Door. (All Provisional)				
	45mm thick standard solid cored to BS 459: Part 2, including 100mm brass butt hinges no. HN-DW-403020, 3-Lever Mortice lock ref. 2295PB complete with 150x75mm approved hardwood door frame, aluminum handles, 150mm aluminum tower bolt inside and 150x75 male or female signage ref MSC-75PB or/FSC-75PB as described:				
A	Flush door overall size 900x2100 mm high faced both sides with 4mm thick mahogany veneer, 6mm hardwood lipping all round.	NO	28		
B	Fabricate, deliver, and install purpose made steel casement doors complete with approved prime coating hinges handles catches and three lever mortise lock England or an approved equivalent as described in the architectural drawings door overall size 1200x2400.	NO	4		
	Glazing				
C	Supply and fix 4mm clear glass on door steel casement with approved first grade quality metal putty.	SM	20		
D	panel door 1.2m wide x2m high. 10mm heavy duty brass hinges, door frame150x75mm and 3 lever union lock and brass handles	NO	28		
E	Supply and fix 5mm thick bronze tinted glass on door steel casement with approved first grade quality metal putty.	SM	3		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	
	Element No.6: Windows:				
	(All Provisional)				
A	150x15mm quarry tile external window all pointed in cement sand (1:3) mortar.	LM	90		
	Fabricate, deliver, and install purpose made steel casement windows with 25x2mm 'Z' section framing including all coupling mullions, bronze handles, peg stays and other ironmongery. Factory primed with red oxide primer including cutting and pinning fixing lugs to concrete or masonry work jambs and bedding in cement and sand (1:3) mortar, pointing all round frames in mastic, easing oiling.				
B	Windows 1 overall size600x600mm	NO	20		
C	Windows 2 overall size1200x1500mm	NO	5		
D	Glazing Supply and fix 4mm blue tinted glass on window steel casement with approved first grade quality metal putty.	SM	40		
	Total carried to collection page 193				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT (KSH)
Element No. 7. Finishes (All Provisional)					
External wall.					
A	12mm cement/sand (1:4) rough cast render to columns and beams	SM	120		
B	12mm thick plaster to door and window reveals not exceeding 100mm girth	LM	40		
C	Extra over hand dressed stone waiting for neat recessed horizontal key in cement mortar (1:3)	SM	250		
	Crown "ruff and tuff" surface coating	SM	250		
Internal wall:					
D	12mm thick cement/sand (1:3) plaster finished smooth with white lime as described.				
E	1500mm high cement/sand (1:3) plaster finished semi rough with wood float to receive tiles at wet areas.	SM	160		
F	Internal walls	SM	500		
G	Beams	SM	30		
H	Soffits of suspended slab	SM	750		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	AMOUNT (KSH)
I	12mm thick Cellotex ceiling fixed to and including 75x50mm sawn Cypress brandering at 600mm centers both directions fixed with cloud headed nails and set out in symmetrical panels with V joints.	SM	800		
J	Fix 75mm wide Cypress timber cornices.	LM	240		
Floor finish					
K	40mm thick sand/cement (1:3) compacted screed finish semi-rough to receive tiles	SM	400		
	40mm thick sand/cement (1:3) compacted screed finish semi-rough to receive terrazzo	SM	400		
L	Ditto for 150mm high skirting.	LM	720		
Approved colored polished tiles as 'SAJ' 1ST GRADE or approved equivalent jointed and					
M	400x400x10mm thick on floors at wet areas.	SM	600		
	Approved white colored glazed ceramic 'Saj' or approved equivalent jointed and pointed with 1:2 cement sand mortar as described.				
N	250x200x6mm thick tiles on walls in wet areas.	SM	160		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	AMOUNT
	Approved colored terrazzo in white strip with strips of non-slip as described in architectural drawing on 40mm thick sand cement screed finished semi-rough on horizontal				
O	20mm thick terrazzo mix with white cement on the horizontal and vertical surfaces.	SM	400		
P	Fabricate, deliver and install purpose made handrail to the pavilion complete with one coat of factory primer as described in architectural drawings.	LM	50		
Total carried to collection.					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	AMOUNT (KSHS)
	Element No.8. Painting and decoration:(All Provisional)				
	Prepare and apply one undercoat and two coats plastic emulsion paint as 1 st grade Crown or approved equivalent to :				
A	Plastered beams internally and externally.	SM	700		
B	Ditto ring beam internally and externally	SM	30		
C	Ditto column surfaces internally and externally.	SM	120		
D	Ditto plastered wall surfaces internally.	SM	750		
E	Ditto Cellotex ceiling internally.	SM	400		
F	Ditto plastered soffits of slab.	SM	400		
G	Plastered door and window reveals not exceeding 100mm girth externally	LM	80		
	Prepare and apply one undercoat and two coats of gloss paint as 1st grade crown or approved equivalent to:				
H	Metal surfaces on windows and doors	SM	50		
I	Metal surfaces on handrails	LM	40		
J	Wooden door surfaces	SM	50		
K	External walls				
L	Neat recessed horizontal key in cement mortar (1:3)	SM	250		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	AMOUNT (KSH)
	BILL NO 5: (PAVILLION) COLLECTION				
	Element No.1: Substructure				
	Element No 2: Super Structure				
	Element No.3: Roof: Pitched roof covering				
	Element No 4: Rain Water Disposal				
	Element No.5: Door				
	Element No.6: Windows				
	Element No. 7. Finishes				
	Element No.8. Painting and decoration				
	Total for Bill No 5 (Pavilion) Carried to main summary				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT (KSH)
	BILL NO 6 (OFFICES AND JACUZZI)				
	ELEMENT NO.1: Substructure				
	(All Provisional)				
	Excavation and earthworks				
A	Excavate over site average 150mm deep to remove vegetable top soil and cart away to spoil as shall be directed by the Project Manager.	SM	390		
B	Excavate foundation trench not exceeding 1.50metres deep starting from stripped level.	CM	185		
C	Return fill and ram selected excavated materials around foundations.	CM	600		
D	Wheel, deposit, spread and level within compound excess excavation as directed by the Project manager.	CM	600		
E	Allow for keeping foundation free of water.	ITEM	1		
F	Allow for keeping clear of fallen materials, maintaining and upholding sides of excavations.	ITEM	1		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Filling				
G	Approved imported hardcore filling rolled and consolidated in layers not exceeding 200mm thick to make up levels.	CM	16		
H	50mm thick stone dust or approved equivalent blinding on hardcore.	SM	400		
I	Insecticide treatment as described; 'TERMIDOR' or other equal and approved on blinded hardcore and bottom of foundations to manufactures specification: Provide 10 years written performance guarantee certificate to approval.	SM	400		
J	Damp proof membrane as described: 1000 gauge polythene sheeting on blinded hardcore including all necessary overlaps.	SM	400		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Concrete Works:				
	Mass concrete class 15/40 to BS 8100 as described;				
A	50mm thick blinding under foundation strip footing	SM	30		
	Vibrated reinforced concrete class 25/20 to BS 8110 as described in:-				
B	Foundation strip footing.	CM	24		
C	100mm thick floor slab.	SM	80		
D	Fabric Mesh BRC Mesh Ref. No. A142 (measured net, allow 300mm end and edge laps)	SM	80		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	BOQ QTY	RATE (KSH)	BOQ AMOUNT
	Sawn formwork to:				
E	Vertical sides of strip footing	LM	71		
F	Edge of floor bed 150mm	LM	31		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	<i>Sub-structure walling</i>				
	Natural stone wall to BS 5390 bedded and jointed in cement/sand (1:3) mortar including 25mm x 18 gauge hoop iron reinforced in every alternate course				
G	150mm thick	SM	30		
	Three ply hessian based bituminous felt horizontal damp proof course to BS 743 type A weighing 3.8				
H	150mm wide	LM	30		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	ELEMENT NO.2: Superstructure (All Provisional)				
	Concrete class 25/20 to BS 8110;				
A	Beams	CM	3		
B	100mm floor slab	SM	52		
	High tensile steel reinforcement to BS 4461 including cutting, bending, tying and hoisting to position;				
C	8mm diameter	KG	40		
D	10mm diameter	KG	95		
E	12mm diameter	KG	0		
	Sawn formwork to:-				
F	Sides and soffits of beam	SM	24		
G	Edges of floor slabs 100mm thick	LM	36		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	ELEMENT NO.3: Walling:				
	Approved uncoursed squared rubble fine chisel dressed natural stone bedded and jointed in cement and sand (1:4) mortar reinforced with 25mmx18 gauge hoop iron every alternate course as described in:				
A	150mm thick walling	SM	75		
	Solid concrete blocks bedded and jointed in cement sand (1:4) mortar including 25mmx18				
B	150mm thick walling	SM	14		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	ELEMENT NO.4: Roof: Pitched roof covering. (All Provisional)				
A	26 gauge TT5' box profile pre-painted galvanized iron sheets on 100mmx50mm purlins including nailing and approved rubbers.	SM	60		
B	26 gauge x 380mm wide overall pre-painted plain sheet galvanized iron ridge or hip capping, once bent and dressed over roof covering including all necessary end laps.	LM	11		
	Sawn cypress celured pressure impregnated Cypress or approved equivalent in trusses spanning 5,000mm as described in the drawings;				
C	150x50mm rafters, tie beams and king posts	LM	40		
D	100x50mm struts	LM	20		
E	150x25mm gussets	LM	4		
F	100x50mm wall plates	LM	30		
G	200x38mm ridge board	LM	12		
H	200x25mm fascia board nailed to end of rafters.	LM	36		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT (KSH)
	Rain Water Disposal: (All Provisional)				
	Supply and fix the following UPVC rain water goods from 'Terrain 2100 half round system' or equal and approved manufacturer (s):				
A	100mm diameter PVC gutter complete with necessary fastening accessories and openings for rainwater downpipes	LM	30		
B	Domed roof outlet No. 2171.40 complete with removable grid, screws and polypropylene washer.	NO	4		
C	110mm diameter rainwater down pipe No. 2100.4.40 cast in concrete.	LM	20		
	Extra over ditto for spigot socket bend as No. 107.4.135	NO	8		
D	25x25 angle fillet	LM	16		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE	BOQ AMOUNT (KSH)
				(KSH)	
	FITTINGS				
	Element No.5: Door. (All Provisional)				
A	Fabricate, deliver, and install purpose made steel casement doors complete with approved prime coating hinges handles catches and three lever mortise lock England or an approved equivalent as described in the architectural drawings door overall size 1200x2100.	NO	2		
	Glazing				
B	Supply and fix 4mm clear glass on door steel casement with approved first grade quality metal putty.	SM	1		
C	Supply and fix 5mm thick bronze tinted glass on door steel casement with approved first grade quality metal putty.	SM	1		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT (KSH)
	Element No.6: Windows: (All Provisional)				
A	150x15mm quarry tile external window all pointed in cement sand (1:3) mortar.	LM	6		
	Fabricate, deliver, and install purpose made steel casement windows with 25x2mm 'Z' section framing including all coupling mullions, bronze handles, peg stays and other ironmongery. Factory primed with red oxide primer including cutting and pinning fixing lugs to concrete or masonry work jambs and bedding in cement and sand (1:3) mortar, pointing all round frames in mastic, easing oiling.				
B	Window 1 overall size 1800x1200mm	NO	2		
C	Glazing Supply and fix 4mm clear glass on window steel casement with approved first grade quality metal putty.	SM	5		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT (KSH)
	Element No. 7. Finishes (All Provisional)				
	External wall.				
A	12mm thick plaster to door and window reveals not exceeding 100mm girth	LM	15		
B	Extra over machine cut stone waiting for neat recessed horizontal key in cement mortar (1:3)	SM	75		
C	Crown "ruff and tuff" surface coating	SM	75		
	Internal wall:				
D	12mm thick cement/sand (1:3) plaster finished smooth with white lime as described.				
E	Internal walls	SM	0		
F	Beams	SM	100		
G	12mm thick Cellotex ceiling fixed to and including 75x50mm sawn Cypress brandering at 600mm centers both directions fixed with cloud headed nails and set out in symmetrical panels with V joints.	SM	52		
H	Fix 75mm wide Cypress timber cornices.	LM	32		
	Floor finish				
I	40mm thick sand/cement (1:3) compacted screed finish semi-rough to receive tiles.	SM	52		
J	Ditto for 150mm high skirting.	LM	32		
	Approved colored polished ceramics tiles as 'SAJ' or approved equivalent jointed and pointed with				
K	500x500x10mm thick on floors	SM	52		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT (KSH)
	Element No.8. Painting and decoration:(All Provisional)				
	Prepare and apply one undercoat and two coats plastic emulsion paint as 1 st grade Crown or approved equivalent to :				
A	Plastered beams internally and externally.	SM	20		
D	Ditto plastered wall surfaces internally.	SM	75		
E	Ditto Cellotex ceiling internally.	SM	52		
F	Ditto plastered soffits of slab.	SM	52		
G	Plastered door and window reveals not exceeding 100mm girth externally	LM	15		
	Prepare and apply one undercoat and two coats of gloss paint as 1 st grade crown or approved equivalent to:				
H	Metal surfaces on windows and doors	SM	10		
I	External walls		50		
J	Neat recessed horizontal key in cement mortar (1:3)	SM	75		
	Total carried to collection				

