

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A WARD OFFICE

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO.1 SUBSTRUCTURE (ALL PROVISIONAL)				
A	Clear site of all bushes,shrubs and small trees; load and cart away debris as directed	190	SM		-
B	Excavate topsoil;average depth 150mm commencing from the original ground level;load and cart away debris	190	SM		-
C	Excavate to foundation strip depth n.e 1.50 meters commencing from the stripped level; load and cart away surplus	105	CM		-
	<u>Concrete Blinding class 15/20</u>				
D	50mm thick quarry dust blinding in foundation strip	70	SM		-
	<u>In-situ reinforced concrete class 20/20mm</u>				
E	Foundation strip	14	CM		-
F	150mm thick slab	152	SM		-
G	150mm thick Entry porch	20	SM		-
	<u>Reinforcement</u> <u>High tensile steel reinforcement to BS 4466;including supporting,cutting,tying and bending in:</u>				
H	8mm bars	138	KG		-
J	10mm bars	252	KG		-
	<u>Sawn timber formwork to :</u>				
K	Sides of the foundation strip	47	SM		-
L	Edge of slab; girth 75-150mm	71	LM		-
	<u>Walling</u>				
M	200mm thick natural stone foundation walling bedded and jointed in mortar mix (1:4);with and including hoop iron at every alternate course	146	SM		-
	<u>Hardcore filling</u>				
N	300mm thick hardcore deposited and compacted in layers not exceeding 150 mm thick	52	CM		-
	<u>Damp proof membrane</u>				
P	1000 gauge polythene water proofing damp proofing membrane	172	SM		-
	TOTAL CARRIED TO COLLECTION		PAGE 1		-

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	Apply antitermite treatment as "TERMIDOR" or other equal and approved;including spraying by approved personnel and a warranty	172	SM		-
	<u>Fabric mesh reinforcement</u>				
B	Mesh reinforcement ref. BRC A142 weighing 2.22kg per square metre (No allowance for laps);including cutting and supporting with spacer blocks	172	SM		-
C	Allow for maintenance of the trenches free from collapse by way of planking and strutting	1	ITEM		-
D	Allow for maintenance of the trenches free from surface water by way of balling,dredging or any other approved means	1	ITEM		-
	<u>Plinth area treatment</u>				
E	12mm thick cement sand render (1:4) mix	21	SM		-
F	Prepare and apply undercoat and two finishing coats of bituminous paint as "Crown Paints" or other equal and approved	21	SM		-
TOTAL CARRIED TO COLLECTION					-
	<u>COLLECTION</u>				
	Brought forward from page 1				-
	Brought forward from above				-
TOTAL FOR SUBSTRUCTURE CARRIED TO SUMMARY		PAGE 2			-

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO.2</u>				
	<u>WALLING</u>				
	<u>Natural stone walling as local approved stone: machine dressed both sides: bedded and jointed in cement sand (1:4) mortar;including hoop iron at every alternate course :in</u>				
A	200 mm Thick walls	234	SM		-
B	Ditto;Gables	14	SM		-
	<u>Bituminous hessian base to BS 743 type A: or other equal approved damp-proof course: in cement/ sand (1:4) mortar</u>				
D	150 mm wide	87	LM		-
TOTAL FOR WALLING CARRIED TO SUMMARY		PAGE 3		-	

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	ELEMENT NO. 3 RC SUPERSTRUCTURE <u>Reinforced concrete class 20/20mm</u> Beams	7	CM		-
B	<u>High yield deformed steel bar reinforcement to BS 4461 and KS 02-22:1976:</u> <u>including bends, hooks, tying wire, distance blocks and spacers</u> 8 mm Bars	208	KG		-
C	10 mm Bars	288	KG		-
D	<u>Sawn formwork: to</u> Sides and soffits of the beam	82	SM		-
TOTAL FOR RC SUPERSTRUCTURE CARRIED TO SUMMARY		PAGE 4			-

