

Item No.	Description	Unit	Quantity	Rate	Kshs.	Cts.	
	<p><u>KENYA WILDLIFE SERVICE</u> <u>PROPOSED CONSTRUCTION OF FENCE GUARDPOST</u> <u>GATUNDIA, MACKENZIE AND RWATHIA</u> <u>ALONG RUMURUTI/MARMANET FOREST FENCE</u> <u>LAIKIPIA COUNTY</u></p> <p><u>Element No. 1</u> <u>Substructures (All Provisional)</u></p> <p><u>Site Preparation</u></p> <p>A. Clear site of shrubs, grass small trees of girth not exceeding 600mm and grub roots and remove debris from site as directed by the engineer</p> <p>B. Cut down trees of girth 600-900mm; cut the tree into logs and grub up all roots and remove the arising materials from site; set the logs aside for future use by the client.</p> <p>C. Excavate vegetable soil 200 mm (average) Deep: spread on site as directed</p> <p>D. Excavate to reduce levels n.e 300mm deep from stripped levels</p> <p>E. Excavate foundation trench not exceeding 1.50 metres deep from reduced level</p> <p>F. Extra over all excavations for excavating in rock</p> <p><u>Disposal of excavated materials</u></p> <p>G. Backfill and compact selected excavated materials</p> <p>H. Spread surplus excavated materials on site as may be directed by the project manager</p> <p><u>Planking and strutting</u></p> <p>I. Planking and strutting to sides of excavations</p>						
	Total carried to collection				Kshs.		

Item No.	Description	Unit	Quantity	Rate	Kshs.	Cts.
	<u>Disposal of water:</u>					
A	Keep trenches free from all water Keep excavations free from all fallen materials		Item			
	<u>Hardcore fillings</u>					
B	300mm Thick well compacted Hardcore Fillings: levelled and compacted in 150 mm layers	SM	52			
C	Gladiator "TC" or any other equal and approved chemical anti-termite treatment to subsoil filling and trench bottoms.	SM	52			
	<u>Murram blinding</u>					
D	50 mm fillings as blinding to hardcore : levelled and compacted	SM	52			
	<u>Insitu concrete : Mix 1:3:6</u>					
E	50 mm blinding : under strip foundations	SM	37			
	<u>Insitu concrete : Mix 1:2:4 : Vibrated reinforced</u>					
F	Foundations in trenches	CM	6			
G	100 mm Thick beds	SM	61			
	<u>High tensile reinforcement to BS 4461 incl. Cutting to lengths,bending, twisting and fixing.include all necessary wires and spacing blocks</u>					
H	Assorted bars	Kg.	600			
	<u>Mesh fabric reinforcement to BS 4483: Square mesh reference A142 : weighing 2.22 kilogrammes per square metre</u>					
I	In beds : 200 mm laps	SM	61			
	<u>Formwork : to</u>					
J	Vertical : sides of foundations	SM	30			
Total carried to collection				Kshs.		

Item No.	Description	Unit	Quantity	Rate	Kshs.	Cts.
A	Vertical : edges of beds over 75 but not exceeding 150 mm wide <u>Undressed masonry walling: laid in cement mortar (1:4): and including hoop iron reinforcement in every alternate course</u>	LM	34			
B	200 mm Walls <u>Damp proof courses : bituminous felt bedded in cement mortar (1:4) : 300 mm laps</u>	SM	78			
C	Horizontal : 200 mm wide <u>Labours and sundries</u>	LM	50			
D	Single layer 1000 gauge damp proof membrane : 200 mm laps <u>12 mm cement and sand (1:4) render: on concrete or blockwork to:</u>	SM	61			
E	Plinths <u>Prepare and apply two coats bituminous paint : on render : to</u>	SM	15			
F	Plinths <u>Paving slab surround</u>	SM	15			
G	Pre-cast concrete (1:2:4) in paving slabs size 600x600x50mm thick laid on consolidated sand bed jointed in cement sand mortar (1:4)	SM	30			
	Carried to Collection					
	<u>Collection</u>					
	From page 1					
	From page 2					
	From page 3 (above)					
	Total carried to Summary				Kshs.	

