PROPOSED CONSTRUCTION OF ADMINISTRATION BLOCK AT MMANGANI SECONDARY SCHOOL - MALINDI NG-CDF

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	ELEMENT NO.1 **SUBSTRUCTURES** **ALL PROVISIONAL.** **EXCAVATIONS AND EARTH WORKS** **Site clearance**				
A.	Clear site of all bushes, shrubs and undergrowth, up root and burn all the arising	M^2	268		
B.	Excavate vegetable soil average 200mm deep and cart away as directed.	M^2	268		
C.	Excavate foundation trench not exceeding 1.5m deep commencing from stripped level.	M^3	124		
D	Extra over excavation for excavating in hard rock not exceeding 1.5m	M^3	8		
E	Allow for keeping the whole of the excavations free from all water including spring and running water.	ITEM			
F	Allow for planking and strutting to sides of excavations.	ITEM			
G	Return fill and ram selected excavated material.	M^3	66		
H	Cart away surplus excavated material and spread 20m away.	M^3	119		
I	300mm thick approved hardcore well compacted in layers not exceeding 150mm deep.	M^2	224		
J	50mm thick murram blinding to surface of hardcore.	M^2	224		
	TOTAL CARRIED TO COLLECTION				

ITEM	DESCRIPTION	QTY	UNIT	RATE	SHS. CTS
	.**INSECTICIDE TREATMENT**				
A.	Treat surface of blinded hardcore with **Termidor** or any other equal and approved insecticides with ten year guarantee as per the manufacturers printed instructions.	M^2	224		
B.	500 gauge polythene sheet damp proof membrane lay with 150mm side and end laps.	M^2	224		
	CONCRETE WORKS				
C.	50mm Thick blinding to Strip foundations and column bases	M^2	89		
D.	Insitu reinforce concrete (1:2:4) to foundation trenches and columns	M^3	12		
	BEDS				
E.	150mm Thick surface bed	M^2	224		
F.	150mm Ditto access ramps	M^2	12		
	SAWN FORM WORK TO:				
G.	Edges of slab 75 to 150mm high	LM	70		
	High steel reinforcement to b.s 4461 including tying wire spacer blocks.				
H.	8mm ditto	KGS	179		
I.	12mm ditto	KGS	366		
J	B.R.C Mesh BS 4483 ref.A 98 200 X 200mm wgt 1.89kgs/m^2 measured net no allowance made for laps including bends tying wire and distance	M^2	224		
	Substructure walling				
K	200mm thick natural stone block walling in cement and sand mortar (1:3) reinforced with and including 20swg x 25mm wide hoop iron in every alternative course.	M^2	166		
	CARRIED TO COLLECTION				

ITEM	DESCRIPTION	QTY	UNIT	RATE	SHS. CTS
A	Formwork Column; vertical	7	M^2		
	PLINTHS				
B	15mm thick cement and sand(1:4) rendering to plinth walls.	42	M^2		
C	Two coats bituminous paint to rendered plinth walls.	42	M^2		
C	B.S 743; Type A bitumen hessian 150mm (no allowance made for laps) for horizontal ; 1NO layer ;200 wide	82	Lm		
D	B.S 743; Type A bitumen hessian 150mm (no allowance made for laps) for horizontal ; 1NO layer ;150 wide	39	Lm		
	P.C.C PAVING SLABS.				
E	600 x600 x50 mm thick precast concrete paving slabs around the building including 100mm thick bed of murram.	42	M^2		
	CARRIED TO COLLECTION				
	COLLECTION				
	From Page LP/01				-
	From Page LP/02				-
	From Page above				-
TOTAL FOR ELEMENT NO .1 CARRIED TO SUMMARY					**-**

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	ELEMENT NO. 02				
	SUPERSTRUCTURES WORKS				
	CONCRETE WORKS				
	Insitu; concrete; reinforced normal; concrete (1:2:4); vibrated				
A	Beams, columns	M^3	8		
	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				
B	8mm Diameter	KGS	314		
C	12mm Diameter	KGS	707		
	FORMWORK				
	Sawn formwork to soffits and sides				
D	Beams and columns	M^2	139		
TOTAL FOR SUPERSTRUCTURE CARRIED TO MAIN SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	ELEMENT NO. 3 **WALLING.** **MACHINE DRESSED NATURAL STONEWORK** **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)**				
	EXTERNAL WALL				
A.	200mm thick block	M^2	196		
B.	Eaves fillings	LM	70		
C.	Ditto gable	M^2	74		
D	Raking cutting 200mm thick stone walling for slope	LM	47		
	INTERNAL WALLS				
E	150mm thick	M^2	115		
	SECRETARY'S PARTITIONS AND COUNTER				
F	75x50mm cypress timber framing .	LM	45		
G	**MDF BOARDS** 38mm thick MDF boards including a MDF door including three vertical partitions with central having lockable shelves	M^2	12		
TOTAL ELEMENT NO.3 WALLING CARRIED TO SUMMARY.					

