

PROPOSED CONSTRUCTION OF 4NO.CLASSROOMS

AND EQUIPPING

AT

NYAKIO MIXED DAY SECONDARY SCHOOL

IN

ELDAMA RAVINE CONSTITUENCY

BARINGO COUNTY



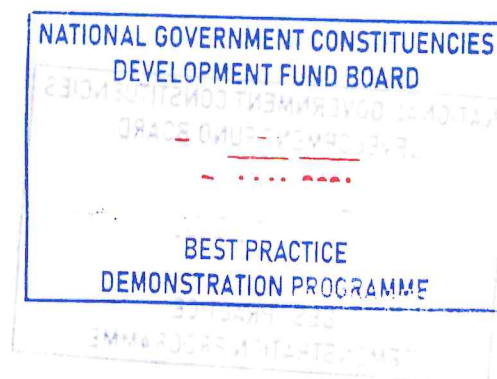
ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
	<u>ENVIRONMENTAL CONSERVATION</u>				
A	The Contractor shall plant trees immediately the site is handed over as directed by County Works Officer and Head Teacher and water during contract period till well established	ITEM		SUM	20,000
	<u>SUBSTRUCTURE</u>				
	1.If site is sloping flatten site before construction commences and where possible Building should be along contours and not across same.				
	2. Substructure Walling should on average be 300mm above flattened ground.				
	<u>ALL PROVISIONAL</u>				
B	Clear site of bushes, grass and debris and cart away and burn	400	SM		
C	Excavate oversite 150mm deep to remove vegetable soil and cart away and deposit as directed	400	SM		
D	Excavate to reduce levels commencing from stripped ground level	41	CM		
E	Excavate for trench not exceeding 1.50 metres deep from reduced ground	87	CM		
F	Ditto column bases	0	CM		
G	Cart away excavated material and deposit in council approved dump	189	CM		
H	Return, fill and ram selected material to back of foundations	42	CM		
I	Allow for planking and strutting to uphold sides of excavations	ITEM		SUM	
J	Allow for keeping excations free from general water including spring water by pumbing, bailing or otherwise	ITEM		SUM	
K	Hardcore fill in making up levels laid and compacted in layers of 150 mm thick and overall thickness 300 mm	330	SM		
	Carried to Collection				
	1				



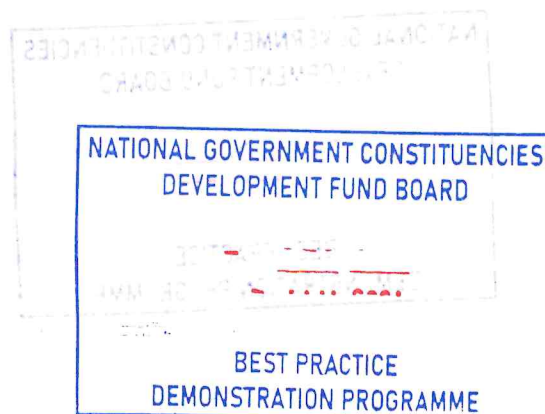
ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
A	Treat surface of stripped ground with chloropyrif or antitermite treatment applied in accordance with the manufacturer' printed instructions	353	SM		
B	Murram blinding laid on hardcore(ms)	330	SM		
C	Gauge 500 damp proof membrane	353	SM		
	<u>Concrete Work</u>				
	<u>Plain Concrete Class mix (1:4:8) in:</u>				
D	50 mm Thick blinding under column bases and strip foundations	68	SM		
	<u>Vibrated Reinforced concrete mix (1:2:4) in:-</u>				
E	Strip foundations	13	CM		
F	200X400 mm Piers	40	LM		
G	100 mm Thick floor bed	353	SM		
H	100 Ditto ramp 1200 mm wide and 3000 mm long including 20mm thick cement and sand screed (1:3) with grooves in approved pattern	4	NO		
J	Concrete site step size 1200x500 mm ,200 mm step and 165 mm high	8	LM		
	Carried to Collection				
	2				



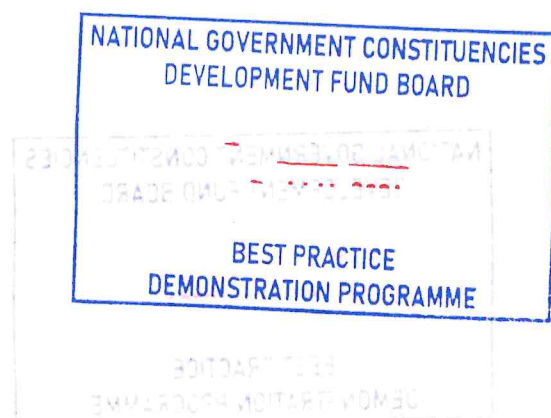
ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
A	50 mm Thick precast concrete paving slabs (1:2:4) with joints in cement mortar (1:4) pointed and laid on murrum and hardcore bed including excavating 150 mm deep <u>REINFORCEMENT</u> <u>Supply and fix the following high tensile ribbed round steel bars to B.S. 4461 including binding wires, spacer blocks, cutting and bending</u>	55	SM		
B	10 mm Diameter bars	275	KG		
C	8mm Ditto	180	KG		
D	BRC Fabric REF. A142 weighing 2.20 KGS per square metres including side and end laps, stools and binding wire	353	SM		
	Carried to collection				
	3				



