

**PROPOSED 2 NO CLASSROOMS EACH AT NDABIBI AND KIPKONYO
POLYTECHNICS IN MAELLA WARD NAIVASHA SUB COUNTY 2018-2019**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 1</u>				
	<u>SUBSTRUCTURE</u>				
A	Excavating oversite to remove top vegetable soil average 150mm disposing on site average 50m from excavations	270	SM		
B	Mass excavation to reduce level not exceeding 1.50m deep	64	CM		
C	Excavate trenches in red soil to receive foundations not exceeding 1.50m deep starting from reduced level	112	CM		
D	Ditto for column bases	28	CM		
E	Extra over normal excavation for excavating in rock of any class	28	CM		
F	Backfill and compact selected excavated materials in 150mm thick layers	58	CM		
G	Load and cart away surplus excavated material	122	CM		
H	Allow for keeping all excavations free from surface and ground water		ITEM		
J	Allow for planking and strutting to uphold sides of all excavations		ITEM		
K	Approved natural stone hard-core; depositing and compacting in 150mm thick layers, levelling	52	CM		
L	25mm thick stone dust or murrum blinding over hardcore	174	SM		
M	Termidore 25 EC" insecticide treatment to hard-core beds and tops of foundation walls	178	SM		
	<u>Concrete</u>				
N	Plain concrete (1:4:8) in 50mm thick blinding under strip footings	31	SM		
	<u>Vibrated reinforced concrete class 20/20 to:</u>				
P	Foundations in trenches	8	CM		
Q	100mm thick horizontal ground slab	178	SM		
	CARRIED TO COLLECTION				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Fabric mesh reinforcement 200mm laps</u>				
A	Reference A1042 weighing 2.22kg per square metre	178	SM		
	<u>Ribbed mild steel reinforcement Bars</u>				
B	8mm diameter bars	100	KG		
C	10mm diameter bars	216	KG		
	<u>Sawn formwork to:</u>				
D	Vertical side of foundations	34	SM		
E	Edges of slab; 75 to 150mm wide	76	LM		
	<u>Approved natural stonework, roughly squared in cement mortar (1:4):25mm wide x20 gauge hoop iron strapping every alternate course</u>				
F	200mm thick walls	92	SM		
G	Extra for attached pier 400x200mm	14	LM		
	<u>500 gauge polythene; 150mm laps</u>				
H	Damp proofing membrane; horizontal	178	SM		
	<u>Cement and sand (1:4) rendering as described</u>				
J	12mm thick, two coatwork to walls steel trowelled	20	SM		
	<u>Painting and Decorations</u>				
K	Prepare prime and apply three coats of black bituminous paint to rendered surface externally	20	SM		
	CARRIED TO COLLECTION				
	COLLECTION				
	Page NDK/P/1 above				
CARRIED TO SUMMARY					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 2</u> <u>REINFORCED CONCRETE FRAME</u>				
A	Roof Beams	4	CM		
	<u>Ribbed mild steel reinforcement in structural concrete works</u>				
B	8mm diameter bars	125	KG		
C	12mm diameter bars	180	KG		
	<u>Sawn formwork as described to:</u>				
D	Sides and soffites of Roof beams	24	SM		
	<u>Cement, Sand and Lime (1:2:) render as as describes to:-</u>				
E	15mm Thick to vertical surfaces of beams	24	SM		
	<u>Prepare and apply three coats silk vinyl plastic emulsion paint as described on:-</u>				
F	Plastered surfaces, internally and externally	24	SM		
	<u>Galvanized mild steel Pipes</u>				
G	3000mm long, class B, 75mm diameter steel pipes, complete with concrete base, rate to include a fixing to ground	10	NO		
	<u>Painting and Decoration</u>				
	<u>Prepare surfaces and apply one coat of zinc chromate metal primer and two finishing coats of gloss oil paint on:</u>				
