

# BOQ FOR CONSTRUCTION OF PRIMARY SCHOOL.

## FOUNDATION TO ROOFING:

### A – GROUND WORK:

N°s	DESCRIPTION	UNIT	QTY	RATE (UShs)	TOTAL (UShs)	TOTAL US\$
A	GROUNDWORK					
A1	Setting				150,000	88
A2	Excavation of trenches	@ metre	600	1,000	600,000	353
A3	Sand	Tipper trip	15	30,000	450,000	265
A4	Course Aggregate	Tipper trip	16	50,000	800,000	470.5
A5	Burnt bricks	Pieces	20,000	100	2,000,000	1,176
A6	Cement	Bags	30	30,000	900,000	529.5
A7	Anti termite	Tins	15	5,000	75,000	44
A8	Transport	Trips	36	40,000	1,440,000	847
A10	Supervision				300,000	176
<b>Subtotal</b>					<b>6,715,000</b>	<b>3,950</b>

### B – FLOORING:

N°s	DESCRIPTION	UNIT	QTY	RATE (UShs)	TOTAL (UShs)	TOTAL US\$
B	FLOORING					
B1	Hard core	Tipper trips	35	50,000	1,750,000	1,029
B2	Sand	Tipper trips	34	30,000	1,020,000	600
B3	Course Aggregate	Tipper trips	25	45,000	1,125,000	662
B4	Cement	Bags	40	30,000	1,200,000	706
B5	DPC Bituminous	Roll	15	16,000	240,000	141
B6	Poles for veranda	Pipes	80	20,000	1,600,000	941
B7	Transport	Trips	98	40,000	3,920,000	2,306
B8	Labour skilled/unskilled				400,000	235
B9	Supervision				1,800,000	1,059
<b>Subtotal</b>					<b>13,055,000</b>	<b>7,679</b>

### C – WALLING:

N°s	DESCRIPTION	UNIT	QTY	RATE (UShs)	TOTAL (UShs)	TOTAL US\$
C	WALLING					
C1	Burnt clay bricks	Pieces	110,000	100	11,000,000	6,470.5
C2	Air bricks	Pieces	200	450	90,000	53
C3	Cement	Bags	125	30,000	3,750,000	2,206
C4	Platform	Pieces 12" x 1"	75	16,000	1,200,000	706
C5	Standards	Poles	120	1,000	120,000	70.5
C6	Put logs	Pieces	40	6,000	240,000	141
C7	Tying ropes	Pieces	130	1,000	130,000	76
C8	Transport	Trips	60	40,000	2,400,000	1,412
C9	Labour skilled/unskilled				3,600,000	2,118
C10	Supervision				600,000	353
<b>Subtotal</b>					<b>23,130,000</b>	<b>13,606</b>

**D – RING BEAM:**

N°s	DESCRIPTION	UNIT	QTY	RATE (UShs)	TOTAL (UShs)	TOTAL US\$
<b>D</b>	<b>RING BEAM</b>					
D1	Sand	Tipper trips	10	30,000	300,000	176
D2	Lintel	Tipper trips	8	110,000	880,000	518
D3	Shuttering	Pieces 12" x 1"	60	16,000	960,000	565
D4	Cement	Bags	35	30,000	1,050,000	617
D5	Twisted bars 12mm	Pieces	60	28,000	1,680,000	988
D6	Round bars 6mm	Pieces	65	18,000	1,170,000	688
D7	Binding wire	Roll	5	65,000	325,000	191
D8	Propping	Poles	60	1,000	60,000	35
D9	Transport	Tipper trips	20	40,000	600,000	353
D10	Labour skilled/unskilled				1,800,000	1,059
D11	Supervision				300,000	176
<b>Subtotal</b>					<b>9,125,000</b>	<b>5,368</b>

