



**MINISTRY OF TRANSPORT, INFRASTRUCTURE, HOUSING,
URBAN DEVELOPMENT AND PUBLIC WORKS**

DIRECTORATE OF PUBLIC WORKS

COUNTY WORKS OFFICE
P.O. BOX 763
BUNGOMA

Telephone Nos. 055-20334
When replying please quote
Ref. No.CWO/BGM/MT.ELGON/GEN /VOLII (45)
and Date

6th February, 2023

The Fund Manager
NG-CDF Mt. Elgon Constituency
P.O Box 267
Kapsokwony

**RE: PROPOSED ERECTION AND COMPLETION OF 1NO. CLASSROOMS IN MT. ELGON
CONSTITUENCY.**


Early Warning Notice:

This is to notify you that the above project costs will be above normal estimated costs. This is majorly caused by:-

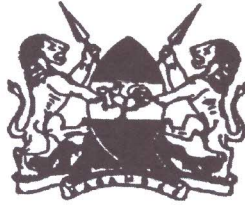
- ❖ Site topography and conditions. The areas are steep and this will cause high variations on substructure works.
- ❖ Access road and weather patterns in area. The roads in the area not well maintained and this caused delay in material delivery and use of local transport (donkey cart) by contractors.
- ❖ Equipping and furnishing the classroom with 45No. Student Lockers, 1 Table and Table chair for the teacher.

Our estimated costs for above projects per 1No. Classroom will be average of **Kshs.2, 000,000.**

N/B: This will be guiding figure during tendering and not fixed tender costs.


SUB-COUNTY WORKS OFFICER
DEPT. OF PUBLIC WORKS
BUNGOMA COUNTY

Khaemba Geoffrey
SUB COUNTY WORKS OFFICER
BUNGOMA COUNTY



REPUBLIC OF KENYA
MINISTRY OF LANDS, HOUSING AND URBAN DEVELOPMENT
DEPARTMENT OF PUBLIC WORKS

**SPECIFICATIONS AND BILLS OF
QUANTITIES**

FOR

**PROPOSED ERECTION AND
COMPLETION CUM EQUIPING
OF**

**1NO. STANDARD CLASSROOM
AT**

MT. ELGON CONSTITUENCY

IN

BUNGOMA COUNTY

TENDER NO.....

PREPARED BY.

County Quantity Surveyor
P.O Box 763
Bungoma.

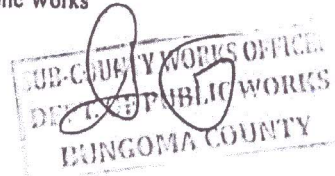
County Architect
P.O Box 763
Bungoma.

County Elect./Mech. Engineer
P.O Box 763
Bungoma.

County structural Engineer
P.O Box 763
Bungoma.

Issued By:

