

		Shs.
<u>PRELIMINARIES</u>		
BILL NO. 1		
<u>PRELIMINARY PARTICULARS</u>		
A	<u>NAME OF PARTIES</u>	
	<p>The "Employer" is : Kenya Power & Lighting Co. Ltd P.O. Box 30099 - 00100 <u>NAIROBI</u></p> <p>The term "Employer" and "Kenya Power" and "Kenya Power & Lighting Co. Ltd" wherever used in the contract</p> <p>The "Project Manager" is : The Manager, Administration & Property, HR& Administration Kenya Power & Lighting Co. Ltd P.O. Box 30099 - 00101 <u>NAIROBI</u></p> <p>The "Project Officer " is : The Kenya Power Principal Projects Officer Administration & Property, HR& Administration Kenya Power & Lighting Co. Ltd P.O. Box 30099 - 00101 <u>NAIROBI</u></p> <p>The "Project Quantity Surv The Kenya Power Quantity Surveyor, Administration & Property, HR& Administration Kenya Power & Lighting Co. Ltd P.O. Box 30099 - 00101 <u>NAIROBI</u></p>	
B	<u>DESCRIPTION OF SITE</u>	
	<p>The site is located in Meru town (behind Meru Law courts - Next to lands office), Meru County approximately 250 KMS from Nairobi city via Nairobi - Embu - Meru Highway.</p> <p>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.</p> <p>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.</p> <p>The Contractor must obtain the Project Manager's approval and directions regarding the use of any materials found on the site.</p> <p>The above site description including distances are given for guidance only and without warranty.</p>	
C	<u>ACCESS TO SITE</u>	
	<p>Access to site shall be as directed by the Project Manager. The Contractor shall strictly observe police & NTSA regulations regarding traffic movement.</p>	
Preliminaries Carried to collection		KShs.

A WORKING AND STORAGE SPACE

Working and storage space will be confined to the area designated by the Project Manager within the plot boundary.

B WORKING HOURS

The Work must be carried out to cause the minimum inconvenience to the occupants of the adjoining premises. In particular, no hammering, mechanical drilling or other unduly noisy work may be commenced before 8.00 a.m. or continued after 6.00 p.m. without prior approval of the Project Manager.

C DESCRIPTION OF THE WORKS

The Works comprise of the following:-

- i) Construction of an office block and associated building services

Services

- i) Plumbing and drainage works
- ii) Electrical installations
- iii) Structured cabling works

External Works

- i) Construction of a retaining wall

Preliminaries

Carried to collection

KShs.

			Shs.
<u>GENERAL MATTERS</u>			
<u>SUFFICIENCY OF TENDER</u>			
A	The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his 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.		
B	<u>STAMP CHARGES</u>		
	The Contractor shall allow for the payment of all Stamp Charges in connection with the Surety and Contract Agreement.		
C	<u>DEFINITIONS AND ABBREVIATIONS</u>		
	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.	
	"CM."	Shall mean Cubic Metres.	
	"SM."	Shall mean Square Metres.	
	"LM."	Shall mean Linear Metres.	
	"MM"	Shall mean Millimetres.	
	"KG."	Shall mean Kilogramme.	
	"NO."	Shall mean Number.	
	"M.S"	Shall mean Measured Separately	
	PRS or Prs	Shall mean Pairs	
	a.b.d	Shall mean as before described	
	Ditto or Do	Shall mean the whole of the preceding description except as qualified in the description in which it occurs.	
	NTSA	Shall mean National Transport & Safety Authority of Kenya	
	E.o	Shall mean Extra Over	
	bsm	Shall mean both sides measured	
Preliminaries			Carried to collection KShs.

	Shs.
<p>A <u>PROGRESS SCHEDULE</u></p> <p>The Contractor shall, upon receiving instructions to proceed with the Work, draw up a time and progress Schedule setting out the order in which the Works are to be carried out with the appropriate dates thereof. This Time and Progress schedule is to be agreed with the Project Manager and no deviation from the order set out in this Schedule will be permitted without the written consent of the Project Manager. The Main Contractor will be responsible for arranging the above programme with all Sub-Contractors including the Nominated Sub-Contractors and Nominated Suppliers.</p>	
<p>B <u>FIGURED DIMENSIONS</u></p> <p>Figured dimensions are to be followed in preference to dimensions scaled from the Drawings; but wherever possible dimensions are to be taken on the Site or from the Buildings. Before any Work is commenced by Sub-Contractors or Specialist Firms, dimensions must be checked on the Site and/or buildings and agreed with the Contractor, irrespective of the comparable dimensions shown on the Drawings. The Contractor shall be responsible for the accuracy of such dimensions.</p>	
<p>C <u>PROVISIONAL WORK</u></p> <p>All "Provisional" and other work liable to adjustment under this Contract shall be left uncovered for a reasonable time to allow all measurements needed for such adjustment to be taken by the Quantity Surveyor. Immediately the work is ready for measurement, the Contractor shall give notice to the Quantity Surveyor.</p> <p>If the Contractor makes default in these respects he shall, if the Project Manager so directs, uncover the work at his own expense to enable the measurements to be taken.</p>	
<p>D <u>EXISTING SERVICES</u></p> <p>Prior to commencement of any work the Contractor is to ascertain from the relevant Authorities the exact position, depth and level of all existing electric cables, water pipes or other services in the area and he shall make whatever provisions may be required by the Authorities concerned for the support and protection of such services. Any damage or disturbance caused to any services shall be reported immediately to the Project Manager and the relevant Authority and shall be made good to their satisfaction at the Contractor's expense.</p>	
<p>E <u>TRANSPORT TO AND FROM THE SITE</u></p> <p>The Contractor shall include in his prices for the transport of materials workmen, etc., to and from the Site of the Proposed Works, at such hours and by such routes and vehicles as are permitted by the Authorities and in particular by the Transport Licensing Board and / or the National Transport & Safety Authority ,</p>	
<p>Preliminaries Carried to collection KShs.</p>	

	<p>A <u>PUBLIC AND PRIVATE ROADS, PAVEMENTS, ETC</u></p> <p>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.</p> <p>B <u>POLICE REGULATIONS</u></p> <p>The Contractor is to allow for complying with all instructions and regulations of the police Authorities.</p> <p>C <u>ENVIRONMENTAL REGULATIONS</u></p> <p>The Contractor shall observe all the requirements of the National Environment Management Authority (NEMA) and especially those conditions given in the Project's Environmental Impact Assessment Report Approved by NEMA. The Contractor shall collaborate with the Environmental Impact Assessment (EIA) expert to ensure that proposed mitigation measures are adhered to during construction phase and where necessary appropriate mending up activities undertaken and the same reported back to NEMA as required.</p> <p>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.</p> <p>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.</p> <p>D <u>CONTRACTORS' SUPERINTENDENCE</u></p> <p>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.</p> <p>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.</p>	<p>Shs.</p>
	<p>Preliminaries</p> <p>Carried to collection</p> <p>KShs.</p>	