BILL NO 6: (OFFICES AND JACUZZI) COLLECTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT (KSH)
Element No.1: Substructure				
Element No 2: Super Structure				
Element No.3: Roof: Pitched roof covering				
Element No 4: Pitched roof covering Rain Water Disposal				
Element No.5: Door				
Element No.6: Windows				
Element No. 7. Finishes				
Element No.8. Painting and decoration				
Total for Bill No 6 Carried to main summary				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT (KSH)
	BILL NO 7 EXTERNAL TOILETS				
	ELEMENT NO.1: Substructure				
	(All Provisional)				
	Excavation and earthworks				
	Bush clearance				
A	Excavate over site average 150mm deep to remove vegetable top soil and cart away to spoil as shall be directed by the Project Manager.	SM	135		
B	Excavate foundation trench not exceeding 1.50metres deep starting from stripped level.	CM	46		
C	Return fill and ram selected excavated materials around foundations.	CM	22		
D	Wheel, deposit, spread and level within compound excess excavation as directed by the Project manager.	CM	24		
E	Allow for keeping foundation free of water.	ITEM	1		
F	Allow for keeping clear of fallen materials, maintaining and upholding sides of excavations.	ITEM	1		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Filling				
G	Approved imported hardcore filling rolled and consolidated in layers not exceeding 200mm thick to make up levels.	CM	28		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
H	50mm thick stone dust or approved equivalent blinding on hardcore.	SM	90		
I	Insecticide treatment as described; 'TERMIDOR' or other equal and approved on blinded hardcore and bottom of foundations to manufactures specification: Provide 10 years written performance guarantee certificate to approval.	SM	90		
J	Damp proof membrane as described:				
	500 gauge polythene sheeting on blinded hardcore including all necessary overlaps.	SM	90		
	Total carried to collection page 184				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Concrete Works:				
	Mass concrete class 15/40 to BS 8100 as described;				
A	50mm thick blinding under foundation strip footing	SM	30		
	Vibrated reinforced concrete class 20/20 to BS 8110 as described in:-				
B	Foundation strip footing.	CM	6		
C	100mm thick horizontal floor slab	SM	135		
	Fabric Mesh				
G	BRC Mesh Ref. No. A142 (measured net, allow 300mm end and edge laps)	SM	135		
	Sawn formwork to:				
H	Vertical sides of strip footing	SM	32		
I	Edge of floor bed 75-150mm	LM	35		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Sub-structure walling Natural stone wall to BS 5390 bedded and jointed in cement/sand (1:3) mortar including 25mm x 18 gauge hoop iron reinforced in every alternate course				
A	150mm thick	SM	135		
	Three ply hessian based bituminous felt horizontal damp proof course to BS 743 type A weighing 3.8				
B	150mm wide	LM	280		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	ELEMENT NO.2: Superstructure (All Provisional)				
	Concrete class 20/20 to BS 8110;				
A	Beams	CM	6		
	High tensile steel reinforcement to BS 4461 including cutting, bending, tying and hoisting to position;				
G	8mm diameter	KG	90		
H	10mm diameter	KG	180		
I	12mm diameter	KG	60		
	Sawn formwork to:-				
N	Sides and sides of beam	SM	75		
P	Edges of floor slabs 100mm thick	LM	90		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	ELEMENT NO.3: Walling: Approved uncoursed squared rubble fine chisel dressed natural stone bedded and jointed in cement and sand (1:4) mortar reinforced with 25mmx18 gauge hoop iron every alternate course as described in:				
A	150mm thick walling	SM	90		
	Solid concrete blocks bedded and jointed in cement sand (1:4) mortar including 25mmx18				
B	150mm thick walling	SM	45		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	ELEMENT NO.4: Roof: Pitched roof covering. (All Provisional)				
A	26 gauge TT5' box profile pre-painted galvanized iron sheets on 100mmx50mm purlins including nailing and approved rubbers.	SM	180		
B	26 gauge x 380mm wide overall pre-painted plain sheet galvanized iron ridge or hip capping, once bent and dressed over roof covering including all necessary end laps.	LM	110		
	Sawn cypress celured pressure impregnated Cypress or approved equivalent in trusses spanning 5,000mm as described in the drawings;				
C	150x50mm rafters, tie beams and king posts	LM	60		
D	100x50mm struts	LM	20		
E	150x25mm gussets	LM	20		
F	100x50mm wall plates	LM	26		
G	200x38mm ridge board	LM	12		
H	200x25mm fascia board nailed to end of rafters.	LM	50		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Rain Water Disposal: (All Provisional)				
	Supply and fix the following UPVC rain water goods from 'Terrain 2100 half round system' or				
A	100mm diameter PVC gutter complete with necessary fastening accessories and openings for rainwater downpipes	LM	25		
B	Domed roof outlet No. 2171.40 complete with removable grid, screws and polypropylene washer.	NO	4		
C	110mm diameter rainwater down pipe No. 2100.4.40 cast in concrete.	LM	10		
	Extra over ditto for spigot socket bend as No. 107.4.135	NO	8		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE	BOQ AMOUNT
				(KSH)	
	FITTINGS				
	Element No.5: Door. (All Provisional)				
	45mm thick standard solid cored to BS 459: Part 2, including 100mm brass butt hinges no. HN-DW-403020, 3-Lever Mortice lock ref. 2295PB complete with 150x75mm approved hardwood door frame, aluminum handles, 150mm aluminum tower bolt inside and 150x75 male or female signage ref MSC-75PB or/FSC-75PB as described:				
A	Flush door overall size 900x2100 mm high faced both sides with 4mm thick mahogany veneer,	NO	14		
	panel door 1.2m wide x2m high. 10mm heavy duty brass hinges, door frame150x75mm and 3 lever union lock and brass handles	NO	2		
	Glazing				
E	Supply and fix 5mm thick bronze tinted glass on door steel casement with approved first grade quality metal putty.	SM	0		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE	BOQ AMOUNT
				(KSH)	
	Element No.6: Windows:				
	(All Provisional)				
A	150x15mm quarry tile external window all pointed in cement sand (1:3) mortar.	LM			
	Fabricate, deliver, and install purpose made steel casement windows with 25x2mm 'Z' section framing including all coupling mullions, bronze handles, peg stays and other ironmongery. Factory primed with red oxide primer including cutting and pinning fixing lugs to concrete or masonry work jambs and bedding in cement and sand (1:3) mortar, pointing all round frames in mastic, easing oiling.				
B	Windows 1 overall 600x600mm	NO	12		
C	Window 2 overall size 2000x750mm	NO	2		
	Glazing				
D	Supply and fix 4mm clear glass on window steel casement with approved first grade quality metal putty.	SM	15		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
Element No. 7. Finishes (All Provisional)					
External wall.					
E	12mm thick plaster to door and window reveals not exceeding 100mm girth	LM	30		
F	Extra over machine cut stone waiting for neat recessed horizontal key in cement mortar (1:3)	SM	75		
	Crown "ruff and tuff" surface coating	SM	75		
Internal wall:					
12mm thick cement/sand (1:3) plaster finished smooth with white lime as described.					
G	1500mm high cement/sand (1:3) plaster finished semi rough with wood float to receive tiles at wet areas.	SM	130		
H	Internal walls	SM	200		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	
I	12mm thick Cellotex ceiling fixed to and including 75x50mm sawn Cypress brandering at 600mm centers both directions fixed with cloud headed nails and set out in symmetrical panels with V joints.	SM	135		
J	Fix 75mm wide Cypress timber cornices.	LM	150		
Floor finish					
K	40mm thick sand/cement (1:3) compacted screed finish semi-rough to receive tiles.	SM	135		
L	Ditto for 150mm high skirting.	LM	120		
Approved colored none- slip ceramics tiles as 'SAJ' or approved equivalent jointed and pointed					
M	500x500x10mm thick on floors	SM	135		
Approved white colored glazed ceramic 'Saj' or approved equivalent jointed and pointed with 1:2 cement sand mortar as described.					
N	250x200x6mm thick tiles on walls at wet areas.	SM	120		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Element No.8. Painting and decoration:(All Provisional)				
	Prepare and apply one undercoat and two coats plastic emulsion paint as 1 st grade Crown or approved equivalent to :				
A	Ring beam internally and externally	SM	10		
B	Plastered wall surfaces internally.	SM			
C	Cellotex ceiling internally.	SM	180		
D	Ditto plastered soffits of slab.	SM	180		
E	Plastered door and window reveals not exceeding 100mm girth externally	SM	30		
	Prepare and apply one undercoat and two coats of gloss paint as 1 st grade crown or approved equivalent to:				
F	Metal surfaces on windows and doors	SM	60		
G	Wooden door surfaces	SM	120		
	External walls				
H	Neat recessed horizontal key in cement mortar (1:3)	SM	180		
	Total carried to collection				