Item No.	Description	Unit	Quantity	Rate	Kshs.	Cts.	
	KENYA WILDLIFE SERVICE PROPOSED CONSTRUCTION OF FENCE GUARDPOST GATUNDIA,MACKENZIE AND RWATHIA ALONG RUMURUTI/MARMANET FOREST FENCE LAIKIPIA COUNTY						
	Element No. 2 Walling <u>Insitu concrete : Mix 1:2:4 : Vibrated reinforced</u>						
A.	Beams	CM	3				
	<u>High yield square twisted reinforcement including cutting to lengths, bending twisting and fixing, including all necessary tying wires and spacing blocks, mild steel bars to B.S. 4449:-</u>						
B	Assorted	Kg	300				
	<u>Formwork to:</u>						
C	Sides and soffits : beams	SM	54				
	<u>medium chisel dressed masonry wall: laid in cement mortar (1:4): and including hoop iron reinforcement in every alternate course</u>						
D	200 mm Walls	SM	119				
	<u>Labours and sundries</u>						
E	Labour and materials for eaves filling 300mm high to 200mm thick walls	LM	22				
F	Fair raking	LM	14				
	<u>Vents</u>						
G	100 mm Diameter x 300 mm long pvc pipe sleeve: grouted into walling : mosquito gauze set into both ends: coffee tray wire reinforced	NO	16				
	Total carried to Summary				Kshs.		

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	Element No.3 Roof						
	<u>Roof coverings</u>						
A.	28 gauge prepainted (forest green colour) corrugated iron sheets with one corrugation side lap and 75mm wide end lap fixed onto purlins (M/S) with and including approved nails and washers	SM	110				
B.	Pre-painted gauge 28 roof cap fixed with and including roofing nails to match roof	SM	11				
	<u>Roof Construction:</u>						
	<u>The following in sawn cell cured treated cypress roof trusses; hoisting and placing 3.0 metres above the ground level: Roof trusses fixing to include approved plates; making holes and fixing bolts and nuts as per Engineers detail</u>						
C.	100x50 mm Rafters	LM	49				
D.	150x50 mm Ridge board	LM	22				
E.	75x50 mm Purlins	LM	66				
F.	100x50mm wall plate fixed onto blockwork with approved bolts and nuts as per Engineers detail	LM	22				
	<u>Wrot Cypress, Selected and kept clean</u>						
	<u>fascias and barge boards</u>						
G.	250x25 mm Fascia or barge board with splayed wading joints	LM	39				
	Total carried to Collection				Kshs.		

Item No.	Description	Unit	Quantity	Rate	Kshs.	Cts.
	<u>Rainwater goods</u>					
	<u>24 Gauge galvanised mild steel sheet rainwater goods with lapped, rivetted and soldered joints or seams including all labours</u>					
A	150 mm Diameter half round eaves gutter: 25x6 mm: M.S brackets screwed to fascia at 600 mm centres	LM	25			
B	Extra for stopped end	NO	4			
C	Extra for 100 mm drop nozzle	NO	2			
D	100 mm Diameter rainwater down pipe : fixed with M.S brackets to concrete or block work and including 225x150x25 mm hardwood blocks chamfered all round and plugged and screwed to walling generally at 1.50 metre centres	LM	6			
E	<u>Extra</u> for bend	NO	2			
F	<u>Extra</u> swan neck projections	NO	2			
G	<u>Extra</u> for shoe	NO	2			
	<u>Knot, prime, stop and apply one coat undercoat and twos coat gloss finishing paint on woodwork</u>					
H	Fascia and barge board: Girth 200-300 mm	LM	25			
	<u>Prepare, touch up primer and apply one undercoat and two coats gloss finishing paint on metalwork</u>					
I	Large pipes	SM	2			
J	150 mm diameter half round gutter	SM	5			
	Total carried to Collection			Kshs.		

