



REPUBLIC OF KENYA

**MINISTRY OF HEALTH
STATE DEPARTMENT FOR MEDICAL SERVICES**

**EAST AFRICA'S CENTERS OF EXCELLENCE FOR SKILLS AND TERTIARY
EDUCATION IN BIOMEDICAL SCIENCES PHASE 1(ADDITIONAL FINANCING)**

**PROPOSED COMPLETION WORKS OF EAST AFRICA'S CENTERS
OF EXCELLENCE COMPLEX AT KENYATTA NATIONAL
HOSPITAL (KNH) GROUNDS NAIROBI, KENYA**

Contract Identification No: MOH/EACE/OCBI/001/2024-20245

ADB Loan Number: 2100150043449

Project ID Number: P-ZI-IBO-023

ADB Loan Name: EAST AFRICA CENTER OF EXCELLENCE; KENYA

Works Programme No: D108 NB/NB/ 1801 JOB NO. 10398A

BIDDING DOCUMENT – VOL 2 of 4

BIDDING DOCUMENT

VOLUME 2

BUILDER'S WORK

(ALL RATES EXCLUSIVE OF TAXES)

EMPLOYER

**PRINCIPAL SECRETARY
MINISTRY OF HEALTH
STATE DEPARTMENT FOR
MEDICAL SERVICES
P.O BOX 30016-00100
NAIROBI, KENYA**

EMPLOYER'S

REPRESENTATIVE

**WORKS SECRETARY
STATE DEPARTMENT FOR
PUBLIC WORKS
P.O BOX 30743-00100
NAIROBI, KENYA**

APRIL, 2025

VOLUME 2
SECTION A-1
PARTICULAR PRELIMINARIES

Item	DESCRIPTION	Amount Kshs.
	PARTICULAR PRELIMINARIES	
A	<u>PRICING ITEMS OF PRELIMINARIES</u> Prices SHALL BE INSERTED against items of “Preliminaries” in the tenderer’s priced Bills of Quantities. The Bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Bidder shall be deemed covered by the rates for other items in the Bill of Quantities and will not be paid for separately by the Employer.	
B	<u>VALUE ADDED TAX</u> The Contractor's rates shall be net of VALUE ADDED TAX. The contractor shall price for Value Added Tax at the Main Summary page of these Bills of Quantities.	
C.	<u>DEFINITION OF TERMS</u> <u>EMPLOYER</u> The “Employer” is Ministry of Health, State Department for Medical Services whose address unless otherwise notified is P.O. Box 30016 - 00100, Nairobi.”	
D.	<u>PROJECT MANAGER</u> The term "Project Manager" wherever used in these Bills of Quantities shall be deemed to imply the Project Manager, East Africa's Centre of Excellence for Urology and Nephrology, Ministry of Health.	
E.	<u>EMPLOYER'S REPRESENTATIVE</u> The term "Employer's Representative" wherever used in these Bills of Quantities shall be deemed to imply the The Works Secretary, Ministry of Lands, Public Works, Housing & Urban Development (State Department for Public Works), P.O Box 30743 - 00100, Nairobi	
F.	<u>ENGINEER</u> The term “ Engineer” whenever used in the Bills of Quantities shall be deemed to imply, Lead Consultant Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A. <u>LEAD CONSULTANT</u>	The term “Lead Consultant” whenever used in the Bills of Quantities shall be deemed to imply,	
B. <u>TEAM LEADER</u>	The term “Team Leader” whenever used in the Bills of Quantities shall be deemed to imply,	
C. <u>ARCHITECTS</u>	The term "Architect" shall be deemed to mean	
D. <u>QUANTITY SURVEYOR</u>	The term "Quantity Surveyor" shall be deemed to mean	
E. <u>ELECTRICAL ENGINEER</u>	The term "Electrical Engineer" shall be deemed to mean	
F. <u>MECHANICAL ENGINEER</u>	The term "Mechanical Engineer" shall be deemed to mean	
G. <u>CIVIL/ STRUCTURAL ENGINEER</u>	The term "Civil Engineer" shall be deemed to mean	
H. <u>ENVIRONMENTAL IMPACT ASSESSMENT EXPERT</u>	The term “Environmental Impact Assessment Expert” shall be deemed to mean	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A. INTERIOR/GRAPHIC DESIGNER		
	The term “ Interior/Graphic Designer” shall be deemed to mean	
B. <u>LOCATION OF SITE</u>		
	The site for the works is located in the East African Centre of Excellence for Urology & Nephrology along Ngong Road and opposite Nairobi Hospital, adjacent to Nairobi Area Traffic Police Offices.	
C. <u>PUBLIC AND PRIVATE ROADS</u>		
	Maintain as required throughout the execution of the works and make good any damage to public or private roads arising from or consequent upon the execution of the works to the satisfaction of the local and other competent authority and the Employer's Representative.	
D. <u>EXISTING PROPERTY</u>		
	The Contractor shall take every precaution to avoid damage to all existing property including roads, cables, drains and other services and he will be held responsible for and shall make good all such damage arising from the execution of this contract at his own expense to the satisfaction of the Employer's Representative	
