

**BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF TWO STOREY
CLASSROOM BLOCK (PHASE 2, FIRST AND SECOND FLOORS) AT OLEPASHA
PRIMARY SCHOOL**

FIRST FLOOR AND RAMP FROM SUBSTRUCTURE

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	ELEMENT NO. 01 SUPERSTRUCTURES WORKS				
	CONCRETE WORKS				
	In situ; concrete; reinforced normal; concrete (1:2:4); vibrated				
A	Beams	M ³	16	12000	192,000.00
B	Columns	M ³	10	12000	120,000.00
C	Stairramp and ease	M ³	8	12000	96,000.00
	REINFORCEMENT				
	Fabric B.S. 4483				
	Reference A98; 50 x50mm; wgt 0.54kgs/m2 (measured net no allowance made for laps) including bend, tying wires and distance blocks in any location				
	Bars; m.s; high yield; cold worked; B.S 4461 including bend, tying wires and distance blocks and spacers in any location				
D	8mm Diameter	KGS	1178	200	235,600.00
E	12mm diameter for verandah columns	KGS	1020	200	204,000.00
F	16mm diameter	KGS	4218	200	843,600.00
G	20mm diameter for centre beam	KGS	458	200	91,600.00
	FORMWORK				
	Sawn formwork to soffits and sides				
H	Beams	SM	172	400	68,800.00
I	Ramp from substructure	SM	42	400	16,800.00
J	Columns	SM	44	400	17,600.00
TOTAL FOR SUPERSTRUCTURE CARRIED TO MAIN SUMMARY					1,886,000.00

LB/01

SUB-COUNTY WORKS OFFICER

07 FEB 2024

Sign. *[Signature]*
KAJIADO NORTH/WEST

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	<u>ELEMENT NO. 2</u> <u>WALLING.</u> <u>MACHINE DRESSED NATURAL</u> <u>STONework</u> Approved local stone, fine chisel dressed all sides; reinforced with hoop iron G500 in every alternate course; bedding and jointing in cement sand mortar (1:3)				
A.	200mm thick	M ²	306	1200	367,200.00
B	150mm thick as parapet wall on top of slab	M ²	31	900	27,900.00
	<u>STEEL BALLUSTRADING AND HAND</u> 40x2mm square tube steel bars smoothly welded 200mm apart and not exceeding 400mm on vertical elevation and mortised to slab with appropriate design and decorated with paint to Engineer's detail to;				-
C	900mm high hand rails to sides of stair ramp, staircase and front	Lm	58	1500	87,000.00
	<u>EXPANSION JOINT</u> 18mm thick styrofoam board	M ²	24	1800	43,200.00
					-
TOTAL, ELEMENT NO.3 WALLING CARRIED TO SUMMARY.					525,300.00

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	ELEMENT NO. 3 ROOF SLAB /2ND FLOOR				
	CONCRETE WORKS				
	Insitu; concrete; reinforced normal; concrete (1:2:4); vibrated				
A	Slab and ramps	M ³	61	12000	732,000.00
	REINFORCEMENT				-
	Bars; m.s; high yield; cold worked; B.S 4461 including bend, tying wires and distance blocks and spacers in any location				-
B	10mm Diameter	KGS	3440	200	688,000.00
	FORMWORK				-
	Sawn formwork to soffits and sides				-
C	Shutter	SM	406	400	162,400.00
D	100mm diameter wooden props not less than 3000mm high	NO	270	350	94,500.00
CARRIED TO COLLECTION					1,676,900.00

LB/03

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	ELEMENT NO. 4				
	DOORS				
	METAL WORK – PURPOSE-MADE UNITS				
	<u>Mild steel casement doors;100x50x3mm thick frame pegged to concrete or block work with 100mm long fish tail 25 x 25x 2mm thick angle section,50 x 50x3mm thick angle section frames at 300mm centres both sides, angles cut, mitered and welded; panels in filled with glazing(m/s),one coat manufacturer's primer, complete with all necessary iron mongery; all welding ground to smooth finish</u>				
A	Double door: 1500x 2400mm high. including 3 pairs 150mm long purpose made hinges; and 2No. 300mm aluminium D handle (m/s); all welded.	NO	5	20000	100,000.00
B	Ditto but grille size 1500x2400mm high	NO	1	15000	15,000.00
	<u>PAINTING AND DECORATING</u>				
	Three coats : aluminium wol.B primer; to crown solo or other equal and approved to				-
C	Doors surfaces	M ²	26	200	5,200.00
	<u>GLAZING</u>				
D	Glass in openings set; clear 4mm thick to metal putty 0.10-0.50mm with silicon base	M ²	2	2400	4,800.00
TOTAL FOR DOORS CARRIED TO SUMMARY					125,000.00