			Shs.
<u>CONTRACTORS' SUPERINTENDENCE -(CONTINUED)</u>			
Before the Tenderer's offer is accepted the Project Manager may personally interview the Contractor's proposed Representative.			
A curriculum vitae of past experience and qualifications must be provided for the Project Manager's scrutiny.			
The Project Manager's decision will be final regarding the suitability of the proposed Representative.			
A	<u>WATER</u>		
All water shall be fresh, clean and pure, free from earthy, vegetable or organic mater, acid or alkaline substances in solution or suspension			
The Contractor shall provide at his own risk and cost all water for use in connection with the Works (including the work of Sub-Contractors). The Contractor shall provide at his own expense all temporary distribution pipes, storage tanks, metres, etc., and he shall clear away same upon completion of the Works.			
B	<u>LIGHTING AND POWER</u>		
The Contractor shall provide at his own risk and cost all artificial lighting and power for use on the Works, including all Sub-Contractors' and Specialists' requirements and including all temporary connections, wiring, fittings, etc., and clearing away on completion. The Contractor shall pay all fees and obtain all permits in connection therewith.			
C	<u>SAFETY</u>		
The Contractor shall comply at all times with the requirements of the Factory Act (Cap 514), Building Construction Rules, Supplement 18, Legal Notice No.40 dated April, 1984 and ensure that the safety of his workpeople and authorised visitors to the Site is protected at all times. In particular there shall be proper provision of planked footways and guard-rails to scaffolding, etc., protection against falling materials and tools and the Site shall be tidy and clear of dangerous rubbish.			
The Contractor shall appoint a safety officer as required by the Factory Act and notify the Factory Inspector of his name. the safety Officer shall be on Site at all times and all directions given by the Project Manager to the Safety Officer shall be deemed to be Project Manager's Instructions, and shall be complied with promptly without additional cost to the contract.			
Occupational Safety and Health Act no. 15 of 2007 must also be complied with			
The Project Manager shall be empowered to suspend work on the Site should he consider these conditions are not being observed, and no claim arising from such suspension will be allowed.			
Preliminaries	Carried to collection	KShs.	

	Shs.
<p>A <u>PROTECTIVE CLOTHING</u> The Contractor shall provide all protective or any other special clothing or equipment for his employees that may be necessary.</p> <p>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.</p> <p>B <u>PROVISIONAL SUMS</u> The term "Provisional Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A Item A7(i) of the Standard Method of measurements Such sums are net and no addition shall be made to them for profit.</p> <p>C <u>ADJUSTMENT OF PROVISIONAL SUMS</u> 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 variation clause 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.</p> <p>D <u>PRIME COST (OR P.C.) SUMS</u> 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 A7(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.</p> <p>E <u>ADJUSTMENT OF P.C. SUMS</u> 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 receipted 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.</p> <p>Preliminaries Carried to collection. KShs.</p>	

		Shs.
	<p><u>MATERIALS AND WORKMANSHIP</u></p> <p>A <u>GENERALLY</u></p> <p>All materials shall be new unless otherwise directed or permitted by the Project Manager and in all cases where the quality of goods or materials is not described or otherwise specified, is to be the best quality obtainable in the ordinary meaning of the word "best" and not merely a trade signification of that word.</p> <p>All materials and workmanship shall, unless otherwise specified or described, conform to the appropriate British Standard Institution specification and/or Kenya Standards current at the date of tender.</p> <p>The Contractor shall order all materials to be obtained from overseas immediately after the Contract is signed and shall also order materials to be obtained from local sources as early as necessary to ensure that such materials are on Site when required for use in the Works.</p> <p>The Contractor shall be responsible for and shall replace or make good at his own expense any materials lost or damaged.</p> <p>The Works throughout shall be executed by skilled workmen well versed in their respective trades.</p> <p>B <u>REJECTED WORKMANSHIP OR MATERIALS</u></p> <p>Any workmanship or materials not complying with the specific requirements or approved samples or which have been damaged, contaminated or have deteriorated, must immediately be removed from the Site and replaced at the Contractor's expense, as required.</p> <p>C <u>PROPRIETARY MATERIALS</u></p> <p>Where proprietary materials are specified herein-after the contractor may propose the use of materials of other manufacturer but equal quality for approval by the Project Manager.</p> <p>All materials and goods, where specified to be obtained from a particular manufacturer or supplier are to be used or fixed strictly in accordance with their instructions.</p> <p>D <u>SAMPLES</u></p> <p>The Contractor shall furnish within the first two weeks of site take over and before work commences and at his Preliminaries Carried to collection KShs.</p>	

			Shs.
A	<u>CONCRETE TESTS</u>		
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	<u>OTHER MATERIAL TESTS</u>		
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			
C	<u>PROGRAM OF WORKS</u>		
The Contractor shall allow in his programme for the following 11 public holidays per calendar year in Kenya.			
<div><div>1.</div><div>New Year's Day (1st January)</div></div> <div><div>2.</div><div>Good Friday</div></div> <div><div>3.</div><div>Easter Monday</div></div> <div><div>4.</div><div>Labour Day (1st May)</div></div> <div><div>5.</div><div>Madaraka Day (1st June)</div></div> <div><div>6.</div><div>Idd Ul Fitr</div></div> <div><div>7.</div><div>"Utamaduni" Day (10th October)</div></div> <div><div>8.</div><div>Mashujaa Day (20th October)</div></div> <div><div>9.</div><div>Jamhuri day (12th December)</div></div> <div><div>10.</div><div>Christmas Day (25th December)</div></div> <div><div>11.</div><div>Boxing Day (26th December)</div></div>			
The Contractor should also allow per calendar year for a further 2 unspecified public holidays which may be			
D	<u>MINISTRY OF HEALTH REGULATIONS</u>		
The Contractor shall adhere to the interim guidelines and protocols for SARS-CoV 2 and COVID 19 which were developed in response to the new Coronavirus Disease 2019. The adherence to these guidelines shall include any periodical updated guidelines by the said MoH - Kenya			
Preliminaries			
Carried to collection			KShs.

			Shs.
	<u>TEMPORARY WORKS</u>		
A	<u>OFFICE AND SHEDS</u> The Contractor shall erect and maintain temporary office accommodation for his own use, and ample temporary watertight sheds for the proper storage and protection of materials and for the use of artisans and remove when ordered. Floors of sheds shall be at least 150mm above ground level.		
B	<u>SANITATION</u> The Contractor shall provide the necessary sanitation for his staff and workmen to the requirements and satisfaction of the Health Authorities and maintain the same in a thoroughly clean and sanitary condition and pay all conservancy fees during the period of the Works and remove when no longer required.		
C	<u>SECURITY</u> The Contractor shall be responsible for the security of the works in every respect and in particular it shall be the Contractor's responsibility to ensure that each of his workers security is guaranteed while working on the site and in such manner as is acceptable by KPLC The Contractor shall also accept liability for and bear the cost of failure to provide security for the works and workers as per the conditions of this contract once entered into		
D	<u>WORKING DRAWINGS & DEVELOPMENT APPROVALS</u> Provide for preparation and approval of final set of working drawings in A1 size; using the attached drawings; all by a licenced Architect & licenced Structural Engineer including all necessary county government's approvals before commencement of works but after contract signing.		
E	ALTERATIONS TO BILLS, PRICING, ETC.		
	Preliminaries	Carried to collection	KShs.