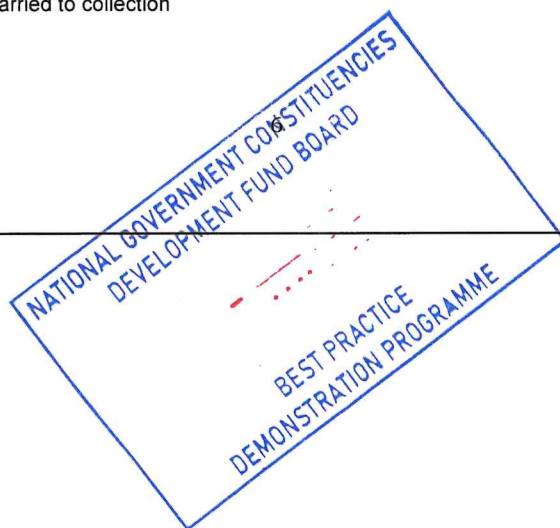
ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
	<u>Sawn Formwork to:-</u>				
A	Sides of foundations	45	SM		
B	Vertical sides of columns	29	SM		
C	Edge of bed 75- 150 mm high	92	LM		
D	Edge of riser 150 - 225 mm high	8	LM		
	<u>WALLING</u>				
E	200 mm Thick natural stone walling to 14 N/mm ² crushing strength joint in cement and sand mortar (1:4) and reinforced with 25x20 mm hoop iron at alternate courses	128	SM		
	<u>PLINTHS</u>				
F	12 mm Thick cement and sand (1:4) render to plinth woodfloat finished	28	SM		
G	Prepare and apply three coats bitumastic paint to rendered plinth	28	SM		
	Carried to collection				
	4				



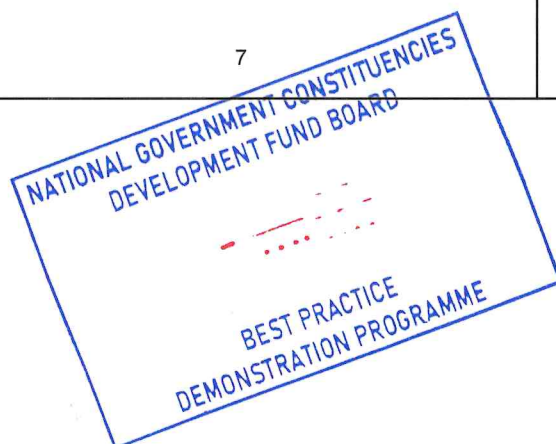
ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
	<u>COLLECTION</u> From page 1 " " 2 " " 3 " " 4 TOTAL FOR SUBSTRUCTURE CARRIED TO MAIN SUMMARY 5				



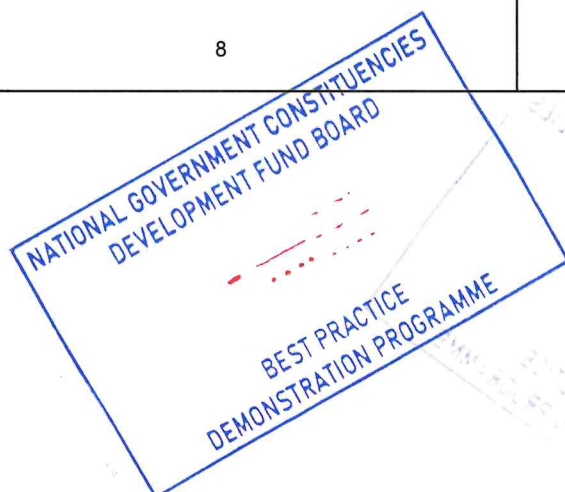
ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
	<u>REINFORCED CONCRETE SUPERSTRUCTURE</u>				
	<u>Vibrated Reinforced Concrete mix class 25/20 with crushing strength of 25N/mm²</u>				
A	Ring Beams	7	CM		
	<u>REINFORCEMENT</u>				
	<u>Supply and fix the following high tensile ribbed steel bars as before :</u>				
B	12 mm Diameter bars	835	KG		
C	8 mm Ditto	345	KG		
	Carried to collection				



ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
	<u>Sawn formwork to:-</u>				
A	Sides and soffits of beams	82	SM		
	<u>MILD STEEL</u>				
B	75mm Diameter hollow section tubular pillar 2800 mm high with 100x100 x3 mm base plate welded on with 4NO. 12 mm diameter anchor bolts with nut and washers and form holes in base plate	13	NO		
	<u>Painting and Decorating</u>				
D	Prepare and apply one undercoat and two coats gloss oil paint to general surfaces of metal	37	LM		
	<u>SUNDRY</u>				
	<u>WELD ON</u>				
E	100X50 x2mm Plate with 4NO.10 mm bolts 150 mm long with nut and washers and form holes in mild steel and timber	21	NO		
	<u>Second grade timber:</u>				
F	100X50 mm Wall plate to steel pillars (MS)	36	LM		
	Carried to collection				
	<u>COLLECTION</u>				
	From page 6				
	" Above				
	TOTAL FOR REINFORCED CONCRETE SUPERSTRUCTURE CARRIED TO MAIN SUMMARY				



ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
	<u>WALLING</u>				
	<u>EXTERNAL WALLING</u>				
	Natural stone machine cut , with crushing strength of 14.00 N/MM2 bedded in cement and sand (1:4) mortar joints reinforced with hoop as before:				
A	200 mm Thick walls	179	SM		
B	200mm Ditto in gables	21	SM		
C	200x400 mm Piers	70	LM		
D	200 mm Wide damp proof course laid in cement and sand (1:4) bed	88	LM		
E	Extra over medium chisel dressed walling for neatly recessed horizontal joints	179	SM		
	<u>INTERNAL WALLING</u>				
F	200 mm Thick machine cut stone in cement and sand mortar joints (1:4)	64	SM		
G	150X200 mm Precast concrete permanent vents with mosquito gauze wire build in walling	40	PR		
H	200 mm Wide damp proof as before described	24	LM		
	<u>Sundry</u>				
I	Raking cutting on 150 mm thick walls	40	LM		
J	Eaves filling on 150mm thick walling and 300mm average height	90	LM		
	TOTAL FOR WALLING CARRIED TO MAIN SUMMARY				
	8				

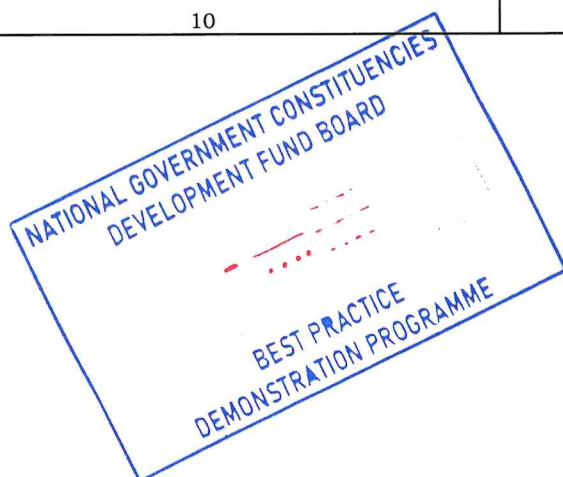


ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
	<u>ROOFING</u>				
	<u>ROOF CONSTRUCTION</u>				
	<u>TIMBER TRUSSES</u>				
	<u>Fabricate, bolt and hoist the following 20NO.Trusses, span 8.20 metres and hoist and fix 3.00 metre above ground:</u>				
	<u>Second grade timber</u>				
A	100x50 mm Rafters	248	LM		
B	150x50 Ceiling joists/tie beams	206	LM		
C	100x50 Struts and ties	248	LM		
D	100X50 mm King post	42	LM		
	<u>Sundry</u>				
E	12 mm Diameter rawl bolts 200 mm long with washers	51	NO		
	<u>END OF TRUSSES</u>				
	<u>General Construction</u>				
F	100X50 mm Wall plate	72	LM		
I	75X50 mm Purlins	440	LM		
	<u>ROOF COVERING</u>				
J	Pre-painted gauge 28 galvanised corrugated roofing sheets with side and end laps including brass 'J' bolts with plastic caps to suppliers's specification	432	SM		
K	Ridge and hip cap in matching sheet	37	LM		
L	200X25 mm Fascia and Barge board	97	LM		
	<u>Painting and Decorating</u>				
M	Prepare and apply one under coat and three finishing coats of gloss oil paint to general surfaces of wood work 200 to 300 mm girth	97	LM		
	Carrie to Collection				
	9				