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	<p>ELEMENT NO. 4</p> <p><u>ROOF CONSTRUCTION</u></p> <p><u>All the following structural timber shall be sawn second grade treated cypress to an equilibrium moisture content of between 9% and 15%</u></p> <p>100 x 50mm thick wall plate;including fixing with bolt and 16 gauge x 25mm steel strip</p> <p><u>Trusses</u></p> <p><u>The following sawn cypress 6 No.trusses with 8.30 metres span,1.45 metres rise ;including nailed connection and hoisting to approximately 3.2metres above ground level in;</u></p>	55	LM		-
B	100 x 50 rafters	161	LM		-
C	Ditto tie beams	140	LM		-
D	Ditto Kingpost	40	LM		-
E	75 x 50mm ties and Struts	200	LM		-
F	75 x 50mm Purlins at 1200mm centres	201	LM		-
G	<p><u>ROOF COVERINGS</u></p> <p>28 gauge prepainted IT5 galvanised iron roofing sheets nailed on purlins (M/S) ;with one corrugation edge lap and 150mm end lap</p>	249	SM		-
H	Ditto;250mm wide Ridge cap	20	LM		-
J	225x25mm wrot cypress fascia and badge board nailed onto edge of rafters	64	LM		-
	TOTAL FOR ROOF CONSTRUCTION & RAINWATER GOODS CARRIED TO SUMMARY	PAGE 5			-

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO.6				
	WINDOWS				
	Steel Casement Windows				
	<u>Standard windows casements complete with hinges, stays, fasteners, permanent vent with mosquito gauze and sheet metal hood etc assembled and fixed to opening including cutting and pinning lugs to concrete or blockwork surround and bedding frame in cement and sand mortar (1:4) (Grille and Glazing excluded)</u>				
A	Window size 900 x 900mm high overall	6	NO		-
B	Window size 1200 x 1500mm high overall	4	NO		-
C	Window size 1500 x 1500mm high overall	3	NO		-
D	Window size 2100 x 1500mm high overall	5	NO		-
	<u>Glass and glazing to metal with glazing compound</u>				
E	4mm thick clear sheet glass 0.10 to 0.50 square metres	35	SM		-
	<u>Painting and Decoration</u>				
F	Touching up manufacturer's priming coat, two undercoats and one finishing coat to glazed metal surfaces Internally	35	SM		-
G	Ditto to glazed metal surfaces Externally	35	SM		-
	<u>Buglar Proofing Grilles (Varies depending on pattern</u>				
H	Galvanised mild steel grille framed with 40 x 25 x 2 mm thick R.H.S. Aat 150 centers sections including assembly and fixing to opening cutting and pinning lugs to concrete or blockwork and bedding frame in cement and sand mortar (1:4)	35	SM		-
TOTAL FOR WINDOWS CARRIED TO SUMMARY		PAGE 7			

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 7 FINISHES Floor finishes <u>Cement and sand (1:3) screed: to hacked floors: in</u> A 32mm thick one coat backings; wood floated to receive ceramic floor tiles (m/s) to concrete base; to floors level; internal 172 SM -				
	<u>Approved; local; non-slip; ceramic floor tiles to regular or other approved pattern: bedding and jointing in cement sand (1:4) mortar; grouting with matching cement</u> B 300x300mm ceramic floor tiles; internal 172 Sm -				
	C Skirtings; 100mm wide with rounded junction with wall finish and coved junction with floor finish 180 Lm -				
	<u>Internal Wall Finishes</u> <u>Cement and sand (1:4): to walls: in</u> <u>Plaster: 9 mm first coat of cement/lime putty/sand (1:2:9): 3 mm second coat of cement/lime putty/sand (1:1:6): steel trowelled: on masonry or concrete: to</u> B Walls: internally 404 SM -				
	<u>Prepare surfaces and apply undercoat and two finishing coats silk vinyl emulsion paint as " Crown Paints" or other equal approved on plastered masonry or concrete surfaces: to</u> C Walls: internally 404 SM -				
	<u>External Wall finishes</u> <u>Cement and sand (1:4)</u> <u>Plaster: 9 mm first coat of cement/lime putty/sand (1:2:9): 3 mm second coat of cement/lime putty/sand (1:1:6): steel trowelled: on masonry or concrete: to</u> D Rendered surfaces: Externally 16 SM -				
	<u>Prepare surfaces and apply undercoat and two finishing coats silk vinyl emulsion paint as " Crown Paints" or other equal approved on plastered masonry or concrete surfaces: to</u> E Rendered surfaces: Externally 16 SM -				
	F Extraover walling for keying (Externally) 101 SM -				
	TOTAL CARRIED TO COLLECTION		PAGE 8		-