A	<u>PLANT, TOOLS AND SCAFFOLDING</u>	Shs.
	<p>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.</p> <p>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.</p> <p>Such scaffolding shall be constructed of tubular steel or timber of sufficient scantlings and be provided with planked footways and guard-rails to approval.</p> <p>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.</p> <p>Scaffolding is not measured hereinafter, and the Contractor must allow here</p>	
B	<u>EXISTING AND ADJACENT PROPERTY</u>	
C	<u>INSURANCE</u>	
D	<u>LABOUR CAMPS</u>	
	<p>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.</p>	
	<p>Preliminaries Carried to collection KShs.</p>	

			Shs.
A	<p><u>HOARDING</u></p> <p>The Contractor shall enclose the Site with a hoarding 2.40 metres high, with openings and gates as required, constructed of substantial timbers to approval and covered with new Galvanised iron corrugated sheeting painted to approval.</p>		
B	<p><u>TEMPORARY ROADS</u></p> <p>The Contractor shall provide where directed all temporary access roads, tracks and paths necessary for the execution of the Works, including making good when no longer in use.</p>		
C	<p><u>SIGNBOARD</u></p> <p>The Signboard and lettering on same for the display of the General and Sub-Contractor's names shall be of an approved size with the Employer's name painted thereon. The Project Manager's name shall be printed in letters not exceeding 100mm in height all to the Project Manager's design. No other signboard or advertising will be permitted.</p> <p><u>NOMINATED SUB-CONTRACTORS AND SUPPLIERS</u></p>		
D	<p><u>NOMINATED SUB-CONTRACTORS</u></p> <p>The Contractor shall be responsible for Nominated Sub-Contractors in every respect and in particular it shall be the Contractor's responsibility to ensure that each Sub-Contractor commences and completes the work in such manner and is ready on the Site with his materials, labour and special plant at such times so as to conform with the progress Schedule, as specified previously, and so ensure satisfactory progress.</p> <p>The Contractor shall also accept liability for and bear the cost of General Attendance on Nominated Sub-Contractors which shall be deemed to include for:</p>		
	Preliminaries	Carried to collection	KShs.

			Shs.
<u>NOMINATED SUB-CONTRACTORS - CONTINUED</u>			
<p>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.</p> <p>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.</p> <p>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:</p> <p>Unloading, storing, hoisting, placing in position, providing power, provision of special scaffolding.</p> <p>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.</p> <p>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.</p>			
A	<u>NOMINATED SUPPLIERS</u>		
<p>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.</p> <p>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.</p>			
B	<u>PRIME COST RATES</u>		
<p>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.</p> <p>The actual nett cost per unit will be adjusted within the Final Account against the P.C. rate stated.</p>			
Preliminaries			
Carried to collection			KShs.

	Shs.
<p>A <u>PROTECTION</u></p> <p>The Contractor shall cover up and protect from damage, including damage from inclement weather, all finished work and unfixed materials, including that of Sub-Contractors, etc., to the satisfaction of the Project Manager until the completion of the Contract, and carefully preserve all trees or bushes on or near the Site.</p>	
<p>B <u>CLEANING</u></p> <p>The Contractor shall, upon completing of the Works, at his own expense, remove and clear away all surplus excavated materials, plant, rubbish and unused materials and shall leave the whole of the Site and Works in a clean and tidy state to the satisfaction of the Project Manager, including clearing away and making good all traces of temporary access roads, offices, sheds camps, etc. Particular care shall be taken to leave clean all floors and windows and to remove all rubbish and dirt as it accumulates. The Contractor is to find his own dump and shall pay all charges in connection therewith.</p>	
<p>C <u>TRAINING LEVY</u></p> <p>The Contractor's attention is drawn to legal Notice No. 237 of October, 1971, which requires payment by the Contractor of Training Levy on all Contracts of more than 50,000/- in value and his Tender must include for all costs arising therefrom.</p>	
<p>D <u>STANDARD LEVY (STANDARDS ACT- CAP 496)</u></p> <p>The Contractor's attention is drawn to legal Notice No. 267 of 2nd June, 1990 which requires payment by the Contractor of the Standards Levy at a rate of 0.2% of the contract sum less allocation for prime cost sums and provisional sums, subject to a ceiling of KShs. 400,000.00 per annum. The Contractor must therefore include for all costs (if any) arising or resulting therefrom.</p>	
<p>E <u>NATIONAL CONSTRUCTION AUTHORITY LEVY (NCA)</u></p> <p>The contractor shall comply with any required NCA approvals including any costs associated with execution of</p>	
<p>F <u>VALUE ADDED TAX</u></p> <p>The Contractor's attention is drawn to the Finance Act 1993 and subsequent amendments thereof which requires payment by the Contractor of Value Added Tax (VAT) on construction services rendered. Whether VAT is added at the grand summary page or inclusive in the rates, The tender sum as stated in the form of tender shall be deemed to be inclusive of VAT unless otherwise stated in the tender document.</p>	
<p>Preliminaries Carried to collection KShs.</p>	

COLLECTION

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PRELIMINARIES

TO GRAND SUMMARY
AT END OF BILLS

KSHS.