	BILL NO 7: (EXTERNAL TOILETS) COLLECTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT (KSH)
	Element No.1: Substructure				
	Element No 2: Super Structure				
	Element No.3: Roof: Pitched roof covering				
	Element No 4: Rain Water Disposal				
	Element No.5: Door				
	Element No.6: Windows				
	Element No. 7. Finishes				
	Element No.8. Painting and decoration				
	Total for Bill No 7 Carried to main summary				

	BILL NO 8 (CANTEEN)				
	ELEMENT NO.1: Substructure (All Provisional)				
	Excavation and earthworks				
A	Excavate over site average 150mm deep to remove vegetable top soil and cart away to spoil as shall be directed by the Project Manager.	SM	20		
B	Excavate foundation trench not exceeding 1.50metres deep starting from stripped level.	CM	15		
D	Return fill and ram selected excavated materials around foundations.	CM	10		
E	Wheel, deposit, spread and level within compound excess excavation as directed by the Project manager.	CM	10		
F	Allow for keeping foundation free of water.	ITEM	1		
G	Allow for keeping clear of fallen materials, maintaining and upholding sides of excavations.	ITEM	1		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Filling				
H	Approved imported hardcore filling rolled and consolidated in layers not exceeding 200mm thick to make up levels.	CM	6		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
I	50mm thick stone dust or approved equivalent blinding on hardcore.	SM	20		
J	Insecticide treatment as described; 'TERMIDOR' or other equal and approved on blinded hardcore and bottom of foundations to manufactures specification: Provide 10 years written performance guarantee certificate to approval.	SM	20		
K	Damp proof membrane as described: 1000 gauge polythene sheeting on blinded hardcore including all necessary overlaps.	SM	20		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Concrete Works:				
	Mass concrete class 15/40 to BS 8100 as described;				
A	50mm thick blinding under foundation strip footing	SM	15		
	Vibrated reinforced concrete class 20/20 to BS 8110 as described in:-				
B	Foundation strip footing.	CM	2		
C	100mm thick horizontal floor slab	SM	20		

D	Fabric Mesh BRC Mesh Ref. No. A142 (measured net, allow 300mm end and edge laps)	SM	20		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	BOQ QTY	RATE (KSH)	BOQ AMOUNT
	Sawn formwork to:				
E	Vertical sides of strip footing	SM	7		
F	Edge of floor bed 75-150mm	LM	20		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Sub-structure walling Natural stone wall to BS 5390 bedded and jointed in cement/sand (1:3) mortar including 25mm x 18 gauge hoop iron reinforced in every alternate course				
A	150mm thick	SM	14		
	Three ply hessian based bituminous felt horizontal damp proof course to BS 743 type A weighing 3.8				
B	150mm wide	LM	20		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	ELEMENT NO.2: Superstructure (All Provisional)				
	Concrete class 25/20 to BS 8110;				
A	Beams	CM	1		
	High tensile steel reinforcement to BS 4461 including cutting, bending, tying and hoisting to position;				
B	8mm diameter	KG	30		
C	Ditto 10mm diameter	KG	90		
D	Ditto 12mm diameter	KG			
	Sawn formwork to:-				
E	Sides and soffits of beam	SM	16		
Total carried to collection page 190					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	ELEMENT NO.3: Walling: Approved uncoursed squared rubble fine chisel dressed natural stone bedded and jointed in cement and sand (1:4) mortar reinforced with 25mmx18 gauge hoop iron every alternate course as described in:				
A	150mm thick walling	SM	30		
	Solid concrete blocks bedded and jointed in cement sand (1:4) mortar including 25mmx18				
B	150mm thick walling	SM	0		
Total carried to collection page 190					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	ELEMENT NO.4: Roof: Pitched roof covering. (All Provisional)				
A	26 gauge TT5' box profile pre-painted galvanized iron sheets on 100mmx50mm purlins including nailing and approved rubbers.	SM	30		
B	26 gauge x 380mm wide overall pre-painted plain sheet galvanized iron ridge or hip capping, once bent and dressed over roof covering including all necessary end laps.	LM	0		
	Sawn cypress celured pressure impregnated Cypress or approved equivalent in trusses spanning 11,000mm as described in the drawings;				
C	150x50mm rafters, tie beams and king posts	LM	30		
D	100x50mm struts	LM	20		
E	150x25mm gussets	LM	4		
F	100x50mm wall plates	LM	20		
G	200x38mm ridge board	LM	5		
H	200x25mm fascia board nailed to end of rafters.	LM	20		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Rain Water Disposal: (All Provisional)				
	Supply and fix the following UPVC rain water goods from 'Terrain 2100 half round system' or				
A	100mm diameter PVC gutter complete with necessary fastening accessories and openings for rainwater downpipes	LM	10		
B	Domed roof outlet No. 2171.40 complete with removable grid, screws and polypropylene washer.	NO	1		
C	110mm diameter rainwater down pipe No. 2100.4.40 cast in concrete.	LM	5		
D	Extra over ditto for spigot socket bend as No. 107.4.135	NO	6		
E	25x25 angle fillet	LM	2		
Total carried to collection					

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE	BOQ AMOUNT
	FITTINGS				
	Element No.5: Door. (All Provisional)				
	45mm thick standard solid cored to BS 459: Part 2, including 100mm brass butt hinges no. HN-DW-403020, 3-Lever Mortice lock ref. 2295PB complete with 150x75mm approved hardwood door frame, aluminum handles, 150mm aluminum tower bolt inside and 150x75 male or female signage ref MSC-75PB or/FSC-75PB as described:				
A	Flush door overall size 900x2100 mm high faced both sides with 4mm thick mahogany veneer, 6mm hardwood lipping all round.	NO	0		
B	Fabricate, deliver, and install purpose made steel casement doors complete with approved prime coating hinges handles catches and three lever mortise lock England or an approved equivalent as described in the architectural drawings door overall size 1200x2400.	NO	1		
	Glazing				
C	Supply and fix 4mm clear glass on door steel casement with approved first grade quality metal putty.	SM	1		
	panel door 1.2m wide x2m high. 10mm heavy duty brass hinges, door frame 150x75mm and 3 lever union lock and brass handles	NO	0		
E	Supply and fix 5mm thick bronze tinted glass on door steel casement with approved first grade quality metal putty.	SM	1		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Element No.6: Windows:				
	(All Provisional)				
A	150x15mm quarry tile external window all pointed in cement sand (1:3) mortar.	LM	4		
	Fabricate, deliver, and install purpose made steel casement windows with 25x2mm 'Z' section framing including all coupling mullions, bronze handles, peg stays and other ironmongery. Factory primed with red oxide primer including cutting and pinning fixing lugs to concrete or masonry work jambs and bedding in cement and sand (1:3) mortar, pointing all round frames in mastic, easing oiling.				
B	Windows 1 overall size 3000x1500mm	NO	1		
	Glazing				
C	Supply and fix 4mm blue tinted glass on window steel casement with approved first grade quality metal putty.	SM	5		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)
Element No. 7. Finishes (All Provisional)				
External wall.				
A	12mm thick plaster to door and window reveals not exceeding 100mm girth	LM	14	
B	Extra over machine cut stone waiting for neat recessed horizontal key in cement mortar (1:3)	SM	45	
	Crown "ruff and tuff" surface coating	SM	45	
Internal wall:				
	12mm thick cement/sand (1:3) plaster finished smooth with white lime as described.	SM		
C	1500mm high cement/sand (1:3) plaster finished semi rough with wood float to receive tiles at wet areas.	SM	3	
D	Internal walls	SM	45	
Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)
Ceiling				
E	12mm thick Cellotex ceiling fixed to and including 75x50mm sawn Cypress brandering at 600mm centers both directions fixed with cloud headed nails and set out in symmetrical panels with V joints.	SM	20	
F	Fix 75mm wide Cypress timber cornices.	LM	18	
Floor finish				
G	40mm thick sand/cement (1:3) compacted screed finish semi-rough to receive tiles/Terrazzo	SM	20	
H	Ditto for 150mm high skirting.	LM	18	
	Approved white colored glazed ceramic 'Saj' or approved equivalent jointed and pointed with 1:2 cement sand mortar as described.			
I	250x200x6mm thick tiles on walls at wet areas.	SM	3	
Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)
	Approved colored terrazzo in white strip with strips of non-slip as described in architectural			
J	10mm thick terrazzo mix with white cement on the floor.	SM	20	
Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	
	Element No.8. Painting and decoration:(All Provisional)				
	Prepare and apply one undercoat and two coats plastic emulsion paint as 1 st grade Crown or approved equivalent to :				
A	Plastered wall surfaces internally.	SM	50		
B	Ditto Cellotex ceiling internally.	SM	20		
C	Plastered door and window reveals not exceeding 100mm girth externally	SM	14		
	Prepare and apply one undercoat and two coats of gloss paint as 1 st grade crown or approved equivalent to:				
D	Metal surfaces on windows and doors	SM	8		
	External walls				
E	Neat recessed horizontal key in cement mortar (1:3)	SM	50		
F	fabricate Deliver install a purpose made hood medium size with one smoke chamber to engineers satisfaction.	ITEM	1		
Total carried to collection					