E. <u>VISIT SITE AND EXAMINE DRAWINGS.</u>		
	The Contractor is recommended to examine the drawings and visit the site the location of which is described in the Particular Preliminaries hereof. He shall be deemed to have acquainted himself therewith as to its nature, position, means of access or any other matter which, may affect his tender. No claim arising from his failure to comply with this recommendation will be considered.	
F. <u>SCOPE OF CONTRACT</u>		
	The scope of this contract comprises of completion of 3rd and 4th floors of the existing structure. The entire third and fourth floors shall be fitted out internally with masonry and light weight partitions. The corresponding Electrical and Mechanical Engineering works shall equally be completed.	
	Fit-Out of Nurse Stations and other Joinery Works shall be done in Basement, Ground, 1st and 2nd Floor.	
	Completion of spaces defined by the following grids on basement floor: (U-W, 12-15), (U-V, 15-16), (T-Q, 15-16) and (R-P, 12-14)	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A.	<u>SCOPE OF CONTRACT (CONT'D)</u> External works shall comprise Drive & Parking outside plot boundary, Stormwater drainage outside plot boundary, Walkways & Footpaths outside plot boundary. Sports field includes Volley ball Pitches, Flood Lights, associated Storm Water Drainage and Grass Planting around Volley ball pitch area.	
B.	<u>DESCRIPTION OF THE WORKS</u> <u>Builders Works</u> The works comprises partitions of masonry walling & light weight partitions, floor finishes, wall finishes, timber and metal doors, Aluminium casement windows, plaster and paint in 3rd , 4th and basement floor. Other works include Nurse stations and Joinery works in Basement, Ground, 1st, 2nd , 3rd and 4th Floors. Works may also include repair works to damaged existing works and finishes to the imaging rooms A Waste Management and Boiler Houses shall be constructed <u>Civil / External Works</u> External works include Drive and Parking , stormwater drainage, walkway & footpath, landscaping outside plot boundary. The Contractor shall have to liaise with the relevant authorities on works outside the plot boundary. There shall be construction of 2No Volley ball pitches fields within the site. This being a specialized Teaching and Referral Hospital, works shall include large infrastructure for medical equipment and facilities. Services include electrical and mechanical engineering works briefly described hereunder <u>Electrical Engineering Works</u> 1. Sub-Switchboards for Laundry, Kitchen, Medical Plants and Waste Management plants 2. Associated Power Distribution System 3. Associated Lighting and small power installations 4. Associated Fire detection and alarm system 5. Electrical Power supply to Kitchen, Laundry, Waste Management System, Boiler, Radiology etc 6. 1No 1600KVA Automatic Voltage Regulator (AVR) and 3No UPS system 7. Third and Fourth Floor associated structured cabling and active devices 8. Third & Fourth Floor Nurse call, public address and Hospital Clock system 9. Third and Fourth Floor associated security systems installations 10. Facility Building Management System 11. Learning Facility Conference System Installation Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A.	<u>DESCRIPTION OF THE WORKS (CONT'D)</u>	
	<u>Mechanical Engineering Works</u>	
1.0	Plumbing, Drainage and Firefighting	
	Contractual Requirements and General Conditions	
	Incoming & External Water Reticulation	
	Internal Water Supply	
	Sanitary Fittings & Accessories	
	Drainage Systems	
	Fire Fighting Systems	
2.0	Air Conditioning & Mechanical Ventilation	
	Contractual requirements and General Conditions	
	Chillers Pipework & Accessories	
	AHUs	
	Ducts & Air Terminal Units	
	Mechanical Ventilation	
3.0	Medical Gases Installations	
	Contractual requirements and General Conditions	
	Medical Plants	
	ZSU's, Area Alarms & Terminal Units	
	Bedheads & Pendants	
	Pipework & Accessories	
	Accessories & Support Services	
4.0	Kitchenhoods, and Laundry	
	Contractual Requirements and General Conditions	
	Kitchen Equipment	
	LP Gas Installations	
	Kitchen Cold Room & Freezer	
	Laundry Equipment	
5.0	Borehole Drilling	
	Preliminaries & General Conditions	
	Borehole Drilling	
	Borehole Pump Installation	
	Borehole Water Treatment Plant	
	Carried to Summary	