**E – ROOFING:**

N°s	DESCRIPTION	UNIT	QTY	RATE (UShs)	TOTAL (UShs)	TOTAL US\$
<b>E</b>	<b>ROOFING</b>					
E1	Tie beam	Pieces 6" x 2"	80	11,000	880,000	518
E2	Rafter	Pieces 4" x 2"	300	9,000	2,700,000	1,588
E3	Struts	Pieces 4" x 2"	250	9,000	2,250,000	1,323
E4	Purlin	Pieces 3" x 2"	350	7,000	1,750,000	1,029
E5	Preservative	Jerricans	30	25,000	750,000	441
E6	Fascia band	Pieces 9" x 1"	102	15,000	1,530,000	900
E7	Hoop iron straps	Rolls	8	70,000	560,000	329
E8	Nail 6", 5", 4", 3", 2"	Bags	3kg@	40,000	600,000	353
E9	Corrugated iron sheets	Bundles	28	245,000	6,860,000	4,035
E10	Ridge capping	Pieces	80	7,500	600,000	353
E11	Roofing nails	Boxes	40	15,000	600,000	353
E12	Bamboo	Bundles	20	4,000	80,000	47
E13	Transport	Trips	16	40,000	480,000	282
E14	Labour skilled/unskilled				3,800,000	2,235
E15	Supervision				400,000	235
<b>Subtotal</b>					<b>23,840,000</b>	<b>14,022</b>

1) **SECONDARY FINISHES ON 2 CLASSROOM BLOCKS (16 CLASSROOMS).**

Item	Description	Unit	Quantity	Rate	Ushs	US \$
	<b>A) OPENINGS</b>					
A. 1	DOORS:	No	24	180,000	4,320,000 =	
A. 2	WINDOWS:	No	104	220,000	22,880,000 =	
	<b>B) FINISHES</b>					
B. 1	SECONDARY FINISHES:	Sm	515	9,000	4,635,000=	
B. 2	FINAL FINISHES: Wall Painting:	Sm	515	6,000	3,090,000=	
	<b>C) APRON</b>					
C. 1	Excavate foundation trenches:	Cum	25	5,000	125,000=	
C. 2	Foundation concrete:	Cum	8	180,000=	1,440,000=	
C. 3	Plinth/foundation wall:	Sm	93	17,000=	1,581,000=	
C. 4	Backfilling and hardcore:	Cum	25	5,000=	125,000=	
C. 5	Place hardcore of approved rocks 150mm thick.	Cum	23.4	30,000=	703,200=	
C. 6	Cast mass concrete for the apron 75mm thick.	Cum	12	180,000=	2,160,000=	
C. 7	Apply cement sand screed.	Sm	156	15,000=	2,340,000=	
C. 8	Fascia and verge board 200*25 out of soft wood.	m	180	2,500=	450,000=	
	<b>TOTAL</b>				<b>43,849,200=</b>	

2) **SUPPLY OF FURNITURE FOR 16 CLASSROOMS, OFFICE AND TEACHER'S RESOURCE ROOM**

Item	Description	Unit	Quantity	Rate	UShs	
1	3-seater benches with desks attached. (18pcs per classroom)	No.	288	99,000=	28,512,000=	
2	Teacher's Chairs (1pc per classroom)	No.	16	50,000=	800,000=	
3	Teacher's Table (1pc per classroom)	No.	16	155,000=	2,480,000=	
4	Soft boards (2 per room)	No.	34	60,000=	2,040,000=	
5	Office desks	No	2	250,000	500,000=	
6	Office chairs	No	6	50,000=	300,000=	
7	Bookshelves	No	4	300,000=	1,200,000=	
8	Tables (Teacher's resource room)	No	6	155,000=	930,000=	
9	Benches (Teacher's resource room)	No	12	75,000=	900,000=	
	<b>TOTAL</b>				<b>37,662,000 =</b>	

### 3) CONSTRUCTION OF CHAINLINK FENCE

<b>I te m</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>UShs</b>	<b>US \$</b>
<b>1</b>						
a)	Site clearance.	Ls	-----	-----	300,000=	
b)	Excavate foundation	Cum	198	5,000=	990,000=	
c)	Cast mass concrete mix	Cum	49.5	180,000=	8,910,000=	
d)	Build plinth wall.	Sq	600	23,000=	13,800,000=	
e)	Backfill around plinth wall.	Cum	90	5,000=	450,000=	
f)	Mass concrete base chain link.	Cum	17.25	250,000=	4,312,500=	
<b>2</b>						
a)	Supply and fix in poles	Pcs	250	25,000=	6,250,000=	
b)	Cast reinforced concrete base.	Cum	14.375	260,000=	3,737,500=	
c)	Barb wire.	Roll	3	80,000=	240,000=	
d)	Tension wire.	Roll	5	60,000=	300,000=	
e)	Chain link.	Roll	28	220,000=	6,160,000	
f)	Binding wire.	Kgs	250	3,500=	875,000=	
g)	Supply and installation of steel gate.	LS	1	800,000=	800,000=	
	<b>SUBTOTAL</b>				47,125,000=	
	Contingencies 10%				4,712,500=	
	Labour cost 15%				7,068,750=	
	<b>TOTAL</b>				<b>58,906,250=</b>	

4) CONSTRUCTION OF ADMINISTRATION BLOCK (*Offices, Teacher's Resource Room & Stores*).