	BILL NO 8: CANTEEN COLLECTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT (KSH)
	Element No.1: Substructure				
	Element No 2: Super Structure				
	Element No.3: Roof: Pitched roof covering				
	Element No 4: Rain Water Disposal				
	Element No.5: Door				
	Element No.6: Windows				
	Element No. 7. Finishes				
	Element No.8. Painting and decoration				
	Total for Bill No 8 Carried to main summary				

	BILL NO 9: EXTERNAL WORKS (INCLUDES THE DRAINAGES,FENCE, LAND SCAPING AND THE PARKING.)				
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	Element No.1: Storm Water Drainage (All Provisional)				
	Excavation and earthworks				
A	Excavate foundation trench not exceeding 1.50metres deep starting from stripped level.	CM	100		
B	Return fill and ram selected excavated materials around the trenches	CM	20		
C	Wheel, deposit, spread and level within compound excess excavation as directed by the Project manager.	CM	40		
D	Allow for keeping foundation free of water.	ITEM	1		
E	Allow for keeping clear of fallen materials, maintaining and upholding sides of excavations.	ITEM	1		
F	Insecticide treatment as described; 'TERMIDOR' or other equal and approved on blinded hardcore and bottom of foundations to manufactures specification: Provide 10 years written performance guarantee certificate to approval.	SM	180		
	Concrete Works:				
	Mass concrete class 15/40 to BS 8100 as described;				
G	50mm thick blinding under foundation strip footing	SM	60		
	Concrete class 20/20 to BS 8110 as described in:-				
H	Foundation strip footing.	CM	12		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Sub-structure walling				
	Natural stone wall to BS 5390 bedded and jointed in cement/sand (1:3) mortar including 25mm x 18 gauge hoop iron reinforced in every alternate course				
I	150mm thick	SM	120		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Finishes (All Provisional)				
	Storm water drains.				
	12mm thick cement/sand (1:3) plaster finished smooth as described.				
J	Substructure walls	SM	120		
K	Floors	SM	60		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Element No.2. Parking and Walk Ways:(All Provisional)				
A	Excavate 150mm deep top soil, wheel, deposit, spread within compound as directed	SM	1,140		
B	Excavate to reduced levels not exceeding 1.5m deep, cart, deposit and spread soil on site where directed	CM	240		
C	Approved imported hardcore filling rolled and consolidated in layers not exceeding 200mm thick to make up levels.	SM	800		
D	Provide, place and compact 75mm murrum blinding on top of hardcore	SM	900		
	Fabric mesh.				
E	BRC Mesh Ref. No. A142 (measured net, allow 300mm end and edge laps)	SM	800		
	Concrete class 25/20 to BS 8110 as described in:-				
F	150mm thick on the plinth	SM	800		
G	125mm x250mm half battered kerb on and including 100mm thick x475mm girth mass concrete (1:3:6) bed haunching to back all necessary formwork, excavations and disposal.	LM	120		
H	125mmx100mm channel block ditto	LM	120		
I	600x600mm precast concrete paving slabs bedded and jointed in cement/ sand (1:4) mortar around plinths	SM	540		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
Element No.3. Gate and Sentry Box Construction :(All Provisional)					
A	A double leaf gate of size 4000mm wide by 2000mm high made of 50 X 50 X 3mm thick SHS as the main frame, and the vertical members size 25 X 25 X 2mm thick SHS all as detailed in the drawing. Finally Prepare and apply one undercoat and two coats plastic emulsion paint as 1st grade Crown or approved equivalent.	NO	1		
B	Construct 1 (one) No. Sentry Box as detailed in the drawing.	NO	1		
Total carried to collection					
Element No.4 Swimming Pool Wall fence and Sentry Box :(All Provisional)					
Sub Structure Works					
A	Excavate oversight average 150mm deep to remove vegetable top soil and cart away to spoil as shall be directed by the Project Manager.	SM	720		
B	Excavate foundation trench not exceeding 1.50metres deep starting from stripped level.	CM	60		
C	Ditto Column bases	CM	40		
D	Return fill and ram selected excavated materials around foundations.	CM	35		
E	Wheel, deposit, spread and level within compound excess excavation as directed by the Project manager.	CM	65		
Concrete works (Both Sub & Super Structure)					
Mass concrete class 15/20 to BS 8100 as described;					
F	50mm thick blinding under foundation strip footing				
G	Ditto but for 50mm thick to column bases	SM	360		
Vibrated reinforced concrete class 20/20 to BS 8110 as described in:-					
H	Foundation strip footing.	CM	43		
I	Column bases	CM	4		
J	Columns	CM	15		
High tensile steel reinforcement to BS 4461 including cutting, bending, tying and hoisting to position;					
K	8mm diameter	KG	1,043		
L	10mm diameter	KG	798		
M	12mm diameter	KG	2,112		
Sawn form work (Both Sub & Super Structure)					
N	Vertical sides of strip footing	LM	480		
O	Vertical sides of column bases	SM	144		
P	Vertical sides of columns	SM	384		
Q	Edges of wall coupling 75-100mm	LM	720		

	Walling				
	Natural stone wall to BS 5390 fine chisel dressed bedded and jointed in cement and sand (1:4) mortar reinforced with 25mmx18 gauge hoop iron every alternate course as described in:				
R	200mm thick walling	SM	540		
S	150mm thick walling	SM	432		
T	Neat recessed horizontal key in cement sand mortar (1:3) over natural stone	SM	430		
	12mm thick cement/sand (1:3) plaster finished smooth with white line as described over;				
U	Internal perimeter wall	SM	430		
V	Column surfaces	SM	390		
W	Column saddle	NO	120		
X	Metallic grill on perimeter wall as detailed in the drawings	NO	120		
Y	Allow for keeping the foundation free from water	NO	1		
Z	Allow for keeping clear of the fallen materials, maintaining and upholding sides of excavations.	NO	1		
	Total carried to collection				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	Element No.5 Land Scapping:(All Provisional)				
	Trees and Grass lawns				
A	Cut and fill surfaces of all configurations and remove debris and large stones from site: bring to fine tilt.	SM	1500		
B	200mm Bed of local top soil found on campus (from an average distance of about 400m): free from weeds, stones, roots, rubbish: spread and leveled to receive grass seedlings	SM	1500		
C	Imported compost manure to be mixed with red soil (measured separately) at the ratio 2:1 for planting	SM	1,500		
D	Plant Arabica grass or equal and approved grass, water, nurture, cut and roll until established from 0-60 degree sloping ground	SM	1,500		
E	Excavate 1200mm diameter x 800mm deep hole for trees	NO	20		
F	Supply, plant, build barricades all round and maintain to maturity including fertilization the indigenous trees as instructed by the project Manager.	NO	20		
G	Allow for tending, removal of weeds and maintenance of grassed areas including watering, fertilization and weeding for at least 3 months until established	SUM			
	Stone pitching				
H	Natural stone as ngomeni or approved equal a pitching to drain slope bedded (include cutting to slopes) and jointed in cement sand 1:3 mortar as directed.	SM	400		
	Total carried to collection				500,000

S/NO	DESCRIPTION	UNITS	QTY	RATE	BOQ AMOUNT
	Element No.6 Sewer Drainage Works				
	<u>Bush clearance</u>				
A	Clear bush including shrubs	SM	960		
B	Cut down trees and deposit as directed trees of average girth not exceeding 600mm including uprooting the tree stumps	NO	5		
	<u>Trench excavation</u>				
C	Excavate 150mm deep top soil, wheel deposit, spread within compound as directed.	SM	800		
D	Excavate trenches from the strip level to reduced levels not exceeding 1500mm deep, cut, deposited and spread	CM	480		
E	Excavate trenches to depths ranging from 1500mm to 3000mm deep part refill and part cut away	CM	480		
F	Excavate for manholes and inspection chambers to reduced levels not exceeding 1500mm deep, cut, deposited and spread as directed by the project manager	CM	78		
G	Excavate manholes and inspection chambers to depths ranging from 1500mm to 3000mm deep part refill and part cart away	CM	78		
H	Extra over for excavating in rock	CM	5		
	<u>Heavy duty PVC pipe to BS standards</u>				
I	100mm diameter pipe in trench	LM	50		
J	150mm diameter pipe in trench	LM	350		
	<u>Pipe Surround</u>				
K	100mm thick mass concrete 1:3:6 bed and surround Type 'D' to 100mm diameter pipe including all necessary formwork	LM	20		
L	Ditto for 150mm diameter pipe	LM	20		
	<u>Manholes</u>				
M	Man hole chambers type A, comprising 150mm thick mass concrete (1:3:6) base slab and benching, 150mm thick reinforced concrete cover slab reinforced with Y-8 bars at 80mm centers both ways, 200mm thick natural stone wall, 12mm thick sulphate resistant plaster and 20mm thick screed to benching, dishing out concrete bench to form channel for cast iron manhole cover and frame fixed to top slab with mild steel lag as detailed in the drawing	No.	10		
N	ditto but for man hole type B	No.	3		
	<u>Manhole cover</u>				
O	450x600mm concrete filled cast iron heavy duty manhole cover and frame complete with fixing in concrete slab with mild steel lugs	No	13		
P	Cast iron steps fixed to concrete wall and staggered at 300mm centers	No.	75		