H	Surface of large pipes	24	LM		
CARRIED TO SUMMARY					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 3</u>				
	<u>EXTERNAL WALLING</u>				
	<u>Machine cut natural quarry stone-work bedded and jointed in cement and sand (1:4) mortar as described in:-</u>				
A	200mm thick walls <u>Vent Blocks</u>	156	SM		
B	Provide, deliver to site and fix 200x200x25 mm thick pre-cast concrete vents jointed in 1:3 mortar	16	NO		
	<u>Damp Proofing</u>				
C	200mm wide hesian based damp proof course: 150mm laps	60	LM		
D	Eaves filling to 200mm walls; 300 mm average height	42	LM		
E	Raking cutting to 200mm thick wall	32	LM		
	TOTAL ELEMENT NO. 3 CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 4</u>				
	<u>ROOF CONSTRUCTION, COVERINGS AND RAINWATER DISPOSAL</u>				
	<u>Construction</u>				
	<u>Truss joints to be bolted with appropriated No. of shear connectors or as instructed by Structural Engineer and hoisting approximately 3000mm above ground floor level</u>				
	<u>All carpentry timber to be treated and sawn cypress second grade seasoned to an equilibrium moisture content of between 9% and 15%</u>				
A	100x50mm Wall plate bolted to concrete with and including 12mm diameter bolts at 1500mm centres	42	LM		
B	200x25mm Ridge Board	20	LM		
	<u>The following in nailed timber trusses including hoisting and placing 2400mm above ground floor slab level</u>				
C	150x50mm Rafters	156	LM		
D	150x50mm Tie beam	124	LM		
E	100x 50mm king post	28	LM		
F	100x50mm struts and ties	158	LM		
G	75x50mm purlins	120	LM		
	<u>Wrot cypress</u>				
H	225mm x25mm Fascia and barge board	82	LM		
	<u>ROOF COVERINGS</u>				
J	28 Gauge Prepainted galvanized box profile iron roofing sheets nailed on purlins	224	SM		
K	Ditto Ridge copping	24	LM		
	CARRIED TO COLLECTION				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>RAINWATER DISPOSAL</u>				
A	150x120mm wide 22 gauge Prepainted galvanised mild steel purpose made box gutter	96	LM		
B	Extra over gutter for stopped ends	8	NO		
C	Ditto for rainwater outlets	8	NO		
D	100mmx22 gauge galvanized mild steel purpose made rainwater down pipe	22	LM		
E	Extra over rainwater down pipe for swanek offset, projecting 600mm	8	NO		
F	Ditto for shoes	8	NO		
	<u>Painting and decoration</u>				
	<u>Prepare surfaces and apply one coat of zinc chromate metal primer and two finishing coats of gloss oil paint on:-</u>				
G	Surfaces of metal gutter 200-300mm girth	96	LM		
H	Surfaces of large pipes - 200-300mm	44	LM		
	<u>Knot, prime, stop, prepare surfaces and apply one undercoat and two finishing coats of gloss oil paint on:</u>				
J	General timber surfaces 200-300mm girth externally	41	LM		
	CARRIED TO COLLECTION				
	<u>COLLECTION</u> Page NDK/P/5 above				
	TOTAL ELEMENT NO. 4 CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 5				
	MILD STEEL CASEMENT DOORS				
	<u>Standard door complete with hinges, stays, fasteners permanent vent with mosquito gauze and sheet metal hood etc assembled and fixed to opening including cutting and pinning lugs to concrete or blockwork surround and bedding frame in cement and sand (1:4) mortar, Grille and glazing included, steel casement door comprising 40x25x3mm stiles, bottom and top rail & 4 No. intermediate rails all primed with red oxide.</u>				
A	2400x1200mm door complete with 50x50x3mm fixed angle frame, 2.5mm thick black sheet checkered plate built into panels, top panels left open ffor glazing "Union" 3 lever steel door lock 3x200mm lockable tower bolts	2	NO		