Item	DESCRIPTION	Amount Kshs.
A. <u>FLOOR AREA</u>		
	The Plinth area is given without warranty and is for guidance only.	
	<u>SM</u>	
	3rd Floor Hospital Dep. 2,543	
	4th Floor Hospital Dep. 2,109	
	Waste Management House 450	
	Boiler House <u>100</u>	
	Total floor area <u>5,202SM</u>	
B. <u>DEMOLITION GENERALLY</u>		
	The items of pulling down and alteration are to include for both labour and material and for shoring, needling and strutting and temporary works in connection therewith. The contractor must allow in his pricing for making good works disturbed on adjacent and neighbouring properties in all trades and for carting away rubbish. The contractor shall indemnify the employer and shall insure against any claims arising from damage or destruction of such properties.	
	The contractor must give all the necessary notices to relevant authorities and general public and must exercise all due care in the demolitions. He must not collapse large sections of walls, floors, etc. and must provide all necessary temporary shoring and support during the demolitions.	
	During demolition works the contractor shall keep debris constantly watered to minimise dust arising therefrom.	
C. <u>MATERIALS ARISING FROM DEMOLITIONS</u>		
	Any materials arising from demolitions and not re-used shall become and remain the property of the Employer. The Contractor will preserve the same until they are safely handed over to the client for storage as directed by the Employer's Representative. Any material that shall be decalred as debris shall be cart away by the Contractor.	
D. <u>INTERPRETATION OF TERMS</u>		
	<u>Demolish</u>	
	Shall be deemed to mean cutting away, breaking up, demolishing, pulling down, taking down, removing etc., as the context requires and shall include in all cases temporary strutting and supporting and making good remaining work as necessary, and clearing away and removing from site all debris, etc.	
	Carried to Summary	