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	BILL 9 COLLECTION				
	Element No.1: Storm Water Drainage				
	Element No.2. Parking and Walk Ways:(All Provisional)				
	Element No.3. Gate and Sentry Box Construction :(All Provisional)				
	Element No.4 Swimming Pool Wall fence and Sentry Box :(All Provisional)				
	Element No.5 Land Scapping:(All Provisional)				
	Element No.6 Sewer Drainage Works				
	Total for Bill 9				
	Total for Bill No 9 carried to main summary				

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT
	BILL NO 10. Pumping and balancing tank(Provisional)				
	Excavate to a depth not exceeding 2metres, supply and install a 10,000Litres tank as ROTO or approved equivalent all be below ground level : including associated connections to detail, considering all the operations and accessories to Engineers approval	ITEM	1		
	Total for Bill No 10 Carried to main summary				

ITEM NO	DESCRIPTION	UNIT	QNTY	RATE	AMOUNT (KSH)
	BILL 11. PROPOSED SWIMMING POOL AND ASSOCIATED WORKS MECHANICAL INSTALLATION				
	INSTALLATION ITEMS				
	Supply, deliver, install and fix the following sanitary fittings including all materials and jointing to supply, waste/soil and overflow pipes. TWYFORD Ltd products are specified only as an indication of quality. Equal and approved appliances may be supplied. Where trade names are mentioned, the Ref. No. is intended only as a guide to the type and quality of fittings				
	PAVILION -LADIES AND GENTS				
A	WATER CLOSET(WC)	NO	10		
	General purpose English type WC as Twyford 'Sola rimless 400 Back-to-Wall toilet pan comprising of the following-:				
	Twyford WC outlet connector or turned up P trap				
	Twyford Avalon/Sola Toilet Seat and Cover Bar Hinge Top fix -White				
B	CISTERN	NO	10		
	Geberit DUOFIX WC Frame(floor standing pan); PreWall Model; with 120mm Sigma Cistern; 1120mm High ,front actuation complete with Stainless steel manual actuation plate. Possible discharge of 4.5l to 9liters.The cistern to be supplied with all necessary fitting for its full functionality.				
C	WASH HAND BASIN (WHB)	NO	6		
	Counter top self rimming stainless steel as described and complete with the following :				
	Berwick 2 stainless steel self rimming countertop bowl, 1¼" combined chain waste & plug Ref.S2628(MY)				
	DOCOL Push Tap: Delay Action, Pressmatic REF.NO.17160606				
	Chrome plated chain waste Ref.NO.CQ5823GA				
	Bottle trap as VIEGA 1 1/4 inch.				
	Self rimming basin sealed to unit with building sealant as twyford.				

A	MIRROR	NO	6		
	Glass plated mirror size: 600mm X 450mm X 5mm thick, polished plate glass silver backed mirror with beveled edges, plugged and screwed to wall with 4 No. Chrome plated dome capped screws. As Twyford's SPECTRUM 2000 accessories Ref. No. PB383XX				
B	SOAP DISPENSER	NO	4		
	Wall mounted soap dispenser with a capacity of one liter having après action soap release mechanism complete with fixing screws. Allow for initial soap supply. As Star mix or approved or equivalent.				
C	URINAL SLAB	NO	1		
	Stainless steel Urinal slab for three persons 1850mm long Complete with the following:-				
	· Channel				
	· 1/2" outlet grating				
	· Automatic 7 liter cistern ref.no.8612WH				
	· Exposed flush pipes and spreaders Ref.No.556072SS				
	· P-trap				
	· Other accessories for full functionality				
D	SHOWER FITTINGS	NO	10		
	Concealed shower mixer consisting of 20mm diameter riser pipe to connect the shower for cold /hot water to the swivel/adjustable shower arm and rose. Chrome plated handle/knob mixer to be as cobra or equal and approved.				
E	TOILET ROLL HOLDER	NO	10		
	Semi-recessed toilet roll holder in vitreous china size 165 x 165mm.As Twyford'sRef.No. VC 9806WH or approved.				
F	AUTOMATIC HAND DRIER	NO	3		
	Automatic hand drier operating on an infrared automatic sensing system with safety cut out complete with plastic crawl plugs and fixing screws				

SPECIAL NEEDS					
A	WATER CLOSET SUITE FOR DISABLED PERSON	NO	4		
	A completely assembled unit of wheel chair accessible WC/WHB facility comprising of:				
	· A close-coupled white in color WC bowl with horizontal outlet, complete with 7.5 liter Dual flush Cistern with fittings and additional security.				
	· Wall mounted wash hand basin with single tap hole and chain stay hole, wall brackets, lever action chrome plated 15mm dia.Tap as DOCOL,chrome plated chain waste32mm				
	· 5No.600mm long grab rails				
	· 1No. hinged support rail and toilet roll holder				
	· Mirror 400mm wide by 900mm high fixed 900mm above floor				
B	Concealed shower mixer FOR DISABLED consisting of 20mm diameter riser pipe to connect the shower for cold /hot water to the swivel/adjustable shower arm and rose. Chrome plated handle/knob mixer to be as cobra or equal and approved	NO	2		
C	CLEANERS SINK	NO	1		
	Twyfords enameled filled fire clay cleaners/stainless steel sink size 450x400x200mm deep sink complete with hardwood pad stainless steel gratings, legs,1No.Bib taps 0.75 inch diameter				
	32mm grid waste fitting or equal and approved equivalent.				
	EXTERNAL WASHROOMS				
D	WATER CLOSET(WC)	NO	8		
	General purpose English type WC as Twyford 'Sola rimless 400 Back-to-Wall toilet pan comprising of the following-:				
	· Twyford WC outlet connector or turned up P trap				
	· Twyford Avalon/Sola Toilet Seat and Cover Bar Hinge Top fix -White				
E	CISTERN	NO	8		
	Geberit DUOFIX WC Frame(floor standing pan); PreWall Model; with 120mm Sigma Cistern; 1120mm High ,front actuation complete with Stainless steel manual actuation plate. Possible discharge of 4.5l to 9liters.The cistern to be supplied with all necessary fitting for its full functionality.				

A	WASH HAND BASIN (WHB)	NO	4		
	Counter top self rimming stainless steel as described and complete with the following :				
	Berwick 2 stainless steel self rimming countertop bowl, 1¼" combined chain waste & plug Ref.S2628(MY)				
	DOCOL Push Tap: Delay Action, Pressmatic REF.NO.17160606				
	Chrome plated chain waste Ref.NO.CQ5823GA				
	Bottle trap as VIEGA 1 1/4 inch.				
	Self rimming basin sealed to unit with building sealant as twyford.				
	Glass plated mirror size: 600mm X 450mm X 5mm thick, polished plate glass silver backed mirror with bedveled edges, plugged and screwed to wall with 4 No. Chrome plated dome capped screws. As Twyford's SPECTRUM 2000 accessories Ref. No. PB383XX				
B	SOAP DISPENSER	NO	2		
	Wall mounted soap dispenser with a capacity of about one liter having après action soap release mechanism complete with fixing screws. Allow for initial soap supply. As Star mix or approved or equivalent.				
C	URINAL SLAB	NO	1		
	Stainless steel Urinal slab for three persons 1850mm long Complete with the following:-				
	· Channel				
	· 1/2" outlet grating				
	· Automatic 7 liter cistern ref.no.8612WH				
	· Exposed flush pipes and spreaders Ref.No.556072SS				
	· P-trap				
	· Other accessories for full functionality				
D	SHOWER FITTINGS	NO	4		
	Concealed shower mixer consisting of 20mm diameter riser pipe to connect the shower for cold /hot water to the swivel/adjustable shower arm and rose. Chrome plated handle/knob mixer to be as cobra or equal and approved.				
E	TOILET ROLL HOLDER	NO	8		
	Semi-recessed toilet roll holder in vitreous china size 165 x 165mm.As Twyford'sRef.No. VC 9806WH or approved.				