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	ELEMENT NO. 4				
	ROOFING.				
	Structural timbers; sawn cypress; pressure impregnated.				
	The following in 12NO. double pitch trusses; 7000mm clear span; including hoisting and fixing in position approx. 3000mm above ground floor; including all necessary jointing				
A	100 x 50mm rafters	LM	328		
B	100x50mm tie beam	LM	520		
C	100x50mm king post	LM	83		
D	Ditto struts and ties	LM	582		
E	100x50mm wall fixed with hoop iron straps at 1.0m centers cast in concrete.	LM	70		
F	75x50mm purlins	LM	343		
G	200 x 25mm chamfered and tapered cypress facial board	LM	130		
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	130		
	COVERING				
	Pre-painted galvanizedbox profile sheeting as resin cot or other equal and approved manufacturer.				
I	Gauge 30 G.C.I. roofing sheets.	SM	380		
J	Ditto half round ridge capping and valleys	LM	126		
	TRANSPARENT SHEETS				
K	Supply and fix semi bat deterrent sheets to approval	SM	12		
	Gutters				
L	Supply and fix semi circular pvc gutters complete with all accessories and down pipes to approval	LM	72		
TOTAL FOR ROOFS CARRIED TO MAIN SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	ELEMENT NO. 5 **DOORS** **METAL WORK – PURPOSE-MADE UNITS** **Mild steel casement doors;50x50x3mm thick frame pegged to concrete or block work with 100mm long fish tail 25 x 25x 2mm thick angle section,40 x 40x3mm 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**				
A	Double door; 1300 x 2400mm high, including 3 pairs 150mm long purpose made hinges; and 2No. 300mm aluminium D handle (m/s); all welded.	NO	3		
B	Single door; 900 x 2400mm high, including 3 pairs 150mm long purpose made hinges; and 2No. 300mm aluminium D handle (m/s); all welded.	NO	2		
	Flush door; B.S 459 part 2 solid core; 36mm thick internal quality wood facing both sides; hardwood lipping sides and panel type.panels in filled with glazing(m/s)				
C	Single door; 45mm thick; size 900 x 2000mm high.	NO	17		
D	Single mdf doors 800x2000mm high	NO	1		
	Wrot cypress timber as described				
E	150mm x 50mm frame rebated; once times moulded	LM	134		
F	40 x 15mm Architrave	LM	134		
G	20 Quadrant	LM	134		
TOTAL FOR DOORS CARRIED TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	IRON MOGERY **Supply and fix the following iron mongering screw to match (Ref is to union dialogue or other equal and approved)Softwood or the like with matching screws**				
A	Three levers rebated mortise lock as complete with furniture.	NO	4		
B	Ditto but two lever	NO	14		
C	100mm butt hinges	PRS	27		
	PAINTING AND DECORATING Three coats ; aluminium wood primer; to crown solo or other equal and approved to				
D	wood surfaces of girth 100- 200mm	LM	134		
	One undercoat; two coats gloss finish oil paint; crown solo; paints or equal and approved metal surfaces				
F	300mm girth.	M^2	24		
G	300mm girth but clear varnish to wooden surfaces	M^2	82		
	GLAZING				
H	Glass in openings set; clear 4mm thick to metal putty 0.10-0.50mm and with wooden beads to wooden doors	M^2	6		
	CARRIED TO COLLECTION				
	COLLECTION From Page LP/07 From Page above				
TOTAL FOR DOORS CARRIED TO SUMMARY					