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>BILL 2 - OFFICE BLOCK (BUILDING WORKS)</u>				
	<u>ELEMENT NO. 1</u>				
	<u>SUBSTRUCTURES (ALL PROVISIONAL)</u>				
	<u>Site clearance</u>				
A	Clear site off grass, bushes, small trees & the like & burn or cart away all arisings	2782	sm		
B	Cut down small trees not exceeding 600 mm girth; grub up up roots, cut in to approved sizes and dispose as directed to a location not exceeding 15 KM from site as directed	98	no		
C	Cut down trees approx. 600 mm girth but not exceeding 900 mm girth ditto	63	no		
D	Ditto exceeding 900 mm girth but not exceeding 1200 mm girth ditto	31	no		
E	Allow for removal and disposal of tree stamps girth exceeding 600 mm but not exceeding 900 mm.	63	no.		
F	Ditto exceeding 900 mm but not exceeding 1200 mm ditto	31	no.		
	<u>Oversite excavation</u>				
G	Excavate oversite to remove top vegetable soil average 150mm deep; wheel and spread on site n.e 100m away from the construction area as directed	2782	sm		
H	Excavate to reduce levels average 300 mm deep ditto	2782	sm		
	<u>Bulk Excavation</u>				
J	Bulk excavation for basement not exceeding 1.5 M from reduced level	788	cm		
K	Ditto exceeding 1.5 M but not exceeding 3.0 M from reduced level	324	cm		
	<u>Foundation Excavation</u>				
L	Excavate for strip footing n.e 1.50 meters deep starting from reduced levels	182	cm		
M	Ditto for column bases starting from reduced level not exceeding 1.50 meters ditto	45	cm		
N	Extra-over all excavation for excavating in rock irrespective of class	11	cm		
	<i>Carried to collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	Backfilling with selected excavated materials; rammed & compacted around foundations in layers of 150mm thick to structural engineers approval	1325	cm		
B	Wheel and spread on site n.e 100m away from the construction area surplus excavated material as directed	565	cm		
C	Imported red soil filling rammed and compacted in layers to make up levels	1247	cm		
	<u>Diposal of water</u>				
D	Keeping all excavations free from all water including spring or running water	1	Item		
	<u>Planking and strutting</u>				
E	Uphold the sides of all excavations	1	Item		
	<u>Filling</u>				
F	Hardcore filling in making up levels, hand packed, averaging 300mm thick in layers of 100mm maximum thickness with roller to the satisfaction of the PM	502	sm		
G	50mm (average) thick quarry dust blinding to surfaces of hardcore	502	sm		
	<u>Antitermite treatment</u>				
H	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	542	sm		
	<u>Concrete</u>				
J	50mm thick mass concrete class (1:4:8) to bottoms of strip footing	129	sm		
K	Ditto column bases	34	sm		
	<u>In situ concrete; reinforced; class 20 / (20mm); vibrated</u>				
L	Strip footing	41	cm		
M	Column bases	12	cm		
N	Columns	10	cm		
P	Ground Beam	15	cm		
Q	150mm thick bed	542	sm		
	<u>Reinforcement</u>				
	<u>Bars; high yield steel; cold worked to B.S. 4461 including bends, hooks, tying wire and distance blocks</u>				
R	In assorted reinforcement of various sizes	7660	kg		
	<i>Carried to collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	<u>Fabric; B.S. 4483</u> 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)	542	sm		
B	<u>Sawn formwork to insitu concrete as described:-</u> To vertical sides of column bases	35	sm		
C	To vertical sides of columns	69	sm		
D	To ground beams	125	sm		
E	To edges of ground floor slab; 150mm high	143	lm		
F	Ditto strip footing; 300 mm high	124	sm		
G	<u>Walling</u> 200mm thick approved local natural stone; rough dressed; bedding, jointing in cement sand (1:4) mortar with and including hoop-iron after every alternate course	422	sm		
H	<u>Damp proofing</u> Polythene sheet; 1000 gauge, 200mm welted laps (no allowance made to laps), horizontal; 1 no. layer laid on compacted quarry dust blinding	542	sm		
J	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	208	lm		
K	<u>Cement and sand (1:4) rendering</u> Rendering to concrete and masonry surfaces finished with a steel float, thickness 25mm	75	sm		
L	<u>Prepare and apply three coats bituminous paint</u> Rendered surfaces externally	75	sm		
M	<u>Waterproofing of Basement</u> Waterproof cement sand plaster (1:3) admixed with 200 ml liquid waterproofing agent per bag of cement applied to basement walls externally below ground level	72	sm		
N	Prepare and apply appropriate basement waterproofing sealant or membrane to approval	72	sm		
P	Install drainage board to waterproofed surfaces to further prevent water ingress from retained soil masses	72	sm		
Q	<u>Paving Slabs.</u> 600 x 600 x 50 mm Precast concrete class 20/20 paving slabs, laid to falls on blinded hardcore surface and jointed in cement and sand (1:3) mortar	182	sm		
Carried to Collection					

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	200 x 200mm lintel reinforced with and including two 12mm diameter mild steel rods hooked at ends	9	lm		
	<u>NATURAL STONE WALLING</u>				
B	200 mm thick approved local; machine dressed both sides; bedding, jointing and pointing in cement sand (1:3) mortar	293	sm		
	Ditto in constructing pillars and arches	13	sm		
D	150mm ditto reinforced with hoop iron at alternate courses; ditto	40	sm		
	<u>ALUMINIUM PARTITION</u>				
E	Erect 2800 mm high aluminium framed partitions comprising of 75 x 45 x1.5 mm powder coated aluminium framing; 2 No. intermediate transome members; vertical members at 1200 mm centers complete with 1200 mm high bottom panels infilled with 18 mm thick mdf laminated both sides in blue colour; 1000 mm middle panel infilled with 6 mm one way tinted glass; 600mm top panel infilled in 5mm glazed alumunium louvres including matching all necessary aluminium beadings, antivibration rubber gaskets; all to detail and approval	69	sm		
TOTAL FOR WALLING CARRIED TO OFFICE BLOCK SUMMARY					