Item No.	Description	Unit	Quantity	Rate	Kshs.	Cts.
A	<p><u>Plastic Tank</u></p> <p>Supply and install 2300 litres capacity cylindrical vertical "Kentank" model CV -232c: 1550mm diameter 1520mm height: As manufactured by Kentainers ltd, of P.O BOX 42168 NRB. TEL: (02) 823513-6: Including fixing inlet and lockable outlet taps in accordance with manufacturers instructions</p> <p><u>Circular tank platform:</u> <u>150mm concrete class 15 strip foundation:</u> <u>150mm solid concrete blockwork walling</u> <u>500mm high above existing ground level</u> <u>enclosure to all sides rendered externally:</u> <u>350 mm thick compacted hardcore</u> <u>infill: 100mm thick concrete class 15</u> <u>base slab : laid on 50mm thick murram</u> <u>blinding: BRC A-142 reinforcement</u></p>	No.	2			
B	2000mm diameter tank platform	No.	2			
	Carried to Collection					
	<u>Collection</u>					
	From page 5					
	From page 6					
	From page 7- Above					
	Total carried to Summary				Kshs.	

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	<u>KENYA WILDLIFE SERVICE</u> <u>PROPOSED CONSTRUCTION OF FENCE GUARDPOST</u> <u>GATUNDIA,MACKENZIE AND RWATHIA</u> <u>ALONG RUMURUTI/MARMANET FOREST FENCE</u> <u>LAIKIPIA COUNTY</u>						
	Element No.4 Windows						
	<u>Burnt clay window cill</u>						
A.	150x150x20mm mm cill : weathered and throated :bedded and jointed in matching cement mortar (1:4) :pionted in mastic	LM	8				
	<u>Supply and fix the following;</u> <u>Mild steel : one coat red oxide primer before erection</u>						
	<u>Composite purpose made steel windows : fixed to concrete or blockwork with lugs plugged: brass ironmongery: bedded and pointed all round in mastic: burglar proofing: as per Engineers detail's:</u>						
B	Window size 1500x1200 mm high overall	NO	4				
C	Window size 450x600 mm high overall	NO	2				
	<u>Glazing</u>						
	<u>5 mm clear sheet glass and glazing: to metal with approved putty</u>						
D	In panes: over 0.1 but not exceeding 0.50 square metres	SM	6				
E	Ditto obscure Sheet glass	SM	1				
	<u>Pelmet boxes: softwood: selected and kept clean</u>						
F	150x25 mm top	LM	8				
G	150x25 mm fascia : two labours	LM	8				
H	Extra for stopped ends	NO	12				
	Total carried to collection				Kshs.		

Item No.	Description	Unit	Quantity	Rate	Kshs.	Cts.
	<u>General joinery: cypress or equal approved: selected and kept clean</u>					
A	50x20 mm bearers : plugged	LM	12			
	<u>Curtain tracks</u>					
B	Brass "I" section track screwed to pelmets (measured seperately): rollers: end stops: laps	LM	12			
	<u>Prepare, touch up primer and apply one undercoat and two coats gloss finishing paint : on metal</u>					
C	Windows: general surfaces	SM	12			
	<u>Prepare and prime before fixing on wood</u>					
D	Bearers : not exceeding 100 mm girth	LM	8			
	<u>Prepare and knot coated surfaces: prime and apply one undercoat and two coats gloss finishng paint : on wood</u>					
E	pelmets : general surfaces	SM	12			
	Carried to collection					
	<u>Collection</u>					
	From page 8					
	From page 9 (Above)					
	Total carried to Summary				Kshs.	

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	<p><u>KENYA WILDLIFE SERVICE</u> <u>PROPOSED CONSTRUCTION OF FENCE GUARDPOST</u> <u>GATUNDIA,MACKENZIE AND RWATHIA</u> <u>ALONG RUMURUTI/MARMANET FOREST FENCE</u> <u>LAIKIPIA COUNTY</u></p> <p>Element No. 5 Doors</p> <p><u>Mild steel: K.S. 02-18</u></p> <p><u>custom made steel door : 50x50x3mm</u> <u>SHS framing and intermediate rails,</u> <u>ends welded and angles cut, mitred and</u> <u>welded: 1.5mm thick metal sheet cladding</u> <u>welded to both faces: all welding ground to</u> <u>smooth finish: Puropse made hinges per leaf</u> <u>3-lever mortice locks: locking cleats and</u> <u>bolt: guides: padlock eye: All as per</u> <u>Architects detail's:</u></p>					
A	Door size 900 x 2400 mm high overall	NO	2			
B	Ditto double door size 1500x 2400 high overall in two equal leaves	NO	2			
	<u>Flush doors: solid cored</u>					
C	45 mm thick door size 850x2050 mm high: faced both sides with imported quality veneer : hardwood lipped all edges	NO	2			
	<u>Frames and linings : softwood : selected and kept clean</u>					
D	100x50 mm frame : plugged	LM	11			
E	20x20 mm Architrave : ditto	LM	11			
F	Ditto quadrant	LM	11			
	Total carried to collection				Kshs.	