ITEM	DESCRIPTION	QTY	UNIT	RATE	SHS. CTS
	ELEMENT NO.6				
	WINDOWS				
	Wrot cypress				
A	150 x 25mm Thick board; bull-nosed ledges; 25 x 25mm bearer; plugged; countersunk and flush pelleted	LM	31		
B	15 x 15mm Quadrant bead	LM	31		
	METAL WORK				
	Purpose made units				
	Mild steel; ks 02-18 neat cut and welded; all welds ground smooth and to even surfaces				
	Casement windows; standard metal casement ; section comprising of standard z-section forming, burglar proofing flat bars, transoms, mullions, permanent ventilators, comprising t-bars, gauze and 6G sheet metal hood, 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 cill; bedding in cement sand (1:3) mortar; pointing round frames easing, oiling adjusting opening lights on completion.				
C	Window overall size 1500 x 1500mm; 2NO. openable and 2NO. fixed ends each size 450 x 1500mm high	NO	15		
D	Window overall size 1500 x 1200mm; 2NO. openable and 2NO. fixed ends each size 450 x 1500mm high	NO	3		
E	Window overall size 300 x 500mm; with upper openable leaf	NO	5		
TOTAL CARRIED TO COLLECTION					

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	CURTAIN RAILS				-
	Supply and fix double brass metal rods including all the rings as below;				-
A	1500mm long	No	18		-
	GLAZING				
B	Glass in openings set; clear 4mm thick to metal putty 0.10-0.50mm	M^2	39		
C	Ditto but obsecure glass size 300x250mm high	No	1		
	PAINTING & DECORATION				
	One undercoat; three coats gloss finish oil paint; to crown solo paints or other equal and approved to				
D	Metal surfaces girth over 300mm	M^2	40		
	CARRIED TO COLLECTION				
	COLLECTION				
	From Page LP/09				
	From Page above				
TOTAL FOR WINDOWS CARRIED TO MAIN SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	ELEMENT NO. 7 FINISHES **FLOOR FINISH** Bedding screed; cement and sand (1:3)				
A	32mm Thick; 1NO coat bed; roughly casted to concrete base (m/s) with ceramic tile finish	M^2	206		
B	300x300x8mm thick ceramic wall tiling of approved colour to urinal	M^2	18		
C	Ramps ; slopping; external	M^2	12		
	INTERNAL WALL FINISHES. **Plaster; 12mm first coat of cement sand (1:4); 3-5mm; steel trowel led**				
D	Concrete or stone walls.	M^2	476		
	PAINTING & DECORATING				
E	Three coats of silk vinyl paint; to crown solo or other equal and approved to Plastered surfaces of girth over 300mm.	M^2	476		
	EXTERNAL WALL				
F	A neat recessed keying; horizontal; in 10mm diameter rod in cement sand mortar (1:3) to external walling	M^2	172		
G	15 mm (minimum) two coat lime plaster with wood floated finish as described to masonry beams	M^2	122		
H	200x300x8mm thick ceramic wall tiling of approved colour to urinal	M^2	32		
	PAINTING AND DECORATIONS				
I	Three coats silk vinyl paint; to crown solo paint or equal and approved to plastered surfaces of girth over 300mm and keys	M^2	109		
TOTAL FOR CARRIED TO COLLECTION					

ITEM	DESCRIPTION	UNIT	QTY	RATE	SHS. CTS
	CEILING FINISH **Sawn cypress as described:-**				
A	50x50mm second grade treated pine; celcured brandering.	LM	1221		
B	12mm thick; set to symmetrical pattern v-joint; fixed to brandering with clout headed nails celotex ceiling fixed into brandering.	M2	224		
C	100 x 25mm thick cornice ; concave moulding; plugged	LM	266		
D	Size 600 x 600; comprising sawn cypress 50 x 50mm joist frame all round; 12mm soft board panel fixed on top of frame with clout and other necessary accessories	NO	2		
	Three coats aluminium primer to crown solo paints r equal and approved to celotex surfaces				
E	Over 300mm girth	M^2	224		
F	0-200mm girth	LM	266		
	.				
	CARRIED TO COLLECTION				
	<u>COLLECTION</u> From Page LP/11 From Page above				
TOTAL FOR FINISHES CARRIED TO MAIN SUMMARY					

ELECTRICAL INSTALLATION WORKS

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Supply, install, test and commission the following:				
	LIGHTING POINTS.				
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	35	NO		
	.				
	SWITCHES.				
B	5A white moulded plate switches mounted 1350mm above FFL as MK or approved equivalent as follows:				
	a) 1 gang1 way	8	NO		
	b) 2 gang2 way	9	NO		
	Lighting fittings.				
C	Complete with energy saving bulbs and tubes of appropriate wattage and colour rendering:				
	a) Security bulkhead lamp	8	NO		
	b) Sphirical ball head	6	NO		
	c) 1200mm batten fluorescent fitting type thorn, Philips.	20	NO		
	d) 30W flood light led fitting	1	NO		
TOTAL CARRIED TO COLLECTION					

TEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	POWER POINTS				
	SOCKET OUTLETS				
A	Socket outlet points wired in 3 x 2.5sq.mm PVC insulated single core cu cables drawn in 25mm PVC Conduits as follows:				
	a) Twin switched	13	NO		
B	13A socket outlet plates mounted 300mm above worktop as Crabtree or approved equivalent, flush mounted.				
	a)Twin switched	13	NO		
C	Multiple circuit breakers				
	a) 10A SP MCB	2	NO		
	b) 20 SP MCB	2	NO		
	c) 32A SP MCB	2	NO		
	d) Blanking plate	0	NO		
D	**EARTHING TO KPLC APPROVAL**				
	a) 300 x 300 x 300mm concrete earthing chamber complete with concrete cover.	1	NO		
	b) Earth rod (16mm dia 1800mm long) with Earth-rod-cable clamp and Driving Head for Earth rod.	1	NO		
	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	5	LM		
TOTAL CARRIED TO COLLECTION					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	INTERNAL POWER DISTRIBUTION.				
A	6way SPN consumer unit with 100A integral isolator as Crabtree or approved equivalent.	1	NO		
	Sub main cables.				
B	Lay 3x16mm^2 PVC/SWA/PVC Sub main copper cable from loop-in box to CU	15	LM		
C	Standard galvanized cable loop-in box c/w 30Atwin cutout and HRC fuse and connection to consumer unit with 25mm diameter pvc	1	NO		
D	16.00mm^2 2-core pvc armored underground cable from meter box/cubicle to the loop in box	50	LM		
	TOTAL CARRIED TO COLLECTION				
	COLLECTION				
1	FROM PAGE EW/01				-
2	FROM PAGE EW/02				-
3	FROM ABOVE				-
TOTAL CARRIED TO COLLECTION					-

MECHANICAL WORKS					
Item	**Description**	**Qty**	**Unit**	**Rate**	**Cost Kshs**
	SANITARY APPLIANCES Supply, deliver, install, test and commission the following sanitary appliances complete with all the accessories including all connections to the services, waste, jointing to water supply overflows, supports and all plugging and screwing to walls and floors. **Note:** (i) All sanitary fittings shall be in approved colour. (ii) The Model and Ref No. indicated is only a guide to the type and quality of fittings. (iii) Equivalent and Approved models may be acceptable.				
A	**Water Closet (WC) Suite** Squatting type WC suite in approved colour complete 9 litre cistern low level with horizontal outlet to BS 3402 . As **Twyfords Galerie Design H.O** or approved equivalent.	2	No.		
C	**Wash hand basin (WHB)** Wash hand basin size 510 x 420mm with one tap holes and chain stay hole, 32mm diameter chrome plated pop up chain waste as cat. No. WF 4330, concealed wall brackets, chrome plated double bip taps as Cobra Ref: 293, and chrome plated bottle trap (32mm 'P' trap) with 75mm seal. The wash hand basin to be as **Twyfords 'Sola 510'** or equal and approved.	4	No.		
	Total carried to collection page				

Item	Description	Qty	Unit	Rate Kshs	Cost Kshs
	FOUL WATER INTERNAL DRAINAGE				
	Supply and fix uPVC soil system to BS 4660 and BS 4515 and MuPVC waste systems to BS 5255 with screwed and socketed joints to BS 21. Solvent welded joints shall be as per the system's manufacturer's written instructions. Tenderers must allow in their pipework prices for all the couplings, clippings, connectors, joints etc. as required in the running lengths of pipework and also where necessary, for pipe fixing clips, holder bats plugged and screwed for the proper and satisfactory functioning of the system.				
	MuPVC and uPVC Waste and Soil pipework				
A	100mm diameter heavy gauge golden brown UPVC pipe	60	Lm		
B	40mm diameter waste pipe	24	Lm		
	Bends				
C	100mm diameter long radius bend	11	No.		
D	100mm diameter sweep bend	11	No.		
E	40mm diameter sweep bend	8	No.		
	Access Caps				
F	100mm diameter access cap	11	No.		
G	40mm diameter access cap	8	No.		
H	Allow for a standard 300 x 300 x 450mm masonry gully trap complete with mild steel cover.	4	No.		
	Weathering Slates and Vent Cowls				
J	100mm diameter vent cowl	2	No.		
	Testing and Commissioning				
K	Allow for testing and commissioning of the plumbing and drainage installations to the satisfaction of the Engineer.	1	Item		
	EXTERNAL DRAINAGE				
L	1000mm radius x 6000mm depth soakpit	1	Item		
M	2500 x 4000 mm septic tank	1	Item		
M	Excavate trench300x 750mm deep lay pipe and back fill to original level	60	Lm		
N	Supply and fix 150mm diameter heavy gauge Umpvc pipe complete with all necessary conectors, bends, tees to drain the waste water to septic tank from sanitation blocks	60	Lm		
	Total carried to collection page				