	<u>Glass</u>				
B	4mm thick clear shet glass and glazing with steel putty compound in panes not exceeding 0.10 square metres	2	SM		
	<u>Iron mongery</u>				
	<u>Supply and fix the following ironmongery with screws to match (Ref. is to Union Catalogue or other equal abd approved)</u>				
C	Rubber door stop fixed to concrete floor or masonry walling with and including 38mm raw bolt	2	NO		
D	3 lever steel door lock	2	NO		
	<u>Prepare and apply two undercoat and one finishing coat gloss paint in metak work</u>				
E	General surfaces; steel casement doors	10	SM		
TOTAL ELEMENT NO. 5 CARRIED TO SUMMARY					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 6</u>				
	WINDOWS				
	<u>Purpose made steel casement windows in 25mm wide standard casement 'z' sections comprising permanent ventilators with T-bar, gauze and metal hood for full width of window; all ironmongery and one coat red oxide primer by manufacturer.</u>				
A	1500x1800mm window	6	NO		
B	1500x1500mm window	8	NO		
	<u>Cill</u>				
C	100x150x15mm clay tile cills, bedding; jointing in cement mortar (1:4); pointing in coloured cement mortar (1:4)	24	LM		
	<u>Glass and glazing to metal with glazing compound</u>				
D	4mm thick clear sheet glass 0.10 to 0.50 square metres	24	SM		
	<u>Painting and Decoration</u>				
E	Touching up manufacturer's priming coat, two undercoats and one finishing coat to glazed metal surfaces internally	24	SM		
H	Ditto to glazed metal surfaces externally	24	SM		
TOTAL FOR ELEMENT NO. 6 WINDOWS CARRIED TO SUMMARY					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT No. 7</u>				
	<u>FINISHES</u>				
	<u>EXTERNAL WALL FINISHES</u>				
A	Extra over dressed stone walling for forming recessed horizontal joints and flush vertical joints on walls in cement mortar (1:3) externally	156	SM		
	<u>INTERNAL WALL FINISHES</u>				
	<u>Cement and sand (1:2:9) plaster as describes in:-</u>				
C	15mm Thick to vertical surfaces	156	SM		
D	Extra over for black board	64	SM		
	<u>Prepare and apply three coats silk vinyl plastic emulsion paint as described on:-</u>				
E	Plastered surfaces	156	SM		
	<u>FLOOR FINISHES</u>				
	<u>EXTERNAL FLOOR FINISHES</u>				
	<u>Cement and sand (1:3) screed finished with Red Oxide as described in:-</u>				
F	Floors 40mm thick, trowelled hard and smooth	38	SM		
G	20x100mm high skirting	22	LM		
	<u>INTERNAL FINISHES</u>				
	<u>Cement and sand (1:3) screed finished with Red Nil Oxide as described in:-</u>				
H	Floors 32mm thick, trowelled hard and smooth	126	SM		
J	20x100mm high skirting	64	LM		
	<u>CEILING FINISHES</u>				
	<u>Sawn cypress, pressure impregnated as described in:-</u>				
K	50x50mm brandering	756	LM		
	<u>Wrot cypress prime grade as described in:-</u>				
L	75x25mm cornice with three labours; plugged	64	LM		
M	12mm thick 'celotex' ceiling lining with vee butt joints	126	SM		
N	Extra for access panel size 600x600mm; including 50x50mm framing	2	NO		
	<u>Paved areas around Building Plinth</u>				
O	75mm thick in-situ concrete 600mm wide screeded with cement sand 1:4 mix steel trowelled hard and smooth	22	SM		
	CARRIED TO COLLECTION				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Painting and Decorations</u>				
A	Prime back of timber surfaces not exceeding 100mm girth	128	LM		
B	Ditto on ceiling lining	126	SM		
C	Ditto 100-200mm girth internally	128	LM		