County Works Officer
Department of Public Works
P.O. Box 763
Bungoma



**PROPOSED CONSTRUCTION AND COMPLETION OF 1NO.
STANDARD CLASSROOM AT MT. ELGON CONSTITUENCY IN
BUNGOMA COUNTY.**

	DESCRIPTION	QTY	UNIT	RATE	KSHS
	SUBSTRUCTURE (ALL PROVISIONAL)				
	EXCAVATION AND EARTHWORKS				
	SITE PREPARATION				
	Clearing site vegetation; grubbing up roots and filling up voids left with selected				
A	Bushes, shrubs, undergrowth or the like and cart away from site	138	SM	50	6,900.00
	EXCAVATION				
B	Excavating vegetable soil for preservation, average 150 mm thick	138	SM	100	13,800.00
	Excavating Surface to reduce level.				
C	Over 300mm deep	41	CM	200	8,200.00
	Excavating Trenches; to receive foundations starting from reduced level				
D	Not exceeding 1.50m deep	27	CM	200	5,400.00
	Breaking out existing material; extra over all kinds of excavations irrespective of depth				
E	Rock irrespective of class	2	CM	1200	2,400.00
F	Excavate pit for column bases starting from stripped level n.e 1.5 metres deep	0	CM	200	-
	Total Carried to collection				36,700.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>Disposal</u>				
A	Excavated material; Backfilling depositing and compacting in layers maximum 150mm thick	20	CM	300	6,000.00
B	Surplus excavated material; removing from site mechanically	10	CM	200	2,000.00
	DISPOSAL OF WATER				
C	Labour and materials, keeping excavations free from general water		ITEM	5000	5,000.00
	PLANKING AND STRUTTING				
D	Labour and materials, to uphold sides of excavation generally		ITEM	5000	5,000.00
	<u>FILLING</u>				
	<u>Hardcore</u>				
E	300mm thick depositing and compacting in layers maximum 150mm thick in making up levels	95	SM	450	42,750.00
	<u>Murram</u>				
F	Blinding surfaces of fill 50 mm thick	95	SM	150	14,250.00
	ANTI-TERMITE AND HERBICIDE TREATMENT <u>Applying "Termidor 25 EC" solution or other equal and approved sprayed evenly</u>				
G	To surface of fill and tops of foundation walls	95	SM	100	9,500.00
	<u>CONCRETE WORK</u>				
	<u>INSITU CONCRETE</u>				
H	Plain mix 1:4:8 in foundation strip blinding 50mm thick	29	SM	400	11,600.00
	Total Carried to collection				96,100.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>Vibrated reinforced concrete Class 20/20mm (1:2:4) in:-</u>				
A	Foundation strip	5	CM	13000	65,000.00
B	Floor Beds 150 mm thick	95	SM	1950	185,250.00
	<u>REINFORCEMENT</u>				
	<u>Bars : high tensile steel; cold worked; B. S. 4461 including bends, hooks, tying wire, distance blocks and spacers</u>				
C	8mm ditto	60	KG	170	10,200.00
D	12mm ditto	140	KG	170	23,800.00
	<u>Fabric; B.S 4483</u>				
E	Reference A142; mesh 200 x 200 mm weight 2.22 kgs per square meter (Measured net - no allowance made for laps); including bends, tying wire and distance blocks in any location	95	SM	450	42,750.00
	Total Carried to collection				327,000.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>SAWN FORMWORK TO INSITU CONCRETE</u>				
A	Edges of floor bed 75 to 150 mm wide	39	LM	200	7,800.00
	WALLING				
B	225mm thick approved local stone, roughly squared; bedding and jointing in cement mortar (1:4); reinforced with hoop iron gauge 500 in	60	SM	1800	108,000.00
	DAMP PROOF MEMBRANES				
	500 gauge Polythene laid with 150mm laps, (No allowance made for laps)				
C	Horizontal, 1 No. of layer(s) over 300 mm wide	95	SM	120	11,400.00
	PLINTH FINISHES				
	Render, cement and sand (1:4) wood floated				
D	12mm thick 2 No. coat work, to concrete or blockwork base (m/s) generally external	18	SM	300	5,400.00
	Painting; 3 coats black bituminous paint to				
E	Rendered surfaces external	18	SM	300	5,400.00
	PAVING SLABS				
	Precast Concrete; class 20/20				
F	600 x 600 x 50 mm thick slabs laid on and including 50 mm (consolidated) bed of sand; jointed and pointed in cement sand 1:3 mortar V-joints	23	SM	1200	27,600.00
	Total Carried to collection				165,600.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>COLLECTION</u>				
A	Brought forward from page 1				36,700.00
B	Brought forward from page 2				96,100.00
C	Brought forward from page 3				327,000.00
D	Brought forward from page 4				165,600.00
Total Substructures carried to Summary					625,400.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>REINFORCED CONCRETE FRAME</u> <u>CONCRETE WORK</u>				
	INSITU CONCRETE				
	<u>Vibrated class 20/20mm (1:2:4) in:-</u>				
A	Beams	2	CM	13000	26,000.00
	<u>REINFORCEMENT</u>				
	<u>Bars : high tensile steel; cold worked; B. S. 4461 including bends, hooks, tying wire, distance blocks and spacers</u>				
B	8mm diameter in any location	71	KG	170	12,070.00
C	12mm ditto	120	KG	170	20,400.00
	FORMWORK TO INSITU CONCRETE				
D	Sides and soffites of beams	26	SM	500	13,000.00
	Total Reinforcement Concrete carried to Summary				71,470.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>WALLING</u>				
	<u>Approved Machine Cut Stones in cement sand mortar (1:4) .</u>				
A	Walls 200mm thick reinforced with hoop iron gauge 500 in every alternate course	117	SM	1800	210,600.00
B	Form or leave 250mm x 250mm opening in 200 mm walling for permanent ventilation(m.s)	8	NO	40	320.00
C	75mm diameter SHS	5	NO	5000	25,000.00
	<u>DAMP PROOF COURSES</u>				
	<u>B.S 743, type A, bitumen hessian base 150mm laps, No allowances made for laps</u>				
D	200mm wide, bedded in cement mortar (1:3)	39	LM	120	4,680.00
	Total Walling carried to Summary				240,600.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>ROOFING</u>				
	<u>ROOF COVERING</u>				
A	Gauge 30 prepainted galvanised corrugated iron sheets fixed to purlins	115	SM	1400	161,000.00
