

**PROPOSED KIGANJO STORES WAREHOUSE & ASSOCIATED CIVIL WORKS**

**BILL NO. 1**

**PRELIMINARIES**

**PRELIMINARY PARTICULARS**

**A NAME OF PARTIES**

The "Employer" is : Kenya Power & Lighting Co. Ltd  
P.O. Box 30099 - 00100  
NAIROBI

The term

The "Project Manager" is : The Manager,  
Administration & Property, HR& Administration  
Kenya Power & Lighting Co. Ltd  
P.O. Box 30099 - 00101  
NAIROBI

The "Project Officer " is : The Kenya Power Projects Officer  
Administration & Property, HR& Administration  
Kenya Power & Lighting Co. Ltd  
P.O. Box 30099 - 00101  
NAIROBI

The "Project Quantity Surveyor" The Kenya Power Quantity Surveyor,  
Administration & Property, HR& Administration  
Kenya Power & Lighting Co. Ltd  
P.O. Box 30099 - 00101  
NAIROBI

**B SITE**

The site is located at 18KM Nyeri county headquarters via Nyeri - Kiganjo police collage road and approx 139KM from Nairobi Capital City through Nairobi-Sagana-Marua Kiganjo Road

The Contractor shall obtain the Project Manager's approval for the siting of all temporary buildings, spoil heaps, temporary paths and storage areas for materials.

The Contractor shall visit the Site to acquaint himself with its nature and position, the nature of the ground, substrata and other local conditions, position of power and water supplies, access roads or any other limitations, and no claims for extras will be considered on account of lack of knowledge in this respect.

The Contractor must obtain the Project Manager's approval and directions regarding the use of any materials found on the site.

**C ACCESS TO SITE**

Access to site shall be as directed by the Project Manager.

Preliminaries Carried to collection KShs.

**GENERAL MATTERS**

**SUFFICIENCY OF TENDER**

A The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of this Tender for the Works and of the rates and prices stated in the Priced Bills of Quantities, which rates and prices shall cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the Works.

**STAMP CHARGES**

The Contractor shall allow for the payment of all Stamp Charges in connection with the Surety and Contract Agreement.

**DEFINITIONS AND ABBREVIATIONS**

Terms used in these Bills of Quantities shall be interpreted as follows:

"Approved"	Shall mean approved by the Project Manager.
"as directed"	Shall mean as directed by the Project Manager.
"B.S."	Shall mean the current British Standard specifications published by the British Standards Institution, 2 Park Street, London W.I., England.
"C.M."	Shall mean Cubic Metres.
"S.M."	Shall mean Square Metres.
"L.M."	Shall mean Linear Metres.
"MM"	Shall mean Millimetres.
"Kg."	Shall mean Kilogramme.
"No."	Shall mean Number.
"M.S" or M/S	Shall mean Measured Separately
Ditto or Do	Shall mean the whole of the preceding description except as qualified in the description in which it occurs.

Preliminaries

Carried to collection

KShs.

**A PUBLIC AND PRIVATE ROADS, PAVEMENTS, ETC**

The Contractor will be required to make good, at his own expense any damage he may cause to the present road surfaces and pavements within or beyond the boundary of the Site, during the period of the Works. In particular, all existing trees, shrubs, plants. etc., which may be destroyed or damaged during the progress of the Works are to be made good by the Contractor to the approval of the Project Manager.

**B POLICE REGULATIONS**

The Contractor is to allow for complying with all instructions and regulations of the police Authorities.

**C ENVIRONMENTAL REGULATIONS**

The Contractor shall observe all the requirements of the National Environment Management Authority (NEMA)

In particular the Contractor shall give special emphasis to control dust. The Contractor shall provide all necessary dust screens to prevent dust from the construction works affecting neighbouring property. The dust screens shall be approved by the Project Manager and be acceptable to NEMA officials. The Contractor shall also control dust on site by appropriate watering of the sources of dust.

The Contractor shall put emphasis on controlling noise, vibrations and occupational hazards. The provisions of the Occupational Safety and Health Act No. 15 of 2007 must be strictly observed.

**D CONTRACTORS' SUPERINTENDENCE**

The Contractor shall constantly keep on the Works a literate English-speaking Agent or Representative, competent and experienced in the kind of work involved, who shall give his whole time to the superintendence of the Works. Such Agent or Representative shall receive on behalf of the Contractor, directions and instructions from the Project Manager and such directions and instructions shall be deemed given to the Contractor in accordance with the conditions of the Contract. The Agent shall not be replaced without the specific approval of the Project Manager.

It is to be a specific condition of this Contract that the successful Tenderer shall provide on Site throughout the period of construction until the Date for Practical completion a suitably qualified, experienced and competent person to ensure that the works are carried out to the standard required by the specification and detailed on the Drawings; and shall ensure that upon any termination of employment a suitable replacement is found.

Preliminaries

Carried to collection

KShs.

**A PROTECTIVE CLOTHING**

The Contractor shall provide all protective or any other special clothing or equipment for his employees that may be necessary. This shall include, inter-alia, safety helmets, gloves, goggles, earmuffs, gumboots, overalls, etc., according to the type of work. The Contractor shall ensure that safety helmets are worn by all staff at all times.

**B PROVISIONAL SUMS**

The term "Provisional Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A Item A6(i) of the Standard Method of measurements  
Such sums are net and no addition shall be made to them for profit.

**C ADJUSTMENT OF PROVISIONAL SUMS**

In the final account all provisional sums shall be deducted and the value of the work properly executed in respect of them upon the Project Manager's order added to the contract sum. Such work shall be valued as described for variations in condition No. 30 of the conditions of contract, but should any articles for the work be executed by a Nominated Sub-Contractor, or any articles for the work be supplied by a Nominated Supplier, the Value of such work or articles shall be treated as a P.C. sum and profit and attendance comparable to that contained in the priced Bills of Quantities for similar items added.

**D PRIME COST (OR P.C.) SUMS**

The term "Prime Cost Sum" or "P.C. Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A67(ii) of the Standard Method of Measurements  
Persons or firms Nominated to execute the work or to provide and fix materials or goods as stated in the Conditions of Contract are described herein as Nominated Sub-Contractors. Persons or firms so nominated to supply goods or materials are described as Nominated suppliers.

**E ADJUSTMENT OF P.C. SUMS**

In the final account all P.C. sums shall be deducted and the amount properly expended upon the Project Manager's order in respect of each of them added to the contract sum. The Contractor shall produce to the Project Manager such quotation, invoices or bills properly received as may be necessary to show the actual details of the sums paid by the contractor.  
Items of profit upon P.C. sums shall be adjusted in the final account prorata to the amount paid.  
Items of Attendance following P.C. Sums shall be adjusted prorata to the physical extent of the work executed (not prorata to the amount paid) and this shall apply though the Contractor's Bills shows a percentage in the rate column in respect of them.  
Should the Contractor be permitted to tender and his tender be accepted for any work which a P.C. sum is included in these Bills of Quantities, profit and attendance will be allowed at the same rate as it would if the work were executed by a Nominated Sub-Contractor.

Preliminaries

Carried to collection.

KShs.

**D SAMPLES**

The Contractor shall furnish within the first two weeks of site take over and before work commences and at his own cost, any samples of materials or workmanship that may be called for by the Project Manager for his approval or rejection, and any further samples in case of rejection until such samples are approved by the Project Manager and such samples, when approved, shall be the minimum standard for the work to which they apply. Such approved samples shall be mounted on a sample board erected on site. The sample board shall be of minimum size 2400x1200mm high fabricated in RHS supports & framings minimum size 75x50x3mm secure from tampering with and including all necessary sample mounting bases & roof cover where required and available for quick reference during the entire period of the contract. The approved samples shall be mounted / applied using the correct methodology, edging and finish as per the bill of quantities; all to reflect the high quality workmanship that will be replicated on the permanent works. Specific to this contract, the contractor shall be required to provide a sample wall averaging 6M long including expansion joint, coping to walls, coping to columns, plaster work, keying and pointing, paints works and razer wire, which may form part of the permanent works once approved by the project manager.

**A CONCRETE TESTS**

Concrete test cubes, will not be required under these works; any concrete works must be done in the presence of the Project Manager or his/her representative

**B OTHER MATERIAL TESTS**

The Contractor shall allow for providing samples of all other materials such as reinforcement bars, building sand, cement, building stone, concrete blocks, hardcore, etc, that may be requested by the Project Manager or Engineer for testing. He shall allow for the delivery of the same to the testing Laboratory (ies), pay the testing fees and any other costs that may be required and arrange for test certificates to be sent directly to the Project Manager or Engineer by the testing Laboratory. Under no circumstances will the Contractor be paid for such tests if he does not allow for that here

Preliminaries

Carried to collection

KShs.



**A PLANT, TOOLS AND SCAFFOLDING**

The Contractor shall provide all necessary hoists, tackle, plant, vehicles, tools and appliances of every description for the due and satisfactory completion of the Works and shall remove same on completion.

The Contractor shall provide, erect and maintain all temporary scaffolding, sufficiently strong and efficient for the due performance of the Works, including Sub-Contract works, provide special scaffolding as and when required during the Works and remove on completion and make good.

Such scaffolding shall be constructed of tubular steel or timber of sufficient scantlings and be provided with planked footways and guard-rails to approval.

All such plant, tools and scaffolding shall comply with all regulations whether general or local, in force throughout the period of the contract and shall be altered or adapted during the Contract as may be necessary to comply with any amendments in or additions to such regulations.

Scaffolding is not measured hereinafter, and the Contractor must allow here or in his rates for the above.

**B EXISTING AND ADJACENT PROPERTY**

The Contractor must take all steps necessary to safeguard existing and adjacent property, make good at his own expense any damage to persons or property caused thereon, and hold the Employer indemnified against any such claim arising.

The Contractor will be held fully responsible for the safety of the existing and adjacent buildings and for any damage caused in consequence of these Works. He must reinstate all damage at his own expense and indemnify the Employer against any loss.

The Contractor must take such steps and exercise such care and diligence as to minimise nuisance from dust, noise or any other cause to the occupiers of the existing and adjacent property.

**C LABOUR CAMPS**

No labour, with the exception of watchmen may be housed on the site and the Contractor shall allow for all transport and other charges in moving labour to and from site at such hours and by such routes as are permitted by the Authorities. The Contractor shall provide, erect and maintain satisfactory housing for the watchmen and shall remove same on completion of the works.