E	BROUGHT FORWARD FROM		PAGE 6		-
F	BROUGHT FORWARD FROM		PAGE 7		-
G	BROUGHT FORWARD FROM		PAGE 9		-
TOTAL FOR BUILDER'S WORK CARRIED TO SUMMARY			BW/11		-
ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>2 DOOR PIT LATRINE</u>				
	<u>ELEMENT No.1</u>				
	<u>SUBSTRUCTURE (All Provisional)</u>				
	<u>Excavation and Earthworks</u>				
A	Clear site of debries ,shrubs, small trees undergrowths and the like, grub up roots and cart away arising's from site	7	SM		-
B	Excavate 150 mm deep top soil wheel, deposit and spread within compound distance not exceeding 100 metres as directed	7	SM		-
C	Excavate trench for foundation strip footing not exceeding 1.50 metres deep starting from stripped level	6	CM		-
D	Mass excavation to reduced levels not exceeding 1.50m deep	2	CM		-

E	Excavate for pits depth exceeding 1.5m but not exceeding 3.0m deep	2	CM		-
F	Excavate for pits depth exceeding 3.0m but not exceeding 4.5m deep	2	CM		-
G	Excavate for pits depth exceeding 4.5m but not exceeding 6.0m deep	2	CM		-
H	Excavate for pits depth exceeding 6.0m but not exceeding 7.5m deep	2	CM		-
J	Excavate for pits depth exceeding 7.5m but not exceeding 9.0m deep	2	CM		-
K	Extra over normal excavation for excavating in rock of any class	5	CM		-
L	Return, fill in and rum selected excavated material	4	CM		-
M	Remove and cart away from site surplus excavated material as directed	10	CM		-
N	Filling Hardcore filling in making up levels ground level and 300mm below, depositing an compacting in layers of 150mm maximum thickness	2	CM		-
Total Carried to Collection					-

PL-12

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Substructure contd'				
A	50mm thick stone dust or murram blinding to surfaces over hardcore	5	SM		-
B	Keeping all excavations free from water including spring or running water	1	ITEM		-
C	Uphold the sides of all excavations	1	ITEM		-
D	Antitermite treatment 'TERMIDOR' or other equal and approved insecticides with a ten-years guarantee to surfaces of fill and tops of foundations.	5	SM		-
	Concrete Works Class15/20				
E	50mm thick mass concrete to bottoms of foundations and bases	4	SM		-
	Vibrated reinforced Concrete class 20/20				
F	Foundations in trenches irrespective of thickness	1	CM		-
G	150mm thick bed	5	SM		-
	REINFORCEMENT Supply and fix bars Reinforcement including bending ,hooks,tying wire,cutting spacersand supporting all in position as decribed				
H	10mm bars	14	KG		-
J	8mm bars	8	KG		-

From page PL-13					-
From above					-
TOTAL CARRIED TO SUMMARY					-

PL-14

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT No. 2 CONCRETE SUPERSTRUCTURE <u>Vibrated reinforced concrete class 20/20 as described in:</u>				
A	Ring Beam <u>High tensile square twisted bars to BS 4461 as before described</u>	1	CM		-
B	12mm diameter bars	24	KG		-
C	8mm ditto <u>Sawn formwork to insitu concrete as described</u>	12	KG		-
D	To sides and soffits of beams	5	SM		-

