

REPUBLIC OF KENYA



**MINISTRY OF TRANSPORT, INFRASTRUCTURE,
HOUSING, URBAN DEVELOPMENT & PUBLIC
WORKS
(STATE DEPARTMENT OF PUBLIC WORKS)**

**PROPOSED CONSTRUCTION OF ADMINISTRATION
BLOCK AT MAI-AI-HII POLICE POST**

TENDER NO:

BILL OF QUANTITIES

DIRECTOR-COUNTY PUBLIC WORKS
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JUNE,2021



PROPOSED CONSTRUCTION OF ADMINISTRATION BLOCK AT MAI-AI-HII
POLICE POST

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<p>PROPOSED CONSTRUCTION OF 7 DOOR ADMINISTRATION BLOCK AT MAI-AI-HII POLICE POST.</p> <p>ELEMENT NO. 1 - SUBSTRUCTURES</p> <p><u>Reinforcement to BS 4449:1997 , Grade 460B high strength type 2 ribbed bars with proof stress of 460 N/mm2</u></p> <p><u>All concrete to be from OPC cement Power Plus 42.5 , to SE approval</u></p> <p><u><i>Site Clearance</i></u></p> <p>A Clear site of all grass, hedges, shrubs, bushes grub up roots, load and remove from site and dispose at designated local authority areas. SM 154</p> <p>B Allow for maintaining and upholding sides of excavation clear of all fallen materials, rubbish etc Item</p> <p>C Allow for keeping the whole of the excavation free from general water Item</p> <p><u><i>Excavations</i></u></p> <p><u><i>Excavations to include cutting to slope, strutting and shoring, stockpiling and keeping same free from all fallen materials, mud and water by pumping ,bailing or otherwise</i></u></p> <p><u><i>Oversite excavations</i></u></p> <p>D Excavate oversite average 150mm deep to remove vegetable top soil, wheel and deposit on site as directed SM 154</p> <p>E Excavate for Strip foundations depth not exceeding 1.5 metres deep, starting from reduced level CM 94.5</p>				
	TOTAL CARRIED TO COLLECTION				

PROPOSED CONSTRUCTION OF ADMINISTRATION BLOCK AT MAI-AI-HII
POLICE POST

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
A	Extra over excavations for excavating in rock <i>Disposal</i>	CM	5		
B	Load, wheel and deposit surplus excavated material away from site	CM	60		
C	Retun fill and Ram excess excavated materials <i>Hardcore or other approved filling, as described</i>	CM	23		
D	300mm Thick handpacked well compacted hardcore <i>Anti - termite to treatment</i>	CM	46.2		
E	Chemical anti-termite treatment, executed complete by an approved specialist under a ten-year guarantee, to surfaces of hardcore <i>Damp-proof membrane</i>	SM	117		
F	1000 gauge polythene damp-proof membrane, laid over blinded hardcore (measured separately) with 300mm side and end laps (measured nett- allow for laps) <i>Blinding</i>	SM	117		
G	50mm thick murrum blinding under floor slab sloping or otherwise	SM	117		
H	Plain concrete class 10 in 50mm blinding under strip footing	SM	63		
TOTAL CARRIED TO COLLECTION					

PROPOSED CONSTRUCTION OF ADMINISTRATION BLOCK AT MAI-AI-HII
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ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>Reinforced concrete class 20, as described in:-</u>				
A	150mm thick concrete base slab	SM	117		
B	200mm thick foundation strip	CM	13		
	<u>Reinforcement, as described High yield square twisted reinforcement to BS 4461:</u>				
B	Assorted Reinforcement	Kg	1170		
	<u>Mesh fabric reinforcement to B.S 4483 and setting in concrete with 300mm side and end laps (measured nett-allow for laps).</u>				
C	Fabric ref. A142 in surface	SM	117		
	<u>Sawn formwork, as described, to:-</u>				
D	Edges of base Slab over 75mm but not exceeding 150mm wide	LM	43		
	<u>WALLING</u>				
E	200mm Thick natural stone walling jointed in cement sand mortar mix 1:4 and reinforced with hoop iron every alternate course	SM	158		
	TOTAL CARRIED TO COLLECTION				

PROPOSED CONSTRUCTION OF ADMINISTRATION BLOCK AT MAI-AI-HII
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ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>Three coat external render (1:4) with a woodfloat</u>				
A	12mm to walls	SM	13		
	<u>Three coats black bitumastic paint on:</u>				
B	Rendered walls	SM	13		
	TOTAL CARRIED TO COLLECTION				
	COLLECTION				
	Total Carried from page 1				
	Total Carried from page 2				
	Total Carried from page 3				
	Total Carried from above				
	TOTAL CARRIED TO SUMMARY				

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ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>ELEMENT - 2</u> <u>REINFORCED CONCRETE SUPERSTRUCTURE</u>				
A	Ringbeams	CM	6.3		
B	Columns	CM	1		
	<i><u>Reinforcement, as described High yield square twisted reinforcement to BS 4461:</u></i>				
C	Assorted Reinforcement	Kg	657		
	<i><u>Sawn formwork, as described, to:-</u></i>				
D	Sides and soffites of beams	SM	84		
	TOTAL CARRIED TO SUMMARY				