Item	Description	Unit	Quantity	Rate	Ushs	US \$
	<b><u>PRELIMINARIES</u></b>					
1	<b>SETTING:</b>					
a)	Organize for setting out tools and equipment.	Item	-----	-----	200,000=	
b)	<u>Trench excavation:</u> Excavate foundation trenches (690*1000)mm minimum	Cum	56	5,000=	280,000=	
c)	<u>Foundation concrete:</u> Cast mass concrete mix	Cum	12	180,000=	2,160,000=	
d)	<u>Plinth/foundation wall:</u> Build in ordinary burnt clay bricks	Sm	81	23,000=	1,863,000=	
e)	<u>Backfilling and hardcore:</u> Backfill around plinth walls and oversite level, water, roll and compact	Cum	8	5,000=	40,000=	
f)	Place hardcore of approved rocks 200mm thick minimum compact ready for over site concrete.	Cum	20	30,000=	600,000=	
g)	<u>Over site concrete:</u> Cast mass concrete mix 1:3:6/38mm aggregate 100mm thick as oversite slab and cure by constant watering.					
2	<b>SUPERSTRUCTURE WALLS:</b>					
a)	Ant and damp proof courses. (APC and DPC).	cum	13	180,000=	2,340,000=	
b)	Spread APC strong cement screed mix 1:3 average 25mm thick along the main wall layouts.	Sm	16.2	5,000=	81,000=	
c)	Lay DPC of approved bituminous felt single layer and with an overlap of 300mm ready for brick walling.	Roll	6	16,000=	96,000=	
d)	<u>Walling:</u> Build superstructure walls of ordinary burnt clay bricks in cement mortar mix 1:4 header bond.	Sm	284	23,000=	6,532,000=	
	<u>Reinforced concrete beam:</u> Erect formwork and cast a reinforced concrete beam mix 1:2:4/20mm aggregate.	Cum	3.3	270,000=	871,000=	
3	<b>OPENINGS:</b>					
	<u>Doors:</u> Supply and fix in position steel paneled double leaf door and lock including painting in gloss.	No	4	200,000=	800,000=	
	Ditto to internal doors but standard flush door shelters including lever mortise locks painted in gloss.	No	2	180,000=	360,000=	
	<u>Windows:</u> Supply and fix in position steel paneled windows using 1:2 dia mm thick mild steel sheets and burglar proofing using 12mm bars painted in oil.	No	12	160,000=	1,920,000=	

(Continued)

Item	Description	Unit	Quantity	Rate	UShs	US \$	
	<u>Vents:</u> Supply and lay air brick vents above all external doors and windows.	Sm	3	18,000=	54,000=		
	Provide and fix in position R. concrete sill as per details (windows on rear elevation.)	LS	15	120,000=	1,800,000=		
	<b>SECONDARY FINISHES</b>						
	<u>Plaster/Render::</u> Apply cement mortar mix 1:5 average 20mm thick finished smoothly using steel float.	Sm	428	9,000=	3,852,000=		
	<u>Roughcast:</u> Apply roughcast mix 1:3 on the external sides and rear walls to ring beam.	Sm	142	7,000=	99,400=		
	<u>Ceiling:</u> Provide permanent ceiling of reinforced mortar mix 1:4 using hexagonal expanded wire mesh on timber framing of 75*50 timber	Sm	117	30,000=	3,510,000=		
	<b>FINAL FINISHES</b>						
	Apply cement sand screed mix 1:3 to the floor after hacking washing and sprinkling of cement for better bonding.	Sm	117	9,000=	1,053,000=		
	<b>APRON</b>						
	Excavate foundation trenches by hand 450*300 minimum for stretcher wall.	Cum	12.5	5,000=	62,500=		
	Cast mass concrete mix 1:3:6 150mm thick ready to receive stretcher wall.	Cum	6	180,000=	1,080,000=		
	Build in ordinary burnt clay bricks in stretcher bond wall for apron.	Sm	54	18,000=	972,000=		
	<u>Backfilling/hardcore:</u> Backfill around compact and place hardcore 150mm thick ready to receive concrete slab.	Cum	12	30,000=	360,000=		
	Mass concrete for the apron mix 1:3:6	Cum	4.7	180,000=	846,000=		
	Apply cement sand screed mix 1:3 and finished smooth using cement grout (nilo).	Sm	63	9,000=	567,000=		
	<b>SUB TOTAL (Walling)</b>					<b>32,398,900=</b>	