	<u>Prepare and apply three coats silk vinyl plastic emulsion paint as described on:-</u>				
D	Soft board ceiling	178	SM		
	<u>Prepare and apply thre coats black board paint to:</u>				
E	Plastered surfaces	64	SM		
	<u>COLLECTION</u>				
	Page NDK/P/9				
	above				
TOTAL FOR ELEMENT NO. 7 CARRIED TO SUMMARY					

Electrification

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Element No. 8</u>				
	Supply, install, test and commission the following				
1	Lighting points wired in 3 x 1.5 sq mm sc PVC copper cables drawn in 20mm diameter HG PVC conduits concealed in building fabric including all accessories but without lighting switches and fittings for one way switching	16	NO		
2	5A white included lighting switches as MK or approved equivalent				
	a) One way switching	2	NO		
	b) Two way switching	2	NO		
3	Lighting fittings complete with appropriate rated lamps as follows: -				
	a) 1200mm, 1X36 W, single fluorescent lighting fitting with opal diffuser for surface mounting as Thorn or approved equivalent	14	NO		
	b) 2x8 W bulk head fitting as Thorn or approved equivalent	2	NO		
4	Power point wired in 3 x 2.5 sq mm sc PVC copper cables drawn in 25mm diameter HG PVC conduits concealed in building fabric including all accessories	4	NO		
5	13A twin switched socket outlet plate ivory type as MK or approved equivalent	4	NO		
6	Sub mains comprising 3x6.0 sq mm sc PVC copper cables in concealed in 32mm diameter HG PVC conduits from the CLB to the consumer unit	10	M		
7	4-way SPN consumer unit complete with a 100A integral isolator as havells or approved equivalent	1	NO		
8	MCBs as harvell or approved equivalent:-				
	a) 5A	2	NO		
	b) 30A	2	NO		
9	Standard cable loop in box	1	NO		
10	Earthing	1	NO		
	TOTAL ELECTRICAL CARRIED TO SUMMARY				

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POLYTECHNICS IN MAELLA WARD NAIVASHA SUB COUNTY 2018-2019**

ITEM	DESCRIPTION			AMOUNT
	<u>SUMMARY</u>			
A	SUBSTRUCTURE FROM PAGE NDK/P/2			
B	REINFORCED CONCRETE FRAME FROM PAGE NDK/P/3			
C	WALLING FROM PAGE NDK/P/4			
D	ROOFING FROM PAGE NDK/P/6			
E	DOORS FROM PAGE NDK/P/7			
F	WINDOWS FROM PAGE NDK/P/8			
G	FINISHES FROM PAGE NDK/P/10			
H	ELECTRICAL INSTALLATION FROM PAGE NDK/P/11			
J	Provide all the materials, fabricate and erect project name board in 75mm diameter 3mm thick steel pipes in 150mm wide and 600mm deep holes and supported in mass concrete class 15/20 pedestrian. The face of the board to be 1000mmx900mm written both sides as instructed.		NO	20,000.00
K	Allow a sum of Kenya shillings Fourty Thousand only for payment of transport costs of Engineers site supervisory staff		SUM	40,000.00
L	Allow a sum of Kenya shillings Twenty thousand only for client's transport		SUM	20,000.00
M	Allow a sum of Kenya shillings Eighty six thousand only for furniture		SUM	20,000.00
N	Allow a sum of Kenya shillings fifty thousand only (Kshs. 50,000.00) for supply of 3000 litres capacity rain water catchment UPVC cylindrical water tank complete with concrete base , and splash wash point		SUM	50,000.00
	Sub-Total 01 for 2 NO classrooms			
	Multiply by (two) (2 No)			x2
	sub-Total 02 for 4 NO classrooms			
	Add 16% V.A.T			
	GRAND TOTAL FOR 4 NO CLASSROOMS CARRIED TO FORM OF TENDER			

<p>Contract Period12 weeks.....</p> <p>Amount in words</p> <p>Tenderers Name</p> <p>Adress</p> <p>SignatureDate.....</p> <p align="center">CH/P/12</p>
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