

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS.
	<p><u>BILLS OF QUANTITIES</u></p> <p><u>ELEMENT NO.1</u></p> <p><u>SUBSTRUCTURE</u></p> <p><u>(All Provisional)</u></p> <p><u>NOTES</u></p> <p>1 The Tenderer's attention is drawn to the Preliminaries Contract Particulars Clause 8.0 which states that the Standard Method of Measurement is the June 2008 Edition. Per Clause D5(g) of this S.M.M all excavations in this BoQ have been measured NET and no allowance has been made for working space and the tenderer is shall price for the excavations accordingly.</p> <p>2 Cement for all Structural Works in these Bills of Quantities shall strictly be Grade 32.5</p> <p>3 Cement for Non-Structural Works in these Bills of Quantities shall be Grade 32.5</p> <p>4 All Reinforcement in these Bills of Quantities shall be to BS 4449:1997 with the following characteristic; a) Grade 460 B high strength type 2 Ribbed bars with proof stress of 460N/mm²; allow for cutting, bending, hoisting and fixing including all necessary trying wires and spacer stools;</p>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS.
	<u>SUBSTRUCTURES (CONT'D)</u>				
	<u>Site clearance</u>				
A	Clear site off all vegetation,small bushes,scrubs and undergrowth,grub up roots and including disposing appropriately or as directed	Item	1		
	<u>Excavations & Earthworks</u>				
B	Excavate to remove top vegetable soil average 150mm deep; remove from site	m2	253		
C	Excavate to reduce levels, 300mm deep from stripped level	m3	76		
D	Excavate for strip foundations not exceeding 1.5 m deep from reduced level	m3	44		
E	Ditto for Column Bases not exceeding 1.5 m deep from reduced level	m3	55		
F	Extra over for excavation in rocks	m3	4		
	<u>Disposal</u>				
G	Remove surplus spoil from site and deposit in permanent spoil heaps at a site to be agreed with the Local Authority	m3	45		
H	Backfill around foundations or within the site	m3	38		
	<u>Planking and strutting</u>				
I	Planking and strutting to sides of all excavations:keep excavation free from all fallen materials	item	1		
	<u>Disposal of water</u>				
J	Keep excavation free from all water	item	1		
	Total carried to collection				

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS.
	<u>Imported filling</u>				
A	300mm Thick approved hardcore:desposited,spread,levelled and compacted in 150mm layers under floor bed well compacted	m2	76		
B	50mm ThickStone dust blinding tosurface of hardcore	m2	253		
	<u>Damp proof membrane as described :-</u>				
C	1000 Gauge polythene sheet damp proof membrane to horizontal surfaces:300mm laps	m2	253		
	<u>Anti-termite treatment</u>				
D	Gladiator TC or equal approved chemical anti-termite treatment executed by an approved specialist under a ten-year guarantee to horizontal surfaces of the floor slab and around the plinth, e.t.c.	m2	253		
	<u>Concrete Class (1:3:6) in 50mm thick blinding under :-</u>				
E	Strip foundations for masonry walling	m2	91		
F	Column bases	m2	60		
	<u>Vibrated reinforced concrete class 25(20mm aggregate)in:</u>				
G	Ground Beam	m3	8		
H	Colum Bases	m3	15		
I	Columns	m3	3		
J	Strip foundations	m3	7		
K	150 mm Thick slab	m2	253		
	Total carried to collection				

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS.
	<u>Reinforcement</u>				
	<u>Reinforcement to BS 4449:1997 with the following characteristic; a) Grade 460 B high strength type 2 Ribbed bars with proof stress of 460N/mm²; allow for cutting, bending, hoisting and fixing including all necessary tying wires and spacer stools</u>				
A	8mm dia. Bars	Kg	750		
B	10mm dia. Bars	Kg	238		
C	12mm dia. Bars	Kg	1,500		
D	16mm dia. Bars	Kg	945		
	<u>Steel mesh fabric reinforcement to B.S. 1483</u>				
E	Ref. A142 Layer of fabric mesh reinforcement laid in bed with 200mm side and end laps	m2	253		
	<u>Sawn formwork:one coat approved retarding agent to:</u>				
F	Sides of ground beams	m2	55		
G	Sides of column	m2	40		
H	Edges of floor beds 150 - 225mm high	m	70		
	<u>Quarry dressed natural stone walling in cement sand mortar (1:4) with minimum crushing strength of 7.0 N/mm²</u>				
I	200mm Thick walling reinforced with 20gauge hoop iron	m2	90		
	Total carried to collection				