Item No.	Description	Unit	Quantity	Rate	Kshs.	Cts.
	<u>Ironmongery</u>					
	<u>Supply and fix the following to wood with matching screws</u>					
A.	100 mm pressed steel butt hinges	Prs	3			
B.	5-lever mortice lock with lever handles	NO	2			
C.	3-lever mortice lock with lever handles	NO	2			
D.	Rubber door stop : rawl bolted to concrete	NO	8			
	<u>Prepare and prime before fixing on wood</u>					
E	Frames : not exceeding 100 mm girth	LM	11			
F	Architraves : ditto	LM	11			
G	Ditto quadrant	LM	11			
	<u>Prepare, touch up primer and apply one undercoat and two finishing coats gloss paint : on metal</u>					
H	Doors general surfaces	SM	23			
	<u>Knot, prime, stop and apply three coats crown alkyd clear polyurethane varnish wood:</u>					
I	Doors general surfaces	SM	9			
J	Frames : over 100 but not exceeding 200 mm girth	LM	11			
K	Architraves : not exceeding 100 mm girth	LM	11			
L	Ditto quadrant	LM	11			
	<u>Prepare, touch up primer and apply one undercoat and two finishing coats gloss paint : on metal</u>					
M	Doors general surfaces	SM	26			
	Total carried to collection				Kshs.	

Item No.	Description	Unit	Quantity	Rate	Kshs.	Cts.
	<p><u>Collection</u></p> <p>From page 10</p> <p>From page 11</p>					
	Total carried to Summary				Kshs.	

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	<p><u>KENYA WILDLIFE SERVICE</u> <u>PROPOSED CONSTRUCTION OF FENCE GUARDPOST</u> <u>GATUNDIA, MACKENZIE AND RWATHIA</u> <u>ALONG RUMURUTI/MARMANET FOREST FENCE</u> <u>LAIKIPIA COUNTY</u></p> <p>Element No.06 External Finishes</p> <p><u>Wall finishes</u></p> <p><u>12 mm cement and sand (1:4) render :</u> <u>wood floated : on concrete or blockwork</u> <u>to</u></p>					
A.	Beams	SM	8			
B	Gable end walling	SM	6			
	<u>Painting</u>					
C	Beams	SM	10			
D	Gable end walling	SM	6			
	<u>Pointing</u>					
E	Recessed horizontal and flush vertical joints: external wall finish pointed in cement sand mortar 1:4	SM	81			
F	<u>Extra over</u> wire brushing and dusting to key pointed masonry wall surfaces and random rubble	SM	81			
	Total carried to summary				Kshs.	

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	<u>KENYA WILDLIFE SERVICE</u> <u>PROPOSED CONSTRUCTION OF FENCE GUARDPOST</u> <u>GATUNDIA, MACKENZIE AND RWATHIA</u> <u>ALONG RUMURUTI/MARMANET FOREST FENCE</u> <u>LAIKIPIA COUNTY</u>						
	Element No. 7 Internal Finishes Floor finishes						
	<u>Cement and sand (1:4) screed: steel trowelled on concrete : red oxide admixture.</u>						
A.	40 mm thick: floor screed with green oxide admixture	SM	52				
B.	Ditto 100mm wide skirting	LM	47				
	<u>300x300x7.5 mm glazed ceramic floor tiles: on cement and sand backing(m/s) : bedded and jointed in cement mortar (1:4) : pointed in matching cement</u>						
C.	Floors	SM	5				
D.	Extra for fair edges	LM	10				
	<u>Cement and sand (1:4) screed: steel trowelled on concrete : to receive tiles m/s</u>						
E.	50 mm floors	SM	5				
	<u>Wall finishes</u>						
	<u>300x200x6 mm coloured glazed tiles: on cement and sand backing (m/s) : bedded in cement mortar (1:4) : pointed in white cement and sand backing (m/s) : bedded</u>						
F.	Walls	SM	27				
G.	Extra for fair edges	LM	8				
	<u>12 mm cement and sand (1:4) backing</u>						
H.	Walls : finished to receive tiles	SM	27				
I.	Matching plastic edge trims	LM	40				
	Total carried to Collection				Kshs.		