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	ELEMENT NO. 4 ROOF CONSTRUCTION, COVERING AND RAIN WATER DISPOSAL (PROVISIONAL) <u>Roof covering</u> <u>Galvanized iron box profile IT5 sheets; 28 gauge; pre-painted</u>				
A	Roof covering; 150mm laps both sides; and fixing to timber purlins (ms) on timber trusses (m/s) at 1200mm c/c all laid to fall at 1:12.5°	640	sm		
	<u>Accessories, fixing as necessary to roof sheets</u>				
B	400mm wide overall ridge cap	34	lm		
C	Ditto; hip ditto	74	lm		
D	Ditto; valley sheet	11	lm		
	<u>Timber Sections</u> <u>The following in 55 No. cypress timber trusses spanning</u> <u>averagely 5M centres and hoisted average 5m from ground</u> <u>level including, cutting, assembling, all as necessary:-</u>				
E	100x100 mm wall plate	222	lm		
F	100x75 mm rafters	570	lm		
G	100x75 mm tie beam	557	lm		
H	75x50mm struts and ties	971	lm		
J	100x50 mm cypress timber purlins	588	lm		
	<u>Eaves & Fascia</u> <u>Square Hollow Sections</u>				
L	75x50 X3 mm thick RHS bearers at 1200mm c/c anchored to concrete or block work .	137	lm		
M	25x25x2mm thick (1.13kg/m) frame to hold the metallic fascia.	613	lm		
N	1000 mm high fascia sheets welded on to 25x25x2mm SHS frame MS; joints ground smooth; 3 coats gloss oil paint	228	sm		
N	Approved t&g eaves timber boarding or any other equal and approved ceiling board secret fixed to and including 50 x 50mm celcured wrot cypress bearers or brandering at 600mm centres both ways	81	sm		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>RAINWATER DISPOSAL</u> <u>The following in sheet metal; corrosion and heat resistance</u>				
A	200x300mm gauge 26 sheet metal box gutter including gutter joint bracket, bracket, twin recessed thermo rubber seals, clip lock, joints in the running length fixed to fascia board with and including gutter support brackets at approved centers	110	lm		
B	Extra; for 150mm diameter outlet; 100mm long	18	no		
	<u>Heavy duty PVC pipes</u>				
C	150 mm diameter down pipe	81	lm		
D	Ditto swan neck bend with 1135mm projection	18	No.		
E	Ditto shoe bend encased in concrete surround	18	No.		
	<u>PERGOLA ROOF</u> <u>Translucent Sheets</u> <u>Translucent box profile IT5 sheets; 28 gauge</u>				
F	Roof covering; 150mm laps both sides; and fixing to timber purlins (ms) on timber trusses (m/s) at 1200mm c/c all laid to fall at 11.25°	25	sm		
	<u>Timber Sections</u> <u>The following in cypress timber hoisted average 3m from ground level including, cutting, assembling, all as</u>				
G	100x100 mm wall plate	28	lm		
H	100x75 mm rafters	19	lm		
J	100x50 mm cypress timber purlins	27	lm		
	<i>Carried to Collection</i>				
	From pag BW-OB /7 From above				
	TOTAL FOR ROOF CONSTRUCTION, COVERING AND RAIN WATER DISPOSAL CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>ELEMENT NO. 5</u>				
	<u>DOORS</u>				
	<u>ALUMINIUM DOORS - PURPOSE MADE UNITS</u>				
A	75 x 45 x 1.5 mm thick double leaf aluminium doors glazed with 6mm clear glass with and including including frames, iron mongery, plugged and screwed to walls and all necessary anti-vibration rubber gaskets and approved locks; all as per the door schedules provided to approval; size 3000 x 3000 mm high (D1)	2	No.		
B	Ditto Single leaf size 1000 x 3000 mm high (D2)	2	No.		
C	Ditto 900 x 2400 mm high;(D3)	2	No.		
	<u>Barglarproofing</u>				
D	Mild steel 20x20x3mm thick SHS in 100mm maximum spacing welded and ground smooth to approval including two coats of first quality red oxide primer to details	24	sm		
E	Prepare and apply <u>three coats</u> of 'CROWN SOLO' or other equal and approved super gloss oil paint to metallic surfaces	48	sm		
	<u>TIMBER DOORS</u>				
	<u>Wrot Mahogany framed frames and framings</u>				
F	100 x 50 mm; 2 No. labours; plugged door frame	57	lm		
G	100 x 75 mm; 4 No. labours; door transome	11	lm		
H	100 x 20mm architraves with 8 No. labours	63	lm		
J	20x 20 mm glazing bead	54	lm		
K	25 x 25mm quadrants with 3 No. labours	63	lm		
L	100 x 50 mm non rebated door frame	6	lm		
	<u>45mm Thick solid core flush doors to B.S 459: part 2 mahogany veneered both sides and lipped on all edges in approved hardwood</u>				
M	Door size 900 x 2400 mm high (D6)	10	No.		
N	Double leaf door size 1200x2400mm high; double swing; ditto (D7)	1	No.		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>STEEL WORK - PURPOSE - MADE UNITS</u> <u>Emergency burglar proof doors</u> <u>Mild steel pannelled 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 hollow section stiles, top, bottom and middle rails at 600mm centres vertical and horizontal, angles cut, mitred and welded; all panels faced with 4mm thick mild steel plates both sides; complete with emergency Push Bar; no allowance for forced entry; complete with all necessary iron mongery; door furniture, framings and the like; one coat manufacturer's primer; all welding ground to smooth finish, or any other equal and approved;all to the satisfaction of the Project Manager;</u>				
A	Single door; no allowance for forced entry; 1000 x 2400mm high; (D5) <u>Fire door</u> <u>Mild steel solid pannelled 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 hollow section stiles, top, bottom and middle rails at 600mm centres vertical and horizontal, angles cut, mitred and welded; all panels faced with 4mm thick mild steel plates both sides; complete with pull handle and 3 lever dead lock and all other necessary iron mongery; door furniture, framings and the like; one coat manufacturer's primer; all welding ground to smooth finish, or any other equal and approved;all to the satisfaction of the Project Manager;</u>	2	No.		
B	Single door; 1000 x 2400mm high; (D4) <u>Iron mongery</u> <u>Supply and fix the following to UNION catalogue or other equal and approved to soft wood, hardwood or the like fixing with screws</u>	1	No.		
C	Three lever mortice lock complete with set lever brass handle furniture	4	No.		
	PWD mortice lock complete with lift handles to lock	1	No.		
D	100mm brass butt hinges	15	prs		
E	150mm ditto; double swing	3	prs		
F	Door closer as union ref 8850	9	No.		
	<u>To concrete or blockwork; fixing with bolts; plugging</u>				
G	Rubber door stop complete with 38 mm rawl bolt	18	No.		
H	100mm long brass tower bolt	10	No.		
J	Extra over locks for WC "engaged/vaccant" indicator bolt	7	No.		
	<i>Carried to collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	150mm aluminium D pull handle	6	No.		
B	<u>Glazing</u> 5mm Thick clear sheet glass panes to timber fan lights with beading <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>	4	sm		
C	General surfaces of metal doors; over 300mm girth internal <u>On wood</u> <u>Aluminium primer or other equal and approved wood primer before fixing: -</u>	15	sm		
D	Backs of frame, board, etc n.e 100mm <u>Prepare, stain and apply three coats polyurethane matt varnish on woodwork internally</u>	63	lm		
E	General surfaces of timber doors over 300mm girth;	41	sm		
F	Frames; over 100mm but not exceeding 200mm girth; internal	63	lm		
G	Frames; over 200mm but not exceeding 300mm girth; internal	11	lm		
H	Frames not exceeding 100mm girth; internal	180	lm		
	<i>Carried to Collection</i>				
	<u>COLLECTION</u> From page BW-OB / 9 From page BW-OB / 10 From above				
	TOTAL FOR DOORS CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>ELEMENT NO. 6</u> <u>WINDOWS</u> Bull-nosed burnt clay, finishing fair on all exposed surfaces and hoisting and placing in position, bedding, jointing and pointing in pigmented cement and sand (1:3)				
A	150 x 25mm thick clay window sill <u>Wrot Mahogany</u>	88	lm		
B	100 x 25 mm thick window boards including bull-nosed edges and 25 x 25 mm bearer; plugged, counter sinking and flush pelleting.	88	lm		
C	25 x 25mm quadrant bead <u>ALUMINIUM WORKS</u> <u>PURPOSE - MADE UNITS</u> <u>Aluminium powder coated windows in 80x40x1.5 mm frames, mosquito gauge vents, 6 mm glazing; iron mongery; plugged and screwed to walls; all necessary antivibration rubber gaskets and the like; all to approval as per schedule and drawing</u>	88	lm		
D	Sliding window size 4600 x 2400mm (W1)	14	No		
E	Ditto 1500 x 2000mm (W2)	1	No		
F	Ditto 1500 x 1200mm (W3)	9	No		
A	Ditto 800 x 1200mm (W4) <u>Grills</u> <u>Fabricate and fix corporate grilling as described below;</u>	10	No.		
E	Mild steel 20x20x3mm thick SHS in 100mm maximum spacing welded and ground smooth to approval including two coats of fiirst quality red oxide primer to details <u>Painting and Decorations</u>	184	sm		
F	<u>On Metal Surfaces</u> Prepare and apply three coats of 'CROWN SOLO' or other equal and approved super gloss oil paint to metallic surfaces	368	sm		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>On wood</u> <u>Aluminium primer or other equal and approved wood primer before fixing: -</u>				
A	Backs of window board, etc over 100mm but not exceeding 200mm girth	88	lm		
B	Ditto; quadrant beads; n.e 100mm girth	88	lm		
	<u>Knot, prime, stop, prepare and apply three coats polyurethane clear varnish on woodwork internally</u>				
C	100-200mm girth; windowboards	88	lm		
D	Not exceeding 100 mm girth	88	lm		
<i>Carried to Collection</i>					
	<u>COLLECTION</u> From page BW-OB / 12 From page above				
TOTAL FOR WINDOWS CARRIED TO SUMMARY					