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS.
	<u>Cement sand (1:4) render to :-</u>				
A	15mm Thick render to wall externally	m2	60		
	<u>Prepare and apply two coats of bituminous paint to :-</u>				
B	Rendered walls externally	m2	60		
	<p><u>Carried to Collection</u></p> <p><u>COLLECTION</u></p> <p>Page No.2</p> <p>Page No. 3</p> <p>Page No. 4</p> <p>Page above</p>				
	<p><u>TOTAL FOR SUBSTRUCTURES CARRIED TO SUMMARY</u></p>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS.
	<u>BILLS OF QUANTITIES</u>				
	<u>ELEMENT NO.2</u>				
	<u>RC SUPERSTRUCTURE</u>				
	<u>Concrete Class 25mm in:-</u>				
A	Columns	m3	18		
B	Beams and Ring beams	m3	20		
C	Suspended solid slab 150mm thick	m2	253		
	<u>Reinforcement; as before described</u>				
D	8mm dia.bars	Kg	1,100		
E	10mm dia,bars	Kg	1,240		
F	12mm dia. bars	Kg	1,340		
G	16mm dia.bars	Kg	4,200		
H	20mm dia. Bars	Kg	650		
	<u>Sawn formwork to :-</u>				
I	Sides and soffites:Beams and ring beams	m2	160		
J	Vertical sides of columns	m2	240		
K	Soffites of suspended slabs	m2	253		
L	Edges of suspended slab over 300mm but not exceeding 375mm high	m	70		
	<u>TOTAL FOR RC SUPERSTRUCTURE</u>				
	<u>CARRIED TO SUMMARY</u>				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	KSHS.	CTS.
	<u>BILLS OF QUANTITIES</u>					
	<u>ELEMENT NO.3</u>					
	<u>REINFORCED CONCRETE STAIRCASE</u>					
	<i>Note : Paint for entire project to be 1st Quality Crown, Sadolin, or equal and approved</i>					
	<u>The Following in 5 NO. Staircase</u>					
	<u>Vibrated reinforced concrete class 25 in:-</u>					
A	Staircase	m3	2			
B	150 mm Thick landings	m2	4			
	<u>Reinforcement; as before described</u>					
C	12mm dia.bars	Kg	350			
	<u>Sawn formwork to:-</u>					
D	Soffites of landings	m2	4			
E	Sides of string(350mm Extreme):cut to profile of treads and risers	m	7			
F	Sloping soffites of staircase	m2	9			
G	Riser over 75mm but not exceeding 150mm high	m	24			
H	Ditto:treads	m	24			
I	Edges of landing over 75mm but not exceeding 150mm high	m	8			
	<u>Carried to Collection</u>					

Staircase

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	KSHS.	CTS.
	<u>STAIRCASE FINISHES</u>					
	<u>Cement and sand (1:4) screed trowelled smooth: beds to receive flooring</u>					
A	150mm Thick to landings	m2	4			
B	Ditto:treads 250mm wide	m	24			
C	Ditto:Risers 150mm high	m	24			
	<u>19mm thick Cement Sand (1:2:6) plaster:steel trowelled on concrete or blockwork to:</u>					
E	Soffits of landings	m2	4			
F	Slopping soffits of staircases	m2	9			
G	Edges of strings over 200 but n.e 300mm girth	m	7			
H	Edges of landings over 100 but n.e 200mm girth	m	8			
	<u>300x300x10mm thick first quality granito tiles,pointed in matching colour cement grout on cement and sand screeded beds(measured separately) to:</u>					
I	Landings	m2	4			
J	250 mm wide treads	m	24			
K	150 mm high risers	m	24			
L	10x150mm high skirting rounded edge	m	5			
M	Ditto:slopping to profile of treads	m	24			
	<u>Carried to Collection</u>					

