REPUBLIC OF KENYA

MINISTRY OF PUBLIC WORKS

PROPOSED ESTIMATE FOR CONSTRUCTION AND COMPLETION OF DORMITORY BLOCK

AT

NYACHURURU P.A.G SENOIR SCHOOL

STABLE SOIL

BILLS OF QUANTITIES

PREPARED BY:

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DEPT OF TR & PUBLIC WORKS

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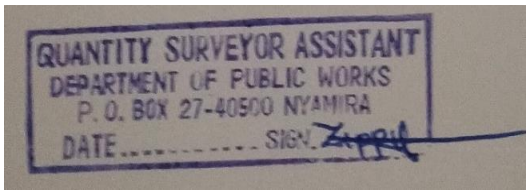
NYAMIRA.



PROPOSED ESTIMATE FOR CONSTRUCTION AND COMPLETION OF DORMITORY AT NYACHURURU SENIOR SCHOOL. BILL OF QUANTITIES

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	BILL NO.1 :BUILDING WORKS				
	ELEMENT NO.1				
	SUBSTRUCTURES				
	(ALL PROVISIONAL)				
	is up to and including the floor slab but				
	Site clearance				
A	Clear the site off all bush scrub undergrowth and small trees grub up roots and cart away or burn all arising (Appox.area 236 sq.sm)	324	S.M		
	Excavation and earthwork				
B	Excavation oversite average 200mm deep to remove vegetable soil , load,wheel and deposit as directed later spread on site as directed	236	S.M		
C	Excavate for strip foundation starting from reduced level not exceeding 1.50 meters deep commencing from reduced level	106	CM		
D	Excavate pit for column bases in normal n.e. 1.5 m deep starting from reduced level.	54	CM		
E	Allow for keeping excavations free from mud and all water including spring and running water by pailing or other approved means.	1	ITEM		
F	Allow for planking and strutting to sides of excavations	1	ITEM		
	Disposal				
G	Load surplus excavated material and cart away	95	CM		
	Filling				
H	Return, fill in and ram selected excavated material around foundations	65	CM		
	Hardcore as described				
I	250mm thick layer of imported hardcore filling including levelling and consolidating in 150mm layers	236	SM		
	Blinding				
J	50mm Thick quarry dust blinding to the surface of hardcore rolled smooth to receive polythene sheeting (s.m)	236	SM		
	Insecticide treatment				
K	**TERMIDOR or other equal and** approved insecticide treatment prepared and applied according to the manufacture's printed instructions.	236	SM		
	Carried to collection.				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	SUBSTRUCTURES (CONT'D)				
	Damp proof membrane				
A	500mm gauge Polythene or other equal and approved plastic sheet damp proof membrane laid over blinding (measured nett-allow for laps)	236	SM		
	In-situ concrete work				
	Mass concrete (1:3:6/38-38mm aggregate)				
B	50mm Thick blinding under foundations	54	SM		
C	Columns	36	SM		
	Vibrated reinforced concrete (1:2.4/20-20mm aggregate) as described in:				
D	Strip foundations	10	CM		
E	150mm thick floor slab	236	SM		
F	Column bases and Columns	11	CM		
	Steel Reinforcement				
	Supply and fix bars reinforcement including bending ,hooks tyingwire ,cutting spacers and supporting all in position as described.				
	High tensile square twisted bars to B.S 4461				
I	12mm Diameter	285	KG		
J	10mm Diameter	325	KG		
K	8mm Diameter	126	KG		
	Mesh reinforcement				
	Fabric; B.S.4483				
L	Fabric mesh reionforcement to B.S 4483 ref:A142 including laps tyingwire and spacer blocks complete(measured nett-for laps)	236	SM		
	Sawn formwork as described to:-				
M	Vertical sides of columns	30	SM		
N	Edges of floor slab;75 to150mm high	79	LM		
	Carried to collection.				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	SUBSTRUCTURES (CONT'D)				
	Foundation Walling				
A	200mm thick approved local natural stone;roughly squared to foundation walling;bedding and jointing in cement sand (1:3) mortar and reinforced with and including 20swgx25mm wide hoopiron in every alternate course	71	SM		
	Plint area finishes				
B	12mm thick cement and sand (1;3)wood float render to plinth area.	22	SM		
C	Prepare and apply three coats black bituminous paint to rendered area	22	SM		
	Paving slab				
D	Supply and lay precast concrete slabs size 600 x600 mm laid on and including 50mm thick consolidated sand and 100mm thick murram sub- base to fall and all necessary excavation	38	SM		
	Carried to collection.				
	COLLECTION				
	Brought forward from page No.	1			
	Brought forward from page No.	2			
	Brought down above				
	TOTAL FOR ELEMENT NO.1 SUBSTRUCTURES CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	ELEMENT NO. 02				
	REINFORCED CONCRETE FRAME				
	Vibrated reinforced concrete (1:2:4) class 20/ 20 aggregates as described in:-				
A	Beams	5	C.M		
B	Columns	6	C.M		
	Sawn Formwork as described to:-				
C	Sides and soffities of ringbeam	58	S.M		
D	Columns	78	S.M		
	Steel Reinforcement				
	Supply and fix bars reinforcement including bending ,hooks tyingwire ,cutting spacers and supporting all in position as described.				
	High tensile square twisted bars to B.S 4461				
E	12mm diameter	581	KGS		
F	8mm diameter	351	KGS		
	TOTAL FOR ELEMENT NO.2				
	R.C SUPERSTRUCTURE				
	CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	ELEMENT NO .3				
	EXTERNAL WALLING				
	Machine cut stone walling with a minimum of 7.0N/mm2 average compressive strength to B.S 5390;bedded and jounted in cement and sand (1:4) mortar to Architect's approval; reinforced with 20 gauge hoop iron at alternate sections				
A	200mm Thick walling External	225	SM		
	Horizontal damp proof course : one laver of -ply bituminous felt or other equal and appraved (measured nett-allow for laps)				
B	200mm wide levelled and bedded in cement and sand(1:3) mortar under walls.	81	LM		