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>ELEMENT NO. 7</u>				
	<u>FINISHES</u>				
	<u>Wall finishes</u>				
	<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	Beams and columns; External	115	sm		
B	Extra over walling for horizontal and vertical key pointing including bituminous paint to joints	309	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>				
C	Walls, beams and columns; internal	734	sm		
	<u>Tile, Slab or Block Finishings</u>				
	<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>				
D	8 mm thick; butt joints straight both ways; to cement sand base (m/s) to walls internal	206	sm		
E	Plastic edging (Provisional)	101	lm		
	<u>Beds or Backings</u>				
	<u>Render; cement and sand (1:3)</u>				
F	14mm thick one coat backings; wood floated to receive ceramic tiles (m/s) to concrete or blockwork base; to walls internal	206	sm		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	<u>Painting and decorations</u> <u>Prepare and apply one undercoat and three coats of first quality silk vinyl emulsion paint to: -</u> Plastered surfaces; internal	734	sm		
B	<u>Prepare and apply one undercoat and three coats of first quality vinyl matt emulsion paint to: -</u> Plastered surfaces; external	115	sm		
	<u>Floor finishes</u> <u>The contractor shall supply samples of all finishes for approval by the client before application</u> <u>Tile, Slab or Block Finishings</u> <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>				
C	10 mm thick granito; butt joints both ways; to cement sand base (m/s); to floors level; internal	576	sm		
D	100 mm thick skirting; straight junction with wall and floor finish.	142	lm		
E	8 mm thick ceramic; butt joints both ways; to cement sand base(m/s); to floor levels; internal	49	sm		
	<u>Beds or Backings</u> <u>Screed; cement and sand (1:3)</u>				
F	32mm thick one coat backings; wood floated to receive ceramic tiles (m/s) to concrete or blockwork base; to floors level; internal	625	sm		
	<u>Terrazzo Floor Finish</u> Prepare floor surface; Lay 24mm thick c/s backing and 15 mm thick insitu polished terrazzo paving finish in bays not exceeding 2 square meters and 1200 mm wide including dividing strips on concrete floor slab all to PM's approval.	123	sm		
	<u>Ceiling finishes</u> <u>Approved sawn softwood; second grade; pressure impregnated.</u>				
H	50 x 50mm brandering spaced at 600 mm c/c both ways	2040	lm		
J	Gypsum ceiling; trap doors; 3 coats brilliant white emulsion paint	483	sm		
	<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>				
K	Basement Soffit	222	sm		
L	<u>Prepare and apply one undercoat and three coats of first quality brilliant white emulsion paint to: -</u> Basement Soffit	222	sm		
	Carried to Collection				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>COLLECTION</u> From page BW-OB /14 From page BW-OB/15				
	TOTAL FOR FINISHES CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>ELEMENT NO. 8</u>				
	<u>JOINNERY, FIXTURES & FITTINGS</u>				
	<u>Kitchen cupboards</u>				
	<u>Masonry work</u>				
A	150 mm thick masonry walling	1	sm		
B	12 mm thick c/s plaster to ditto	3	sm		
	<u>Concrete work</u>				
C	100 mm thick class 20 mass concrete plinth	4	sm		
D	75 mm thick class 20 reinforced concrete top	4	sm		
E	BRC A142 mesh reinforcement to kitchen top	4	sm		
F	Form work to soffit of concrete top	4	sm		
G	Form work to concrete top; 75 - 150 mm high	5	lm		
H	Ditto to plinth; ditto	5	lm		
J	Extra over concrete top for opening to receive standard single bowl kitchen sink	1	No.		
K	25 mm thick imported granite top	4	sm		
L	Extra over granite top for opening to receive standard single bowl kitchen sink	1	No.		
M	25 mm thick granite skirting; 75 mm high	5	lm		
	<u>Kitchen cabinets in varying lengths in 18 mm particle boards, 3mm white backers and standard furniture fittings including installation</u>				
N	720 mm high x 600 mm deep base unit; veneer board both sides frontal with carcass	5	lm		
P	720 mm high x 300 mm deep high level unit ; ditto	4	lm		
	TOTAL FOR JOINERY, FIXTURES & FITTINGS CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>ELEMENT NO. 9</u> BUILDER'S WORK IN RELATION TO SPECIALISED INSTALLATIONS <u>PLUMBING AND DRAINAGE INSTALLATIONS</u>				
A	Chase in masonry and concrete for 20mm diameter PPR pipe	24	lm		
B	Chase in masonry and concrete for 50 mm diameter WHB waste pipes	11	lm		
C	Chase in masonry and concrete for 50 mm diameter stainless steel sink waste pipe	2	lm		
D	Chase in masonry and concrete for 50 mm diameter urinal drainage pipe	2	lm		
E	Cut through 200 mm masonry averaging 150 mm dia; and later make good.	50	No.		
	<u>ELECTRICAL INSTALLATIONS</u>				
F	Chase in masonry and concrete for 20mm diameter heavy gauge conduits for lighting and sockets wiring	1650	lm		
G	Chase in masonry and concrete for 20mm diameter heavy gauge conduits for cooker control unit wiring	30	lm		
H	Cut in masonry and concrete for 12 ways TPN distribution board	1	No.		
J	Cut in masonry and concrete for 24 x 24 Dual tariff meter board	1	No.		
K	Cut in masonry and concrete for Switches-10A one gang one way switch	4	No.		
L	Cut in masonry and concrete for Switches- 10A two gang switch	2	No.		
M	Cut in masonry and concrete for Switches- 10A three gang switch	2	No.		
N	Cut in masonry and concrete for 13A SP twin switched socket outlets	50	No.		
P	Cut in masonry and concrete for 45A DP Cooker control unit	1	No.		
	TOTAL FOR BUILDER'S WORK CARRIED TO OFFICE BLOCK SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	<u>ELEMENT 10 - EXTERNAL WORKS - RETAINING WALL (ALL PROVISIONAL)</u>				
	<u>Earth Works</u>				
A	Excavation for trench foundation not exceeding 1.5m from	CM	64		
B	Ditto for column bases 0-1.5 m ditto	CM	53		
C	E.O in excavating in all classes of rocks.	CM	6		
D	Return fill and ram selected excavated materials around foundations	CM	115		
E	Cart away surplus excavated material and deposit where directed	CM	33		
	<u>Concrete 1:4:8 in</u>				
F	50mm Thick blinding under strip foundation	SM	43		
G	Ditto column bases	SM	36		
	<u>Vibrated reinforced concrete class 20/20 in:</u>				
H	Strip footing	CM	13		
J	Column bases	CM	11		
K	Columns	CM	6		
	<u>Diposal of water</u>				
L	Allow for keeping excavations free from water by baling or pumping as required including provision of drains, etc., as described	ITEM	1		
	<u>Planking and strutting</u>				
M	Allow for maintaining and supporting sides of excavations and for keeping free from fallen materials as described	ITEM	1		
	<u>Sawn formwork to:</u>				
N	Sides of column bases	SM	39		
P	Sides of strip footing	SM	43		
Q	Sides of column	SM	77		
	<u>Steel reinforcement bars; ribbed ; including tying bending spacer blocks tying wires and fixing high tensile bars; to KS: 573</u>				
R	Assorted to srip footing, Column bases and Columns	KG	3600		
	<u>Substructure Walling.</u>				