Staircase

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	KSHS.	CTS.
	<u>Painting</u>					
	<u>Prepare and apply three coats of first quality matt emulsion paint on plastered surfaces to:</u>					
A	Soffits of landing	m2	4			
B	Slopping soffites of staircase	m2	9			
C	Edges of strings over 200 but not exceeding 300mm girth	m	7			
D	Edges of landings over 100 but n.e 200mm girth	m	8			
	<u>Balustrading on staircase and balcony</u>					
	Mild steel in plates,bars sections and tubes:welded and bolted connections one coat two pack zinc chromate primer before fixing					
E	50mm dia.pipe handrail	m	30			
F	Ditto bottom rail	m	30			
G	15mm dia.middle rails	m	90			
H	50x50x3mm "I" section baluster:1050mm long:one end welded to handrail(m/s)and other end cranked and morticed into concrete at 600mm centres	m	60			
	<u>Prepare,touch up primer,prepare and apply three coats of first grade two pack epoxy paint as supplied by Crown paints Kenya Ltds or equal and approved paint to metal surface</u>					
I	Surfaces n.e 100mm girth	m2	210			
	<u>Carried to Collection</u>					

ITEM	DESCRIPTION	UNIT	QTY.	RATE	KSHS.
	<u>BILLS OF QUANTITIES</u>				
	<u>ELEMENT NO. 4</u>				
	<u>WALLING</u>				
A	150mm Thick walling bedded and jointed in cement and sand mortar mix 1:4, reinforced with 25x2mm hoop irons in every alternate course 200mm thick	m2	315		
B	200mm wide Hessian based bituminous felt damp proof course laid and bedded on cement sand(1:4) mortar with 300mm laps	m	70		
	<u>TOTAL FOR WALLS CARRIED TO SUMMARY</u>			KSHS.	

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS.
	<u>BILLS OF QUANTITIES</u>				
	<u>ELEMENT NO.5</u>				
	<u>ROOF CONSTRUCTION, COVERINGS AND RAINWATER DISPOSAL</u>				
	<u>ROOF CONSTRUCTION</u>				
	<u>Structural timber to be sawn celcured cypress</u>				
	<u>The following in 13no. Roof trusses spanning max 9200@1500mm centres 6000mm high</u>				
	<u>Rates to include all necessary bolting and/or nailing</u>				
A	150 x 50 mm Tie beam	m	295		
B	100 x 50 mm Rafters	m	331		
C	75 x 50 mm Struts/ties	m	932		
D	75 x 50 mm Purlins nailed to rafters(m.s) battens	m	945		
E	100 x 50 mm Wall plate fixed with and including 12mm hoop irons at 1200mm centres	m	296		
	<u>ROOF COVERINGS</u>				
F	28 gauge prepainted corrugated iron roofing sheets materials fixed on timber purlins(ms)	m2	250		
G	Ditto ridge caps	m	22		
H	225x25mm wrot fascia/barge boards	m	80		
	<u>Knot prime and stop,prepare surfaces and apply one coat of aluminium wood primer and two finishing coats of gloss oil paint on:</u>				
I	Wood surfaces 200 - 300mm girth	m	80		
	<u>TOTAL FOR ROOF CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS.
	<u>BILLS OF QUANTITIES</u>				
	<u>ELEMENT NO. 6</u>				
	<u>DOORS</u>				
	<u>Steel casement doors</u>				
A	Purpose made door supply,assemble and fix purpose made steel door single leaf size 900x2400mm high,complete with all ironmongery and accessories	No.	4		
B	6mm thick clear sheet glass fixed with steel putty to	m2	18		
C	Prepare and apply 3 coats of gloss paint to metal surfaces	m2	36		
	<u>TOTAL FOR DOORS CARRIED TO SUMMARY</u>				
				KSHS.	