Preliminaries

Carried to collection

KShs.

**A NOMINATED SUB-CONTRACTORS - CONTINUED**

Allowing the use of standing scaffolding, maintenance and alteration of all scaffolding, retention of all scaffolding until such time as all relevant Sub-Contractors' works are complete and removal of all scaffolding on completion. Providing space for office accommodation, and for storage of plant and materials; allowing use of sanitary accommodation; the supply of all necessary water, and lighting; and clearing away all rubbish.

The items for "General Attendance" given herein-after following P.C. Sums in respect of Sub-Contractors' work shall be deemed to include all the above.

The Contractor shall also accept liability for and bear the cost of Special Attendance on Nominated Sub-Contractors which shall include for one or more of the following:

Unloading, storing, hoisting, placing in position, providing power, provision of special scaffolding.

The items of "Special Attendance" given herein-after following P.C. Sums shall include any one or more of the above items as set out in the particular reference.

Cutting away for and making good after the work of Sub-Contractors as may be required will be measured and valued separately by the Surveyor.

**B NOMINATED SUPPLIERS**

The cost of "Fix only" materials to be obtained from Nominated Suppliers which are covered by prime Cost or Provisional Sums shall include for taking delivery where directed, checking with invoices or indents, reporting and claiming damages for shortages and damaged goods, defraying demurrage signing for as having been received in good order, transporting, unloading, storing, covering and protecting until the time of fixing, unpacking, replacing anything lost or damaged, sorting, assembling, hoisting to required levels and fixing as described.

Before placing any orders with Nominated Sub-Contractors or Nominated Suppliers the Contractors must ascertain that the terms and conditions of the quotations and the dates of delivery of materials or execution of works comply with the terms of Contract and the Progress Schedule.

**C PRIME COST RATES**

Where description of items include a P.C. rate per unit this rate is to cover the nett supply of the unit only. The Contractor's price must include for the cost of the unit at the rate stated, plus waste, taking delivery, storage, fixing in position, profit and overheads.

The actual nett cost per unit will be adjusted within the Final Account against the P.C. rate stated.

**COLLECTION**

Preliminaries

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**BILLNO.1  
PRELIMINARIES**

**TO GRAND SUMMARY  
AT END OF BILLS**

**KSHS.**





ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<b>BILL NO. 2</b> <b><u>GO-DOWN</u></b> <b><u>ELEMENT NO. 1</u></b>  <b><u>SUBSTRUCTURES (ALL PROVISIONAL)</u></b> <b><u>Excavation</u></b> <b><u>Over-site excavations: 100-200mm Depth, load</u></b> <b><u>and deposit as instructed by the project manager</u></b>				
A	Reducing levels; 200 mm	610	sm		
B	Excavate for strip footing trenches n.e. 1.5 m deep	207	cm		
C	Ditto column pits 0-1.5 mm	44	cm		
D	Ditto column pits 1.5-3.0 mm	43	cm		
E	Extra-over all excavation for excavating rock irrespective of class.	60 354	cm		
F	Level bottom of foundations to receive blinding	166	sm		
G	Return, fill-in and rum selected imported materials around foundations	204	cm		
H	Remove and cart away surplus excavated materials. <b><u>Diposal of water</u></b>	150	cm		
J	Keeping all excavations free from all water including spring or running water  <b><u>Planking and strutting</u></b>	1	Item		
K	Uphold the sides of all excavations	1	Item		
L	<b><u>Filling</u></b> Hardcore filling in making up levels, hand packed, 400mm thick in layers of 150mm maximum thickness	232	cm		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	25mm (average) thick quarry dust blinding to surfaces of hardcore	576	sm		
	<u>Antitermite treatment</u>				
B	Premise 200 SC' or other equal and approved anti-termite insecticide treatment with ten years guarantee, applied strictly in accordance with manufacturer's instructions, to tops of fill and foundation walls	576	sm		
	<u>Concrete</u>				
C	Insitu mass1:4:8 concrete 50mm thick levelling in strip foundation, and column base	200	sm		
	<u>Insitu concrete: reinforced; class 20 / (20mm); vibrated</u>				
D	Column	12	cm		
E	Column bases	20	cm		
F	Strip footing	30	cm		
G	200mm thick bed	580	sm		
	<u>Reinforcement</u>				
	<u>Supply and fix ribbed bars Reinforcement including bending ,hooks,tying wire,cutting spacersand supporting all in position as decribed</u>				
H	In assorted reinforcement of various sizes	6200	kgs		
	<u>Fabric: B.S. 4483</u>				
J	Reference A142 mesh 200 x 200 mm , weight 2.22 kgs per square meter ( measured net - no allowance made for laps( including bends, tying wire and distance blocks	580	sm		
	<u>Walling</u>				
K	200 mm thick hard natural stone walling; quarry-dressed; bedded and jointed in cement sand (1:3) mortar; reinforced with hoop iron at alternate courses	350	sm		
	<u>Sawn formwork to insitu concrete as described:-</u>				
L	To sides; vertical or battering of foundations, ground beams or the like	180	sm		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	Edges of ground floor slab; 150 to 200mm wide	122	lm		
	<u>Damp proofing</u>				
B	Polythene sheet; 1000 gauge, 200mm welted laps (no allowance made to laps), horizontal; 1 no. layer laid on compacted quarry dust blinding	580	sm		
C	200mm wide; B.S. 743 Type A bitumen hessian base 150 mm laps (no allowance made for laps); horizontal, 1 no. layer, bedded in cement sand (1:3) mortar	176	lm		
	<u>In situ Finishings</u>				
D	12mm thick 2 No. coatwork cement sand (1:3) render; wood floated to concrete or blockwork base to walls; external	72	sm		
	<u>Painting and Decorations</u>				
	<u>Prepare and apply three coats bituminous paint to:</u>				
E	Wood floated rendered plinths over 300mm girth	72	sm		
	<u>Paving</u>				
F	Excavate and lay 600x600mm pcc paving slabs on murrum bed including jointing and pointing in cement sand mortar mix (1:4) all round the building.	65	sm		
<i>Carried to Collection</i>					
<b><u>COLLECTION</u></b>					
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<b>TOTAL FOR SUBSTRUCTURES CARRIED TO SUMMARY</b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>ELEMENT NO. 2</u>				
	<u>RC SUPERSTRUCTURE</u>				
	<u>Insitu concrete: reinforced; class 20 / (20mm); vibrated</u>				
A	Beams	30	cm		
B	Columns	55	cm		
C	Staircases	6	cm		
D	150mm Landings	28	sm		
E	150mm thick suspended roof slab including overhangs twice throated standard	148	sm		
	<u>Reinforcement</u>				
	<u>Supply and fix ribbed bars Reinforcement to KS 573:2014; including bending .hooks.tying wire.cutting spacersand supporting all in position as decribed</u>				
F	In assorted reinforcement of various sizes	10720	kgs		
	<u>Sawn formwork to insitu concrete as described:-</u>				
G	To sides and soffits beams	123	sm		
H	To sides Columns	26	sm		
J	Soffits of suspended floor slab	176	sm		
K	Soffites of landings	28	sm		
L	Sloping soffites of staircases	25	sm		
M	Ditto risers 75-150mm high	76	lm		
N	(extreme) cut and fitted to profile of treads and risers	24	lm		
	<b>TOTAL FOR RC SUPERSTRUCTURE CARRIED TO SUMMARY</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>ELEMENT NO. 3</u>				
	<u>WALLING</u>				
	<u>Precast concrete grade 20(12mm aggregate) including formwork, finishing fair on all exposed surfaces and hoisting and placing in position, bedding, jointing and pointing in cement and sand (1:3) mortar</u>				
A	WINDOW CILL; 250 x 50 mm extreme height; once weathered; once throated; reinforced as necessary for handling; surface fair finish 275 mm girth; bedding, jointing and pointing in cement sand (1:3) mortar	60	lm		
	<u>NATURAL STONE WALLING</u>				
B	200 mm thick approved local Machine cut stone walling; bedding, jointing and pointing in cement sand (1:3) mortar reinforced with hoop iron at alternate courses	588	sm		
C	150 mm thick; ditto	30	sm		
D	Extra over horizontal recessed and flush vertical pointing in averaging 19mm Square tube rod in cement and sand (1:3) mortar; one coat of bituminous paint.	510	sm		
E	300x200x200mm thick Precust concrete louvre block walling; bedding, jointing and pointing in cement sand (1:3) mortar. rate to include supply & fixing approved guze wire	12	sm		
	TOTAL FOR WALLING CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>ELEMENT NO. 4</u>				
	<u>ROOFING CONSTRUCTION, COVERING AND RAIN WATER DISPOSAL</u>				
	<u>Roof covering.</u>				
	<u>IT5 profile box sheets: 28 gauge: prepainted</u>				
A	Supply and fix sheets to an approved standard colour laid with 94mm side laps and 150mm minimum end lap fixed to Z purlins including hook bolts, washers, nuts and rubber caps at 600mm centers. and screwed to 177x50.8 mm Z purlins (m/s) on RHS trusses (m/s) at 1200mm c/c all laid to fall at 17.50 degrees	668	sm		
	<u>Accessories, fixing as necessary to roof sheets</u>				
B	300mm dia. Half round ridge sheet	52	lm		
	<u>Steel Structure Trusses</u>				
	<u>The following in RHS 100x50x4thick trusses, welded connections, to detail; hoisting approx. 6.2m above ground including preparation, applying 2coats of primer and 2coats gloss paint to all steel work.</u>				
	<u>framed structure</u>				
C	100 x 50x4 mm rafters	156	lm		
D	100x50x4mm strut & ties	288	lm		
E	100x50x4mm tie beam	288	lm		
	<u>The following in steel work unframed structure</u>				
F	100 x 50x4 mm rafters	156	lm		
G	100 x 50x4 mm rafters welded as necessary	96	lm		
H	75x75x3mm SHS diagonal bracings.	78	lm		
J	177x50.8x2.5mm Z purlin bolted to 100x100x6mm cleats.(M.S)	604	lm		
K	100x100x6mm cleats.	260	No.		
L	50 x50 x 4mm Fascia frame welded to purlin <u>All material and workmanship shall conform with the requirement of BS 499 and shall include all necessary cutting, welding, bolting, pinning, lugging and fixing all to clients approval</u>	104	lm		
	<u>Stanchion Base.</u>				
M	254x254 x 79kg/m universal Column	3098	kgs		
	<i>Carried to Collection</i>				



ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	300×300×15mm base plate	24	No.		
B	Diameter 19mm bolt with a flat washer nut diameter 250mm.	72	No.		
C	100×100×8mm anchor plate	72	No.		
D	400mm wide × 2mm thick mild steel plate	104	lm		
E	Sag rods complete with nuts and washers.	116	lm		
	<u>Labour and material (Provisional)</u>				
F	100×100×6mm purlin cleats welded to rafters.	144	No		
G	Drill holes for 12mm diameter bolts in both purlins & cleats.	304	No		
H	Diameter 12× 35mm long bolts complete with nuts and washers.	304	No		
J	Ditto but 12x500mm long for apex purlins	8	No		
	<u>Rain water goods</u> <u>14 gauge mild steel black sheet welded and bolted to gutter stool internally painted with 2 coats of black bituminous paint. externally with 2 coats of red oxide primer and 2coats of finishing matt paint including all labours.</u>				
K	Purpose made box gutter 200-416mm girth × 2.5mm thick gutter	64	lm		
L	Extra over for stopped ends.	10	No		
M	24 Gauge galvanized sheet 150x150mm box rain water outlet pipe	61	lm		
	<u>Down pipes</u>				
N	150mm square GCI pipe g24 wall mounted with brackets at 900mm centers.	61	lm		
P	Extra over downpipe for swan neck.	10	No.		
Q	Ditto for shoe.	10	No.		
	<b><u>Roof insulation &amp; ventilation</u></b>				
R	Supply and fix 50mm thick phenolic insulation boards with blue steel sheet reinforcement on both sides to roof structures complete with all necessary fixing accessories or any other equal and approved insulation materials to the underside of roof covering.	668	sm		
S	Supply and fix Cyclone roof ventilators 600 super Eco-galvanised to the roof rate to include material required for such installation	12	No.		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<p><b><u>COLLECTION</u></b></p> <p>From page WH/6</p> <p>From page WH/7</p> <p>From page WH/8</p>				
	<p>TOTAL FOR ROOFING CONSTRUCTION CARRIED TO SUMMARY</p>				



ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>ELEMENT NO. 5</u>				
	<u>DOORS</u>				
	<u>ROLLER SHUTTER DOORS</u>				
A	Supply and fix metal roller shutter 3700mmx4000mm including drilling cutting, greasing, and all necessary locking devices.	4	No		
	<u>METAL WORK - PURPOSE - MADE UNITS</u>				
	<u>Mild steel casement doors: 100 x 50 x 3mm thick frame plugged to concrete or blockwork with 100mm long fishtailed 25 x 25 x 2mm thick angle section, 50 x 50 x 3mm thick angle section frames at 300mm centres both sides, angles cut, mitred and welded; panels infilled with glazing (m/s), one coat manufacturer's primer, complete with all necessary ironmongery; all welding ground to smooth finish</u>				
B	Single door; 900 x 2100mm high; complete; including 3pairs 150mm long purpose made hinges; ditto	3	No.		
	<u>TIMBER DOORS</u>				
	<u>Wrot hardwood framed frames and framings</u>				
C	200 x 38 mm; 4 No. labours; plugged door frame	82	lm		
D	100 x 38mm architraves with 4 No. labours	82	lm		
E	38 x 38mm quadrants with 3 No. labours	82	lm		
	<u>50mm thick framed hardwood and ledged braced battened, single-leave, single swing comprising 150 x 50mm top rail, 150 x 50mm stiles, 150 x 50mm middle rails, 200 x 50mm bottom rail infilled with 50mm thick solid moulded timber members; edges bevelled and grooved into frames; all framed, clamped and grooved together.</u>				
F	Door; overall size 1200 x2400 mm high	1	No		
	<u>FLUSH DOORS</u>				
	<u>45mm Thick semi-solid core flush doors to B.S 459: part 2 veneered both sides with internal quality plywood and lipped on all edges in approved hardwood</u>				
G	Door size 800 x 2400 mm high	16	No		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>Iron mongery</u> <u>Supply and fix the following to UNION catalogue</u> <u>or other equal and approved</u>				
	<i>To softwood, hardwood or the like fixing with</i>				
A	Three lever mortice lock complete with set lever Brass handle furniture	17	No		
B	100mm steel butt hinges	51	prs		
	<i>To concrete or blockwork; fixing with bolts;</i>				
C	Rubber door stop complete with 38 mm rawl bolt	17	No.		
	<u>Painting and Decorations</u>				
	<u>On wood</u>				
	<u>Aluminium primer or other equal and approved</u> <u>wood primer before fixing: -</u>				
D	Backs of frame, board, etc over 100mm but not exceeding 200mm girth	246	lm		
	<u>Knot, prime and stop; prepare and apply one</u> <u>undercoat and three coats of silk vinyl paint</u>				
E	General surfaces of timber doors over 300mm girth; external	26	sm		
F	Frames; over 100mm but not exceeding 200mm	246	lm		
	<u>On metal</u>				
	<u>Prepare and apply three coats oil paint full gloss to</u> <u>Crown Solo or other equal and approved to: -</u>				
G	Backs of frame, over 100mm but not exceeding 200mm girth	4	lm		
H	General door surfaces; over 300mm girth internal	36	sm		
J	General door surfaces; over 300mm girth external	36	sm		
	<i>Carried to Collection</i>				
	<b><u>COLLECTION</u></b>				
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	<b>TOTAL FOR DOORS CARRIED TO SUMMARY</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>ELEMENT NO. 6</u> <u>WINDOWS</u> <u>METAL WORK PURPOSE - MADE UNITS</u> <u>Supply, assemble and fix the following purpose-</u> <u>made mild steel casement windows: standard</u> <u>metal section from approved manufacturer</u> <u>complete with frames, transomes, mullions and</u> <u>with and including permanent ventilators</u> <u>comprising "T" bar, gauze and 16 gauge sheet</u> <u>metal hood 50mm high x 50mm projection to full</u> <u>width of window, coupling mullions, kenya</u> <u>power corporate grillwork, approved</u> <u>ironmongery and one coat manufacturer's</u> <u>primer; all welding ground to smooth finish.</u>				
	Steel; for glazing with putty, lugs to two jambs, cutting and pinning to concrete or blockwork, fixing to head and sill with screws; plugging				
A	Window, overall size 1600 x 1600mm high; heavy duty; all to detail	33	No		
B	Ditto; 1600x900mm high; ditto	3	No		
C	Ditto; 900x600mm high; ditto	7	No		
	<u>Glazing</u>				
D	5mm Thick clear sheet glass panes over 0.1 but not exceeding 0.5 square meters; fixing with putty	86	sm		
E	Ditto; obscure	5	sm		
	<u>Painting and Decorations</u> <u>On Metal work</u> <u>Prepare and apply three coats oil paint full gloss to Crown Solo or other equal and approved to: -</u>				
F	General window surfaces; over 300mm girth	86	sm		
	TOTAL FOR WINDOWS CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>ELEMENT NO. 7</u> <u>FINISHES</u>				
	<b><u>Wall finishes</u></b>				
	<u>External wall finishes</u>				
	<u>Plaster: 12mm thick 2 No. coatwork, 9mm first coat of cement sand (1:6); 3mm second coat of cement and lime putty (1:10); steel trowelled to concrete or blockwork base generally to: -</u>				
A	Walls, column, beams; External	240	sm		
	<u>Internal wall finishes</u>				
	<u>Plaster: 12mm thick 2 No. coatwork, 9mm first coat of cement sand (1:6); 3mm second coat of cement and lime putty (1:10); steel trowelled to concrete or blockwork base generally to: -</u>				
B	Walls, internal	860	sm		
	<u>Tile, Slab or Block Finishings</u>				
	<u>Approved granitto tiles to B.S. 1281; local; coloured glazed wall tiles to regular or approved other pattern; bedding and jointing in cement sand (1:4) mortar, grouting with approved cement</u>				
C	8mm thick tiles; butt joints straight both ways; to cement sand base (m/s) to walls internal	110	sm		
D	Plastic edging (Provisional)	123	lm		
	<u>Beds or Backings</u>				
	<u>Render: cement and sand (1:3)</u>				
E	14mm thick one coat backings; wood floated to receive tiles (m/s) to concrete or blockwork base; to walls internal	110	sm		
	<u>Painting and decorations</u>				
	<u>Prepare and apply three coats of silk vinyl paint to the following surfaces</u>				
F	Plastered surfaces; internal	860	sm		
	<i>Carried to Collection</i>				



ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	<u>Prepare and apply three coats of wall master</u> Medium textured wall master byramix coating on and including 12mm thick render; applied as per the manufacturer's instructions	240	sm		
B	<u>Prepare and apply one zinc plumbate primer and three coats of 'CROWN SOLO' or other equal and approved super gloss oil paint to:-</u> Plastered surfaces; internal (wet areas)	34	sm		
	<b><u>Floor finishes</u></b> <b><u>Tile, Slab or Block Finishings</u></b>				
C	10mm thick granitto floor tiles; butt joints both ways; to cement sand base (m/s); to floors level; internal	144	sm		
D	100 mm high skirting; straight junction with wall and floor finish.	48	lm		
	<b><u>Terrazzo floor</u></b> <b><u>Beds or Backings</u></b> <b><u>Screed; cement and sand (1:3)</u></b>				
E	20mm thick one coat backings; wood floated to receive terrazzo floor (m/s) to concrete or base; to floors level; internal	514	sm		
F	30mm thick one coat backings; wood floated to receive terrazzo floor (m/s) to concrete or base; to floors level; internal	144	sm		
	<b><u>In-situ polished Terrazzo floor as described in:-</u></b>				
G	20mm Thick floor in bays n.e 2sq m	514	sm		
H	20x100mm skirting finished with rounded to edge and coved junction with floor finish.	60	lm		
J	32x3mm. Thick metallicor equal and approved dividing strips set in terrazzo.	340	lm		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>12mm (minimum) two-coat plaster: 9mm first coat of cement sand (1:6). 3mm second coat of cement and lime putty (1:9); steel trowelled to: -</u>				
A	Concrete and beams soffits	200	sm		
	<u>Painting and Decorations</u> <u>On steel trowelled plastered surfaces</u> <u>Prepare and apply three coats of silk vinyl paint to the following surfaces</u>				
B	Concrete and beams soffits	200	sm		
	<u>Ceiling finishes</u>				
C	Acoustic suspended semi recessed LIG acoustic ceiling as Armstrong TEGULAR DUNE on white 24mm wide laid-in grids as Trulok F24 Armstrong complete with white perimeter and curved trim; wall angles as necessary including 12mm diameter hangers and wires as per the manufacturer's specifications fixed approximately 1100mm below soffits of roof structure and to the Architect's approval. 600x600mm Armstrong or other equal and approved mineral fibre acoustic ceiling lining tiles fixed to aluminium gridwork and suspended with steel wires	200	sm		
	<u>Staircases</u> Cement and sand (1:3) plaster to:				
D	Sloping soffites of staircases	8	sm		
E	Soffites of landings	4	sm		
	<u>In situ polished terrazzo paving on screeded floor surfaces:</u>				
F	40mm Thick paving to landings	4	sm		
G	150 x 25mm thick to risers	20	sm		
H	306 x 25mm Thick to treads of staircases	12	lm		
J	100 x 20mm Thick skirting to the profile of risers and treads	5.2	lm		
	<u>Prepare and apply three coats first grade plastic emulsion paint to:</u>				
K	Plastered sloping concrete soffites of staircases	3	sm		
L	Ditto landings	4	sm		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<p><b><u>COLLECTION</u></b></p> <p>From page WH/12</p> <p>From page WH/13</p> <p>From page WH/14</p>				
	TOTAL FINISHES CARRIED TO SUMMARY				



ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<b>ELEMENT NO. 8</b> <b>ALUMINIUM PARTITIONS</b> <u>Powder coated aluminium standard hollow sections; grooved as necessary; frames mitred at corners including reinforcing cleats all to approval</u>				
A	<u>76x45x1.2mm thick aluminium hollow sections (horizontal top members)</u>	32	lm		
B	<u>76x45x1.2mm thick aluminium hollow sections (horizontal middle members)</u>	32	lm		
C	<u>Approx. 76x50mm thick aluminium sections (Vertical members) grooved as necessary to receive blockboard and / or glass panes.</u>	40	lm		
D	<u>76x50x3mm thick base member ditto</u>	32	lm		
E	<u>Beading: 25x25mm screwed as necessary (PROVISIONAL)</u>	140	lm		
F	<u>Extra over ditto for supply and fixing 20mm thick rubber strip to the PM's Approval (PROVISIONAL)</u>	340	lm		
G	<u>18mm thick, non-scratch veneered MDF(for partitions) including aluminium glazing beads (m/s) and all necessary rubber strips(m/s)</u> <u>In aluminium partitions, to detail.</u> <u>Glazing</u> <u>Toughened glass fixed to aluminium framing/connectors and rubber strips (m/s)</u>	24	sm		
H	<u>6mm thick, toughened glass with oneway approved tint.</u>	20	sm		
<i>Carried to Collection</i>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	<u>Aluminium Doors</u> Supply and fix Aluminium framed door 900 x 2100 mm in 2 unequal panels:top panel infilled with 6mm thick toughened with oneway approved tint:bottom panel infilled with 25mm thick non-scratch veneered MDF (m/s) on both sides properly secured to wall and framing complete with accessories including 2 lever cylinder lock (Viro or equally approved English type) and heavy duty hinges.	2	No.		
B	<u>Ditto but 1/2 door infilled with 25mm thick non-scratch veneered MDF size 900 x 1200mm high.</u>	2	No.		
	<u>Aluminium louvres</u> Supply and fix aluminium louvres and / or glazed louvres fixed and /or openable; including aluminium framings and the like at specified parts of the ongoing aluminium partition works as may be directed by the project manager . sizes;				
C	<u>3500 X 300 mm high</u>	15	No.		
D	<u>Working drawings</u> Allow for preparation and approval of final set of working drawings in A1 size; using the attached drawings; all by a registered Architect & registered Structural Engineer including all necessary county government's approvals within the first two (2No.) weeks after contract signing	1	No.		
E	Ditto but copies	4	No.		
<i>Carried to Collection</i>					
<b><u>COLLECTION</u></b>					
From page WH/16					
From page above					
<b>TOTAL ALUMINIUM PARTITIONS &amp; DRAWING CARRIED TO SUMMARY</b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	ELEMENT NO. 9 PLUMBING, JOINNERY, FIXTURES & FITTINGS				
	KITCHEN				
	Plinth				
A	1:3:6 mass concrete concrete as described in 100mm thick high plinth in kitchen	5	sm		
B	VRC class(20/20)mix 1:2:4 as described in 100mm thick kitchen worktops	5	sm		
C	32mm cement sand (1:4) screed trowelled hard and smooth and finished with cement grout as described in Surface finish to surface of plinth	5	sm		
D	30mm thick c/s backing to recive granitto tiles (m/s)	6	sm		
	<b><u>work tops</u></b> <u>Approved granito floor tiles to regular or other approved pattern: bedding and jointing in cement sand (1:4) mortar; grouting with matching cement</u>				
E	10mm thick; butt joints both ways; to cement sand base (m/s); to floors level; internal	6	sm		
F	Extra over for forming sinks / basin hole	1	No		
G	2.5mm thick block board to cabinet 2.4 m long by 400mm wide fixed appropriatly to wall for both High level and Low level				
H	Kitchen top size 3,400 x 600 x 900mm high, with acrylic top including 120mm high back splash and fascia on 25mm thick blockboard including 100mm high fascia; cupboards below and upper in 25mm thick hardwood lipped(painted blockboard; cupboards doors in 20mm malpha hinges (m/s)and 150mm brass handles.(m/s)	1	No.		
	<i>Carried to Collection</i>				



ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	<b>Kitchen sink</b> Supply and fix Heavy gauge single drain stainless steel kitchen sink including all necessary accessories.	1	No		
	<b>High Level Cabinets</b> The following in 25mm thick MDF boards, veneered on one side with Mahogany veneer and hardwood lipped on all edges as described.				
B	25mm Thick top, bottom and shelves.	12	sm		
C	25mm Thick sides and divisions.	6	sm		
D	Door size 550 x 600mm high.	8	No.		
	50 x 25mm Frame/bearers.	28	lm		
	<b>Ironmongery</b>  The following in "Union" or other equal and approved ironmongery,				
E	Approved malper hinges.	8	No.		
F	Approved magnetic ball catch.	16	No..		
G	25mm Diameter x 100mm long chrome plated D pull handles.	8	No.		
J	<b>Noticeboard</b> Supply and fix 1500x1200mm soft board noticeboard complete with all aluminum framing/ beading; and approved fabric finish and two packets of thump pins per notice board	4	No		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT(Ksh)
	<b>WASH ROOMS</b>				
	<u>The following in plumbing work supply fix galvenised pipes for main water supply connect from main line as directed on site including all the necessary fitting ,valves, excavation, backfilling, concrete encasement and any other accessories.</u>				
	<u>G.m.s Pipes class 'B' cold water system including cutting for small pepes and fitting.</u>				
A	25mm galvanised mild steel tubing class 'B'	105	lm		
B	Ditto but 20mm	24	lm		
C	Ditto but 15mm	44	lm		
	<u>Extra over</u>				
	<u>Bends and elbows</u>				
D	25mm diameter bend /elbows	8	No		
E	20mm diameter -ditto-	6	No		
F	15mm diameter -ditto-	36	No		
	<u>Tees</u>				
G	25 x20 x20mm diameter tee	3	No		
H	20 x20 x20 equal tee	2	No		
J	20 x20 x15 equal tee	8	No		
K	15x15x15 equql tee	10	No		
	<u>Nipples</u>				
L	25mm diameter sockets	3	No		
M	20mm -ditto-	4	No		
N	15 mm -ditto-	4	No		
	<u>Sockets</u>				
P	25mm diameter sockets	4	No		
Q	20mm -ditto-	6	No		
R	15 mm -ditto-	6	No		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT(Ksh)
	<u>Unions</u>				
A	25mm gms union	6	No		
B	20mm -ditto-	5	No		
C	15mm -ditto-	3	No		
	<u>Reducers</u>				
D	25mmx20mm -ditto-	2	No		
E	20mmx 15mm-ditto-	9	No		
	<u>Gate valves</u>				
F	25mm diameter approved medium pressure screw down full way gate valve, with wheel and head joints to steel tubing. The gate valve to be as PEGLER or approved	3	No		
G	20mm -ditto-	3	No		
H	15mm -ditto-	3	No		
J	Ball valve 25mm diameter ball valve with plastic float	3	No		
	<u>Flexible connections</u>				
K	15mm diameter 300mm long flexible connector including jointing to steel tubing.	10	No		
	<u>Internal drainage.</u> <u>All drainage pipes to be upvc as 'CaradonTerrain Products'or equal and approved.</u>  <u>Upvc and muPvc pipework.</u>				
L	100mm heavy duty golden brown pipe class D	63	lm		
M	100mm diameter heavy duty grey pipe class D	12	lm		
N	40mm- ditto-	32	lm		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT(Ksh)
	<u>Extra over Upvc pipe work for:</u>				
	<u>Bends</u>				
A	100mm diameter long radius bends	12	No		
B	100mm diameter short radius bends	3	No		
C	40mm diameter bends	16	No		
	<u>Tees</u>				
D	40mm diameter sweep tee	10	No		
	<u>Access caps</u>				
E	100mm diameter access cap	5	No		
F	40mm diameter access cap	8	No		
	<u>Boss connectors</u>				
G	100mmx40mm diameter boss connector	6	No		
	<u>Single branches</u>				
H	100mm dia. Single branch	2	No		
J	40mm dia. -ditto-	4	No		
	<u>W.C connectors</u>				
K	100mm dia. W.c connectors	5	No		
L	100mm diameter floor trap and grating	2	No		
M	100mm diameter vent cowl	2	No		
N	100mm diameter weathering slate	3	No		
P	100mm dia. Weathering apron	3	No		
Q	100mm diameter access cap fitted with screw cap and washer.	5	No		
R	100mm diameter gully trap complete with cover.	5	No		
	<i>Carried to Collection</i>				



ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT(Ksh)
	<u>Sanitary fittings</u> Twyfords Ltd. Products are specified only as indication of quality.				
	<u>Water Closet</u>				
A	Low level wash down WC suite as Twy fords western type ,and of 9 litres cistern,cistern fittings, plastic flush pipe, inlet connections, and cistern support.	4	No		
B	Complete WC suit western type for physically challenged	1	No		
	<u>Wash hand fittings</u>				
C	Wash hand basin size 560mm x 405mm in approved colour, complete with 1No. X15mm tap	5	No		
	<u>Toilet Roll Holder</u>				
D	Toilet roll holder in vitrous china in white colour of size 165x165mm and recessed into wall,as twyfords.	5	No		
	<u>Soap Dish</u>				
E	Semi recessed in wall soap tray in vitrous china,size 150x115x65mm deep as Twyfords.	2	No		
	<u>Urinal</u>				
F	Twyford Clifon or equal and approved urinal Urinal bowl complete with automatic cistern consisting pipework for range of one connected to cistern, 1 urinal bowls secured to wall ,and PVC waste connected to waste pipe via 40mm connector.	2	No		
	<i>Carried to Collection</i>				



ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT(Ksh)
A	Supply and fix hand dryer compact auto hand dryer 1.64 KW complete with switch and wiring Price to include protecting unit with grill casement fixed to wall all to client approval.	3	No		-
	<u>Mirrors</u>				
B	6mm thick polished plate glass, silver backed mirror with bevelled edges, size 610x497mm, plugged and screwed to wall with 4No. Capped screws and 5mm thick foam rest	5	No		
	<u>Water tanks</u>				
C	Supply and install UPVC cylindrical vertical (diaXht) 10,000 Ltrs 2400x2800 mm water tanks	2	No		
D	5,000Ltrs 1670x2060mm ditto	1	No		
	<u>Booster pumps</u>				
F	Hawig ( German) Hobby booster pump C/W Pressure switch, pressure tank and anti vibration hose.	1	No		
	<u>Pedrollo pump</u>				
G	PKm 100/1 1.5HPx80Mx70 Lit/min domestic Pedrollo booster pump	1	No		
	<u>Hose reels</u>				
H	Fixed tupe Hose reel C/W 30x19M hose, tubing, spray nozzle and valve	5	No		
	<u>Accessories for pump</u>				
J	Hydrofresh 24sF spherical water tank with pressure guge	1	No		
K	Eco press- 1.1 Kw electronic flow contral system	1	No		
L	Italy Pedrollo float switch	1	No		
	<i>Carried to Collection</i>				



ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<b><u>50PERSON CAPACITY SEPTIC TANK</u></b>				
	<u>SUBSTRUCTURES (ALL PROVISIONAL)</u>				
	<u>Excavation</u>				
	<u>Over-site excavations: 100-200mm Depth, load and deposit as instructed by the project manager</u>				
A	Reducing levels; 150 mm	8	sm		
B	Excavate for strip footing trenches n.e. 1.5 m deep	12	cm		
C	Ditto column pits 0-1.5 mm deep	8	cm		
G	Extra-over all excavation for excavating rock irrespective of class.	4	cm		
H	Return, fill-in and rum selected imported materials around foundations	3	cm		
J	Remove and cart away surplus excavated materials.	18	cm		
	<u>Diposal of water</u>				
K	Keeping all excavations free from all water including spring or running water	1	Item		
	<u>Planking and strutting</u>				
L	Uphold the sides of all excavations	1	Item		
M	25mm (average) thick quarry dust blinding to surfaces of hardcore	8	sm		
	<u>Concrete</u>				
N	Insitu mass1:4:8 conrete 50mm thick levelling in both colum and column base	8	sm		
	<u>Insitu concrete: reinforced: class 20 / (20mm); vibrated</u>				
P	200mm bottom slab	2	cm		
Q	200mm walling	5	cm		
R	150mm baffle walls	1	cm		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	150mm thick slab <u>Reinforcement</u> <u>Supply and fix ribbed bars Reinforcement</u> <u>including bending ,hooks,tying wire,cutting</u> <u>spacersand supporting all in position as decribed</u>	6	sm		
B	In assorted reinforcement of various sizes <u>Sawn formwork to insitu concrete as described:-</u>	900	kgs		
C	Edges of bottom floor slab; 150 to 200mm wide	120	lm		
D	Side of concrete walling and soffits of suspended slab <u>Internal wall finishes</u> <u>Plaster: 12mm thick 2 No. coatwork, 9mm first</u> <u>coat of cement sand (1:6); 3mm second coat of</u> <u>cement and lime putty (1:10); steel trowelled to</u> <u>concrete or blockwork base generally to: -</u>	50	sm		
E	Walls, floor and suspended slab	54	sm		
F	25mm thick cement (1:3) sand screed to roof slab externally	6	sm		
G	600x 450mm heavy duty cast iron manhole cover and frame or equivalent and approved	4	No.		
H	Ditto but 450x450mm covers	12	No.		
J	Provide and lay 150mm dia PVC waste pipe and fitting to mechanica engineers details	96	lm		
K	costruct 450x350mm and height ranges from 300-500mm standard inspection chamber complete to detail	12	No		
L	Excavate for strip footing trenches n,e 1.5m deep	25	cm		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>Soak away pit</u> <u>SUBSTRUCTURES (ALL PROVISIONAL)</u> <u>Excavation</u> <u>Over-site excavations: 100-200mm Depth. load</u> <u>and deposit as instructed by the project manager</u>				
A	Reducing levels; 150 mm	5	sm		
B	Excavate for pit n.e. 1.5 m deep	5	cm		
C	Excavate for pit n.e. 1.5- 3.0 m deep	5	cm		
D	Excavate for pit n.e. 3.0- 4.5 m deep	5	cm		
E	Excavate for pit n.e. 4.5- 6.0 m deep	5	cm		
F	Excavate for pit n.e. 6.0- 7.5 m deep	5	cm		
G	Excavate for pit n.e. 4.5- 6.0 m deep	5	cm		
H	Excavate for pit n.e. 6.0- 7.5 m deep	5	cm		
J	Extra-over all excavation for excavating rock irrespective of class.	2	cm		
K	Return, fill-in selected imported hardcore. 3/4 of pit	40	cm		
L	Excavate for strip footing trenches n.e. 1.5 m deep	4	cm		
M	Ditto but 1.5-3.0	1	cm		
N	Remove and cart away surplus excavated materials.	40	cm		
	<u>Diposal of water</u>				
P	Keeping all excavations free from all water including spring or running water	1	Item		
	<u>Planking and strutting</u>				
Q	Uphold the sides of all excavations	1	Item		
R	Supply and fill pit with stone/ brick aggregate filing	8	cm		
	<u>Concrete</u>				
	<u>In situ concrete: reinforced; class 20 / (20mm); vibrated</u>				
S	Concrete slab	4	sm		
	<u>Reinforcement</u>				
	<u>Supply and fix ribbed bars Reinforcement including bending ,hooks,tying wire,cutting spacersand supporting all in position as decribed</u>				
T	In assorted reinforcement of various sizes	900	kgs		
v	25mm thick cement (1:3) sand sreen to roof slab externally	6	sm		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>Soak away pit</u> <u>SUBSTRUCTURES (ALL PROVISIONAL)</u> <u>Excavation</u> <u>Over-site excavations: 100-200mm Depth. load</u> <u>and deposit as instructed by the project manager</u>				
A	Reducing levels; 150 mm	5	sm		
B	Excavate for pit n.e. 1.5 m deep	5	cm		
C	Excavate for pit n.e. 1.5- 3.0 m deep	5	cm		
D	Excavate for pit n.e. 3.0- 4.5 m deep	5	cm		
E	Excavate for pit n.e. 4.5- 6.0 m deep	5	cm		
F	Excavate for pit n.e. 6.0- 7.5 m deep	5	cm		
G	Excavate for pit n.e. 4.5- 6.0 m deep	5	cm		
H	Excavate for pit n.e. 6.0- 7.5 m deep	5	cm		
J	Extra-over all excavation for excavating rock irrespective of class.	2	cm		
K	Return, fill-in selected imported absorbent materials around foundations.	40	cm		
L	Excavate for strip footing trenches n.e. 1.5 m deep	4	cm		
M	Ditto but 1.5-3.0	1	cm		
N	Remove and cart away surplus excavated materials.	40	cm		
	<u>Diposal of water</u>				
P	Keeping all excavations free from all water including spring or running water	1	Item		
	<u>Planking and strutting</u>				
Q	Uphold the sides of all excavations	1	Item		
R	Supply and fill pit with stone/ brick aggregate filing	8	cm		
	<u>Concrete</u>				
	<u>Insitu concrete; reinforced; class 20 / (20mm); vibrated</u>				
S	Concrete slab	4	sm		
	<u>Reinforcement</u>				
	<u>Supply and fix ribbed bars Reinforcement including bending ,hooks.tying wire.cutting spacersand supporting all in position as decribed</u>				
T	In assorted reinforcement of various sizes	900	kgs		
v	25mm thick cement (1:3) sand sreen to roof slab externally	6	sm		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b><u>COLLECTION</u></b>				
	From page WH/18				
	From page WH/19				
	From page WH/20				
	From page WH/21				
	From page WH/22				
	From page WH/23				
	From page WH/24				
	From page WH/25				
	From page WH/26				
	From page WH/27				
	TOTAL FOR PLUMBING, JOINNERY, FIXTURES & FITTINGS CARRIED TO SUMMARY				



ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 10</u> <u>ELECTRICAL WIRING &amp; FITTINGS</u> <u>Supply, Deliver to site, install, set to work and</u> <u>commission the</u> following.				
A	<u>Lighting points completely wired in 3x1.5 mm</u> <u>single cable drawn in 20mm diameter heavy</u> <u>gauge conduit for two way switching couplers,</u> <u>sandle clips, circular boxes and switch boxes but</u> <u>excluding the fittings.</u>	1900	lm		
B	3x2.5mm single core pvc insulated copper cables drawn in 20mm diameter heavy gauge pvc conduits including couplers and twin boxes excluding the socket outlets.(for SP sockets)	630	lm		
C	3x2.5mm single core pvc insulated copper cables drawn in 20mm diameter heavy gauge pvc conduits including couplers and twin boxes excluding the socket outlets.(for handryers)	65	lm		
D	3x4.0mm single core pvc insulated copper cables drawn in 20mm diameter heavy gauge pvc conduits including couplers and twin boxes excluding the socket outlets.(for TP sockets)	120	lm		
D	45A DP cooker control point, completely wired in 3x4mm single core pvc insulated copper cables drawn in 20mm diameter heavy gauge pvc but excluding the cooker- unit.	15	lm		
E	<u>8 ways TPN distribution board complete with</u> <u>125A integral isolator as MEM or equivalent</u> <u>excluding the MCBs and blanking plates.</u>	1	No		
F	Duel tarrif meter board 24X24 constructed with 16 SWG powder coated mild steel and complete with mounting back blacket and vew glass.	1	No		
G	100A three phase MCCB as MEM or equiverent	1	No		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	50mm heavy pvc conduits runing from meter board to Distribution board.	20	lm		
B	Protective multiple earthing comprising of 6.0mm pvc insulated cable drawn in 20mm heavy gauge conduits, 15mm by 1200mmlong copper eletrode with clamp and ' eathing manhole with inspection cover to KPLC Ltd by laws and statutory requirements.	1	No		
C	<u>Lighting fittings-1200mm 36W HPF twin batten fluorescent luminaire complete with 18 watts LED tubes(frosted) as philips or equivalent.</u>	28	No		
D	<u>Lighting fittings-1200mm 36W HPF single batten fluorescent luminaire complete with 18 watt LED tubes(frosted) as philips or equivalent.</u>	18	No		
E	600x600mm, recessed mounted fluorescent Luminaire with, Cat 2 parabolic louvres and control gear for 4x 18W T8 lamps complete cool daylight 865 colour lamps. As CROMPTON lighting chevin plus or PIERLITE classic as T8 or equal approved. Type S4	175	No		
F	<u>Lighting fittings- 100 watts floodlight fitting with the following parameters</u> Power-(w) 80-140 frequency 50 HZ-60HZ, operating voltage: AC 85- 265 DC 12/24v LED efficiency(lm/w:80, power supply efficiency>90%,power factor >0.9 color reding index of :>70, color temperature (k)2700-6500,ambient temperature (;c) 40-50, life span 50000 hrs, IP rating : IP65,weight -12kg and should be made of high purity alluminium reflector and heat sink ,high intencity tempered glass cover,single powerful LED light source and a high efficiency LED driver and mounting to existing masonry/ concrete/metal surface	14	no		
G	<u>Switches-10A one gang one way switch as MK or equivalent</u>	3	No		
H	Switches- 10A two gang two way switch as MK or equivalent.	7	No		
J	<u>Switches- 10A Intermediate switch as MK or equivalent.</u>	1	No		
K	Time switch to operate floodlights.	1	No		
<i>Carried to Collection</i>					



ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	<u>Three phase industrial sockets with intergrated isolator as maximus or equivalent.</u>	4	No		
B	45A DP Cooker control unit complete with 13A SP switched socket outlet, <u>neon indicators and marked 'Cooker' as MK or equivalent.</u>	1	No		
C	<i>Cooker connector unit as MK. Or equivalent.</i>	1	No		
D	15 A single socket outlet as MK. Or equivalent	1	No		
E	13A SP twin switched socket outlets as MK or equivalent.	18	No		
F	Consumer blanking covers	3	No		
G	45A DP Water heater switch complete with neon indicators and marked water Heater as MK or equivalent.	2	No		
H	Automatic handryer as stamix or equivalent	3	No		
J	SP MCBs as MEM or equivalent	10	No		
K	TP MCB as MEM or equivalent.	4	No		
L	<u>50 mm and bend heavy gauge conduit for KPLC supply</u>	2	No		
M	Spherical screwneck ball fitting complete with 18W CFL	5	No		
<i>Carried to Collection</i>					
ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>COLLECTION</u>				
	From page WH/29				
	From page WH/30				
	From page Above				
<u>TOTAL FOR ELECTRICAL WIRING &amp; FITTINGS</u>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>SUMMARY PAGE</u>				
1	SUBSTRUCTURE (ALL PROVISIONAL)			WH / 3	
2	RC SUPERSTRUCTURE			WH / 4	
3	WALLING			WH/5	
4	ROOFING CONSTRUCTION			WH/8	
5	DOORS			WH / 10	
6	WINDOWS			WH / 11	
7	FINISHES			WH / 15	
8	ALUMINIUM PARTITIONS & DRAWING			WH/17	
9	JOINNERY, FIXTURES & FITTINGS			WH / 28	
10	ELECTRICAL WIRING & FITTINGS			WH / 29	
<b>TOTAL FOR GO-DOWN CARRIED TO GRAND SUMMARY</b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<b>BILL NO. 3</b>				
	<b><u>EXTERNAL WORKS (ALL PROVISIONAL)</u></b>				
	<b><u>STOCK YARD CABRO SURFACE</u></b>				
	<b><u>GENERAL</u></b>				
A	<u>Allow for survey &amp; levelling works including measurements before site clearance, during excavations, grading and during gravelling.</u>		Item		
	<b><u>EARTH WORKS</u></b>				
	<b><u>Clearing site vegetation</u></b>				
B	Clear site of all grass, weeds, shrubs, bushes, small trees, tree stumps, rubbish etc. and grub up all roots or similar obstructions and burn or cart away.	2,000	sm		
	<b><u>Bulk Excavation</u></b>				
C	Bulk Excavation ( Mechanical) to reduce levels n.e 450 mm from ground load and cart away	3,730	cm		
	<b><u>Filling</u></b>				
D	Supply and handpack 450mm thick hardcore to make up levels for yard areas mechanically compacted in layers not exceeding 150mm thick	3,730	cm		
E	125 x 250mm Precast concrete (class 20) kerb with once chamfered edge laid on and including 450 x 100mm plain concrete (1:3:6) foundation haunched up on one side including all necessary excavations formwork etc.	360	lm		
F	Ditto restrainants block	380	lm		
G	<u>Supply and lay Mechanically, heavy duty 80mm thick interlocking concrete paving blocks to client with and including 50mm sand bed;approval.</u>	3,775	sm		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	Supply and lay Mechanically, heavy duty 80mm thick interlocking concrete paving blocks to client with and including 50mm sand bed;approval.	3,775	sm		
B	175 X 800mm precast shallow invert block drain (600mm overall) (class 20) laid on and including plain concrete (1:3:6) foundation; haunching up; including all necessary excavations formwork etc.	98	lm		
C	150 X 305mm ditto (450mm overall) ditto	100	lm		
ACCESS ROAD WORKS					
D	Form road by reducing the level to fall of 2.5% (300mm) including cutting to fill in soft material, including slopes and side ditches.	120	sm		
E	Provide,handpack and compact mechanically approved hardcore material.	180	cm		
<u>DRAINAGE</u>					
<u>CULVERTS AND HEAD WALLS</u>					
F	Excavate Pit in normal soil for headwall starting from ground level to a depth not exceeding 1.2m	15	cm		
G	Provide all materials, mix and place 50mm thick concrete class P as blinding for headwall base (Mix 1:4:8).	2	sm		
H	Provide and place in trench 150mm thick concrete grade Q (1:3:6 mix) as foundation for headwalls.	1	cm		
J	Provide materials for and erect 200mm thick masonry walling for headwall as per Drawing details.	25	sm		
K	Provide, mix and place 12mm thick cement and sand rendering to both sides of walls.	50	sm		
Carried to Collection					

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	Excavate trench in normal soil for culvert starting from ground level to depth not exceeding 1.0m	14	cm		
B	Provide and place 100mm thick concrete bed for the pipes, (mix 1:3:6). Include for all the necessary formwork.	2	cm		
C	Provide, lay and joint 600mm dia. precast concrete ogee pipes on gravel bedding to correct fall	14	lm		
D	Provide and place 150mm thick concrete surround around pipes, (mix 1:3:6). Including all the necessary formwork.	4	cm		
E	Backfill and compact after laying, jointing and surrounding of the pipes.	6	cm		
	<i>Carried to Collection</i>				
ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<b><u>COLLECTION</u></b>  From page SYP/1  From page SYP/2  From page above				
	TOTAL FOR YARD SURFACE PAVING & DRAINAGE WORKS CARRIED TO GRAND SUMMARY				
ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<b>BILL NO. 4</b>				
	<b><u>STORAGE SHED</u></b>				
A	Supply 3500mm long by 100x100mm cross section by 4mm thick RHS inclusive of the length below finished ground level	16	No.		
B	Ditto provide 400mm long by 3mm thick angle line clamps	32	No.		
C	Erect RHS in 400mm deep by 300mm diameter hole with concrete mix 1:2:4	16	No.		
	<b><u>ROOFING</u></b>				
	<b><u>The following in 3mm thick RHS roofing work well secured with bolt and nuts with all necessary accessories on metal stand 3500mm high from ground level</u></b>				
D	100x50mm wall plate	64	lm		
E	100x50mm rafters	40	lm		
F	100x50mmx2mm thick purlin	130	lm		
G	Allow for apply 1 coat of prime and 2 coat of gloss oil paint (crown paint) or any other equal and approved to general metal surfaces all to project Manager approval.	1	Item		
H	200x 25mm thick wrot cypress fascia board.	76	lm		
J	Knot , prime and stop and apply 3 coat of gloss oil paint "crown paint" or equal to general wood surface.	16	sm		
	<b><u>IT5 profile box sheets: 28 gauge: prepainted</u></b>				
K	Supply and fix sheets to an approved standard colour laid with 94mm side laps and 150mm minimum end lap welded to 75mm RHS purlins including hook bolts, washers, nuts and rubber caps at 600mm centers. all laid to fall at 17.50 degrees	150	sm		
	<b>TOTAL FOR STORAGE SHED CARRIED TO GRAND SUMMARY</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b><u>PERIMETER WALL CONSTRUCTION</u></b>				
	<b>BILL NO. 5</b>				
	<b><u>SUBSTRUCTURES-(PROVISIONAL)</u></b>				
	<b><u>ELEMENT NO. 1</u></b>				
	<b><u>Site clearance</u></b>				
A	Carefully remove and reinstall the existing chain link fencing and concrete poles 3m inside along the entire plot to act as holding.	87	lm		
B	Clear the site off grass, shrubs and all vegetation keiapples, clear vegetation, grub up roots , 1 NO. of approx 8m long trees and the like load & cart away to approved dumping sites by NEMA.	130	sm		
	<b><u>Excavations</u></b>				
C	Excavate oversite to remove top vegetable soil average 150mm deep and spread as directed on site.	54	sm		
D	Excavate for foundation strip footing in normal soil average depth 1.50m deep.	48	cm		
E	Ditto column pits 0-1.5 mm	76	cm		
F	Return fill and ram selected excavated material around foundations.	94	cm		
G	Load, wheel and spead surplus excavated material and as directed by project manager.	30	cm		
H	Extra over all kinds of excavation for excavating in rock irrespective of class.	8	cm		
	<b><u>Disposal of water</u></b>				
J	Allow for keeping excavations free from all water by pumping or otherwise.		Item		
	<b><u>planking and struting</u></b>				
K	Ditto; for plunking and strutting to sides of excavations.		Item		
	<b><u>Concrete Works</u></b>				
	<b><u>50 mm plain concrete (1:4:8 - class 15/20mm) blinding in :</u></b>				
L	Strip footing	54	sm		
M	Ditto collumn bases	54	sm		
	<b><u>Vibrated Reinforced Concrete class 20/20mm in:</u></b>				
N	200mm thick Strip footing	15	cm		
P	200mm Collumn bases	20	cm		
	Carried to Collection				



ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	<b>Vibrated Reinforced Concrete class 20/20mm in:</b> Collumns	5	cm		
B	Ground beam	4	cm		
	<b>Reinforcement</b> <b>Ribbed bars to KS 573:2014; as before described</b>				
C	Diameter; 12mm	2,400	kgs		
D	Diameter; 8mm	2,000	kgs		
	<b>Sawn formwork to :</b>				
E	Sides of strip footing	35	sm		
F	Sides of column bases	34	sm		
G	Sides of columns	63	sm		
	<b>Substructure Walling.</b>				
H	200 mm thick natural stone walling; machine -dressed; bedded and jointed in cement sand (1:3) mortar; reinforced with hoop iron at alternate courses	78	sm		
J	Labour and material for construction joints in 12mm thick flexel expansion and 25x25mm expansion sealer	9	lm		
	<b>Bituminous Damp Proof Course bedded and jointed in cement sand mortar 1:3.</b>				
K	200 mm wide.	87	lm		
	<b>Weep Holes</b>				
L	150mm diameter weep holes at appropriate centres of the wall as directed	30	No.		
Carried to Collection					
<b>COLLECTION</b>					
From page PW/1					
From page Above					
<i>Total to Collection</i>					



ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>Superstructure walling</b>				
A	200 mm thick approved machine cut walling; bedded and jointed in cement sand (1:3) mortar; reinforced with hoop iron at alternate courses	200	sm		
	<b>Vibrated reinforced insitu concrete class 20/(20mm) as described in:-</b>				
B	300X300mm Columns	9	cm		
	<b>Reinforcement (Provisional)</b>				
	<b>Supply and fix bars Reinforcement including bending hooks.tying wire.cutting spacersand supporting all in position as decribed</b>				
C	Diameter; 12mm	500	kgs		
D	Diameter; 8mm	400	kgs		
	<b>Sawn formwork to:</b>				
E	Sides of column	110	sm		
F	Labour and material for construction joints in 12mm thick flexel expansion and 25x25mm expansion sealer	8	lm		
G	Extra-over for pointing & keying in recessed horizontal and flush vertical joints external surface	200	sm		
H	200 x 50 x 65mm thick hand scratched facing bricks to external face of columns bedded in cement sand mortar (1:2:4)	46	sm		
	<b>Plaster</b>				
	<b>Plaster: 18mm thick. 2 No. coatwork. 15mm first coat of cement sand (1:3); 3mm second coat of cement and lime putty (1:9): steel trowelled to concrete or blockwork base generally to: -</b>				
J	Walls; internal surface	200	sm		
	<b>Concrete Coping</b>				
K	350mm Wide x 50mm thick (average) twice-weathered and twice-throated pre-cast concrete coping bedded and jointed in cement/sand (1:3) mortar; to double fall	87	lm		
L	Provide and joint in cement :sand (1.3) 450 x 450 mm precast concrete coping weathered and throated on all sides to pier	35	No.		
Carried to Collection					



ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	<u>painting</u> Prepare and apply three coats and one undercoat of first quality exterior paint to crown or equal and approved to the satisfaction of the PM	240	sm		
B	<u>Razor wire</u> Supply and fix Razor wire at the top of the boundarywall conforming to the following specifications:-coil size - 450mm diameter,Blade profile - Ripper Razor Wire,Stretch factor -coil and secured with steel plates at 1M centres (Galvanised)	87	lm		
<b>COLLECTION</b>					
	From page PW/3				
	From page Above				
<b>Total to Collection</b>					
<b>Collection Page</b>					
1	SUBSTRUCTURE (ALL PROVISIONAL)		PW / 2		
2	RC SUPERSTRUCTURE		PW / 4		
<b>TOTAL FOR PERIMETER WALL CARRIED TO GRAND SUMMARY</b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<b>BILL NO. 6</b> <b><u>1 NO. GATE HOUSE</u></b> <b><u>ELEMENT NO. 1</u></b>				
	<u>SUBSTRUCTURES (ALL PROVISIONAL)</u> <u>Excavation</u>				
	<u>Over-site excavations: 100-200mm Depth. load and deposit as instructed by the project manager</u>				
A	Reducing levels; 200 mm	8	sm		
B	Excavate for strip footing trenches n.e. 1.5 m deep	5	cm		
C	Extra-over all excavation for excavating rock irrespective of class.	1	cm		
D	Level bottom of foundations to receive blinding	5	sm		
E	Return, fill-in and rum selected imported materials around foundations	1	cm		
F	Remove and cart away surplus excavated materials. <u>Diposal of water</u>	4	cm		
G	Keeping all excavations free from all water including spring or running water  <u>Planking and strutting</u>		Item		
H	Uphold the sides of all excavations  <u>Filling</u>		Item		
J	Hardcore filling in making up levels, hand packed, 300mm thick in layers of 150mm maximum thickness	3	cm		
K	25mm (average) thick quarry dust blinding to surfaces of hardcore	8	sm		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	<u>Antitermite treatment</u> Premise 200 SC' or other equal and approved anti-termite insecticide treatment with ten years guarantee, applied strictly in accordance with manufacturer's instructions, to tops of fill and foundation walls	8	sm		
	<u>Concrete</u> Insitu concrete; reinforced; class 20 / (20mm); vibrated				
B	Strip footing	1	cm		
C	100mm thick bed	8	sm		
	<u>Reinforcement</u>				
D	<u>Supply and fix ribbed bars Reinforcement including bending ,hooks,tying wire,cutting spacersand supporting all in position as decribed</u>				
J	Diameter; 12mm	60	kgs		
K	Diameter; 8mm	40	kgs		
E	Reference A142 mesh 200 x 200 mm , weight 2.22 kgs per square meter ( measured net - no allowance made for laps( including bends, tying wire and distance blocks	8	sm		
	<u>Walling</u>				
F	200 mm thick natural stone foundation walling bedded in c/s mortar <u>Sawn formwork to insitu concrete as described:-</u>	4	sm		
G	To sides; vertical or battering of foundations, ground beams or the like	4	sm		
H	Edges of ground floor slab; 75 to 150mm wide	9	lm		
	<u>Damp proofing</u>				
J	Polythene sheet; 1000 gauge, 200mm welted laps (no allowance made to laps), horizontal; 1 no. layer laid on compacted quarry dust blinding	8	sm		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	200mm wide; B.S. 743 Type A bitumen hessian base 150 mm laps (no allowance made for laps); horizontal, 1 no. layer, bedded in cement sand (1:3) mortar  <u>In situ Finishings</u>	9	lm		
B	14mm thick 2 No. coatwork cement sand (1:3) render; wood floated to concrete or blockwork  <u>Painting and Decorations</u>  <u>Prepare and apply three coats bituminous paint to:</u>	4	sm		
C	Wood floated rendered plinths over 300mm girth  <u>Paving</u>	4	sm		
D	Excavate and lay 600x600mm pcc paving slabs on murrum bed including jointing and pointing in cement sand mortar mix (1:4) all round the building.	14	sm		
<i>Carried to Collection</i>					
<p><b><u>COLLECTION</u></b> From page BW/1</p> <p>From page BW/2</p> <p>From page above</p>					
<b>TOTAL FOR SUBSTRUCTURES CARRIED TO SUMMARY</b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>ELEMENT NO. 2</u>				
	<u>RC SUPERSTRUCTURE</u>				
	<u>In situ concrete; reinforced; class 20 / (20mm); vibrated</u>				
A	Beams	1	cm		
B	100mm thick suspended roof slab including overhangs twice throated standard	9	sm		
	<u>Reinforcement</u>				
	<u>Supply and fix ribbed bars Reinforcement including bending ,hooks.tying wire,cutting spacersand supporting all in position as decribed</u>				
C	In assorted reinforcement of various sizes	900	kg		
	<u>Sawn formwork to insitu concrete as described:-</u>				
D	To sides and soffits of ring beam	21	sm		
E	Soffits of suspended roof slab	9	sm		
	<i>Carried to Collection</i>				
	<b><u>COLLECTION</u></b>				
	From page Above				
	TOTAL FOR RC SUPERSTRUCTURE CARRIED TO SUMMARY				



ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>ELEMENT NO. 3</u>				
	<u>WALLING</u>				
	<u>Precast concrete grade 20(12mm aggregate) including formwork, finishing fair on all exposed surfaces and hoisting and placing in position, bedding, jointing and pointing in cement and sand (1:3) mortar</u>				
A	WINDOW CILL; 250 x 50 mm extreme height; once weathered; once throated; reinforced as necessary for handling; surface fair finish 275 mm girth; bedding, jointing and pointing in cement sand (1:3) mortar	4	lm		
	<u>NATURAL STONE WALLING</u>				
B	200 mm thick approved machine cut natural stone; bedding, jointing and pointing in cement	20	sm		
C	Extra over recessed horizontal and vertical flush pointing in 10mm thick rod in cement and sand (1:3) mortar; one coat of bituminous paint.	20	sm		
<i>Carried to Collection</i>					
	<u>COLLECTION</u>				
	From page Above				
<b>TOTAL FOR WALLING CARRIED TO SUMMARY</b>					



ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<b>ELEMENT NO. 5</b>				
	<b>DOORS</b>				
	<u>Wrot hardwood framed frames and framings</u>				
A	100 x 50 mm; 2 No. labours; plugged door frame	11	lm		
B	100 x 50 mm; 4 No. labours; door transome	11	lm		
C	50 x 20mm architraves with 8 No. labours	11	lm		
D	25 x 25mm quadrants with 3 No. labours	11	lm		
	<b><u>45mm Thick flush pannel doors to B.S 459: part 2 mahogany veneered both sides and lipped on all edges in approved hardwood</u></b>				
E	Door size 900 x 2100 mm high	1	No.		
	<u>50mm thick framed hardwood and ledged braced battened, single-leave, single swing comprising 150 x 50mm top rail, 150 x 50mm stiles, 150 x 50mm middle rails, 200 x 50mm bottom rail infilled with 50mm thick solid moulded timber members; edges bevelled and grooved into frames; all framed, clamped and grooved together.</u>				
F	Door; overall size 1200 x2400 mm high 2100X	1	No		
	<u>Iron mongery</u>				
	<b><u>Supply and fix the following to UNION catalogue or other equal and approved</u></b>				
	To softwood, hardwood or the like fixing with screws				
G	Two lever ditto	2	No.		
H	100mm brass butt hinges	12	prs		
J	Rubber door stop complete with 38 mm rawl bolt	2	No.		
K	100mm night latch	2	No.		
L	100x25mm x 20G.m.s cramps twice bent & built into wall	12	No.		
	<b><u>Painting and Decorations</u></b>				
	<b><u>On wood</u></b>				
	<u>Aluminium primer or other equal and approved wood primer before fixing: -</u>				
M	Backs of frame, board, etc n.e 100mm	11	lm		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>Prepare and apply three coats silk vinyl paint on woodwork</u>				
A	General surfaces of timber doors over 300mm girth;	8	sm		
B	Frames not exceeding 100mm girth;	11	lm		
<i>Carried to Collection</i>					
	<b><u>COLLECTION</u></b> From page Above From page Above				
TOTAL FOR DOORS CARRIED TO SUMMARY					

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>ELEMENT NO. 6</u> <u>WINDOWS</u> <u>METAL WORK PURPOSE - MADE UNITS</u> <u>Supply, assemble and fix the following purpose-made mild steel casement windows: standard metal section from approved manufacturer complete with frames, transoms, mullions and with and including permanent ventilators comprising "T" bar, gauze and 16 gauge sheet metal hood 50mm high x 50mm projection to full width of window, coupling mullions, kenya power corporate grillwork, approved ironmongery and one coat manufacturer's primer; all welding ground to smooth finish.</u>				
	Steel; for glazing with putty, lugs to two jambs, cutting and pinning to concrete or blockwork, fixing to head and sill with screws; plugging				
A	Window, overall size 1000 x 1200mm high; heavy duty; all to detail	1	No.		
B	Ditto; 500x1200mm high; ditto	2	No.		
C	Ditto; 450x600mm high; ditto	1	No.		
	<u>Glazing</u>				
D	5mm Thick clear sheet glass panes over 0.1 but not exceeding 0.5 square meters; fixing with putty	2	sm		
E	Ditto; obscure	1	sm		
	<u>Painting and Decorations</u> <u>On Metal work</u> <u>Prepare and apply three coats oil paint full gloss to Crown Solo or other equal and approved to: -</u>				
F	General window surfaces; over 300mm girth	2	sm		
	<i>Carried to Collection</i>				
	<b><u>COLLECTION</u></b> From page BW/1				
	<b>TOTAL FOR WINDOWS CARRIED TO SUMMARY</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>ELEMENT NO. 7</u> <u>FINISHES</u> <u>Wall finishes</u> <u>External wall finishes</u> <b><u>Plaster: 12mm thick 2 No. coatwork, 9mm first coat of cement sand (1:6); 3mm second coat of cement and lime putty (1:10); steel trowelled to concrete or blockwork base generally to: -</u></b>				
A	Walls, beams; External <u>Internal wall finishes</u> <u>Plaster: 12mm thick 2 No. coatwork, 9mm first coat of cement sand (1:6); 3mm second coat of cement and lime putty (1:10); steel trowelled to concrete or blockwork base generally to: -</u>	4	sm		
B	Walls, internal <u>Tile, Slab or Block Finishings</u> <b><u>Approved ceramic tiles to B.S. 1281; local: coloured glazed wall tiles to regular or approved other pattern; bedding and jointing in cement sand (1:4) mortar, grouting with white cement</u></b>	25	sm		
C	8mm thick; butt joints straight both ways; to cement sand base (m/s) to walls internal	7	sm		
D	Plastic edging (Provisional) <u>Beds or Backings</u> <u>Render: cement and sand (1:3)</u>	9	lm		
E	14mm thick one coat backings; wood floated to receive ceramic tiles (m/s) to concrete or blockwork base; to walls internal <u>Painting and decorations</u> <u>Prepare and apply three coats of silk vinyl paint to the following surfaces</u>	7	sm		
F	Plastered surfaces; internal <u>Prepare and apply three coats of wall master</u>	18	sm		
G	Medium textured wall master byramix coating on and including 12mm thick render; applied as per the manufacturer's instructions	4	sm		
	<i>Carried to Collection</i>				



ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	<p><u>Prepare and apply three coats of bacteria &amp; fungal resistant P.E matt wall paint to: -</u></p> <p>Plastered surfaces; internal (wet area)</p> <p><b><u>Floor finishes</u></b></p> <p><u>The contractor shall supply samples of all finishes for approval by the client before application</u></p> <p><u>Tile, Slab or Block Finishings</u></p> <p><b><u>Approved ceramic tiles; local; non slip floor tiles to regular or other approved pattern; bedding and jointing in cement sand (1:4) mortar; grouting with matching cement</u></b></p>	7	sm		
B	<p>10mm thick; butt joints both ways; to cement sand base (m/s); to floors level; internal</p>	9	sm		
C	<p>100 mm thick skirting; straight junction with wall and floor finish.</p> <p><u>Beds or Backings</u></p> <p><u>Screed; cement and sand (1:3)</u></p>	8	lm		
D	<p>30mm thick one coat backings; wood floated to receive ceramic tiles (m/s) to concrete or blockwork base; to floors level; internal</p> <p><b><u>Ceiling finishes</u></b></p> <p><b><u>12mm (minimum) two-coat plaster: 9mm first coat of cement sand (1:6). 3mm second coat of cement and lime putty (1:9); steel trowelled to: -</u></b></p>	9	sm		
E	<p>Concrete soffits</p> <p><u>Painting and Decorations</u></p> <p><u>On steel trowelled plastered surfaces</u></p> <p><b><u>Prepare and apply three coats of silk vinyl paint to the following surfaces</u></b></p>	9	sm		
F	<p>Concrete soffits</p>	9	sm		
	<i>Carried to Collection</i>				
	<b><u>COLLECTION</u></b>				
	From page BW/8				
	From page Above				
	TOTAL FOR FINISHES CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<b>ELEMENT NO. 8</b> <b>JOINNERY, FIXTURES &amp; FITTINGS</b> <b>Wardrobe</b>  <u>Inbuilt wardrobe complete with iron mongery, painting &amp; decorations</u> A Inbuilt wardrobe size 800mm long x 400mm deep x 1800mm high comprising 25mm thick mdf doortops on 40x30mm bearers; 25mm thick mdf sliding double door pannel, varnished; 20mm dia chrome cloth hanging rail; stainless steel door handle; 100x30mm skirting; sloping shoe rack; 15x8mm mdf beading; with and including 100mm high 1:3:6 concrete plinth; all to approval; overall depth 600mm  <b>Worktops</b> B 1800 x 300 x 900 mm suspended worktop comprising 100 mm thick mass concrete 1:3:6 plinth steel trowelled screed, 100mm R.c class 20 worktop, 20 mm thick ceramic tiles top; including fabric mesh reinforcement as necessary  <b>Mirrors</b> C 6mm thick polished plate glass, silver backed mirror with bevelled edges, size 610x497mm, plugged and screwed to wall with 4No. Capped screws and 5mm thick foam rest	1	lm		
		1	No.		
		1	No.		
	<i>Carried to Collection</i>				
	<b>COLLECTION</b>  From page Above				
	TOTAL FOR JOINNERY, FIXTURES & FITTINGS CARRIED TO SUMMARY				



ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<b><u>SUMMARY PAGE</u></b>				
1	SUBSTRUCTURE (ALL PROVISIONAL)			GH / 3	
2	RC SUPERSTRUCTURE			GH / 4	
3	WALLING			GH / 5	
4	DOORS			GH / 6	
5	WINDOWS			GH / 7	
6	FINISHES			GH / 10	
7	JOINNERY, FIXTURES & FITTINGS			GH / 11	
	TOTAL FOR GUARD HOUSES CARRIED TO GRAND SUMMARY				



**PROPOSED KIGANJO STORES WAREHOUSE & ASSOCIATED CIVIL WORKS**

**GRAND SUMMARY**

BILL NO.	DESCRIPTION	Page No.	OFFICIAL USE	CONTRACTOR'S USE
			K.SHS.	K.SHS.
1	PRELIMINARIES	P / 15		
2	WAREHOUSE	WH /32		
3	STOCK YARD PAVING	SYP/3		
4	STORAGE SHED	SS/1		
5	PERIMETER WALL	PW/4		
6	GATE HOUSE	GH/12		
	TOTAL KSHS			
	Add VAT 16%			
	<b>Total carried to form of tender (KShs.)</b>			

**Amount in words: Kenya Shillings**

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 .....

**Contractors Name, Address**.....

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**Contractors Stamp, Signature & Date**.....

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**SCHEDULE OF RATES**

ITEM	DESCRIPTION	QTY	UNIT	RATE
A	350mm thickness for washes grouted stone pitching the formishing of materials and construction of a protective covering in stone pitching Grouted Stone pitching. The spaces between the stones shall be filled with cement mortar composed of one part of cement to three part of sand.with and including 100mm diamater at 1000 weep holes	1	sm	