A	AUTOMATIC HAND DRIER	NO	2		
	Automatic hand drier operating on an infrared automatic sensing system with safety cut out complete with plastic crawl plugs and fixing screws				
B	MIRRORS	NO	4		
	Glass plated mirror size: 1200mm X 460mm X 5mm thick, polished plate glass silver backed mirror with beveled edges, plugged and screwed to wall with 4 No. Chrome plated dome capped screws. As Twyford's SPECTRUM 2000 accessories Ref. No. PB383XX				
	CAFETERIA				
C	KITCHEN SINK	NO	1		
	Rectangular Surface electroplate single bowl double drain sink complete with 1 in No. LONG NECK Bib Taps as Tapis and 1½ inch bottle trap.				
D	KITCHEN EXTRACT SYSTEM-CAFETERIA				
	The following in 2.5mm thick aluminum metal sheet ductwork inclusive of all joints, bracing, and gaskets support stiffeners, turning vanes, splitters and any other equipment to completion. Straight Lengths, Radius Bends and Transformation Pieces				
E	Ductwork aluminum material thickness 2.5mm thick	SM	6		
F	Wall Mounted Kitchen hood 3000mm x 1500mm x 1600mm high kitchen hood in polished stainless steel 2.5 mm thick inclusive of stiffeners, 4 No. Thorn Olv - 4800 lighting fittings (heat resistant) moisture drain, channel, hangers, supports, cleanable type grease DS 10/4 filter as vokes and all other items to complete hood.	NO	1		
G	Extract Fan Axial fan capable of extracting 1.2m³/s against a static pressure of 200Pa. The fan shall be as "WOODS" or approved complete with a direct drive mixed flow fan or equal and approved. Power rating 2.8 kW, 3 phase, 2840 rpm	NO	1		
H	Flexible Connections	ITEM	ITEM		
	The fan shall be connected to ductwork through a flexible connections of approved material. Fan starter and electrical wiring.				

A	WASH HAND BASIN (WHB)-CAFETERIA	NO	1		
	Wall mounted semi pedestal wash hand basin with single tap hole and chain stay hole, wall brackets, chrome plated 15mm dia.Lever action pillar Tap as Tapis, 40mm bottle trap as viega.				
B	Glass plated mirror size: 1200mm X 460mm X 5mm thick, polished plate glass silver backed mirror with bedeviled edges, plugged and screwed to wall with 4 No. Chrome plated dome capped screws. As Twyford's SPECTRUM 2000 accessories Ref. No. PB383XX	NO	1		
C	INTERNAL PLUMBING				
	Supply, deliver and install tubing and fittings as described and shown on the drawings.				
	Tenderers must allow for jointings, clippings, couplings etc. necessary for the proper and satisfactory functioning of the system when pricing.				
	The following in ASTM D2846 : Specification for Chlorinated Poly Vinyl Chloride (CPVC) Plastic for Hot & Cold water distribution systems and to the Engineers approval, pipe jointing shall be by approved Solvent Cements as Ref ASTM F493				
	Rates must allow for all Metal/plastic threaded adaptors where required for the connection of sanitary fixtures, valves , sockets, sliding and fixed joints, support raceways, isolating sheaths, elastic materials, expansion arms and bends, crossovers etc.				
	CPVC PIPES				
D	32mm pipe chased in walls/floors and in duct	LM	90		
E	20mm Ditto	LM	86		
	Extra over CPVC. pipework for the following				
	Bends/elbows				
F	32mm diameter bend/elbow	NO	54		
G	20 mm diameter elbow	NO	28		

A	Tees-equal and unequal				
B	32x32mm diameter Tee	NO	23		
C	20x20mm-ditto	NO	30		
D	32x20mm ditto	NO	30		
	Female/male threaded adaptors				
E	20x½" dia. Female threaded 90° bend	NO	30		
F	20x 1/2" diameter Male threaded 90° bend	NO	30		
G	20x 1/2 " mm male threaded adaptor	NO	56		
	Unions				
H	15mm diameter union	NO	2		
I	20mm diameter -ditto-	NO	10		
J	32mm diameter - ditto-	NO	10		
	Sockets				
K	20mm ditto	NO	22		
L	32mm ditto	NO	18		
	Reducers				
M	32x20 mm reducer	NO	12		
N	20x15mm mm -ditto-	NO	6		
	Gate valves				
	Approved medium pressure screw down full way non- rising stem wedge gate valve to BS 1952, with wheel and head joints to steel tubing. The gate valve to be as PEGLER or approved equivalent.				
O	32mm -gate valve-	NO	8		
P	20mm -ditto-	NO	8		
Q	15mm angle valve	NO	12		
R	Allow for flushing and pressure testing of the internal plumbing system as required to the satisfaction of the Engineer.	ITEM	1		

	INTERNAL AND EXTERNAL DRAINAGE all provisional				
	All drainage pipes to be as Key Terrain or equal and approved equivalent. Allow for connection to the nearest manholes. UPVC and MuPVC pipe work.				
	UPVC and MuPVC pipework				
A	150mm heavy duty grey pipe class D	LM	310		
B	100mm diameter heavy duty grey pipe class D	LM	102		
C	50mm ditto	LM	60		
D	40mm ditto	LM	28		
	Extra over UPVC and MuPVC pipework for the following:				
E	40mm diameter bend	NO	26		
F	40mm diameter Tee	NO	13		
G	40 mm diameter 135° bend	NO	12		
H	40mm diameter plug	NO	12		
I	50mm diameter plug	NO	28		
J	100mm diameter plug	NO	9		
K	50X40mm reducer	NO	10		
L	100x50 mm diameter floor trap and grating	NO	18		
M	100mm diameter access bend	NO	18		
N	100mm diameter Tee	NO	18		
O	100mm long bend	NO	4		
P	100mmWC connector	NO	18		
Q	100mm diameter vent cowl	NO	4		
R	100mm diameter weathering slate	NO	4		
S	100mm weathering apron	NO	4		
T	Inspection Chambers	NO	24		
	Allow excavation ,concreting to class 1:3:6, walling				
	150mm thick solid concrete block walls with 1:3mortar and plastering to1:2, heavy duty cast iron framed , concrete filled Rectangular cover and frame to specification for				
	Manhole not exceeding1500mm depth.				
U	Gully traps	NO	16		
	Ditto but 100mm diameter gulley trap complete with golden brown plastic seal pipe, cast aluminum Grating, chamber and concrete cover.				
V	Allow for connection to an existing manhole	Item	1		

A	PORTABLE FIRE FIGHTING				
	Supply, deliver, install and fix the following fire fighting equipment in positions indicated on the contract drawings: -				
	4.5 Kg Carbon dioxide gas fire extinguisher to BS 3326 and BS 3326 and 5423 and with normal charge and wall mounting brackets	NO	3		
	9kg dry chemical powder portable fire extinguisher complete with pressure gauge, initial charge and mounting bracket	NO	3		
	External water reticulation				
	NOTE: The following quantities for water reticulation are measured from the external surface of buildings wall to the main supply pipe				
B	Excavate trench for 75mm dia. Approved pressure pipe work not exceeding 1200mm deep and 500mm wide on average, part refill and ram, and surplus cart away.	LM	65		
	Supply, deliver and install tubing and fittings as described and shown on the drawings.				
	Allow for jointings, clippings, couplings etc necessary for the proper and satisfactory functioning of the system when pricing.				
	The following in ASTM D2846 : Specification for Chlorinated Poly Vinyl Chloride (CPVC) Plastic for Hot & Cold water distribution systems and to the Engineers approval, pipe jointing shall be by approved Solvent Cements as Ref ASTM F493				
	Rates must allow for all Metal/plastic threaded adaptors where required for the connection of valves , sockets, sliding and fixed joints, support raceways, isolating sheaths, elastic materials, expansion arms and bends, crossovers etc.				

	WATER SUPPLY-connection from high level tank				
A	50 mm diameter Heavy duty PVC pressure pipe network	LM	65		
B	50mm diameter water meter as kent complete with fittings	NO	2		
	Extra over pvc piping for the following				
C	Gate valve 3 inch as Pegler	NO	2		
D	PVC adaptors 3 inch	NO	2		
E	PVC adaptors 2 inch	NO	8		
F	GI union 3 inch	NO	1		
G	GI tee 3 inch	NO	1		
I	GI nipple 3 inch	NO	1		
J	GI Socket 3 inch	NO	1		
K	PVC elbows 2 inch	NO	9		
L	PVC reducers 3 x 1 ¼ inch	NO	4		
M	Pvc adaptor 1¼ inch- male	NO	4		
	<u>VALVES CHAMBERS</u>				
N	150mm thick solid concrete block walls with 1:3mortar and plastering to1:2, purpose made 2mm thick Lockable rectangular MS plate cover and frame to specification for 2 in No.50mm diameter water meter chamber	NO	2		
O	Standard pre-cast concrete (1:2:4) water line marker post marked (WL) set in concrete (1:3:6) base including excavation and disposal and all necessary painting approved blue color.	NO	8		
	SWIMMING POOL PIPING AND CIRCULATION				
P	100mm diameter pressure PVC pipe network	LM	454		
Q	100mm diameter pressure pvc elbows	NO	28		
R	100 mm x50mm reducers	NO	28		
S	100mm couplers	No	14		
T	100mm diameter Tee	NO	28		
U	50mm Diameter tee	NO	16		
V	50mm diameter elbow	NO	28		
W	110mm Stop Tap Valve For HDPE	NO	12		
X	50mm Stop Tap Valve For HDPE	NO	8		
Y	50mm Hayward Sand Filter Multiport Valve	NO	8		
Z	DAYLIFF 'CX 900 Filter fully charged with approved filter media	No	8		

	POOL FILTER PUMPS				
A	Supply and install Pool pump as Dayliff Aurel 4 with power output of 4kW 8.8A.	NO	4		
	Allow for pump control panels to connect 3 pumps				
B	JACUZZI	NO	1		
	Supply Install test and commission the following.				
	Certikin Heavy Commercial Spas Model as Octagon Overflow 2.7m of capacity 2300lit to 3000liters, minimum of 5jets and 5seating capacity. The spa to be supplied complete with the following:				
	- Deep bed filter size of size 950mm-1200mm				
	- Filter Pump 3.0 HP				
	- Booster pump 1.5 HP				
	- Blower 1.5HP				
	- 12Kw heater				
	- Small balance tank				
	- Spa pack sand				
	- Insulated Shell and cover				
	- Pipe work kit, chemical kit and dozer				
	Chrome and stainless steel fittings with Led lights Floor drain and leg kits.				
	POOL CARE ITEMS				
B	STARTING BLOCK:	NO	8		
	A one step stainless steel starting block with anti-slip platform for use with lane markers.				
C	LIFE/RESCUE RING	NO	5		
	Orange with reflective grey strips and white rope, internal diameter 460mm external diameter 720mm, 2.5kg, international standard as IMO (International Marine Organization) Resolution A.689(17)				
D	LADDERS- (2 deep-end, 2 shallow-end)	NO	4		
	Tubular ladder made from 42mm polished stainless steel complete with stainless steel treads, anchor sockets and rubber end pads; four step configurations. With 500mm width. The supplied rubber should be complete with all fasteners (including Escutcheon plates, anchor sockets, rubber bumpers) to fix in place as directed by the project manager.				