WATER RETICULATION

Item	Description	Qty	Unit	Rate Kshs	Cost Kshs
	Tenderers must allow in their pipework prices for all flanges couplings, unions, connector joints, reducers, etc. as required in the running lengths of pipe, all fixing clips, and holderbats, plugged and screwed.				
	Excavations				
A	Excavate trench in red soil/murram for small pipe not exceeding 1000mm deep and average 750mm deep, Part return in, fill and surplus cart away.	80	LM		
B	Allow for keeping the excavated trenches free of water either by bailing or by pumping.	1	Sum		
	PPR Pressure Pipework				
C	19mm dia. Ditto	80	LM		
	Extra over PVC pressure Pipework for the following:				
	Bends				
D	19mm diameter bends/elbows	30	No		
	Tees				
E	50mm diameter equal tee	1	No		
F	19mm ditto	12	No		
	Reducers				
G	50x 19mm diameter valve reducing sockets	1	No		
	Valves				
H	50mm diameter high pressure approved pattern brass rising stem fullway gate valve with wheel head and jointing to tubing as “Pegler” or approved equivalent.	1	No		
I	19mm diameter ditto	15	No		
J	19mm bib tap	9	No		
K	Construct manhole for cover size 600mmx450mm complete with fibre cover to the satisfaction of the project manager	6	NO		
	Total carried to Collection Page				

SUMMARY FOR MECHANICAL WORKS

	Page				Cost
1	Total from page 1				
2	Total from page 2				
3	Total from page 3				
	Total Cost for Mechanical works carried to grand summary page				

ITEM	DESCRIPTION	PAGE	AMOUNT
	SUMMARY.		
1	SUBSTRUCTURES	LP/03	
2	SUPERSTRUCTURES	LP/04	
3	WALLING	LP/05	
4	ROOF CONSTRUCTION AND COVERING	LP/06	
5	DOORS	LP/08	
6	WINDOWS	LP/10	
7	FINISHES	LP/12	
8	ELECTRICAL WORKS	EW/03	
9	MECHANICAL WORKS	MW/04	
TOTAL CARRIED TO GRAND SUMMARY			-

ITEM	DESCRIPTION	QTY	UNIT	RATE	SHS. CTS
	PROVISIONAL & PRIME COST SUMS **The contractor shall include in his tender the following to be deducted in whole or part as directed by the project manager**				
	CONTIGENCIES				
A	Allow a provisional sum of Kenya shillings one hundred and fifty thousand(150,000) for contingencies to be deducted in whole or part as directed by the project manager		LS		150,000.00
	PROJECT PUBLICITY				
B	Allow a prime cost sum of Kenya shillings twenty thousand(20,000) for project publicity as directed on site by the project manager		LS		20,000.00
	PROJECT MANAGEMENT				
C	Allow a prime cost sum of Kenya shillings one hundred thousand(100,000) for project supervision, expenses and attendance by the project manager		LS		100,000.00
	BIO DIGESTER				
D	Allow a prime cost sum of Kenya shillings three hundred thousand(300,000) for construction of Medium capacity bio digester to be deducted in whole or part as directed by the project manager		LS		300,000.00
TOTAL FOR PROVISIONAL & PRIME COST SUMS TO GRAND SUMMARY					**570,000.00**

GRAND SUMMARY

BILL NO	DESCRIPTION	FOR CONTRACTOR'S USE (KSH)
1	PARTICULAR PRELIMINARIES	
2	GENERAL PRELIMINARIES	
3	CONSTRUCTION OF ADMINISTRATION BLOCK	
4	PROVISIONAL SUMS - PS/1	
	TOTAL	
	ADD 16% VAT	
	ADD 0.03% PPRA LEVY	
GRAND TOTAL CARRIED TO FORM OF		

Amount in words:……..

……

Tenderer's Signature and stamp.....

Address: .....

Date: .....

Witness's Name: .....

Signature: .....

Description: .....

Address: .....

Date: ....