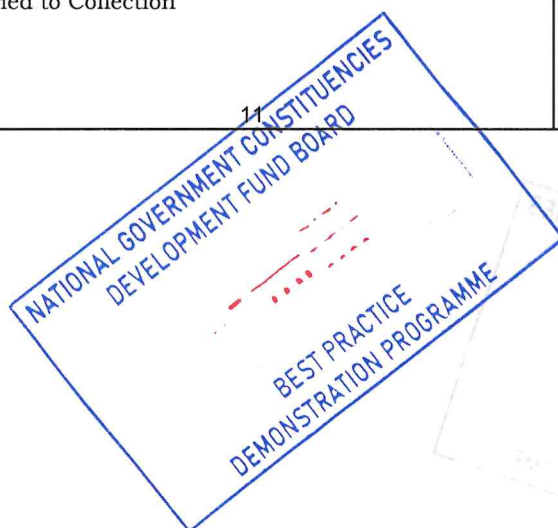
GOVERNMENT CONSTITUENCIES
DEVELOPMENT FUND BOARD

BEST PRACTICE
ON PROGRAMME

ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
	<u>Rainwater Goods</u>				
A	100 mm Diameter half round plastic eaves gutters supported with brackets at 1000 mm centres	74	LM		
B	Extra over for 600 mm long swanneck	4	NO		
C	Ditto stopped ends	4	NO		
D	Ditto outlets	4	NO		
E	Ditto bends	4	NO		
F	75 mm Diameter down pipe held with pipe clips to walling	12	LM		
G	Extra over for offset	4	NO		
	Carried to Collection				
	<u>COLLECTION</u>				
	From Page 9				
	" " 10				
	TOTAL FOR ROOF CARRIED TO MAIN SUMMARY				
	10				



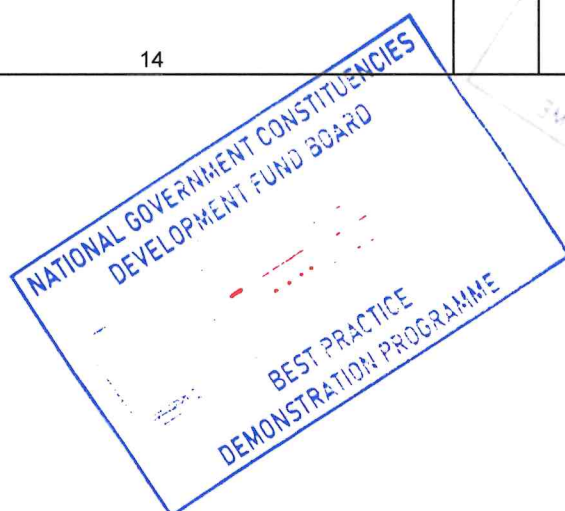
ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
	DOORS				
	<u>Mild Steel</u>				
	<u>Fabricate, weld, supply and fix steel doors comprising gauge 16 cover plate in boxes, heavy gauge sections with weld joints, ground smooth, apply red oxide primer before delivery including lugs built - in walling to Architect's approval:-</u>				
A	Double Steel door size 1200x2400 mm , leaf size 600x2400 mm, consisting 38x38 x 2 mm angle frame, 25x25mm hollow section tube internal framing including necessary ironmongery with 3NO. 25mm Heavy duty hinges, box profile 300x450mm	4	NO		
	<u>Glazing</u>				
B	4mm Thick clear sheet glass in panes 0.10 to 0.50 Square metres and glazing metal with linseed putty	4	SM		
	Carried to Collection				

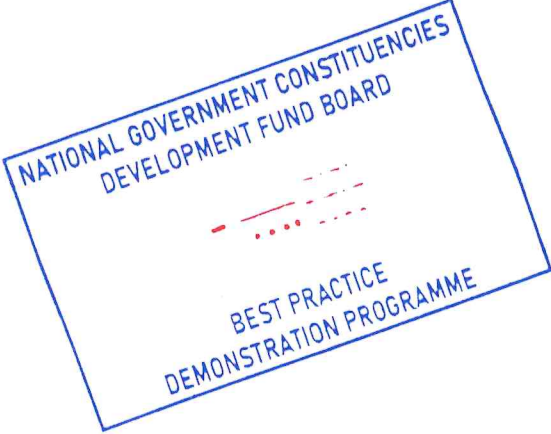


ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
	<u>Ironmongery</u>				
A	Two lever mortice lock and furniture including matching screws as Union	0	NO		
B	Heavy duty bush hinges	8	NO		
C	Rubber stops	8	NO		
	<u>Painting and Decorating</u>				
	<u>Externally</u>				
D	Prepare and apply three coats of gloss oil paint to general surfaces of metal	12	SM		
	<u>Internally</u>				
E	Prepare and apply three coats as before	12	SM		
	Carried to Collection				
	<u>COLLECTION</u>				
	From Page 11				
	" " 12				
	TOTAL FOR DOORS CARRIED TO MAIN SUMMARY				
	12				

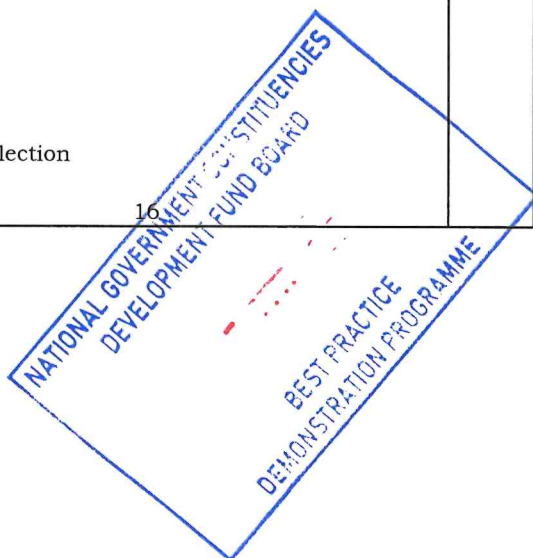


ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
	<u>Painting and Decorating</u>				
	<u>Internally</u>				
A	Prepare and apply one under coat and three coats of gloss oil paint to general surfaces of metal	48	SM		
	<u>Externally</u>				
B	Ditto Surfaces of metal	48	SM		
	Carried to Collection				
	<u>COLLECTION</u>				
	From Page 13				
	" " 14				
	TOTAL FOR WINDOWS CARRIED TO MAIN SUMMARY				
	14				