	<u>Stone walling in cement and sand (1:3) mortar as</u>				
S	200 mm thick natural stone walling; roughly dressed; bedded and jointed in cement sand (1:3) mortar; reinforced with hoop iron at alternate courses	SM	156		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
A	<u>Coping</u> 300 x 75mm Thick precast concrete (1:2:4) coping, twice weathered and throated	LM	71		
B	450 x450X75mm Thick precast concrete (1:2:4) coping, four times weathered and throated	NO	29		
C	Labour and material for construction joints in 12mm thick flexel expansion and 25x25mm expansion sealer at every 30m in averaging 200mm wide	LM	9		
D	Ditto; in concrete bases; averaging 350mm wide	LM	20		
E	<u>Insitu Finishings</u> 15mm thick 2 No. coatwork cement sand (1:3) render; wood floated to concrete or blockwork base to walls	SM	115		
F	<u>Painting and Decorations</u> <u>Prepare and apply two coats bituminous paint to:</u> Wood floated rendered plinths over 300mm girth	SM	115		
	<i>Total Carried to Collection</i>				
Item	Description	Unit	Qty	Rate	Amount (Kshs)
	<u>Collection Page</u> From page BW-OB /19 From Above				
	<i>Total For Substructure Carried to Summary</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMNT
	BILL 3 - BUILDING SERVICES <u>This Section shall be priced by the main contractor's domestic subcontractors or the main contractor if so qualified and registered with NCA to undertake such specialist installations. The relevant NCA practising licenses for these specialist subcontractors should be attached along side the main contractor's</u> <u>ELEMENT NO. 1 - PLUMBING, DRAINAGE & FIRE FIGHTING INSTALLATIONS (All provisional)</u> <u>Sanitary Fittings</u>				
A	Counter top ceramic wash-hand basin as twyfords or equal and approved complete with bottle trap, waste out plug & chain and pedestal	6	NO		
B	Self closing delay action pillar taps	6	NO		
C	Water closet suite comprising pan, heavy duty plastic seat & cover, ceramic cistern, flush pipe,	6	NO		
D	1450x520mm SB DD stainless steel sink complete with kitchen mixer tap, bottle trap, waste out plug &	1	NO		
	<u>Urinal</u>				
E	Twyfords clifton or equal and approved range of 3 (three) consisting of cistern, 3 urinal bowls, pipework for range of 3 urinal bowls, twyford dome shape waste, 4no. twyford urinal dividers	1	NO		
F	Wall mounted clear jumbo tissue holder	6	NO		
G	Ditto 1 (one) litre clear and single chamber soap dispenser	3	NO		
H	Hand Dryer Automatic hand dryer suitable for non-touch ON/OFF switching, complete with electronic infrared proximity switch and sensor-controlled safety switch-off. The hand dryer to be as "Mediclinic" or equal and approved complete with all necessary electronic accessories	3	NO		
	<u>Differently Abled Persons WC Facility</u>				
J	Differently Abled Persons toilet complete assembly comprising of :- i) WC bowl with horizontal outlet. ii) Cistern, fittings, cistern cover clips and standard lever. Cistern to have side inlet and overflow. iii) Seat ring 25mm and hinge, no cover. iv) Germshield. v) Washbasin with one tap hole, no overflow and no chainstay. Wash basin to complete with :- i) Wall hangers (pair) ii) Grid waste iii) angle operated wash hand basin tap 3) 5 No. 600mm long grab rail 4) Hinged support rail with toilet roll holder				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMNT
	5) Handspray 6) Plate glass mirror size 400 x 900mm The disabled toilet assembly shall be as "supplied by tile and carpet" or equal and approved.	1	NO		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMNT
	<u>Plumbing Piping (All provisional)</u> <u>PPR Piping including all necessary excavations, backfilling, chasing in to walls, making good affected surfaces and all associated pipe jointing and termination fittings in :-</u>				
	25mm supply piping from mains to elevated tank	56	LM		
A	40 mm main distribution piping from elevated tank to the building	18	LM		
	32 mm distribution piping to washrooms and kitchen	30	LM		
B	25mm ditto to sanitary fittings	17	LM		
	Extra over PPR piping for the following fittings:-				
K	450 x 20 mm high pressure flex tubes	13	NO		
L	25mm peglar gate valves	2	NO		
M	40 mm peglar gate valves	2	NO		
	32 mm peglar gate valves	2	NO		
P	32 mm peglar ball valve	1	NO		
Q	25 mm CP angle valves	13	NO		
	<u>Water Connection</u> Allow for connection to the water supply company mains including all obtaining and paying for all necessary permits and approvals	1	Item		
	<u>Drainage</u>				
R	Manhole overall size 600x450x1000mm deep average including all necessary excavation, disposal and backfilling; 150mm thick block walling,plaster, concrete cover greased as necessary, concrete base and haunching as necessary	6	NO		
S	Standard 300x300x450mm masonry gully trap complete with 125m thick reinforced concrete cover	3	NO		
T	110mm diameter uPVC golden brown drain pipe ditto, and mass concrete surround	40	LM		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMNT
A	100 x 50 mm 4 way PVC floor traps	4	NO		
B	50mm Heavy gauge UPVC pipes	12	LM		
C	40mm ditto	36	LM		
D	32mm ditto	12	LM		
E	40x32mm PVC reducer	5	NO		
F	40mm PVC elbows	15	NO		
G	40mm PVC tee	5	NO		
H	50mm inspection tee	2	NO		
J	50mm PVC elbows	2	NO		
K	100mm PVC bends	6	NO		
L	110x50 boss connector	5	NO		
M	110mm WC connector	5	NO		
N	110 mm diameter heavy gauge light grey UPVC pipe as vent pipe on clipped on wall as necessary	5	LM		
P	100mm Vent cowl and weathering	1	NO		
Q	<u>Sewer Connection</u> Allow for connection to existing mains sewer line including obtaining and paying for all necessary permits and approvals	1	ITEM		
	<u>Elevated Water Tank and Tower</u> <u>WATER TOWER (ALL PROVISIONAL)</u>				
R	Excavation for column bases n.e 1.50 meters deep starting from stripped level averaging 1.0 meters deep	14	CM		
S	Extra-over excavation for excavating in rock irrespective of class	1	CM		
T	Backfilling with selected excavated materials; rammed & compacted around foundations in layers of 150mm thick to structural engineers approval	10	CM		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMNT
A	Cart away from the construction site surplus excavated material to an approved dumping site as directed	4	CM		
	<u>Diposal of water</u>				
B	Keeping all excavations free from all water including spring or running water	1	Item		
	<u>Planking and strutting</u>				
C	Uphold the sides of all excavations	1	Item		
	<u>Filling</u>				
D	Re use recoved Hardcore in filling to make up levels, hand packed, averaging 300mm thick in layers of 100mm maximum thickness with roller to the satisfaction of the PM	0	CM		
E	50mm (average) thick quarry dust blinding to surfaces of hardcore	0	SM		
F	Lay precast concrete blocks recovered before excavation	0	SM		
	<u>Antitermite treatment</u>				
G	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	9	SM		
	<u>Concrete</u>				