Item	DESCRIPTION	Amount Kshs.
A.	<u>INTERPRETATION OF TERMS (CONT'D)</u> <u>Remove</u> Shall mean taking down, removing, etc. and clearing away from site and all other expenses thereby entailed. <u>Making good</u> Shall be deemed to mean all making good, fitting, facing up, plastering, paving, repairing, etc., to match existing and jointing. <u>To match</u> Shall mean to be equal to relevant existing work in design, workmanship and all other respects. <u>Replace</u> Shall be deemed to mean remove existing, supply and fix new to match existing quality, and make good disturbed areas, cart away debris and all other expenses thereby entailed.	
B.	<u>TRESPASS, DAMAGE AND CARE OF WORKS AND ADJOINING PROPERTY</u> The site of the proposed works is an operating medical facility. The Contractor's Personnel and vehicular movement shall be restricted within area defined as "the site" and access to site. The Contractor shall liaise with the Employer and Engineer regarding Personnel and Vehicular Passes. The contractor shall prevent any trespass on the adjoining property, and he shall take reasonable precaution during the progress of the contract to prevent any damage to the adjoining property or public or private roadways and to prevent material, plant, rubbish, debris, etc., collecting on the adjoining property or roadways. Should the contractor wish to erect scaffolding on or to make use of adjoining property he shall obtain prior permission from the Engineer and clear away at completion of his work or when directed and make good any damage to Engineer's satisfaction. Except as provided for in the conditions of contract, the contractor shall be held responsible for the care of works executed and materials deposited on the site by himself or sub-contractors or suppliers, carelessness of operatives, damage or loss by theft, or by other cause and he shall make good such damage or loss at his own expense. The contractor will be responsible for the protection of adjoining buildings, boundary walls, fences, services either overhead or underground and for the making good of or paying for all damage thereto, should such be caused in the course of building operations. Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A.	<u>NUISANCE AND INSURANCE AGAINST INJURY TO PERSONS AND PROPERTY</u> The works shall be carried out within an operating Medical Facility. The contractor is strongly advised to ensure minimum inconvenience to users of existing facilities and to pay special attention to provisions of Clause 18.3 regarding injury to persons and property and nuisance thereof.	
B.	<u>SCHEDULING FOR WORKING HOURS AND DAYS</u> The proposed works are within a running Medical Facility. The contractor shall liaise with the Employer on daily programme of working hours to minimise disturbance of regular progress of the works. This may include working night shifts within the labour law framework.	
C.	<u>IDENTIFICATION OF CONTRACTORS' WORKERS</u> The contractor shall arrange with the Engineer on identification cards for contractor's labour working on this project. The contractor's Employees shall wear and produce such identification documents at all times and no worker shall be allowed to enter the work site without such identification.	
D.	<u>SEPARATE ACCESS TO SITE</u> The Contractor shall provide where directed on site by the Engineer site access separate from one currently being used by other users of this building. There is a masonry boundary wall all round the Plot. The contractor shall be required to open up the masonry wall to gain access and construction of temporary ramp, staircase, hoist, scaffolding, etc, to access 3rd and 4th floors. The contractor shall make good disturbed area upon completion of the Works.	
E.	<u>RESTRICTED WORKING AREA</u> The contractor shall restrict his works and Labour within the designated working area. Any of the workers found not to observe this rule shall be summarily removed from site in accordance with the Contract.	
F.	<u>MEASUREMENTS</u> In the event of any discrepancies arising between working drawings and the Bills of Quantities, the working drawings shall take precedence. The Contractor shall report such discrepancies to the Employer's Representative for the correct measurements to be established on site. Any work measured as Provisional shall be re-measured as executed on site.	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A.	<u>ADJUSTMENT FOR CHANGES IN LEGISLATURE AND ADJUSTMENT FOR CHANGES IN COST</u> Adjustments for Changes in Legislation and Adjustmenst for Changes in Cost shall apply in accordance with General Conditions of Contract	
B.	<u>SIGN BOARD</u> Allow for providing, erecting and maintaining throughout the course of the contract and afterwards clearing away, a sign board in accordance with the State Department for Public Works standard detail to be obtained from the Employer's Representative	