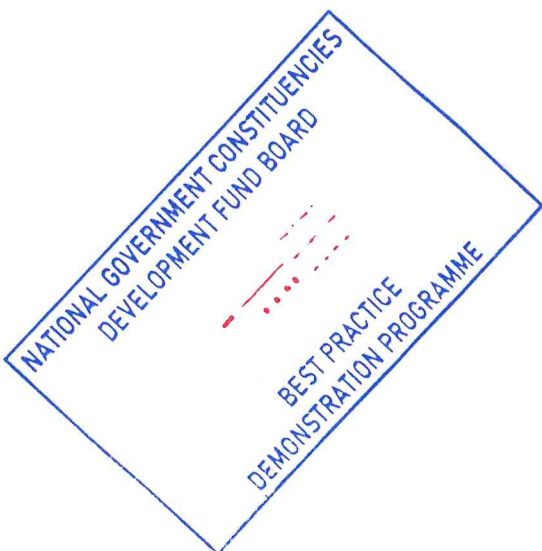


ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
	<u>FINISHES</u>				
	<u>EXTERNAL FINISHES</u>				
A	12 mm Thick cement and sand (1:4) rendering to concrete surfaces woodfloat finished	71	SM		
B	12 mm Ditto to walls and reveals	14	SM		
	<u>Painting and Decorating</u>				
C	Prepare and apply three coats plastic emulsion paint to plastered surfaces	85	SM		
	<u>Internal Wall Finishes</u>				
D	12 mm Thick plaster plus cement and sand (1:4) steel float finished	340	SM		
	<u>Painting and Decorating</u>				
E	Prepare and apply three coats plastic emulsion vinyl silk cream paint to plastered surfaces	340	SM		
					
	Carried to Collection				
	15				

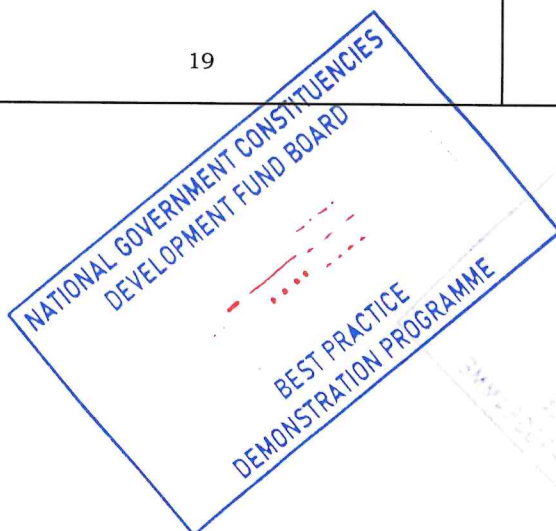
ITEM NO		QTY	UNIT	RATE	SHS
	<u>Floor Finishes</u>				
A	20 mm Thick cement and sand (1:3) floor screed wood float finished to receive Terrazo (M.S)	340	SM		
	<u>CERAMIC TILES</u>				
B	10 mm Thick ceramic tiles in flooring laid with cement grout and joints pointed with white cement to Architect's approval	340	SM		
C	10 mm Ditto and 100 mm high skirting	160	LM		
	<u>Ceiling</u>				
D	12 mm Thick chip board ceiling fixed in symmetrical pattern	340	SM		
E	Extra over ceiling for 600x600 mm trap door with 75x25 mm cornice all round and framing	4	NO		
F	75X25 mm Cornice with moulding	169	LM		
	<u>Second grade timber</u>				
G	50X50 mm Branderings	1246	LM		
H	50X50 mm Branderings but plugged	0	LM		
	<u>Painting and Decorating</u>				
I	Prepare and apply three coats of plastic emulsion paint to general surfaces of soft board (Brilliant white)	340	SM		
J	General surfaces to 100 mm girth	169	LM		
	Carried to Collection				



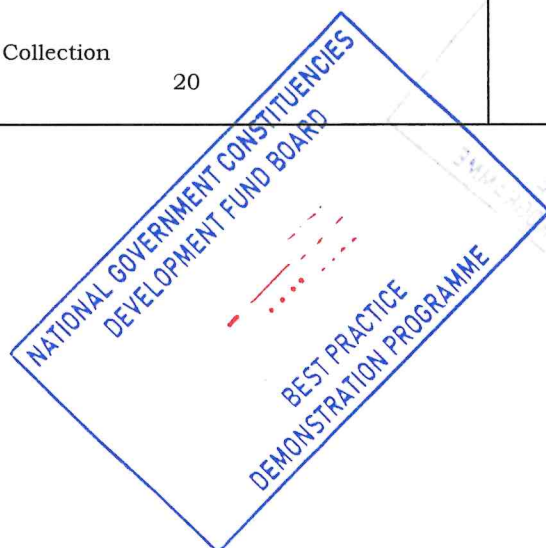
ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
	<u>COLLECTION</u> From Page 15 " " 16 TOTAL FOR FINISHES CARRIED TO MAIN SUMMARY				

ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
	<u>FIXTURES</u>				
	<u>The following in 4NO.White Board size 2000x1500 mm</u>				
A	Supply and mount white board to walling complete with chalk and dust holder all in accordance with specifications from SEPU	4	NO		
	<u>The following in 4NO.Notice Board size 2400x1200 mm</u>				
B	12 mm Thick soft board	12	SM		
C	50X25 mm moulded framing plugged	28	LM		
	<u>Painting and Decorating</u>				
D	Prepare and apply one under coat and three coats of brilliant white emulsion paint to general surfaces of soft board	12	SM		
E	Prepare and apply one under coat and three coat of gloss oil paint to general surfaces of wood work to 100 mm girth	28	LM		
					
	TOTAL FOR FIXTURES CARRIED TO SUMMARY				
	18				

ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
	<u>WATER STORAGE TANK</u>				
A	Excavate over site as before	3	SM		
B	Excavate foundation trench ditto	2	CM		
C	150 mm Thick concrete block walling as before	3	SM		
D	Mass concrete (1:3:6) in foundations	1	CM		
E	450 mm Thick hardcore as before	3	SM		
F	50 mm Thick murrum as before	3	SM		
G	100 mm Thick concrete (1:3:6) in slap	3	SM		
H	20 mm Thick cement and sand screed (1:3) as before	4	SM		
I	BRC REF A142 Fbric mesh as before	3	SM		
J	Supply and install cold water storage plastic water 10000 Litre capacity Heavy duty (3 Ply)	1	NO		
K	12 mm Diameter pegler tap	1	NO		
L	19 mm Ditto union	1	NO		
M	32 mm Diameter overflow pipe 400 mm long	1	NO		
	TOTAL FOR WATER TANK CARRIED TO MAIN SUMMARY				

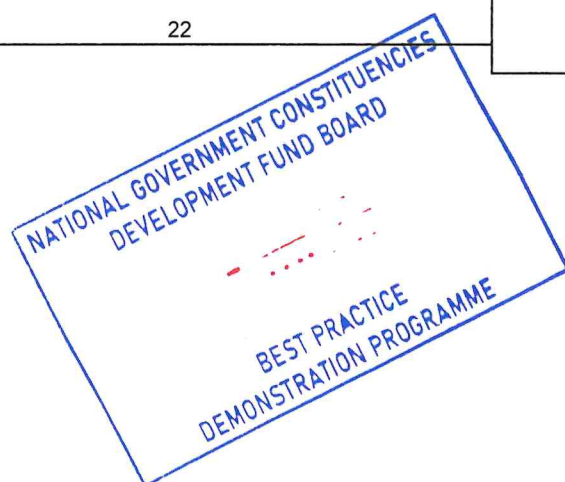


ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
	<u>ELECTRICAL INSTALLATION</u>				
	<u>ELECTRICAL WORKS TO BE EXECUTED BY SPECIALIST REGISTERED BY KPL</u>				
	<u>Supply , install , test and commission the following:</u>				
A	Lighting points wired in 3x1.5mm ² SC PVC CU cables drawn in 20mm dia HG PVC conduits with all necessary accessories excluding switches and fittings for one way switching	50	NO		
B	10A moulded ivory switch plate as crabtree or approved equivalent as follows: i. Two way one gang	5	NO		
	ii. Three way one gang	1	NO		
C	Lighting fittings complete with fixing accessories and lamps as follows: i). 1200mm lx 36w florescent batten fitting or slim cross section with clip on cover plate and adjustable end cap system as Thorn Popular Pack batten or approved equivalent	50	NO		
D	ii) Bulkhead fitting with aluminium body on Thorn or approved equivalent with Energy saving bulb	15	NO		
E	Socket outlets Power outlets i. Comprising of wiring in 3x2.5mm ² PVC SC CU in concealed HG conduits	10	NO		
	ii. 13A 2gang switched moulded socket outlet as crabtree or approved equivalent	5	NO		
	Consumer Units and Distribution Boards				
F	4-Way SP/N consumer unit flush mounted on wall complete with a 10A SP/N integral isolator as crabtree or approved equivalent	1	NO		
G	Single Pole miniature circuit breaker as follows: i. 5ASP ii. 30asp iii. Blanking covers	1 2 1	NO NO NO		
	Carried to Collection	20			