(Continued)

Item	Description	Unit	Quantity	Rate	UShs	US \$	
a)	<b>ROOFING</b> <b>(Offices, Teacher's Resource room and Stores)</b>						
	<u>Timber members:</u>						
	Wall plate 75*150mm	No	10	10,000=	100,000=		
	Tie beam 50mm*100mm	No	26	9,500=	247,000=		
	Rafter and struts 50mm*100mm	No	60	6,500=	390,000=		
	Purlin 50mm*100mm	No	50	5,500=	275,000=		
	Fascia board 25*225mm	No	20	12,000=	240,000=		
	SUBTOTAL					1,252,000=	
	b)	Wire nails:					
		6"	Kgs	8	3,500=	28,000=	
5"		Kgs	5	3,500=	17,500=		
4"		Kgs	10	3,500=	35,000=		
3"		Kgs	5	3,500=	17,500=		
1.5"		Kgs	5	3,500=	17,500=		
SUBTOTAL					115,500=		
c)	Roof covering:						
	28 gauge corrugated iron sheets	No	76	23,000=	1,748,000=		
	Roofing nails	Kgs	11	4,000=	44,000=		
	Ridge cover	Pcs	11	9,000=	99,000=		
	Hoop iron	Roll	1	75,000=	75,000=		
	Wood preservatives	Lts	40	1,500=	60,000=		
SUBTOTAL					2,026,000		
<b>SUB TOTAL (Roofing)</b>					<b>3,393,500=</b>		
<b>TOTAL (Walling, fittings and roofing)</b>					<b>35,792,400=</b>		
<b>Add 10% contingencies</b>					<b>3,579,240=</b>		
<b>Grand Total</b>					<b>39,371,640=</b>		

**5) CONSTRUCTION OF DRAINABLE CESSPOOL LATRINES FOR THE SCHOOL**  
**(2 Blocks of 10 Stances Each)**

Item	Description	Unit	Quantity	Rate	UShs	US \$
<b>A</b>	<b>PRELIMINARIES</b>					
1)	Mobilization of equipments, tools, etc to the site.	L.S			300,000=	
2)	Provision of store.	Item			100,000=	
	Subtotal				400,000=	
<b>B</b>	<b>SUBSTRUCTURE:</b>					
1)	Excavation of 08(12*7m) latrine pit and also (800*80*200)2 columbines (4 in No)2 and cutting off the excavated materials to at least 50m to soil heaps.	Cum	168	11,920=	2,002,560=	
2)	Preparing and casting 200mm reinforced concrete column base pads in 1:2:4 mix compacting and leveling well horizontally and curing to strength using T10 iron bars properly bonded using binding wires.	No	12	35,000=	420,000=	
3)	Providing and hand placing 100mm hardcore at the pit bottom to receive the base.	Sq M	55	4,500=	247,500=	
4)	Preparing and casting cesspool bed in 1:3:6mix, compacting to slope as in drawings and carefully curing to strength.	Cum	11.6	120,000=	1,399,200=	
5)	Erecting 230mm cesspool using wee burnt clay bricks in the mix 1:4 to at least 150mm above ground level. External rendering done as work proceeds.	Sq M	113.4	11,500=	1,304,100=	
6)	Plastering the internal surface of cesspool wall finishing smooth with cement slurry.	Sq M	113.4	6,500=	737,100=	
7)	Provision for R.C columns in the cesspool walling well tied in R <sub>6</sub> stirrups using binding wire.		12	25,000=	300,000=	
8)	Filling the backside of the wall with sand/loose murrum.		11.6	2,500=	29,150=	
9)	Constructing reinforced concretizing beam round the chamber wall and one suspended beam lengthwise embedded onto the 100mm equally reinforced suspended floor concrete. All the main reinforcements are T10. Providing 600*600mm inspection hole. Concrete must be well cured before removing the timber shuttering.	Cum	18.6	130,000=	2,418,000=	
10)	Providing for formwork and shuttering to receive concrete. The assorted wire nails required should be inclusive.	Item	-----	-----	400,000=	
11)	Building 4 manholes attached to cesspool chambers with removable cover for inspection.	N	4	50,000=	200,000=	
12)	Filled with hardcore, concreted to the outflow manhole by 100mm Ø plastic pipe at least 4m.	N	2	25,000=	50,000=	
	Subtotal				9,507,610=	