	TOTAL FOR ELEMENT NO.3 EXTERNAL WALLING ***CARRIED TO SUMMARY***				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	ELEMENT NO.4				
	ROOFING AND AND COVERING				
	The following in structural timber; sawn (second grade) celcured cypress pressure impregnated; primed before fixing; in 9 No. trusses (T1) spanning 1500mm, raised to a height of 4500mm above ground level; prefabricated from timber of GS grade to KS 02-771-1991 seasoned to an equilibrium moisture content of 10-15% treated				
A	150x50mm rafters @ 1500mm c/c	96	LM		
B	150x50mm tie beam/joist	27	LM		
C	150x50mm King post, struts & ties	365	LM		
	The following in celcured sawn cypress treated timber				
D	150x50mm wall plate bolted to concrete block/brick walls with 12mm diameter steel rug or rawl bolts (m.s.) at 1000 mm c/c c/w forming mortice in block/brick work and grouting in cement and sand (1:2) mortar	74	LM		
E	75 x 50mm purling (nailed to rafters)	780	LM		
	Roof Covering				
F	Supply and fix as per manufacturer's printed instructions corrugated sheets gauge 30 prepainted GI and Aluzinc roofing sheets (Effective 762mm wide cover) as MRM Ltd. Or other approved laid or and nailed to timber purlins with roofing nails and including rubber leak seal caps and with 150 -200 mm long end laps and 2 No. corrugations or troughs side laps (measured net; no allowance for laps)	296	SM		
G	320mm x gauge 30 matching ridge caps (prepainted GI/Aluzinc) with and including 300mm long and laps.	46	LM		
	Wrot cypress, prime grade				
H	200x25mm thick fascia board to ends of rafters(m.s)	51	LM		
	Painting and Decorating				
	Knot prime stop and prepare and apply one under coat and two finishing coats of gross oil paint to:				
I	General surfaces of wood 200-300mm girth	51	LM		
	ELEMENT NO.5				
	ROOF CONSTRUCTION AND COVERING				
	CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	ELEMENT NO.5 **WINDOWS** **Supply and fix the following exshop standard welded mild steel casement windows comprising standard z-section framing; complete with aluminium fastners, stays glazing and all other necessary ironmongery; including 75x3mm perforated mild steel permanent vent and hood at the top infilled with mosquito wire guaze and all primed in one coat red oxide primer before delivery to site and all welds ground smooth including fixing lugs to masonry and/or beams bedded in cement and sand (1:3)mortar and pointing all around with mastic** **NOTE:-** **All references to ideal casement catalogue but the tenderer may supply any other equal and approved to the satisfaction of the Project Manager**				
A	Window overall size1500x1500mm high	16	NO		
	4mm thick one way shhet glass and glazing to metal putty				
B	In panes not exceeding 0.10 square metres	36	S.M		
	Sills				
C	125x20mm Thick quarry tile sill with one curved edge including bedding and pointing in cement and sand (1:3) mortar	29	LM		
	prepare and a[pply two undercoats and one finishing coat gloss paint on metal work				
D	General surfaces of mild steel windows (both sides)	72	SM		
	ELEMENT NO.5 **WINDOWS** **CARRIED TO SUMMARY**				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	ELEMENT NO.6 **DOORS** **Steel door**				
A	Door size 1800 x2400mm high mild steel double door complete with lock and all other accessories	2	NO		
B	Glasses with approved metal putty: casement doors	3	S.M		
C	General surfaces of casement doors	17	S.M		
D	50mm thick pannel door of overall size 900 2400mm complete with frame and all necessary ironmongery	1	NO		
	ELEMENT NO.6 **DOORS** **CARRIED TO SUMMARY**				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	ELEMENT NO.7				
	EXTERNAL WALL FINISHES				
	External wall finishes **12mm thick cement, sand render, with wood float finish, as described to:-**				
A	Concrete surfaces of Walls ,columns and beams	318	SM		
	Painting and decorations				
	Prepares and apply one undercoat and two finishing first grade weather resistant gloss oil paint on:-				
B	Fair faced surfaces of walls, beams and columns	318	SM		
	TOTAL FOR ELEMENT NO .7 **EXTERNAL WALL FINISHES** ***CARRIED TO SUMMARY***				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	ELEMENT NO.8				
	INTERNAL WALL FINISHES				
A	Hack out joints and apply 12mm thick gauged lime plaster(1:2:9) in two coats finished with steel trowel on walling ,beams and columns	356	SM		
	Painting and decorations				
	Prepare and apply three coats of first quality plastic emulsion paint to:-				
B	Plastered walls , beams and columns	356	SM		
	TOTAL FOR ELEMENT NO. 8 **INTERNAL WALL FINISHES** ***CARRIED TO SUMMARY***				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	ELEMENT NO.9				
	FLOOR FINISHES				
	Floor finishes				
	Insitu cement and sand (1:3) screed beds, with steel trowelled finish, on concrete				
A	38mm thick(1:4) mortar cement sand screed floor to receive ceramic floor tiles	236	SM		
B	300 x300x 8mm non- ceramic floor tiles approved by the P.M	236	SM		
C	Ditto but 100mm high skirting	81	LM		
	TOTAL FOR ELEMENT NO.9 **FLOOR FINISHES** ***CARRIED TO SUMMARY***				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	BUILDER'S WORKS				
	SUMMARY	PAGE	NO		
1	SUBSTRUCTURES		3		
2	R.R SUPERSTRUCTURES		4		
3	EXTERNAL& INTERNAL WALLING		5		
4	ROOF CONSTRUCTION		7		
5	WINDOWS		8		
6	DOORS		9		
7	EXTERNAL WALL FINISHES		10		
8	INTERNAL WALL FINISHES		11		
9	FLOOR FINISHES		12		
	TOTAL FOR BUILDING WORKS GRAND SUMMARY				