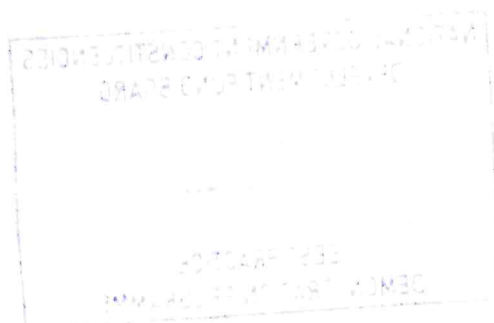
ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
A	Sub-mains Cables				
	3x6.0mm ² SCPVC CU cables drawn in HG conduit	10	LM		
B	Standard cable looping box complete with single cut out fuse neutral link	1	NO		
C	Electrical earthing comprising of 6.0mm ² SC PVC CU cable drawn in HG conduits 1500mm times 15mm copper electrodes c/w clamps pre-cast concrete inspection pit with cover	ITEM		SUM	
D	Testing and commissioning	ITEM		SUM	
E	Allow for supply and fixing Copper Lighting arrestors, w	1	NO		
	Carried to Collection				
	<u>COLLECTION</u>				
	From Page 20				
	" " 21				
					
	TOTAL FOR ELECTRICAL INSTALLATION CARRIED TO SUMMARY				
	21				

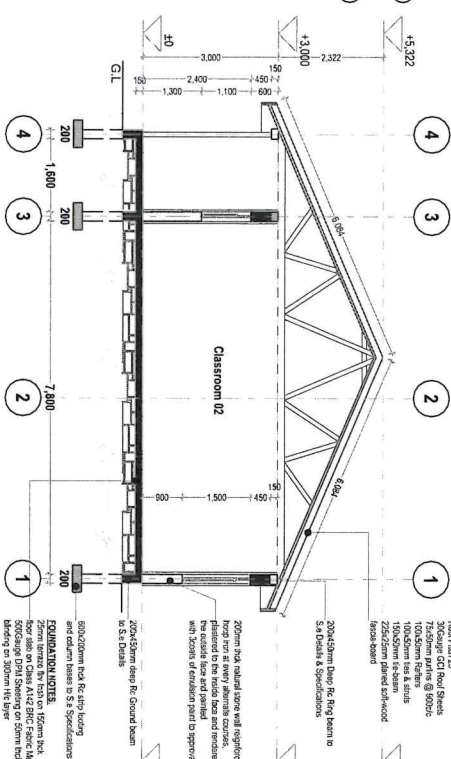
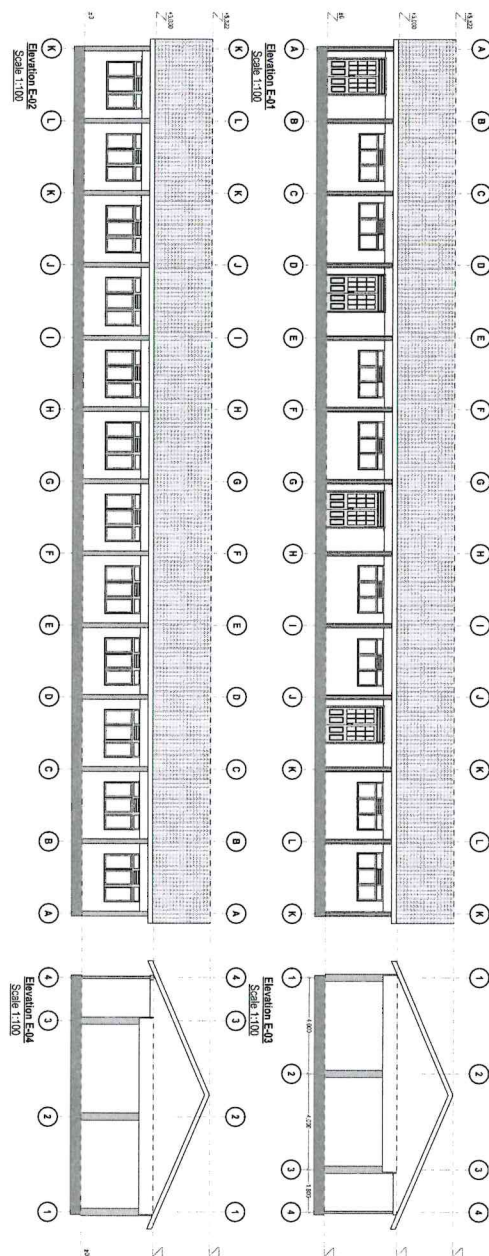
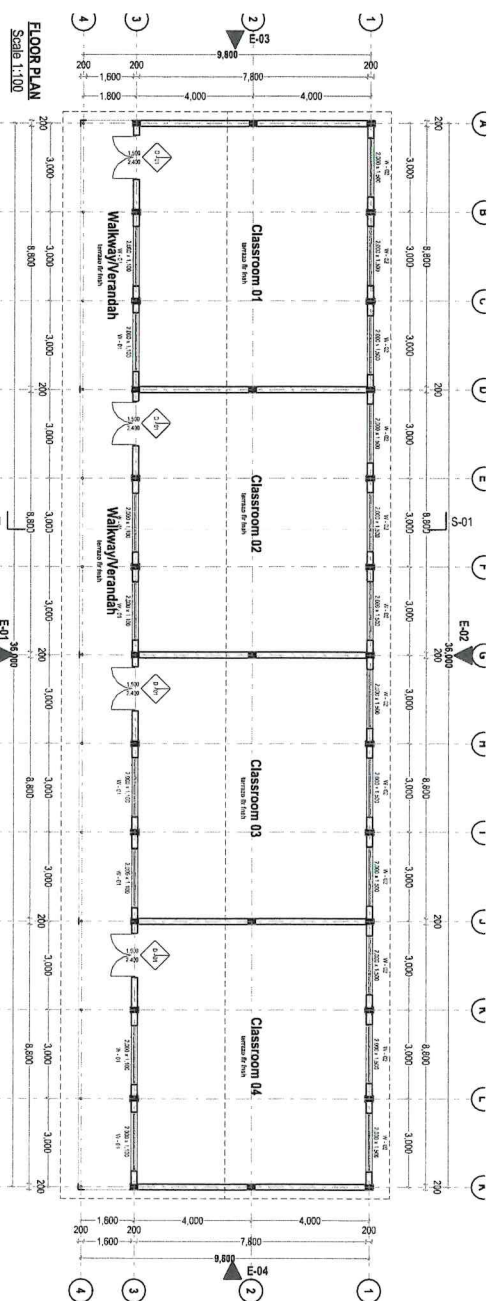
ITEM NO	DESCRIPTION	QTY	UNIT	RATE	SHS
	PRIME COST AND PROVISIONAL SUMS <u>EXPENDITURE FOR ITEMS HERE BELOW SHALL BE APPROVED BY NG-CDF BOARD</u> <u>The following sums shall be expended upon Architect's instructions and may be omitted in whole:</u>				
A	Allow for a Provisional Sum of Kenya Shillings Two Hundred Thousand (Kshs.200,000/) for Contingency	ITEM		SUM	200,000
B	Allow for a Prime Cost Sum of Kenya Shillings Fifty Thousand (Kshs.50,000/) for Supply and Delivery of 9KG and 2NO. Water base and 9 Litre X2NO. Carbon dioxide Fire extinguishers mounted on walling to approval	ITEM		SUM	50,000
C	Allow for Branding of Project in accordance with NG-CDF Board Specifications	ITEM		SUM	50,000
	<u>FURNITURE</u>				
	<u>Mild steel sections shall be heavy duty and weld joints ground smooth</u>				
	<u>Mild Steel tubular framing 25mm diameter heavy duty to Desk Lockers</u>				
	<u>The Desks Locker shall be in 12mm thick hard timber and polished with clear wood varnish. Teachers' Tables shall be 20 thick MDF 25x25 mm Tubular mild steel framing with 4NO.legs. Teachers' Chairs shall be in 9 mm thick plywood on 25mm tubular framing and 4NO.legs</u>				
D	Allow for a Provisional Sum of Kenya Shillings (Kshs 1,180,000.00) for Fabrication and Supply of 180NO Desk Lockers 750mm long and 450mm deep ,4NO.Teachers'Tables and 4NO.Chairs to be supplied by an approved Supplier with specifications from County Works Officer and Principal, including 180 NO.Student Chairs	ITEM		SUM	1,180,000
E	Allow for Transport to site	ITEM		10%	118,000
	TOTAL FOR PRIME COST AND PROVISIONAL SUMS CARRIED TO MAIN SUMMARY				
	22				