L.B/04

ITEM	DESCRIPTION	QTY	UNIT	RATE	SHS. CTS
	ELEMENT NO.5				
	WINDOWS				-
	METAL WORK				-
	Casement windows; standard metal casement ; section comprising of standard z-section forming, transoms, mullions, permanent ventilators, comprising t-bars, gauze and 6G sheet metal hoL.B, 25 x 3mm flats at 100mm c/c both ways, all coupling mullions; complete with bronze handles, pegs stays and all other necessary iron mongering; one coat red primer by manufacturer				-
	Metal; for glazing with putty; cutting and				-
A	Window overall size 1500 x 1500mm	NO	12	12000	144,000.00
B	Window overall size 1500 x 1200mm	NO	8	9000	72,000.00
C	Ditto 2400x1200mm high but grille	NO	2	12000	24,000.00
	GLAZING				-
D	Glass in openings set; clear 4mm thick to metal	M ²	45	2400	108,000.00
	PAINTING & DECORATION				-
E	One undercoat; three coats gloss finish oil paint; to crown solo paints or other equal and approved to windows	M ²	45	200	9,000.00
					-
					-
					-
					-
					-
					-
					-
TOTAL FOR WINDOWS CARRIED TO MAIN SUMMARY					357,000.00

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	<u>ELEMENT NO. 6 FINISHES</u>				
	<u>FLOOR FINISH</u>				
	Bedding screed: cement and sand (1:3) 32mm Thick: 1NO coat bed: steel trowel led: smooth to concrete base (m/s) generally finished with Terazzo complete with dividing strips and polish:				
A	Stairs: slopping: external screed	M ²	33	2200	72,600.00
B	Floor	M ²	406	2200	893,200.00
C	100 x 19mm skirting	LM	183	350	64,050.00
	<u>INTERNAL WALL FINISHES.</u>				
	Plaster; 12mm first coat of cement sand (1:4); 3- 5mm; steel trowel led				
D	Concrete or stone walls.	M ²	369	300	110,700.00
E	Soffits	M ²	406	300	121,800.00
	<u>PAINTING & DECORATING</u>				
F	Three coats of silk vinyl paint: to crown solo or other equal and approved to Plastered surfaces of girth over 300mm.	M ²	369	200	73,800.00
G	Soffits	M ²	406	200	81,200.00
	<u>EXTERNAL WALL</u>				
H	A neat recessed keying: horizontal; in 10mm diameter in cement sand mortar (1:3) to external walling	M ²	206	300	61,800.00
I	15 mm (minimum) two coat lime plaster with steel floated finish as described to concrete beams, walling and columns	M ²	75	300	22,500.00
	<u>PAINTING AND DECORATIONS</u>				
J	Three coats silk vinyl paint: to crown solo paint or equal and approved to plastered surfaces of girth over 300mm and key pointing	M ²	96	200	19,200.00
TOTAL FOR FINISHES CARRIED TO MAIN SUMMARY					1,520,850.00

ITEM	DESCRIPTION	PAGE	SHS.
	<u>FIRST FLOOR SUMMARY.</u>		
1	SUPERSTRUCTURES	LB/01	1,886,000.00
2	WALLING	LB/02	525,300.00
3	ROOF SLAB CASTING	LB/03	1,676,900.00
4	DOORS	LB/04	125,000.00
5	WINDOWS	LB/05	357,000.00
6	FINISHES	LB/06	1,520,850.00
TOTAL CARRIED TO GRAND SUMMARY			6,091,050.00

LB/07

SECOND FLOOR

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	<u>ELEMENT NO. 07 SUPERSTRUCTURES WORKS</u>				
	<u>CONCRETE WORKS</u>				
	Insitu; concrete; reinforced normal; concrete (1:2:4); vibrated				
A	Beams	M ³	16	12000	192,000.00
B	Columns	M ³	10	12000	120,000.00
C	Stairramp and case	M ³	5	12000	60,000.00
	<u>REINFORCEMENT</u>				
	Fabric B.S. 4483				
	Reference A98; 50 x50mm; wgt 0.54kgs/m2 (measured net no allowance made for laps) including bend, tying wires and distance blocks in any location				
	Bars; m.s; high yield; cold worked; B.S 4461 including bend, tying wires and distance blocks and spacers in any location				
D	8mm Diameter	KGS	1178	200	235,600.00
E	12mm diameter for verandah columns	KGS	823	200	164,600.00
F	16mm diameter	KGS	2812	200	562,400.00
G	20mm diameter for centre beam	KGS	458	200	91,600.00
	<u>FORMWORK</u>				
	Sawn formwork to soffits and sides				
H	Beams	SM	172	400	68,800.00
I	Ramp	SM	42	400	16,800.00
J	Columns	SM	44	400	17,600.00
TOTAL FOR SUPERSTRUCTURE CARRIED TO MAIN SUMMARY					1,529,400.00