PROPOSED ESTIMATE FOR CONSTRUCTION AND COMPLETION OF DORMITORY AT NYACHURURU SENIOR SCHOOL. BILL OF QUANTITIES

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	PRIME COST AND PROVISIONAL SUMS				
	PROVISIONAL SUMS				
A	Allow a provisional sum of Kenya shillings Four Hundred Thousand (Kshs 400,000) only for Electrical work				
B	Allow a provisional sum of Kenya Shillings One Hundred Thousand (Kshs 100,000) only for Supervision				
C	Allow a provisional sum of Kenya Shillings One Hundred and Fifty Thousand (Kshs 150,000) only for Contigencies				
	TOTAL FOR PROVISIONAL SUMS				

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ITEM	DESCRIPTION	PAGE	OFFICIAL USE	TENDERER'S USE
			Kshs	Kshs
1	**BUILDING WORKS**	**PG 14**		
2	**PROVISIONAL SUMS**	**PG 15**		
3	**TOTAL**			
4	**ADD 16% V.A.T**			
	ADD 5% P.MC			
	ADD PPRA LEVY @ 0.03%			
	TOTAL AMOUNT FOR CONSTRUCTION OF DORMITORY BLOCK			

NAME OF TENDERER …….

ADDRESS…….

SIGNATURE……..STATUS……

DATE…….

QUANTITY SURVEYOR ASSISTANT
DEPARTMENT OF PUBLIC WORKS
P. O. BOX 27-40500 NYAMIRA
DATE..... SIGN.

NAME OF WITNESS……

ADDRESS…….

SIGNATURE……..……..

GS/1 DATE…….