B	Ridge cap in matching materials	10	LM	150	1,500.00
C	Valley ridge	0	LM	450	-
	<u>CARPENTRY</u>				
	<u>STRUCTURAL TIMBERS</u>				
	<u>Cypress, Prime grade, pressure impregnated</u>				
D	100x50mm purlins	112	LM	180	20,160.00
E	100 x 50mm Wall plate bedded in cement : sand (1:3) mortar bolted to concrete with and including 16mm diameter bolts cast in concrete at 1000mm 1000 mm centres	28	LM	180	5,040.00
F	100 x 50mm Tie or strut	56	LM	180	10,080.00
G	150 x 50mm Rafters	85	LM	200	17,000.00
H	Ditto tie beam	72	LM	200	14,400.00
I	150mm x 50mm support beam/ collar plates	5	LM	200	1,000.00
	<u>BOARDING</u>				
	<u>Wrought cypress, prime grade, pressure impregnated</u>				
J	225 x 25mm thick Fascia or barge boards	30	LM	350	10,500.00
	Total Roofing Carried to Summary				240,680.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>WINDOWS</u>				
	<u>Precast concrete, Normal, Class 20/ 20mm vibrated</u>				
A	Sills 250 x 75mm thick, once sunk weathered, once throated, reinforced as necessary for handling, bedding jointing and pointing in cement mortar (1:4)	46	LM	100	4,600.00
	<u>JOINERY</u>				
	<u>WROT CAMPHOR</u>				
B	120X20mm window boards, moulded and fixed to masonry surface with screws and grounds.	0	LM	0	-
	<u>WROT CYPRESS</u>				
C	Built up pelmet box made of 125x25mm front, 100 x 25 mm top and ends, 25 x 50 mm bearers all assembled and fixed to wall with nails and grounds.	0	LM	0	-
	<u>METAL WORK</u>				
	<u>PURPOSE MADE UNITS</u>				
	Casement mid hang window with horizontal pivots; standard metal casement sections, permanent ventilators comprising T-bar gauze wire and metal hood to fill width of window, but 100mm deep one coat primer by manufacturer; complete with all necessary ironmongery, steel for glazing with putty, cutting and pinning lugs to concrete or blockwork, fixing to head and sill with screws and plugging.				
D	Overall size 1650x1500mm high	4	NO	8500	34,000.00
E	Overall size 1650x1200mm high	3	NO	8000	24,000.00
	Total Carried to collection				62,600.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	Windows cont'd				
A	Welded metal grill burglar proofing in 20x20x1.5mm thick SHS bars with one coat primer including welding to metal in approved pattern	16	SM	3500	56,000.00
	<u>GLAZING</u>				
B	4mm thick clear sheet glass and glazing to metal with putty in panes n.e 0.1m ²	16	SM	1200	19,200.00
	<u>PAINING AND DECORATING</u>				
	<u>ONE UNDERCOAT TWO COATS OIL PAINT</u>				
	<u>GLOSS OIL FINISH AS CROWN PAINTS OR</u>				
	<u>OTHER EQUAL AND APPROVED</u>				
	<u>CATALOGUE</u>				
C	Metal window surfaces generally internally and externally measured overall.	32	SM	300	9,600.00
D	Plastered Concrete and masonry surfaces 200 - 300mm girth	66	LM	60	3,960.00
E	Timber surfaces 100-200mm girth including priming where necessary.	0	LM	150	-
	Total Carried to collection				88,760.00
	<u>COLLECTION</u>				
	Brought Forward from page 12				62,600.00
	Brought forward from page 13 above				88,760.00
	TOTAL WINDOWS CARRIED TO SUMMARY				151,360.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>DOORS</u>				
	<u>Metal Doors</u>				
	<u>necessary ironmongery, permanent vent with mosquito gauze & sheet hood assembled and fixed to opening including cutting and pinning lugs to concrete or sand mortar (1:4) all primed with red oxide before fixing</u>				
A	1200 x 2400mm steel casement door comprising 50x50x3mm fixed frame; 14G mild steel plate on both sides bottom half welded and 40x25mm RHS grills at 100mm centres vertically upper half welded complete with 5 - lever mortice lock and 3 No. tower bolts	1	NO	14000	14,000.00
	Glazing				
B	4mm thick clear sheet glass and glazing with putty to casement door in panes 0.10m - 0.05m squared	2	SM	1,200	2,400.00
	Total Doors carried to Summary				16,400.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	FINISHES				
	<u>FLOOR, WALL AND CEILING FINISHES</u>				
	<u>FLOORS</u>				
	<u>Floor finishes</u>				
A	20mm thick wellcompacted quarry dust floor finish	95	Sm	400	38,000.00
B	100 by 20mm screed skirting	43	Lm.	150	6,450.00
	<u>Polished Terrazzo</u>				
C	20mm thick screed to receive terrazzo	0	Sm	1800	-
D	100 by 20mm screed skirting	0	Lm.	200	-
E	32 x 3mm thick plastic dividing strips.	0	Lm.	50	-
	<u>WALLS</u>				
D	12mm thick, 2 No. coat work Plaster 1:2:6 to concrete or blockwork base (m/s) generally, walls internal steel trowelled	133	SM	300	39,900.00
E	15mm thick, 2 No. coat work Render1:3 to concrete or blockwork base (m/s) generally, walls internal steel trowelled	78	SM	300	23,400.00
	<u>PAINTING AND DECORATING</u>				
	<u>THREE COATS PVA BASED EMULSION PAINT TO CROWN PAINTS OR EQUAL AND APPROVED</u>				
F	Rendered surfaces externally	78	SM	300	23,400.00
G	Timber surfaces 100 - 200 mm girth	0	LM	150	-
	<u>ONE UNDERCOAT TWO COATS OIL PAINT FULL GLOSS FINISH TO CROWN PAINTS OR EQUAL AND APPROVED</u>				
H	Plastered wall surfaces internally	133	SM	300	39,900.00
	<u>Ceiling Finishes</u>				
H	12 mm thick "celotex" softboard ceiling lining	0	Sm	950	-
J	50 x 50mm sawn celcured timber brandering	0	Sm	150	-
K	75 x 50 mm ditto but plugged	0	Lm	150	-
L	75 x 25mm celotex cornice.	0	Lm	200	-
M	Extra over softboard ceiling for access panel 600x600mm including trimmingbrandering and framing around opening.	0	No	500	-
	<u>Painting</u>				
	<u>Prepare and apply three coats first grade plastic emulsion paint to:-</u>				
	Ceiling surfaces	0	Sm.	300	-
	75 x 25mm celotex cornice.	0	Lm	60	-
	Total Finishes carried to Summary				171,050.00