C.	<u>OFFICE FOR THE EMPLOYER'S REPRESENTATIVE</u> The Contractor shall be required to provide a site office with all the necessary furniture and sanitary facilities to accommodate about 40 persons during site meetings and inspections. The Employer's Representative will issue the detailed specifications for these buildings but they will in general be of timber and 0.5 mm thick Galvanised corrugated iron Sheets (G.C.I) construction with board lining internally and partitions. The site office will be located as directed on site. Upon completion of the works, the Contractor shall dismantle and clear away site office. Provide space for Clerk of works and Resident Engineer adjacent to the site office. The office shall have a desk, chairs, lockable drawers, cupboard etc. for safe keeping of their contract Documents. Provide a computer, A4 colour printer complete with Microsoft office, MS project programme and connect to internet for easy communication of site with respective consultant's and Employer's office. The contractor shall maintain, provided office supply and stationery for the Resident Engineer and Clerk of Works during currency of the Works. Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A.	<u>CONTRACT COMPLETION PERIOD</u> The contract completion period in accordance with the conditions of contract must be strictly adhered to. The “Employer's Representative” shall strictly monitor the Contractor’s progress in relation to the progress chart and should it be found necessary, the “Employer's Representative” shall inform the Contractor in writing that his actual performance on site is not satisfactory. In all such cases, the Contractor shall accelerate his rate of performance, production and progress by all means such as additional labour, plant e.t.c, and working overtime all at his cost.	
B.	<u>URGENCY OF THE WORKS</u> The Contractor is notified that these works are very <u>URGENT</u> and should be completed within the period stated in these Particular Preliminaries. The Contractor should allow for any costs they may incur by completing the works within the stipulated period.	
C.	<u>ADVANCE PAYMENTS</u> Advance payment may be granted up to 10% of the contract sum subject to submission of a signed and sealed bank guarantee of the same amount from an approved bank and with consent from the Employer and in accordance with the contract.	
D.	<u>LABOUR CAMPS</u> The Contractor shall not house labour on site. Allow costs for transporting workers to and from the site during the tenure of the contract.	
E.	<u>PRICING RATES</u> The Contractor's rates for any item shall be deemed to include all costs involved in the execution of that particular item which include the cost, transportation and handling of materials, fixing and for complying with other conditions of contract except where otherwise priced separately (Taxes, Duties and levies shall be priced seperately at the grand summary page). Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A.	<u>PREVENTION OF ACCIDENT, DAMAGE OR LOSS</u> The Contractor is notified that these works are to be carried out on a site where the Employer is going on with other normal activities. The Contractor is instructed to take reasonable care in the execution of the works as to prevent accidents, damage or loss and disruption of normal activities being carried out by the Employer. The Contractor shall allow in his rates any expense he deems necessary by taking such care within the site.	
B.	<u>HOARDING</u> The Contractor shall provide, erect and maintain throughout the course of the Contract and thereafter clear away and make good disturbed areas, temporary hoarding 3000 mm high above ground consisting of; 100 x 50 mm timber posts at 1200 mm centres firmly founded and secured, 75 x 50 mm horizontal timber rails at 900 mm centres, painted GCI sheets, proper timber gates with suitable locks defined by the architect. Allow a provisional length of 300m at Kenya Shillings...../- per metre.	
C.	<u>ADJOINING PROPERTY</u> Take all necessary precautions to prevent damage to adjoining property. Any damage occurring must be made good to the satisfaction of the Employer's Representative and owner(s) of the adjoining property at the contractor's expense.	
D.	<u>USE OF SITE</u> The Contractor shall not use the site for any other purpose other than carrying out the works. He shall not permit or display any advertisement without the consent of the Project Manager.	
E.	<u>WHITE ANTS AND TERMITES</u> Allow for destroying any white ants and termites nests found in the vicinity of the buildings, destroying Queen Ants, depositing cyanide lumps in holes and tunnels and filling with hard-core and murram well rammed and sealed	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
	<u>COLLECTION</u>	
	Brought forward from page PP / 1	
	Brought forward from page PP / 2	
	Brought forward from page PP / 3	
	Brought forward from page PP / 4	
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	Brought forward from page PP / 10	
	Brought forward from page PP / 11	
	PARTICULAR PRELIMINARIES CARRIED TO GRAND SUMMARY 1	