Item No.	Description	Unit	Quantity	Rate	Kshs.	Cts.
A	<u>12 mm cement and sand (1:4) plaster : steel trowelled : on blockwork to</u> Walls: internally	SM	127			
B	<u>Prepare and apply one undercoat and two finishing coats hard gloss paint : on plaster to</u> Walls	SM	127			
C	<u>Ceiling finishes</u> <u>General joinery : cypress: pressure impregnated with tanalith "C" or equal</u> Skeleton framework to ceilings: 50x50 mm one direction at 600 mm centres and 50x100 mm other direction at 1200 mm centres	SM	52			
D	<u>chipboard : nailed to branderings (Measured seperately)</u> 9mm ceiling linings	SM	52			
E	Extra over for access trap door size 800x800 mm overall : framing all round	NO	1			
F	75x20 mm Cornice : plugged	LM	50			
G	<u>Knot, prime, prepare and Prepare one undercoat and two finishing coats plastic emulsion paint to</u> ceiling linings	SM	52			
H	Cornice: not exceeding 100 mm girth	LM	50			
	Carried to collection					
	Collection					
	From page 14					
	From page 15(Above)					
	Total carried to Summary				Kshs.	

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	<p><u>KENYA WILDLIFE SERVICE</u> <u>PROPOSED CONSTRUCTION OF FENCE GUARDPOST</u> <u>GATUNDIA,MACKENZIE AND RWATHIA</u> <u>ALONG RUMURUTI/MARMANET FOREST FENCE</u> <u>LAIKIPIA COUNTY</u></p> <p>Element No.08 Fixtures and Fittings</p> <p><u>25mm thick blockboard with first quality mahogany veneer facing on both faces: hardwood lipping on all exposed edges</u></p> <p><u>Concrete worktop</u></p>					
A	2100mm long x600mm long x50mm thick reinforced concrete (Y-10) worktop : mounted at 880mm above finished floor level level on 100mm thick concrete (1:3:6) benching, including all necessary formwork: steel trowelled finish:ceramic tiles top and exposed edges.	NO	2			
	<p><u>Kitchen Undersink Cupboard</u></p>					
B	Cupboard size 2100x600x880 mm high overall: comprising 6No. doors size 700x600 mm 3No. drawers size 600x500x 150 mm deep: shelvings: Ceramic tiles worktop: ironmongery : painting 100mm mass concrete benching	NO	2			
	<p><u>kitchen over head shelving:</u></p>					
C	Overhead shelving size 1200 mm long x 400 mm deep x 600 mm high : comprising 3 No. vertical divisions at 600mm c/c and one No. horizontal division at 300mm c/c complete with all bearer plugs and painting	NO	2			
	Total carried to summary				Kshs.	

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A.	Wash hand basin as "Twyfords" cat. ref no. AL4812WH or any other equal and approved : complete with all accessories, including rubber stopper, chain and chromium plated bottle trap.Basin pillar tap as "Twyfords" CAT No. PE 5205CCP	NO	1				
B.	W.C suite complete with, pan,seat cover and cistern as "Twyfords" cat. ref no. AD1145WH or any other equal and approved: Including all other accessories.	NO	1				
C	"Lorenzetti" or equal and approved Automatic Shower heater with energy saver selector.	NO	1				
D	Stainless steel Single bowl single drainer sink size 1200x600 mm : complete	NO	2				
	<u>Accessories</u>						
E.	Toilet toilet roll holder as "Twyfords" Cat: no. VC9806WH or any other equal and approved.	NO	1				
F.	Soapdish as "Twyfords" Cat: no. VC9312WH or any other equal and approved.	NO	1				
G.	6 mm Float plate silver coated mirror size 600x450mm high with bevelled edges, complete with dome headed screws to match: plugged: on foam backings	NO	1				
	Total carried to collection				Kshs.		