LB/08

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	<u>ELEMENT NO. 8</u> <u>WALLING.</u> <u>MACHINE DRESSED NATURAL</u> <u>STONWORK</u> Approved local stone, fine chisel dressed all sides; reinforced with hoop iron G500 in every alternate course; bedding and jointing in cement sand mortar (1:3)				
A.	200mm thick	M ²	306	1200	367,200.00
	<u>STEEL BALLUSTRADING AND HAND</u> 40x2mm square tube steel bars smoothly welded 200mm apart and not exceeding 400mm on vertical elevation and mortised to slab with appropriate design and decorated with paint to Engineer's detail to;				-
B	900mm high hand rails to sides of stair ramp	Lm	22	1500	33,000.00
	<u>EXPANSION JOINT</u> 18mm thick styrofoam board				-
C		M ²	24	1800	43,200.00
TOTAL CARRIED TO SUMMARY.					443,400.00

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	ELEMENT NO. 09				
	ROOFING				
	<u>Structural timbers; sawn cypress; pressure impregnated.</u>				
	<u>The following in 28NO. Single pitch trusses; 8000mm clear span; including hoisting and fixing in position approx. 12000mm above ground floor; including all necessary jointing</u>				
A	100 x 50mm rafters	LM	344	300	103,200.00
B	150x50mm tie beam	LM	308	400	123,200.00
C	100x50mm king post	LM	73	300	21,900.00
D	Ditto struts and ties	LM	425	300	127,500.00
E	100x50mm wall fixed with hoop iron straps at 1.0m centers cast in concrete.	LM	88	300	26,400.00
F	75x50mm purlins	LM	580	250	145,000.00
G	200 x 25mm chamfered and tapered cypress facial board	LM	121	600	72,600.00
H	Prepare stop and apply three coats glass oil paint or equal and approved to timber surfaces exceeding 200mm but not exceeding 300mm girth.	LM	121	80	9,680.00
	COVERING				
	<u>Pre-painted galvanized box profile sheeting as resin cot or other equal and approved manufacturer.</u>				
I	Gauge 30 G.C.I. roofing sheets.	SM	492	1400	688,800.00
J	Ditto half round ridge capping and valleys	LM	44	300	13,200.00
	RAINWATER INSTAALLATIONS				
	<u>Gutter work; G24;m.s; purpose made; box profile; gutters; soldered joint in running length; fixing with metal brackets at 900mm c/c</u>				
K	100 x 100mm	LM	88	600	52,800.00
L	locked ends with outlet for 75mm pipe 2800mm	NO	4	200	800.00
M	90 Degrees bend <u>Down pipe; G26; m.s; purpose made; box profile; pipe work; soldered joint in running length; fixing with metal brackets at 900mm c/c background requiring plugging</u>	NO	4	200	800.00
N	75mm Diameter	LM	28	600	16,800.00
P	1200mm long swan neck	NO	4	750	3,000.00
Q	500mm long horse shoes <u>One undercoat; two coats gloss finish oil paint; crown solo; paints or equal and approved to metal surfaces</u>	NO	4	350	1,400.00
R	over 300mm girth	M ²	52	200	10,400.00
S	Pipes	M ²	19	200	3,800.00
CARRIED TO SUMMARY					1,421,280.00

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	ELEMENT NO. 10				
	DOORS				
	METAL WORK -- PURPOSE-MADE UNITS				
	<u>Mild steel casement doors;100x50x3mm thick frame pegged to concrete or block work with 100mm long fish tail 25 x 25x 2mm thick angle section,50 x 50x3mm thick angle section frames at 300mm centres both sides, angles cut, mitered and welded; panels in filled with glazing(m/s),one coat manufacturer's primer, complete with all necessary iron mongery; all welding ground to smooth finish</u>				
A	Double door: 1500x 2400mm high, including 3 pairs 150mm long purpose made hinges; and 2No. 300mm aluminium D handle (m/s); all welded.	NO	5	20000	100,000.00
B	Ditto but grille size 1500x2400mm high	NO	1	15000	15,000.00
	<u>PAINTING AND DECORATING</u>				-
	Three coats : aluminium wol.B primer; to crown solo or other equal and approved to				-
C	Doors surfaces	M ²	26	200	5,200.00
	<u>GLAZING</u>				-
D	Glass in openings set; clear 4mm thick to metal putty 0.10-0.50mm with silicon base	M ²	2	2400	4,800.00
TOTAL FOR DOORS CARRIED TO SUMMARY					125,000.00