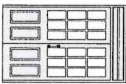


ITEM NO	DESCRIPTION	SHS
	<u>PROPOSED CONSTRUCTION OF 4NO.CLASSROOMS AND EQUIPPING MAIN SUMMARY</u>	
A	SUBSTRUCTURE- PAGE 5	
B	REINFORCED CONCRETE SUPERSTRUCTURE-PAGE 7	
C	WALLING- PAGE 8	
D	ROOFING - PAGE 10	
E	DOORS - PAGE 12	
F	WINDOWS- PAGE 14	
G	FINISHES -PAGE 17	
H	FIXTURES - PAGE 19	
I	WATER TANK - PAGE 20	
J	ELECTRICAL INSTALLATION- PAGE 21	
K	PRIME COST AND PROVISIONAL SUMS - PAGE 22	
L	PRELIMINARIES (Water for Works, Hoarding, Etc)	
	SUB-TOTAL	
	ADD VAT 16%	
	TOTAL COST OF 4NO.CLASSROOMS CARRIED TO FORM OF TENDER	







IES-Q2 Door Schedule		IES-Q2 Window Schedule	
Element ID	D - 01	Element ID	W - 01
Quantity	4	Quantity	8
W x H Size	1,500x2,400	W x H Size	2,000x1,500
Head height	2,400	Sill height	1,300
		Head height	2,400
2D Symbol		2D Symbol	
View from Side Opposite to Opening Side		View from Side Opposite to Opening Side	