H	50mm thick mass concrete class (1:4:8) to bottoms of foundation bases	9	SM		
	<u>Insitu concrete; reinforced; class 20 / (20mm); vibrated</u>				
J	Column bases	4	CM		
K	Stub Columns	1	CM		
	<u>Reinforcement</u>				
	<u>Bars; high yield steel; cold worked to B.S. 4461 including bends, hooks, tying wire and distance blocks</u>				
L	In assorted reinforcement of various sizes	600	KG		
	<u>Sawn formwork to insitu concrete as described:-</u>				
M	To vertical sides of column bases	10	SM		
N	To vertical sides of columns	10	SM		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMNT
A	<u>Bolts</u> 19 mm diameter x 250 mm long anchor bolts encased in to column concrete	16	No.		
	<u>Steel Sections</u> The following steel sections welded and bolted together to structural engineer's detail ; allow for primer and 2 finishing coats aluminium paint				
B	125 x 125 x 6 mm square hollow sections	539	KG		
C	60 x 60 x 6 mm thick angular section bracings	307	KG		
D	60 x 60 x 4 mm thick cat ladder angular sections	23	KG		
E	45 x 45 x 3 mm thick cat ladder angular sections	14	KG		
F	50.8 x 3 mm thick flat bar guard to cat ladder	27	KG		
G	254 x 133 x 43 kgs/m H beams	636	KG		
H	150 x 75 x 6 mm thick U channels	794	KG		
J	45 x 45 x 3 mm thick angular sections rails and ballusters	166	KG		
K	150 x 150 x 6 mm Gusset plates	16	No.		
L	3 mm thick chequered plate	14	SM		
M	<u>Water storage tanks</u> Supply, deliver and install plastic moulded tank of capacity 5000 litres. The tank to be assembled complete with cover and having screwed connections for inlet, outlet, overflow, 25 mm medium pressure ball valve, drain pipes, Float switch regulators, Water level indicator and any other necessary item for its proper functioning with and including RC plinth on masonry foundation walling for ground ground tank. The tank shall be mounted on a platform and shall be as ROTO Model or approved equivalent.	1	No.		
N	Ditto but hoisting to the elevated tank tower (M/S) ditto	1	No.		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMNT
	<u>Fire fighting equipment</u>				
A	9 litres water extinguisher with CO2 propellant for class A fires	2	NO		
B	5 kg gas CO2 gas extinguisher for class B,C,E fires	2	NO		
	<i>Carried to Collection</i>				
	From page S/1				
	From page S/2				
	From page S/3				
	From page S/4				
	From page S/5				
	From Above				
	TOTAL FOR PLUMBING, DRAINAGE & FIRE FIGHTING CARRIED GRAND SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMNT
	<u>ELEMENT NO. 2</u> <u>ELECTRICAL INSTALLATIONS - OFFICE BLOCK</u> <u>Supply,deliver to site, install,set to work and commision the following;</u>				
A	Lighting points completely wired in 1.5 mm single core cable drawn in 20mm diameter heavy gauge conduits for two way switching couplers, sandle clips, circular boxes but excluding the fittings.	1080	LM		
B	3x2.5mm single core pvc insulated copper cables drawn in 20mm heavy gauge pvc conduits including couplers and twin boxes excluding the socket outlets (for SP sockets).	570	LM		
C	45A DP cooker control point, completely wired in 3x4mm ² single core pvc insulated copper cables drawn in 20mm diameter heavy gauge pvc conduits but excluding the 45A DP cooker control unit.	20	LM		
D	Sub mains cables comprising of 2x10mm ² +6.0mm ² single core pvc insulated copper cables drawn in 32mm Ø heavy gauge pvc conduits runing from meter board to Distribution board.	5	LM		
E	4 Ways 100A TPN Distribution board complete with 100A SPN integral isolator, as "HAVELS" or equal and approved, but excluding the MCBs.	1	NO		
	100A 3 pole MCCB as "HAVELS" or equal and approved.	1	NO		
F	24 x 24 Duel tariff meter board constructed from 16SWG powder coated mild steel, and to be complete with mounting back plate and view glass.	1	NO		
G	Protective multiple earthing comprising of 6.0mm pvc insulated cable drawn in 20mm heavy gauge conduits 5mm by 1200mm long copper eletrode with clamp and earthing manhole with inspection cover to KPLC LTD by laws and statutory requirements	1	NO		
H	Lighting fittings-180mm x 180mm recessed 18W LED Panel frosted.	13	NO		
J	Lighting fittings-600mm x 600mm recessed 36W LED Panel frosted.	12	NO		
K	Ditto surface mounted ditto.	8	NO		
	<i>Carried to Collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMNT
A	Lighting fittings-1200mm 36W HPF single batten fluorescent luminaire complete with 28 watt LED tubes (frosted) as philips or equivalent.	18	NO		
B	Switches-10A one gang two way switch as "MK" or equivalent	4	NO		
C	Switches- 10A one gang slim switch as "MK" or equivalent.	2	NO		
D	Switches- 10A three gang switch as "MK" or equivalent.	2	NO		
E	Switches- 10A four gang switch as "MK" or equivalent.	2	NO NO		
F	Switches- 10A one gang slim switch as "MK" or equivalent.	2	NO		
G	13A SP twin switched socket outlets as "MK" or equivalent.	37	NO		
H	15 A SP switched socket outlets as "MK" or equivalent.	4	NO		
J	Automatic hand dryer as stamix or equivalent complete with appropriate switching.	3	NO		
K	photo cell	1	NO		
L	Consumer blanking covers	6	NO		
M	SP MCBs as "MEM" or equivalent	12	NO		
N	45A DP Cooker cooker control unit complete with 13A SP switched socket outlet, neon indicators and marked 'Coker' as MK or equivalent.	1	NO		
P	Cooker connector unit as MK. Or equivalent.	1	NO		
	<i>Carried to Collection</i>				
	<u>Collection</u> From page S/4 From page above				
	TOTAL FOR ELECTRICAL INSTALLATION CARRIED TO GRAND SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE
	<u>SCHEDULE OF RATES FOR STRUCTURED CABLING</u>			
NB:	<p><u>The contractor shall provide the rates only (This Section is mantatory for the contractor to provide the rates)</u></p> <p><i><u>Supply and fix the following as instructed by the ICT Eng. Including cutting, joining, drilling, plugging, screws and all necessay accessories; the rates shall be as guided in this conditions of contract and the PC sum as provided under the entry PC and Provisional Sums of this Bills of Quantities</u></i></p>			
A	CAT 6 Patch Panels	1	No.	
B	CAT 6 Cable Organizers	1	No.	
C	RJ45 Modules (Keystones)	1	No.	
D	UTP CAT 6 Cable	1	Rolls	
E	Trunking (150mm x 50mm)	1	No.	
F	Knockouts (2-way to fit 150mm x 50mm trunking	1	No.	
G	Faceplates (2-way to fit 150mm x 50mm Trunking)	1	No.	
H	32U Cabinet	1	No.	
J	1m Patch cords	1	No.	
K	5m Patch cords	1	No.	
L	RJ45 Connector	1	No.	
M	Cisco switch PoE	1	No.	
	TOTAL FOR ICT STRUCTURED CABLING CARRIED TO SUMMARY			

**PROPOSED CONSTRUCTION OF KPLC COMMERCIAL OFFICE IN MERU TOWN -
MERU COUNTY**

GRAND SUMMARY PAGE

BILL NO.	DESCRIPTION	Page No.	CONTRACTOR'S USE		OFFICIAL USE
			K.SHS	CTS	K.SHS
1	Preliminaries	P/15			
2	Building Works - Office Block	BW-OB/21			
3	Internal Plumbing & Drainage	S/6			
4	Electrical Installations	S/8			
5	PC & Provisional Sums	PC/1			
	Sub Total				
	Add 16% VAT				
	GRAND TOTAL TENDER SUM (VAT Incl.) K.SHS				