LB/11

ITEM	DESCRIPTION	QTY	UNIT	RATE	SHS. CTS
	<u>ELEMENT NO.11</u>				
	<u>WINDOWS</u>				-
	<u>METAL WORK</u>				-
	Casement windows; standard metal casement ; section comprising of standard z-section forming, transoms, mullions, permanent ventilators, comprising t-bars, gauze and 6G sheet metal hoLB, 25 x 3mm flats at 100mm c/c both ways, all coupling mullions; complete with bronze handles, pegs stays and all other necessary iron mongering; one coat red primer by manufacturer				-
	Metal; for glazing with putty; cutting and pinning to concrete or masonry jambs, head and sill; bedding in cement sand (1:3) mortar; pointing round frames casing, oiling adjusting opening lights on completion				-
A	Window overall size 1500 x 1500mm	NO	12	12000	144,000.00
B	Window overall size 1500 x 1200mm	NO	8	10000	80,000.00
C	Ditto 2400x1200mm high but grille	NO	2	12000	24,000.00
	<u>GLAZING</u>				-
D	Glass in openings set: clear 4mm thick to metal putty 0.10-0.50mm	M ²	45	2400	108,000.00
	<u>PAINTING & DECORATION</u>				-
E	One undercoat: three coats gloss finish oil paint; to crown solo paints or other equal and approved to windows	M ²	45	200	9,000.00
					-
					-
					-
					-
					-
					-
					-
					-
TOTAL FOR WINDOWS CARRIED TO MAIN SUMMARY					365,000.00

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	<u>ELEMENT NO. 12 FINISHES</u>				
	<u>FLOOR FINISH</u>				
	Bedding screed: cement and sand (1:3) 32mm Thick; 1NO coat bed; steel trowel led; smooth to concrete base (m/s) generally finished with Terazzo complete with dividing strips and polish:				
A	Stairs: slopping; external screed	M ²	33	2200	72,600.00
B	Floor	M ²	406	2200	893,200.00
C	100 x 19mm skirting	L.M	183	400	73,200.00
	<u>INTERNAL WALL FINISHES.</u>				
	Plaster; 12mm first coat of cement sand (1:4); 3- 5mm; steel trowel led				
D	Concrete or stone walls.	M ²	369	300	110,700.00
E	Soffits	M ²	406	300	121,800.00
	<u>PAINTING & DECORATING</u>				
F	Three coats of silk vinyl paint; to crown solo or other equal and approved to Plastered surfaces of girth over 300mm.	M ²	369	200	73,800.00
G	Soffits	M ²	406	200	81,200.00
	<u>EXTERNAL WALL</u>				
H	A neat recessed keying; horizontal; in 10mm diameter in cement sand mortar (1:3) to external walling	M ²	206	300	61,800.00
I	15 mm (minimum) two coat lime plaster with steel floated finish as described to concrete beams, walling and columns	M ²	75	300	22,500.00
	<u>PAINTING AND DECORATIONS</u>				
J	Three coats silk vinyl paint; to crown solo paint or equal and approved to plastered surfaces of girth over 300mm and key pointing	M ²	96	200	19,200.00
TOTAL FOR FINISHES CARRIED TO MAIN SUMMARY					1,530,000.00

ITEM	DESCRIPTION	PAGE	SHS.
	<u>SECOND FLOOR SUMMARY.</u>		
1	SUPERSTRUCTURES	LB/08	1,529,400.00
2	WALLING	LB/09	443,400.00
3	ROOF SLAB CASTING	LB/10	1,421,280.00
4	DOORS	LB/11	125,000.00
5	WINDOWS	LB/12	365,000.00
6	FINISHES	LB/13	1,530,000.00
TOTAL CARRIED TO GRAND SUMMARY			5,414,080.00