ITEM	DESCRIPTION	UNIT	QTY.	RATE	KSHS.
	<u>BILLS OF QUANTITIES</u>				
	<u>ELEMENT NO. 7</u>				
	<u>WINDOWS</u>				
	<u>STEEL WINDOWS</u>				
	<p><u>Supply and fix the following purpose made casement windows comprising of 50 x 50 x 16 G and 25 mm "Z" section framing including all coupling mullions etc;and complete with 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 ; bedding in cement and sand (1:3) mortar , pointing all round frames in mastic ,easing ,oiling and adjusting opening lights on completion, including 4 mm glazing; All as per the architect's Schedule of windows</u></p>				
A	Window size 1800x1500mm high in 1No fixed leaf size 500x1500mm high,2 no.openable leaves size 500x1500mm high respectively	No.	12		
B	Window size 1800x900mm high in 1No fixed leaf size 400x1500mm high,2 no.openable leaves size 400x1500mm high respectively	No.	8		
	5mm Thick clear sheet glass and glazing to metal with putty				
C	In panes n.e 0.1sm	m2	47		
	<u>Precast concrete units class 20(19mm aggregates)vibrated reinforced with 2 no.6mm dia steel bars</u>				
D	265X75mm thick weathered and throated window cill,fairfaced on exposed surfaces:bedded jointed and pointed in cement and sand(1:4)	m	40		
	Total carried to summary				

ITEM	DESCRIPTION	UNIT	QTY.	RATE	KSHS.
A	Prepare and apply three coats gloss paint to metal surfaces				
B	General surfaces:grilles (measured flats overall)	m2	47		
C	Windows:ditto	m2	47		
Total carried to summary					
Page 1					
Page above					
<u>TOTAL FOR WINDOWS CARRIED TO SUMMARY</u>				KSHS.	

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS.
	<u>BILLS OF QUANTITIES</u>				
	<u>ELEMENT NO.8</u>				
	<u>WALL FINISHES</u>				
	<u>Cement Sand (1:4) screed as described</u>				
A	15mm plaster applied externally in two coats, wood floated to exposed columns and beams externally	m2	120		
	<u>Key pointing</u>				
B	Extra over walling for finishing one side with struck and horizontal keyed and flush vertical joints as per architect detail drawing	m2	315		
	<u>Internal Lime Plaster, first coat Cement, sand, lime (1:2:9) second coat cement, lime and sand (1:1:6) steel trowelled smooth in :-</u>				
C	15mm thick two coat plaster to walls internally	m2	366		
	<u>Prepare and apply one mist coat and three coats of prime grade silk vinyl Emulsion paint internally to:-</u>				
D	Plastered wall surfaces	m2	366		
	<u>Prepare and apply three coats of first grade weather resistant gloss oil paint</u>				
E	Rendered surfaces	m2	120		
	<u>Ceiling Finishes</u>				
	<u>Internal Lime Plaster, first coat Cement, sand, lime (1:2:9) second coat cement, lime putty</u>				
F	12mm thick two coats plaster to soffites of suspended slab	m2	253		
G	12mm chipboards soffit lining with "V" joints	m2	253		
	<u>Carried to Collection</u>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS.
	<u>CYPRESS PRIME GRADE PRESSURE IMPREGNATED</u>				
A	75x50mm timber bandering	m	500		
B	50x50mm timber bandering	m	415		
C	Ditto 100x25mm moulded cornice	m	142		
D	PVC T&G in eaves including 75x50 and 50x50 timber bandering	m2	50		
E	Extra over for forming 600x600mm access panel including 50x50mm softwood framing all round fixing with chromium plated screws and cup washers	no	2		
	<u>Prepare and apply undercoat two coats internal quality matt emulsion paint to:-</u>				
F	General surface of the ceiling	m2	506		
	<u>FLOOR FINISHES</u>				
	<u>Cement and sand(1:4) in</u>				
G	25mm backing finished to receive floor tiles(m.s)	m2	506		
	300x300x6mm thick first quality ceramic as saj floor tiles on screeded backings(m.s)bedded and jointed in approved colour cement grout pointed to:				
H	Floor	m2	506		
I	8mm thick x 100mm high skirting	m	100		
	<u>Carried to Collection</u>				
	<u>COLLECTION</u>				
	Page No. 2/1				
	Page No. 2/2				
	<u>TOTAL FOR INTERNAL FINISHES CARRIED TO SUMMARY</u>				

ITEM NO.			SHS.	CTS.
	<u>BILLS OF QUANTITIES</u>			
	<u>SUMMARY</u>			
1	PRELIMINARIES			
2	SUBSTRUCTURES			
3	RC SUPERSTRUCTURE			
4	STAIRCASE			
5	WALLING			
6	ROOF			
7	DOORS			
8	WINDOWS			
9	FINISHES			
	<u>TOTAL FOR CLASSROOM BLOCK CARRIED TO MAIN SUMMARY</u>	KSHS.		