PROPOSED CONSTRUCTION OF ADMINISTRATION BLOCK AT MAI-AI-HII
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ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<p><u>ELEMENT NO 3</u> <u>WALLING</u></p> <p><i><u>Natural quarry Machine Dressed walling bedded, bonded and jointed in cement, sand (1:3) mortar reinforced as necessary with hoop irons at every alternate course:allow for horizontal recessed keying</u></i></p>				
A	200mm thick External Walling	SM	111		
B	200mm thick Internal Walling	SM	148		
C	Ditto gable walling	SM	22		
	TOTAL CARRIED TO SUMMARY				

PROPOSED CONSTRUCTION OF ADMINISTRATION BLOCK AT MAI-AI-HII
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ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>ELEMENT NO 4- DOORS</u>				
	<u>steel doors</u>				
	<i><u>Supply and fix the following purpose made 30 by 4 mm thick ' Z ' and ' T ' section steel casement doors; 16 fixed lights size 300 by 300 mild steel plates, 3mm thick 50mm PV with 2 layers of land 5mm mosquito gauze complete with approved steel locks and fixing to masonry.</u></i>				
A	Door size 1200 x 2100 mm	NO	1		
	Door size 900 x 2100 mm	NO	6		
	<u>Glazing</u>				
B	6mm thick clear sheet glass panes over 0.1 but not exceeding 0.5 square meters; fixing with putty.	SM	2		
	<u>Painting and Decorations</u>				
	<u>Prepare and apply three coats oil paint full gloss to crown solo or others equal and approved to;</u>				
C	General surfaces of metal door both internal and externally	SM	5		
	<u>Wrot celcured cypress framed frames and framing</u>				
A	150x50mm; 2 no.Labours plugged door frame	LM	5.0		
B	40x25mm weathered architrave	LM	5.0		
C	25mm rounded quadrant	LM	5.0		
	<u>45mm Thick semi-solid core flush doors veneered boh sides with first quality plywood and lipped on all edges in</u>				
D	Door size 900x2100mm high	NO	1.0		
	<u>IRONMONGERY</u>				
	<u>Supply and fix the following ironmongery with screws to match.</u>				
E	3-lever mortice lock as complete with lever furniture.	NO	1.0		
F	100mm steel butt hinges with steel screws	Prs	2.0		
G	Rubber door stop fixed to concrete floor or masonry walling with and including 38mm rawl bolt	NO	7		
	TOTAL CARRIED TO SUMMARY				

PROPOSED CONSTRUCTION OF ADMINISTRATION BLOCK AT MAI-AI-HII
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ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<p><u>ELEMENT NO. 5- WINDOWS</u> <u>MILD STEEL WINDOW FRAMES</u></p> <p><i>Supply and fix the following purpose made mild steel casement small panes (maximum size 200 x 300 mm), burglar proofed with standard "Z" section framing including all coupling mullions etc and complete with polished brass handles, peg stays and other ironmongery; factory primed with red oxide primer including cutting and pinning fixing lugs to concrete or masonry work jambs; bedding in cement and sand (1:3) mortar, pointing all round frames in mastic, greasing, oiling and adjusting opening lights on completion all in accordance with the Architect's window schedule</i></p>				
A	<p>Window size 1500 x 1500mm</p> <p><u>Window cill</u></p>	NO	6		
B	<p>250 x 50mm thick machine cut stone window cill throated and bedded in cement and sand (1:3) mortar to racked external</p> <p><u>Glazing</u> <u>4mm Clear sheet glass and glazing to metal windows including fixing with approved putty</u></p>	LM	9		
B	<p>In panes not exceeding 0.10 square metres</p>	SM	14		
C	<p><u>Painting and Decorations</u></p> <p><u>Prepare and apply three coats oil paint full gloss to crown solo or others equal and approved to;</u></p> <p>General surfaces of metal Windows</p>	SM	28		
	TOTAL CARRIED TO SUMMARY				

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ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>ELEMENT NO. 6- FINISHES</u>				
	<u>External wall finishes</u>				
	<u>Keying</u>				
A	Key Pointing with cement and sand screed(1:3) to achieve recessed horizontal joints and vertical joints.	SM	133		
	<u>Render; 18mm thick, 1 NO. coatwork,9mm first coat of cement sand (1:6) 3mm second coat of cement and lime putty (1:10) steel trowelled.</u>				
B	Beams; Columns; external	SM	32		
	<u>Painting and Decoration</u>				
	<u>Prepare and apply coats of first quality plastic emulsion paint to;</u>				
C	Beams; Columns; external	SM	32		
	<u>Internal wall finishes</u>				
	<u>Plaster work</u>				
	<u>12mm (minimum) two-coat lime plaster, with steel trowelled finish including anticracking mesh where necessary to joints as described to:-</u>				
D	Stone walls /concrete surfaces	SM	429		
	<u>Painting and decorating</u>				
	<u>Prepare and apply three coats silk vinyl matt emulsion paint or other and approved</u>				
E	Plastered walls and beams	SM	429		
TOTAL CARRIED TO COLLECTION					