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PL-15

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT No.3</u> <u>WALLING</u>				
A	<u>Approved machine cut natural stone bedded and jointed in cement and sand (1:4) mortar as described in:</u> 200 mm Thick walling including 25 x 20 gauge hoop iron reinforcement at every two alternate courses	18	SM		-
	<u>Hessian based 3 ply bituminous felt horizontal damp proof course to B.S 743, Type "A" weighing not less than 3.8kg per mm2 bedded and levelled in cement and sand (1:3) mortar as described (measured net allow for laps)</u>				
B	150 mm Wide	8	LM		-
	<u>VENT PIPE</u>				
C	100mm diameter P.V.C.pipe fixed to walling with holder bats at 1 meters centres	6	LM		-

Approved machine cut natural stone bedded and jointed in cement and sand (1:4) mortar as described in:

200 mm Thick walling including 25 x 20 gauge hoop iron reinforcement at every two alternate courses

Hessian based 3 ply bituminous felt horizontal damp proof course to B.S 743.
Type "A" weighing not less than 3.8kg per mm2 bedded and levelled in cement
and sand (1:3) mortar as described (measured net allow for laps)

150 mm Wide

VENT PIPE

100mm diameter P.V.C.pipe fixed to walling with holder bats at 1 meters centres

	TOTAL CARRIED TO SUMMARY				-

PL-16

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT No.4 ROOFING Roof covering "Gauge 28 Box profile roofing Mabatis (MRM)" on and including 50 x25 mm pressure impregnated sawn cypress at 300 mm centres, all in accordance with the manufacturer's instructions ;				
A	Roof covering n.e 37 degrees from the horizontal including all necessary fixtures	5	SM		-
	Grade II pressure impregnated sawn cypress in: Framed timberwork The following truss of assorted heights and spans including scarfed or dovetailed jointing, hoisted and fixed various hights above ground floor slab				
B	100 x 50 mm main rafter	4	LM		-
C	100 x 50 mm Wall plate	7	LM		-
D	100 x 50mm sawn cypress tie beam	3	LM		-
E	75 x 50mm sawn cypress purlins	11	LM		-
F	In grade II wrot cypress 225 x 38 mm Fascia board and barge board	5	LM		-
	Painting and decorating Knot, prime and stop, prepare and apply one undercoat and three finishing coats first grade external quality gloss oil paint on wood work surfaces as described:				
G	Surfaces over 200 mm but not exceeding 300mm girth	5	LM		-
	TOTAL CARRIED TO SUMMARY				-

PL-17

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 5 DOORS				

	<u>MILD STEEL CASEMENT DOORS</u> Standard door complete with hinges, stays, fasteners permanent vent with mosquito gauze and sheet metal hood etc assembled and fixed to opening including cutting and pinning lugs to concrete or blockwork surround and bedding frame in cement and sand (1:4) mortar, Grille and glazing included, steel casement door comprising 40x25x3mm stiles, bottom and top rail & 4 No. intermediate rails all primed with red oxide.				
A	900x2100mm high door complete with 50x50x3mm fixed angle frame, 2.5mm thick black sheet checkered plate built into panels <u>The following from 'Union' or other equal and approved manufacturer(s) as per latest East Africa catalogue including all necessary matching fixing screws.</u>	2	NO		-
B	100mm long, 10mm diameter mild steel pad-lock bolts with accessories <u>Touch up primer, prepare and apply one undercoat and three finishing coats internal quality gross oil paint on metal work as described on:</u>	4	NO		-
C	General surfaces	8	SM		-
TOTAL CARRIED TO SUMMARY					-

PL-18

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 6</u> <u>WINDOWS</u> Supply, assemble and fix the following purpose made mild steel casement windows, standard metal section from approval manufacturer complete with frames transoms, mullions and with and including permanent ventilators comprising "T" bar, gauze and 16 gauge sheet metal hood 50mm high * 50mm projection to full width of window, coupling mullions, approved ironmongery and one coat manufacturer's primer all welding ground to smooth finish				