Item No.	Description	Unit	Quantity	Rate	Kshs.	Cts.
A	25mm diameter x 900mm long chromium plated towel rail including end brackets to match: Plugged to blockwork or masonry.	NO	1			
B	Satin aluminium coat hook as Twyfords cat No. PB0204SI or any other equal and approved.	NO	2			
C	Tumbler and tooth brush holder as "Twyfords" Cat: no.VC9805WH or any other equal and appro	NO	1			
Carried to collection						
<u>Collection</u>						
From page 17						
From page18 (above)						
Total carried to Summary					Kshs.	-

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A.	32mm diameter in wall chase: Including brackets	LM	30				
B.	50mm diameter in wall chase: Including brackets	LM	15				
C.	80mm diameter vent pipe fixed to wall including metal holder bats	No.	2				
	<u>Extra over for pipes</u>						
D.	32mm bend	NO	15				
	<u>Extra over for pipes</u>						
E.	32mm plug	NO	10				
F.	32mm access plug	NO	10				
G.	50mm ditto	NO	5				
H.	50mm inspection bend	NO	10				
I.	100mm ditto	NO	2				
J.	50mm sweep tee	NO	2				
K.	80mm plain bends.	NO	2				
L.	100mm ditto	NO	8				
	Total carried to collection				Kshs.		

Item No.	Description	Unit	Quantity	Rate	Kshs.	Cts.
A	32mm equal tee	NO	10			
B	Galvanised steel balloon grating and setting on head of 100mm pvc pipe	NO	2			
C	100mm weathering apron	NO	2			
D	100mm diameter floor trap complete with cover grating	NO	2			
E	50mm ditto	NO	1			
	<u>Gulley traps</u>					
F	Gulley trap chamber size 250x250, approximately 400mm deep in 150mm blockwork with cement mortar joints on 150mm thick mass concrete slab, and plastered inside: for 100mm diameter trap and hopper 40mm thick, 250x250mm precast concrete cover to gulley trap chamber and provide with 40mm ventilating hole.	NO	2			
	<u>Manholes/inspection chambers</u>					
G	Inspection chamber 900x600x600mm deep comprising 150mm thick (1:3:6) bed, 150mm thick concrete block walls: 100mm concrete (1:2:4) slab reinforced with 8mm mild steel bars at 100mm centres both ways, concrete (1:3:6) benching to form 300mm diameter channel: 600x450mm medium duty manhole cover complete with frame including plastering walls internally and steel troewelled screed to benching, all excavations formwork and disposal	NO.	2			
H	ditto: 1000mm deep	NO.	1			
I	ditto 1500mm deep	NO.	1			
Total carried to collection				Kshs.		

Item No.	Description	Unit	Quantity	Rate	Kshs.	Cts.
A.	<p><u>septic tank</u></p> <p><u>Septic tank, excavating:disposing of surplus soil by spreading on site: compacting on site compacted hardcore filling, in making up levels: 50mm concrete class 15 blinding: concrete class 25 in 150mm thick beds and cover slabs: 200mm thick natural stone walling and 100mm thick dividers: reinforcement: formwork: rendered internally with water-proof render : light duty manhole covers and frames to BS 497: holes in sides for pipes:internal size</u></p> <p><u>REF drawing No. (50)5342: Capacity 6000 litres: Twenty persons: 2 Years desludging interval</u></p>					
B.	<p>6000x1800x2200mm overall</p> <p><u>Soakpit</u></p> <p><u>1200mm diameter soak pit 6000mm deep, excavation and disposal 200mm diameter backfill , 1050mm reinforced concrete cover, on 60mm mm deep msonry wall on mass concrete 1:3:6 stip footing</u></p> <p><u>Ref drawing No. (50) 5345</u></p>	No.	1			
C	1200mm Diameter by 6000mm deep	No.	1			
D	Excavate pipe trenches for small pipes girth n:e 100mm . Average depth n.e 0.6 metres deep part return fill in and ram part spread on site as directed	LM	25			
	Carried to collection					
	<u>Collection</u>					
	From page 19					
	From page 20					
	From page 21 (Above)					
	Total carried to Summary				Kshs.	