PROPOSED CONSTRUCTION OF ADMINISTRATION BLOCK AT MAI-AI-HII
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ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>FLOOR FINISHES</u>				
A	12mm thick plaster (1:3) with steel trowelled finish to receive ceramic tiles <u>Ceramic tiles</u> <u>Supply and fix approved coloured non-slip ceramic floor tiles including bedding, bonding, jointing with cement grout pointing in stained cement laying to falls where necessary</u>	SM	117		
B	300 x 300mm ceramic floor tiles	SM	117		
C	100 high x 25mm thick ceramic skirting	LM	145		
	<u>Paving slab</u>				
D	600x600x50mm thick precast concrete paving slabs bedded and jointed in cement and sand (1:4) mortar laid on 50mm thick sand bed and including all excavations.	SM	28		
	Total carried to collection				
	<u>COLLECTION</u>				
	Total carried from page 9				
	Total carried from above				
	TOTAL CARRIED TO SUMMARY				

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ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<p><u>ELEMENT NO. 7 - ROOFING</u> <u>(All Provisional)</u> <u>The following in roof trusses with and including bolted connections including hoisting and fixing in position not exceeding 6.0 metres above ground floor level.</u> <u>In sawn celcure treated cypress Grade 2:</u></p>				
A	100 x 50mm Tie beam	LM	120		
B	100 x 50mm Rafters	LM	144		
C	75 x 50mm ties/struts	LM	122		
D	100 x 50mm Kingpost	LM	25		
	<p><u>Other roof members</u> <u>In sawn celcure treated cypress Grade 2:</u></p>				
E	50 x 50mm purlins	LM	158		
F	150 x 50mm Ridge board	LM	27		
G	100 x 50mm wall plate fixed with and including 200mm long 10mm diameter rag bolts cast into beam at 1200mm centres	LM	46		
	<p><u>In mild steel</u></p>				
H	etc	Item			
	<p><u>In wrot cypress - prime grade</u></p>				
J	200 x 25mm Fascia/verge board	LM	50		
	<p><u>Roof covering</u></p> <p><u>Prepainted galvanised IT 5 gauge 28 profile sheets complete with approved washers, j-bolts, caps, plastic washers etc, including all necessary curvatures, hoisting, placing and connection: (measured nett, bidder to include for laps)</u></p>				
K	Roof covering curved to match existing	SM	158		
L	Ditto hip cap, 300mm wide	LM	14		
	TOTAL CARRIED TO COLLECTION				

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ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>24 Gauge pressed steel shaped as required</u>				
A	150 x 150mm deep box gutter including joints in running length fixed to outside of fascia board with and including brackets at rafter centers	LM	27		
B	150 x 150mm downpipe fixed with and including mild steel holderbats plugged and screwed to walls	LM	6		
C	Extra over swan neck	NO	2		
D	Ditto shoe	NO	2		
	<u>CEILING FINISHES</u>				
	<u>Suspended ceiling</u>				
E	15mm thick chipboard ceiling nailed to and including 50x50mm branderling at 600mm centres.	SM	117		
F	Cornice to Architect's approval	LM	145		
H	Three coats of first quality interior painting as approved by the project manager on the ceiling surfaces	SM	117		
	Carried to Collection				
	<u>COLLECTION</u>				
	<i>From page 11</i>				
	<i>From above</i>				
	TOTAL CARRIED TO SUMMARY				

PROPOSED CONSTRUCTION OF ADMINISTRATION BLOCK AT MAI-AI-HII
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ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	SUBSTRUCTURE				
2	R.C STRUCTURE				
3	WALLS				
4	WINDOWS				
5	DOORS				
6	FINISHES				
7	ROOFING				
TOTAL CARRIED TO GRAND SUMMARY					

PROPOSED CONSTRUCTION OF ADMINISTRATION BLOCK AT MAI-AI-HII
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ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>ELEMENT NO. 3 - P.C SUMS</u>				
A	Allow a provisional sum of kenya Shillings One hundred thousand (Kshs 100,000) only for contingencies.	ITEM			100,000.00
B	Allow a provisional sum of kenya Shillings One hundred and fifty thousand (Kshs 150,000) only for electrical work.	ITEM			150,000.00
C	Allow a provisional sum of kenya Shillings Two hundred thousand (Kshs 200,000) only for project management.	ITEM			200,000.00
D	Allow a provisional sum of kenya Shillings Two hundred thousand (Kshs 200,000) only for office furnitures.	ITEM			200,000.00
	TOTAL CARRIED TO SUMMARY				450,000.00
	<u>GRAND SUMMARY</u>				

PROPOSED CONSTRUCTION OF ADMINISTRATION BLOCK AT MAI-AI-HII
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ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	PRELIMINARIES				
2	BUILDER'S WORK				
3	PROVISIONAL SUMS				
TOTAL CARRIED TO TENDER DOCUMENT					

AMOUNT IN WORDS.....

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TENDERER'S NAME.....

ADDRESS.....

SIGNATURE.....

OFFICIAL STAMP.....

DATE.....

NAME OF WITNESS.....

SIGNATURE.....

DATE.....