(Continued)

Item	Description	Unit	Quantity	Rate	UShs	US \$
<b>C</b>	<b>NEAT WALLING:</b>					
1)	Providing and placing 25mm APC of 1.2 mix along all walls.	LM	82	1,000=	82,000=	
2)	Providing and placing approved DPC on the APC.	LM	73.2	1,500=	109,800=	
3)	Erecting 150mm well burnt clay bricks as neat wall to wall plate; screen wall stops at 1:8m high from the floor level in 1:5 mix with beds and joints well.	Sq M	146.6	6,000=	879,600=	
4)	Provision of scaffoldings.	Item	-----	-----	200,000=	
	Subtotal				1,271,400=	
<b>D</b>	<b>ROOF:</b>					
1)	Providing and casting 100mm R.C wall plate with R8 bars in 1:2:4 mix. Alternatively, providing 100*75mm defect free timber wall plate tied rigid onto wall.	M	26	2,000=	52,000=	
2)	Making and fixing roof trusses of 100*50mm tie beam and 100*50mm rafters, struts, and ties fixed rigid. Use well seasoned softwood timber	N	14	25,000=	350,000=	

3)	Providing preservative for timber.	Lt	10	2,000=	20,000=
4)	Providing G28 corrugated iron sheets (galvanized) by carefully fixing to purlins by roofing nails.	Sq m	193.2	6,000=	1,159,200=
5)	Fixing 200mm*25mm fascia boards of defect free and sawn softwood timber.	M	46.6	4,000=	186,400=
Subtotal					1,767,600=
<b>E</b>	<b>DOORS AND OTHER FINISHES:</b>				
1)	Steel sheet door 2400*900mm overall 900*300mm Vo. Must be well seasoned treated hardwood.	N	10	60,000=	600,000=
2)	20mm plaster 1:5 mix to internal walls whitewashed with lime finishing surface smooth to receive paint.	Sq m	193.2	6,000=	1,159,200=
3)	20mm external rendering in 1:4 mix with surface finished so as to receive paint or roughcast.	Sq m	66.6	6,000=	399,600=
4)	Application of 25mm screed on the latrine floor smooth slopping towards the drop hole; and all over concrete cover slab.	N	70	6,000=	420,000=
5)	Providing splash apron of width 450mm finished smooth with screed all round the latrine.	Lm	72	6,000=	432,000=
6)	Providing and fixing gutters plus other fittings for water collection into the tank in the washroom.	Lm	15	9,000=	135,000=
Subtotal					3,145,800=
TOTAL (Material cost for latrine) Add 20% Labour cost					16,092,410= 3,218,482=
<b>TOTAL</b>					<b>19,310,892=</b>
<b>F</b>	Supply and installation of 5,000litre rain water harvesting tanks( <i>guttering and taps inclusive</i> ) (CRESTANKS)	LS	4	1,500,000=	6,000,000=
<b>Grand Total</b>					<b>25,310,892=</b>

### **BUDGET SUMMARY**

Item	Description	UShs	US \$
1	Groundwork & Flooring (16 CLASSROOMS)	19,770,000	11,629
2	Walling & Beam (16 CLASSROOMS)	32,255,000	18,974
3	Roofing(16 CLASSROOMS)	23,840,000	14,022
4	Secondary Finishes (16 CLASSROOMS)	43,849,200	25,794
5	Supply of Furniture for 16 Classrooms and Offices	37,662,000	22,154
6	Construction of Chainlink Fence	58,906,250	34,650

4	Construction of Offices, Teacher's Resource Room & Stores	39,371,640	23,160
5	Construction of Drainable Cesspool Latrines (20 Stances) and Installation of 5,000litre Water Tanks (CRESTANKS)	25,310,892	14,889
SUBTOTAL (Direct Costs)		280,964,982	165,273
Administrative Costs ( <i>Indirect costs</i> LS) 20%		56,192,996	33,055
<b>OVERALL PROJECT TOTAL BUDGET</b>		<b>337,157,978</b>	<b>198,328</b>

**EXCHANGE RATE FOR Uganda shillings to US Dollars approximately 1,700 = 1.**