Item No.	Description	Unit	Quantity	Rate	Kshs.	Cts.
	<p><u>KENYA WILDLIFE SERVICE</u> <u>PROPOSED CONSTRUCTION OF FENCE GUARDPOST</u> <u>GATUNDIA,MACKENZIE AND RWATHIA</u> <u>ALONG RUMURUTI/MARMANET FOREST FENCE</u> <u>LAIKIPIA COUNTY</u></p> <p>Element No. 11 Plumbing (provisional)</p> <p>Prices for pipework shall include for the cost of couplings; connectors and jointing to fittings, appliances etc and fixing brackets all as required in the pipework installation together with marking pipe routes on walls and floors: and builders work incidental thereto</p> <p><u>supply, deliver and fix u P.V.C</u> <u>Polypropylene Random (PPR) pipes</u> <u>jointed and fixed as described in</u> <u>accordance to manufacturers</u> <u>instructions</u></p>					
A.	15mm diameter	LM	40			
B.	20mm ditto	LM	18			
C.	25mm ditto	LM	12			
D	15mm bend	No.	10			
E	20mm ditto	No.	6			
F	15mm equal tee	No.	6			
	<u>high pressure brass valves and</u> <u>jointing to pipes</u>					
G	15mm ditto	No.	1			
H	20mm ditto	No.	1			
I	32mm. Ball valve with plastic float, brass stem and connecting to tank with union and backnut including perforation	No.	1			
J	20mm ditto	No.	1			
	Total carried to collection			Kshs.		

Item No.	Description	Unit	Quantity	Rate	Kshs.	Cts.
	<u>Excavate trenches for small pipes not exceeding 100 mm diameter, not exceeding 1.50 metres deep: part backfill and compact excavated materials : remove surplus spoil: grade and compact bottoms including planking and strutting for upvc pipes</u>					
A	Average 500 mm deep	LM	10			
	<u>Valve chamber</u>					
B	Chamber size 300x300x600 mm deep internally: 100 mm thick concrete (1:3:6) bed : 150 mm solid concrete blockwalls: 75 mm thick precast concrete cover slab with 1No. grip: excavation and backfill: disposal	NO	1			
	<u>Roof space Water storage tank</u>					
C	Plastic water storage tank 900 litres (200 gallons) rectangular tank in roof space approximate dimensions 1270x1270x580mm including overflow pipes	NO	1			
	<u>Testing</u>					
D	Allow for testing of the complete internal plumbing installation to the satisfaction of the Engineer and the local Authority Representative	item	1			
	Carried to collection					
	<u>Collection</u>					
	From page 22					
	From page 23 (above)					
	Total carried to Summary				Kshs.	

Item No.	Description	Unit	Quantity	Rate	Kshs.	Cts.	
	<p><u>KENYA WILDLIFE SERVICE</u> <u>PROPOSED CONSTRUCTION OF FENCE GUARDPOST</u> <u>GATUNDIA,MACKENZIE AND RWATHIA</u> <u>ALONG RUMURUTI/MARMANET FOREST FENCE</u> <u>LAIKIPIA COUNTY</u></p> <p>Element No. 12 <u>Electrical Works (provisional)</u></p> <p>Rates quoted shall be inclusive of supply and installation including builders work incidental thereto.</p> <p><u>Lighting point wired in 3X1.5mm2 single core PVC cables drawn in 20mm diameter heavy gauge PVC conduits including all conduit accessories and switch boxes for:-</u></p>						
A.	One way switching	No.	4				
B.	Two way switching	No.	3				
C.	Pendant light fitting comprising ceiling rose,code and lampholder as volex complete with bulb	No.	5				
D.	100W bulkhead fitting as microlite	No.	4				
	<p><u>13A power point wired in 3x2.5mm2 single core PVC copper cables drawn in 20mm diameter heavy gauge PVC conduits incl. All conduit accessories for:</u></p>						
E.	Single	No.	2				
	<p><u>5A Flush mounted switches as volex</u></p>						
F.	1gang 1 way	No.	4				
G.	2 gang 2 way	No.	3				
	Total carried to collection				Kshs.		