ITEM	DESCRIPTION				KSHS
<u>SUMMARY</u>					
A	SUBSTRUCTURES				625,400.00
B	REINFORCED CONCRETE FRAME				71,470.00
C	WALLING				240,600.00
D	ROOFING				240,680.00
E	WINDOWS				151,360.00
F	DOORS				16,400.00
G	FINISHES				171,050.00
TOTAL BUILDING WORKS CARRIED TO GRAND SUMMARY					1,516,960.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>PC AND PROVISIONAL SUMS</u>				
A	Allow a Provisional Sum of Kshs. 50,000 (Fifty Thousands) only for Contingencies				50,000.00
B	Allow a Provisional Sum of Kshs. 50,000 (Fifty Thousands) only for Electrical Works				50,000.00
C	Allow a Provisional Sum of Kshs. 250,000 (Two Hundred an Fifty Thousands) only for Fabrication and Supply of 45NO. Student Lockers 750mm wide top, with 300mm wide, 1NO. Teacher's Chair and Table to be supplied by an approve Supplier with specification from County Work Officer and School Management.				250,000.00
D	Allow a Provisional Sum of Kshs. 35,000 (Thirty Five Thousands) only for Notice board and Blackboard				35,000.00
	Total PC& Provisional Sum to Grand Summary				385,000.00

GRAND SUMMARY

ITEM	DESCRIPTION	Page No.	For Official use only	ForTender's Use only
A	Bill No. 1 Preliminaries	PP/		80,000.00
B	Bill No. 2 Building Works	LP/		1,516,960.00
C	Bill No. 3 Prime Cost & Provisional Sums	PC/1		385,000.00
TOTAL CARRIED TO FORM OF TENDER				1,981,960.00

Amount in words: Kenya Shillings.....

Tenderer's Signature.....

Address.....

Date

Witness Signature

Address

Date

GS/1