A	DECK DRAIN AND DECK GRILLES:	LM	200		
	Gutter drain around the swimming pool. suitable for both straight and curved edges. made from hard wearing molded plastic and in color white and 250mm wide. Include GRP (Glass fiber Reinforced Plastic) spacer corner pieces for corners. Due to the grilles strength no special channel edging is necessary, and they should be supported by a counter sunk recess molded in the channel rim				
B	FIXED SKIMMERS	NO	20		
	Skimmers for the removal of floating debris. standard mouth flap type molded from ABS (Acrylonitrile butadiene styrene)				
C	LIFEGUARD ELEVATED CHAIR (PORTABLE)	NO	2		
	Contains a rear access ladder and non-slip platform top, Stainless steel lifeguard chair frame. Column and seat post 2500mm above surface of swimming pool deck. Platform top textured surface molded-in to prevent slipping. 304L stainless steel construction. 360 degree swivel chair. Closed cell UV protected foam padded seat. 22inch wide non-slip injection molded UV stabilized ABS step treads. And Passivated for maximum corrosion resistance				
D	HAND RAILS:	LM	160		
	Stainless steel 32mm handrails with blanked ends available in standard lengths of 3m and 6m or alternatively sized to order suitable for straight walls only. Handrails are secured by screwed stainless steel supports.				
E	INLETS/OUTLETS	NO	28		
	Water inlet points wall application suitable for up to 5 m/hr. flow rates.				
	Wall Inlet: Molded PVC with 1½" internal and 2" external BSP (British Standard Pipe) threads and fitted with adjustable eyeball flow director.				
F	Vacuum Outlet: A standard inlet body fitted with a screwed cover	NO	16		
G	Suction Gratings: GRP suction gratings in 450mm size	NO	6		
H	Suction Chambers: PVC molded chamber with screwed grille covers with anti-vortex gratings.	NO	20		

A	TESTING KITS				
	4 IN 1 SWIMMING POOL TESTING KIT	NO	4		
	"The standard 4-in-1 HTH (High Test Hypochlorite) test kit for measurement of pH, residual chlorine level and acid demand" or approved equivalent.				
B	QUICK INSTANT TEST STRIPS	NO	1		
	100 No strips As "The 'Aquacure Quick Insta' test strips for a quick testing of Chlorine, Bromine, Alkalinity, pH, water hardness and stabilizer concentration" or approved equivalent.				
C	TWO PIECE TELESCOPIC POLE (WITH GRIP LOCK)	NO	2		
	2 No. 2 x 4m aluminum telescopic pole (extendable to 8m)				
D	FLEXIBLE VACUUM HEAD (12 INCH)	NO	2		
	12inch vacuum head, with four wheels, aluminum body and plastic handle				
E	FLEXIBLE VACUUM HEAD (18 INCH)	NO	2		
	18inch vacuum head, with four wheels, aluminum body and plastic handle				
F	STAINLESS STEEL VACUUM HEAD HEAVY DUTY	NO	2		
	Vacuum Head 36 Inch				
G	WALL BRUSH / SWIMMING POOL SS ALGAE BRUSHES	NO	2		
	18inch stainless steel algae brush				
H	POOL PLASTIC BRUSHES	NO	4		
	18inch Plastic brush				
I	SWIMMING POOL HOSES	NO	12		
	50 ft. Flexible Vacuum Hose to connect to pump for vacuum cleaning				
J	Swimming Pool Hand Skimmer	NO	4		
	Standard Hand Skimmer				
K	Supply, deliver test and commission a movable hydraulic scarfold of load capacity of atleast 300kg, a maximum reach of 25 metres, of approved brand and a warranty against manufactures defect of not less than one year.	NO	1		
A	LOW LEVEL DIVING BOAD	NO	2		

	U-Frame Stainless Steel Stand with 2400mm Diving Board, and 500mm wide, 1m from the surface of the water at the tip, 180kg weight limit, Board and Stand Combination. Board has a non-slip tread for maximum safety. Contains the diving board, stand, and all necessary hardware required for installation. Mounting bolts are located on 11 inch centers. Including weather resistant diving board covers to be provided. Or Approved equivalent.				
	The fixed diving board should be approved by the project manager prior to installation including all necessary fixtures				
B	HIGH LEVEL DIVING BOARD	NO	1		
	Water level Diving board should be 3 meters above the water surface at the tip end. It should be 16 feet [4.87 m] long by 20 inches [50.80 cm] wide with the entire length of the upper surface covered with adequate nonslip material. The fixed diving board should be approved by the project manager prior to installation including all necessary fixtures				
	BILL NO 11 COLLECTION				
A	TOTAL FOR CHANGING ROOM PLUMBING AND DRAINAGE				
B	TOTAL FOR SWIMMING POOL				
C	TOTAL FOR POOL CARE ITEMS AND ASSESORIES				
D	TOTAL FOR JACUZZI				
	Total for Bill 11 Carried to collection page				

ITEM	DESCRIPTION	UNIT	BQ QTY	RATE (KSh)	BQ AMOUNT (KSh)
	BILL NO. 12. ELECTRICAL INSTALLATION WORKS				
	Element No.1 - INCOMING ELECTRICITY SUPPLY				
	ALL RATES SHALL BE INCLUSIVE OF CONTRACTUAL OBLIGATIONS, DUTIES AND GOVERNMENT TAXES Indicated Product Brands are only a guide to the quality required Supply, install, test, commission and hand over in proper working condition the following.				
1	Allow for attendance to Kenya Power (KP) with respect to the following:-				
(i)	- Application for Additional Electricity loading	item	1		
(ii)	- Attendance and Follow up with KPLC on Quotati	Item	1		
(iii)	- Liaising between the employer and KPLC with regards to signing of relevant contract documents and payment of requisite amounts for additional loads.	Item	1		
2	70.0mm ² 4 core, XLPE/SWA/PVC copper feeder cable from Overhead line to Main incomer MCCB at the LVSB	m	70		
3	Trenching, sifting, tiling and backfilling above 2x150mm diameter Heavy Gauge PVC Duct with concrete Surround under road/along boundary wall	LM	60		
4	Any other item necessary to complete the installation in this section as specified. (Provide Details below)	Sum	1		
5	Termination of 70.0mm ² 4 core, XLPE/SWA/PVC copper feeder cable from Overhead line to Main incomer MCCB at the LVSB	Item	0		
6	Cooper and aluminum metals connectors	Item	0		
7	450mm x450mm x 450mm manhole complete with concrete cover	No.	0		
	SUB-TOTAL FOR INCOMING ELECTRICITY SUPPLY CARRIED MAIN SUMMARY PAGE				

Element No. 2.0 - ELECTRICAL POWER DISTRIBUTION

ITEM	DESCRIPTION	UNIT	BQ QTY	RATE (Ksh)	BQ AMOUNT (Ksh)
1	Recessed, TPN MCB Distribution Board incorporating 60 Amps TPN integral isolator, lockable front door, labelling front cover and spare way blanking plates. As CRABTREE, LOADSTAR, SAPPHIRE, MERLIN GERIN or equal and approved.				
i)	4-way TPN MCB Distribution Board -DB A1	No	1		
2	Miniature Circuit Breaker for incorporation in Distribution Boards; DBA1, DBA2- As CRABTREE, LOADSTAR, SAPPHIRE, MERLIN GERIN or equal and approved.				
i)	5 Amps SP	No	3		
ii)	10 Amps SP	No	3		
iii)	20 Amps SP	No	6		
iv)	30 Amps SP	No	6		
v)	Single Blanking plates	No	7		
vi)	30 Amps Tripple Pole Miniature Circuit Breaker for Water Pump circuit for incorporation in above Distribution Board as MERLIN GERIN or approved equivalent.	No	0		
3	Sub-mains comprising XLPE/SWA/PVC cable complete with glands, surface laid with saddles, in a Perfoma Mesh Tray from the LV Switch Board to the Distribution Boards in the Ground Floor as follows:				
i)	10.0mm ² ,4 core XLPE/SWA/PVC 4 copper cable to DB A1	LM	20		
ii)	10.0mm ² ,4 core XLPE/SWA/PVC 4 copper cable to DB A2	LM	35		
4	Heavy Duty PVC Conduits concealed in the Building Fabric complete with bends,couplers and all accessories as follows:-				
i)	32 mmØ for Mains power link to the DBA1	LM	15		
TOTAL FOR POWER DISTRIBUTION CARRIED FORWARD TO MAIN SUMMARY PAGE					