Item No.	Description	Unit	Quantity	Rate	Kshs.	Cts.
A	6Ways consumer unit as crabtree complete with cicuit breakers	No.	1			
B	3x16mm2 single core copper cables as sub-main and drawn in 50mm diameter heavy gauge PVC conduits including all conduit accessories.	Lm.	10			
C	KPL&C manhole size 600x600x750mm complete with iron cover.	No.	1			
D	1,200mmx25mm copper earth electrode complete with clamp.	No.	1			
E	Standard cable looping box		Item			
F	Allow for the Testing of the complete electrical installations to the satisfaction of the engineer		Item			
Carried to collection						
<u>Collection</u>						
From page 24						
From page 25 (Above)						
Total carried to Summary					Kshs.	

element No.	Description	Kshs.	Cts.
<p><u>KENYA WILDLIFE SERVICE</u> <u>PROPOSED CONSTRUCTION OF FENCE GUARDPOST</u> <u>GATUNDIA, MACKENZIE AND RWATHIA</u> <u>ALONG RUMURUTI/MARMANET FOREST FENCE</u> <u>LAIKIPIA COUNTY</u></p>			
<p><u>Summary</u> <u>From</u> <u>page</u></p>			
1	Substructures		3
2	Walling		4
3	Roof		7
4	Windows		9
5	Doors		12
6	External wall finish		13
7	Internal finishes		15
8	Fixtures and fittings		16
9	sanitary fittings		18
10	Drainage		21
11	Plumbing		23
12	Electrical Works		25
<p>Subtotal</p> <p>Sub-total multiplied by three (Gatundia, Mackenzie, Rwathia)</p>			
<p>Total Measured Works Carried to Grand summary pg 28 of 28</p>		<p style="text-align: right;">x3</p>	
<p style="text-align: right;">Kshs.</p>			

Item No.	Description	Unit	Quantity	Rate	Kshs.	Cts.
	<p><u>KENYA WILDLIFE SERVICE</u> <u>PROPOSED CONSTRUCTION OF FENCE GUARDPOST</u> <u>GATUNDIA,MACKENZIE AND RWATHIA</u> <u>ALONG RUMURUTI/MARMANET FOREST FENCE</u> <u>LAIKIPIA COUNTY</u></p> <p><u>P.C. and Provisional sums</u></p> <p><i><u>The contractor shall include in his tender for the following amounts to be deducted either in whole or in part as directed by the project manager</u></i></p>					
A	Provide the prime cost sum of Kenya shillings two hundred and forty thousand for electrical connection to mains and incidental cost thereto				240,000	
B	Allow for liason fee		sum			
C	Allow for attendance		Sum			
D	Provide the prime cost sum of Kenya shillings ninety thousand for water connection to mains				90,000	
E	Allow for liason fee		sum			
F	Allow for attendance		Sum			
	Total carried to Grand Summary				Kshs.	

Item No.	Description	Kshs.	Cts.
	<u>KENYA WILDLIFE SERVICE</u> <u>PROPOSED CONSTRUCTION OF FENCE GUARDPOST</u> <u>GATUNDIA, MACKENZIE AND RWATHIA</u> <u>ALONG RUMURUTI/MARMANET FOREST FENCE</u> <u>LAIKIPIA COUNTY</u>		
	<u>GRAND SUMMARY</u>	<u>From page</u>	
A	Preliminaries	72	
B	Measured Works	26 of 28	
C	PC. and Provisional Sums	27 of 28	
	Subtotal		
	Add 10 % Contigencies		
	GRAND TOTAL CARRIED TO FORM OF TENDER	Kshs.	