A	Window overall size 600x600mm high	2	NO		-
TOTAL CARRIED TO SUMMARY					

PL-19

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 7</u>				
	<u>FINISHES</u>				
	<u>FLOOR FINISH</u>				
A	32mm thick cement sand(1;3) screed with coloured nil finish	5	SM		-
	<u>WALL</u>				
	<u>Cement and sand (1:4) as ddescribed</u>				
B	Horizontal raking externally and flush keying to joints	18	SM		-
	<u>Cement, lime and sand (1:1:6) as described</u>				
C	12 mm Thick cement and sand (1:4) plaster in two coats to wall surfaces internally	25	SM		-
D	Ditto sides surfaces of beam	3	SM		-
	<u>Painting and Decorating</u>				

E	<u>Prepare and apply one undercoat and three finishing coats first quality plastic emulsion paint as before described on:</u>				
	Plastered wall or concrete surfaces	27	SM		-
TOTAL CARRIED TO SUMMARY					-

PL-20

ITEM	DESCRIPTION	PAGE NO			AMOUNT
	<u>SUMMARY</u>				
A	ELEMENT NO.1: SUBSTRUCTURE	PL-28			-
B	ELEMENT NO.2: SUPERSTRUCTURE	PL-29			-
C	ELEMENT NO.3: WALLING	PL-30			-
D	ELEMENT NO.4: ROOFING	PL-31			-
E	ELEMENT NO.5: DOORS	PL-32			-
F	ELEMENT NO.6: WINDOWS	PL-33			-
G	ELEMENT NO.7:FINISHES	PL-34			-

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TOTAL FOR 2DOOR PIT LATRINE CARRIED TO SUMMARY				-

PL-21

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>PROVISIONAL AND PRIME COST SUMS</u>				
	<u>Prime Cost sums for works to be executed by nominated subcontractors</u>				
	<u>The following provisional sums are to be measured on completion and priced in accordance with the rates contained in these bills of quantities or prorata thereto or deducted in whole if not required</u>				
A	Allow a Provisional sum of Kenya Shillings One Hundred Fifty Thousand (150,000/-) only for Electrical Installation Works		SUM		
B	Allow a Provisional sum of Kenya Shillings One Hundred Fifty Thousand (150,000/-) only for Mechanical works.		SUM		
C	Allow a Provisional sum of Kenya Shillings Four Hundred Fifty Thousand (450,000/-) only for Construction of Septic Tank.		SUM		
D	Provide a sum of Kenya Shillings Two Hundred Thousand (200,000/-) only for Engineer's Transport and site supervision		SUM		
E	Provide a sum of Kenya Shillings One Hundred Thousand (100,000/-) only for Project Documentation		SUM		
F	Allow a Provisional sum of Kenya Shillings One Hundred Fifty Thousand (150,000/-) only for Contingency		SUM		
G	Provide a sum of Kenya Shillings One Hundred Thousand (100,000/-) only for Clerk of Works		SUM		

	TOTAL FOR PROVISIONAL AND PRIME COST SUMS CARRIED TO SUMMARY	PS/1		-
ITEM	DESCRIPTION	PAGE NO		AMOUNT
	<u>GRAND SUMMARY</u>			
A	TOTAL FOR BUILDER'S WORK BROUGHT FORWARD FROM	BW/11		-
B	TOTAL FOR 2DOOR PIT LATRINE BROUGHT FORWARD FROM	PL-21		-
C	TOTAL FOR PROVISIONAL AND PRIME COST SUMS BROUGHT FORWARD FROM	PS/1		-
	TOTAL ESTIMATED COST CARRIED TO FORM OF TENDER (VAT INCLUSIVE)			
	Contract Period.....Weeks..... Tender Sum in words..... Name of Tenderer..... Address..... Signature..... Date..... Witnesses's Name..... Address..... Signature.....			

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