Element No.3					
SCHEDULE 1.0- LIGHTING INSTALLATIONS - IN PUMP HOUSE, EXTERNAL TOILETS, CANTEEN,GATE HOUSE, JACUZZI AND OFFICE					
ITEM	DESCRIPTION	UNIT	BQ QTY	RATE (KSh)	BQ AMOUNT (KSh)
	Indicated Product Brands are only a guide to the quality required Supply, install, test, commission and hand over in proper working condition the following.				
3.01	LIGHTING POINTS				
1	Lighting point, wired in 3 x 1.5mm ² single core PVC insulated copper cables, drawn in 20mmØ Heavy Duty PVC Conduits concealed in the Building Fabric and complete with bends, couplers and all accessories but excluding the light fitting and switch for:-				
	i) One way switching	No	20		
	ii) Two way switching	No	11		
3.02	LIGHTING ACCESSORIES				
1	10 Amps single pole molded plate switch for flush mounting as CRABTREE or equal and approved.				
	i) One gang One-way As CRABTREE Catalogue No 4170	No	13		
	ii) Two gang One-way As CRABTREE	No	3		
	iii) One gang Two-way As CRABTREE	No	14		
	iv) One gang Two-way Intermediate As CRABTREE	No	7		
3.03	LIGHTING FITTINGS				
1	1200mm LED tube fitting complete with Dust & Moisture Resistant Luminaire As CROMPTON,THORN or equal and approved.	No	20		
2	1200mm LED fitting complete with Electronic choke, Rated Lamp and waterproof prismatic diffuser as THORN ARROWSLIM 1200 or approved equivalent (Type WP).	No	25		
3	600mmx18W LED fitting complete with Electronic choke and anti-glare louvre as THORN or approved equivalent	No	2		
5	Weatherproof Bulkhead fitting complete with Polycarbonate base, Diffuser and Rated (18W) Energy saving lamp as THORN or approved equivalent	No	4		
TOTAL FOR SCHEDULE 1.0					

SCHEDULE 2.0 - AMENITY LIGHTING

ITEM	DESCRIPTION	UNIT	QTY	RATE (KSh)	BQ AMOUNT (KSh)
	<p><u>SOLAR SECURITY/STREET LIGHTING</u> Supply, assemble, erect, and commission automated operation (automatic on/off) from dusk to dawn solar lighting complete with 2No. Additional lamps for replacement as "PHILIPS" or approved equivalent and described as follows:</p> <p>i) The Support Pole - 6.0 meters above the ground level, 150mm diameter rigid aluminum pole fixed in 500x500x500mm mass concrete foundation and Die cast aluminum lamp fixtures.</p> <p>ii) Solar Panel - poly crystalline solar panel. Battery - tabular construction with 75% depth discharge covered in polymer/galvanized battery box with three (3No) days autonomy as backup during a cloudy day. All fixed at the topmost of the pole</p> <p>iii) Lamp - weather proof 90w LED version lamp</p> <p>iv) Charge controller - highly efficient to charge the battery with intelligent microprocessor controlled algorithms autonomously determine sunrise and sunset . all fixed at the topmost of the pole</p>	No	12		
	<i>Solar security/ street lighting summary carried to main collection page</i>				
	SUB-TOTAL FOR SCHEDULE 2.0				
	TOTAL FOR ELEMENT NO 3 CARRIED TO SUMMARY PAGE				

**Element No 4.0- IN PUMP HOUSE, TOILETS
CANTEEN,GATE HOUSE, JACUZZI AND OFFICE**

ITEM	DESCRIPTION	UNIT	BQ QTY	RATE (KSh)	BQ AMOUNT (KSh)
	Indicated Product Brands are only a guide to the quality required Supply, install, test, commission and hand over in proper working condition the following. POWER POINTS				
1	13 Amps Twin Socket Outlet Point, recessed in the wall wired in 3 x 2.5mm ² single core PVC insulated copper cables in ring circuit drawn in 25mmØ Heavy Duty PVC Conduits concealed in the Building Fabric, from the Raw Power Distribution Board but without the outlet plate.	No	25		
2	20A Radial circuit - wired in 3 x 2.5mm ² PVC S/C CU cables in 20mmØ HG PVC conduits via a control DP switch for:-				
(i)	Automatic Hand drier	No.	8		
4	3 Phase power circuit outlet comprising 5x4.0mm ² single core PVCI copper cables to 3KW, 3Ø Water pump drawn in concealed PVC conduit complete with isolator and all accessories	m	0		
4	40 Amps Triple pole control Isolator as KATCO or equal and approved.	No	1		
3	Twin rectangular PVC Blanking covers (White)	No	25		
TOTAL FOR POWER INSTALLATIONS CARRIED TO SAMMARY PAGE					

Element No. 5 LIGHTNING PROTECTION INSTALLATION

ITEM	DESCRIPTION	UNIT	BQ QTY	RATE (KSh)	BQ AMOUNT (KSh)
	Indicated Product Brands are only a guide to the quality required Supply, install, test, commission and hand over the following in proper working condition the following;				
1	Air Termination				
	i) 25mm wide x 3 mm thick bare copper tape as Furse Cat. No. TC030. laid along the roof ridge.	Lm	100		
	ii) Fix and secure with copper ridge saddles, copper junction clamps, State Holdfast as Furse Cat. No. HF015 and all accessories along the roof ridge	No.	20		
	iii) Air termination comprising 2000mm Long x 15mm Ø copper rod complete with; copper multiple point spikes and copper air terminal base as Furse Cat. No. RA240; RA600 & SD105 respectively.	No.	5		
2	Down Conductors				
	i) 25mm wide x 3 mm thick bare copper tape as Furse Cat. No. TC030. laid along the vertical wall surface to ground.	Lm	60		
	ii) Copper square tape clamp/Direct Coupling tape clip as Furse Cat. No. CP 210 or approved equivalent	No	6		
	iii) Test Clamp. As FURSE Cat. No. CN105 or approved equivalent	No	6		
	iv) 32mm Ø HG PVC conduit saddled to the wall surface for the down conductors above.	m	60		
3	Earth Termination				
	i) 15mm Ø, x 1500mm long solid pure copper earth rod as Furse Cat. No. RC 020, complete with driving stud and spike.	No	6		
	ii) Earth rod-to-tape clamp type A.	No	6		
	iii) Earth inspection concrete manhole/earth pit/chamber; 300mm x300mm x 300mm as FURSE Cat. No. PT 005 with removable concrete cover inscribed "EARTH INSPECTION PIT" and a 32mm Ø HG PVC duct for earth lead/tape..	No	6		
4	Bonding Bonding and clamping to all metal work including water pipes, gas pipes, hand-rails, air-conditioning units, window frames, cladding, metal roof etc. and the main earth for the building.	Item	1		
5	Allow for Testing of resistivity of the soil.	Item	1		
6	Any other item not included under the LIGHTNING PROTECTION - that is necessary to complete this electrical installations as specified(provide details	Item	1		
SUB-TOTAL FOR LIGHTNING PROTECTION INSTALLATIONS CARRIED FORWARD TO THE PRICES SUMMARY PAGE					

Element No 6.0 - FIRE DETECTION INSTALLATIONS

ITEM	DESCRIPTION	UNIT	BQ QTY	RATE (KSh)	BQ AMOUNT (KSh)
	Supply, install, test, commission and hand over the following in proper working condition as a complete Fire Detection & Alarm System in accordance with BS 5839:2002				
1	Detector and Alarm outlet point comprising wiring in 1.5mm ² x 2 core fire retardant cable drawn in 25mm Ø Heavy Duty PVC conduits concealed in the walls, floors and ceiling from the Fire Alarm Control Panel (FACP)	No	27		
	ACCESSORIES				
2	Break glass call point for Flush Mounting. As MENVIER Catalogue No MBG913 or equal and approved	No	5		
3	6" Ø ,240 Volts Mains Operated Sounder/bell as MENVIER MM240.	No	1		
4	Smoke Detector as Menvier	No	8		
5	Heat Detector as Menvier	No	1		
SUB-TOTAL FOR ELEMENT No 6.0 - FIRE DETECTION INSTALLATIONS TO THE SAMMARY PAGE					

BILLS SUMMARY PAGE

BILL NO	DESCRIPTION			BQ AMOUNT (KSh)
1	Element No 1 - INCOMING ELECTRICITY SUPPLY brought forward to Main			
2	Element No 2 - ELECTRICAL POWER DISTRIBUTION brought forward to			
3	Element No 3 - LIGHTING INSTALLATION brought forward to Main			
4	Element No 4 - POWER INSTALLATION brought forward to Main Summary			
5	ElementL No 5 - LIGHTNING PROTECTION INSTALLATION brought forward			
6	Element No 6 -FIRE DETECTION brought forward to Main Summary Page			

TOTAL FOR ELECTRICAL WORKS					
ITEM NO	ITEM DESCRIPTION	UNIT	QTY	RATE (KSH)	BOQ AMOUNT (KSH)
BILL 13. PRIME COST AND PROVISIONAL SUMS					
A	Allow a Provisional sum of Kenya Shillings Five Hundred Thousand (Ksh. 500,000) only for Project Management costs			SUM	500,000
B	Allow a Provisional sum of Kenya Shillings Three Hundred Thousand (Ksh. 300,000) only for Project Manager's stationery			SUM	300,000
D	Allow a Provisional sum of Kenya Shillings Two Hundred Thousand (Ksh. 200,000) only for relocation of services.			SUM	200,000
E	Allow a Provisional sum of Kenya Shillings Four Hundred Thousand (Kshs.400,000)for CCTV Installation.			SUM	400,000
Total carried to Collection					1,400,000

MAIN SUMMARY					
ITEM NO	ITEM DESCRIPTION				BOQ AMOUNT (KSH)
1	PRELIMINARIES				
2	BILL NO 1 & 2 (MAIN SWIMMING POOL)				
3	BILL NO 3 (BABY POOL)				
4	BILL NO 4 (HYDROTHERAPY POOL)				
5	BILL NO 5 (PAVILLION)				
6	BILL NO 6 (OFFICES AND JACUZZI)				
7	BILL NO 7 EXTERNAL TOILETS				
8	BILL NO 8 (CANTEEN)				
9	BILL NO 9 EXTERNAL WORKS (INCLUDES THE DRAINAGES,FENCE, LAND SCAPING AND THE PARKING.)				
11	BILL NO 10. PUMPING AND BALANCING TANK				
12	BILL NO 11. ELECTRICAL WORKS				1,400,000
13	BILL NO 12.MECHANICAL WORKS				
14	BILL NO 13.PRIME COSTS AND PROVISIONAL SUMS				
PROJECT TOTAL					

(In words)
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Signed

Address
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Date

Witness
Name
Address
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Date

Company stamp