LB/14

ELECTRICAL INSTALLATION WORKS

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Supply, install, test and commission the following:				
	<u>LIGHTING POINTS.</u>				
A	Lighting points wired in 3 x 1.5sq mm single core pvc cables drawn in 20mm diameter h/g concealed conduits all accessories included but excluding switches and fittings	53	NO	1400	74,200.00
	<u>SWITCHES.</u>				
B	5A white moulded plate switches mounted 1350mm above FFL as MK or approved equivalent as follows:				
	a) 1 gang 1 way	14	NO	400	5,600.00
	b) 2 gang 1 way	6	NO	400	2,400.00
	<u>Lighting fittings.</u>				
C	Complete with energy saving bulbs and tubes of appropriate wattage and colour rendering:				
	a) 1200mm batten fluorescent fitting with reflector type thorn, Philips.	43	NO	2200	94,600.00
	b) Flood light lamp	10	NO	4500	45,000.00
	<u>POWER POINTS</u>				
	<u>SOCKET OUTLETS</u>				
D	Socket outlet points wired in 3 x 2.5sq.mm PVC insulated single core cu cables drawn in trunking/25mm PVC Conduits as follows:				
	a) Twin switched	34	NO	2400	81,600.00
E	13A socket outlet plates mounted 400mm above FFL as Crabtree or approved equivalent, flush mounted.				
	a) Twin switched	34	NO	800	27,200.00
TOTAL CARRIED TO COLLECTION					330,600.00

EW/1

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	<u>MAINS CONNECTION</u> Multiple circuit breakers				-
	a) 10A SP MCB	16	NO	2000	32,000.00
	b) 30A SP MCB	16	NO	2000	32,000.00
B	<u>INTERNAL POWER DISTRIBUTION.</u> 4way SPN consumer unit with 100A integral isolator as Crabtree or approved equivalent.	8	NO	2400	19,200.00
C	<u>Sub main cables.</u> Lay 3x6mm ² PVC/SWA/PVC Sub main copper cable from loop-in box to CU	90	LM	400	36,000.00
D	Standard galvanized cable loop-in box c/w 30Atwin cutout and HRC fuse and connection to consumer unit with 25mm diameter pvc	1	NO	2500	2,500.00
E	10.00mm ² 2-core pvc armored underground cable from Adjacent loop in box to supply loop in box	20	LM	450	9,000.00
F	<u>EARTHING TO KPLC APPROVAL</u>				-
	a) 300 x 300 x 300mm concrete earthing chamber complete with concrete cover.	1	NO	2000	2,000.00
	b) Earth rod (16mm dia 1800mm long) with Earth-rod-cable clamp and Driving Head for Earth rod.	1	NO	1500	1,500.00
	c) 10mm ² SC/PVC copper cable earth lead in concealed 20mm dia. HP/PVC conduit from the loop-in box to the earth pit	6	LM	650	3,900.00
TOTAL CARRIED TO COLLECTION					138,100.00
EW/2					

ITEM	DESCRIPTION	AMOUNT
	<u>COLLECTION</u>	
A	BROUGHT FORWARD FROM PAGE EW/1	330,600.00
B	BROUGHT FORWARD FROM PAGE EW/2	138,100.00
TOTAL FOR ELECTRICAL INSTALLATIONS WORKS CARRIED		468,700.00

EW/3

ITEM	DESCRIPTION	QTY	UNIT	SHS.
	<u>PROVISIONAL & PRIME COST SUMS</u> The contractor shall include in his tender the following to be deducted in whole or part as directed by the project manager			
	<u>CONTINGENCIES</u> Allow a provisional sum of kenya shillings two hundred thousand (200,000) for contingencies to be deducted in whole or part as directed by the project manager		LS	100,000.00
A				
	<u>PROJECT SUPERVISION</u> Allow a prime cost sum of kenya shillings one hundred and fifty thousand(150,000) for project supervision and management		LS	150,000.00
B				
	<u>PROJECT MONITORING</u> Allow a prime cost sum of Kenya shillings one hundred and fifty thousand(150,000) for project monitoring and supervision by the SIC Committee		LS	150,000.00
C				
	<u>PROJECT PUBLICITY</u> Allow a prime cost sum of Kenya shillings twenty thousand(20,000) for project labelling and commissioning expenses as directed on site by the project manager		LS	20,000.00
D				
TOTAL FOR PROVISIONAL & PRIME COST SUMS TO GRAND				420,000.00

Pc&Ps/1

GRAND SUMMARY

BILL No.	DESCRIPTION	FOR CONTRACTOR'S USE (KSH)
1	PARTICULAR PRELIMINARIES	20,000.00
2	GENERAL PRELIMINARIES	120,000.00
3	FIRST FLOOR FROM LB/07	6,091,050.00
4	SECOND FLOOR FROM LB/14	5,414,080.00
5	ELECTRICAL WORKS FROM PAGE EW/03	468,700.00
6	PROVISIONAL SUMS - PS/1	420,000.00
	TOTAL	12,533,830.00
	ADD 16% VAT	2,005,412.80
	TOTAL CARRIED TO FORM OF TENDER	14,539,242.80

Amount in words:

Tenderer's Signature and stamp.....

Address:

Date:

Witness's Name:

Signature:

Description:

Address:

Date:

GS/01