VOLUME 2
SECTION A-2
GENERAL PRELIMINARIES

Item	DESCRIPTION	Amount Kshs.
	<u>GENERAL PRELIMINARIES</u>	
A.	<u>PRICING OF ITEMS OF PRELIMINARIES AND PREAMBLES</u>	
	The Contractor shall be deemed to have included his prices or rates for various items in the Bills of Quantities or Specifications for all the cost involved and complying with the requirements of the proper execution of the whole of the works of the Contract.	
B.	<u>ABBREVIATIONS</u>	
	Throughout these Bills, units of measurement and terms are abbreviated and shall be interpreted as follows:-	
	<i>C.M. or m³ or cu m</i> Shall mean cubic metre	
	<i>S.M. or m² or sq m</i> Shall mean square metre	
	<i>mm² or sq mm</i> Shall mean square millimetre	
	<i>ha</i> Shall mean hectare	
	<i>L.M. or m</i> Shall mean linear metre	
	<i>wk</i> Shall mean week	
	<i>mon</i> Shall mean month	
	<i>MM</i> Shall mean Millimetre	
	<i>h</i> Shall mean hour	
	<i>Kg.</i> Shall mean Kilogramme	
	<i>t</i> Shall mean metric ton	
	<i>No. or nr</i> Shall mean Number	
	<i>Prs.</i> Shall mean Pairs	
	<i>sum</i> Shall mean lumpsum	
	<i>B.S.</i> Shall mean the British Standard Specification Published by the British Standards Institution, 2 Park Street, London W.I., England.	
	<i>Ditto</i> Shall mean the whole of the preceding description except as qualified in the description in which it occurs	
	<i>m.s.</i> Shall mean measured separately.	
	<i>a.b.d</i> Shall mean as before described.	
	<i>KEBS</i> Shall mean Kenya Bureau of Standards.	
C.	<u>GENERAL SPECIFICATION.</u>	
	For the full description of materials and workmanship, method of execution of the work and notes for pricing, the Contractor is referred to the Ministry of Roads and Public Works General Specification dated 1976 or any subsequent revision thereof which is issued as a separate document, and which shall be allowed in all respects unless it conflicts with the General Preliminaries, Trade Preambles or other items in these Bills of Quantities.	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A.	<u>STANDARD METHOD OF MEASUREMENT</u> The Standard Method of Measurement shall be the "STANDARD METHOD OF MEASUREMENT OF BUILDING WORKS AND ASSOCIATED CIVIL WORKS FOR EASTERN AFRICA" 'Second Edition, Published by The Architectural Association of Kenya, Quantity Surveyors Chapter, June 2008 The contractor is to familiarize and acquire a copy from the AAK, 6th floor, Blue Violet House, off Ngong' Road	
	<u>B. EXCEPTION TO THE STANDARD METHOD OF MEASUREMENT OF BUILDING WORKS AND ASSOCIATED CIVIL WORKS FOR EASTERN AFRICA</u> <u>Fix Only:-</u> "Fix Only" shall mean take delivery at nearest railway station or Employer's store (Unless otherwise stated), pay all demurrage charges, load and transport to site where necessary, unload, store, unpack, assemble as necessary, distribute to position, hoist and fix only. <u>Attendance ;</u> Clause B20(b) of the Standard Method of Measurement is deleted and the following clause is substituted:- Attendance on nominated Sub-Contractors shall be given as an item in each case shall be deemed to include: allowing use of standing scaffolding, mess rooms, sanitary accommodation and welfare facilities; provision of special scaffolding where necessary; providing space for office accommodation and for storage of plant and materials; providing light and water for their work: clearing away rubbish; unloading checking and hoisting: providing electric power and removing and replacing duct covers, pipe casings and the like necessary for the execution and testing of Sub- Contractors' work and being responsible for the accuracy of the same. Carried to collection	

Item	DESCRIPTION	Amount Kshs.
A.	<u>FORM OF CONTRACT</u> The Conditions of Contract are the “General Conditions” which form part of the “Conditions of Contract for Construction for Building and Engineering Works Designed by the Employer (“Red Book”) Second edition 2017” published by the Federation Internationale Des Ingenieurs – Conseils (FIDIC) and the following “Particular Conditions” which comprise of the AfDB’s COPA and the amendments and additions to such General Conditions. An original copy of the above FIDIC publication i.e. “Conditions of Contract for Building and Engineering Works Designed by the Employer ” must be obtained from FIDIC. International Federation of Consulting Engineers (FIDIC) FIDIC Bookshop – Box- 311 – CH – 1215 Geneva 15 Switzerland Fax: +41 22 799 49 054 Telephone: +41 22 799 49 01 E-mail: fidic@fidic.org www.fidic.org FIDIC code: ISBN13: 978-2-88432-084-9	
B.	<u>PERFORMANCE BANK GUARANTEE</u> The Contractor shall find and submit on the Form of Tender an approved bank and who will be willing to be bound to the Government in an amount equal to Five per cent (5%) of the Contract amount for the due performances of the Contract up to the date of completion as certified by the Employer's Representative and who will when and if called upon, sign a Performance Bank Guarantee to that effect on the relevant standard form included herein. (without the addition of any limitations) on the same day as the Contract Agreement is signed.	
C.	<u>PLANT, TOOLS , SCAFFOLDING AND VEHICLES</u> Allow for providing all scaffolding, plant, tools and vehicles required for the works. No timber used for scaffolding, formwork or temporary works of any kind shall be used afterwards in the permanent work.	
D.	<u>TRANSPORT.</u> Allow for transport of workmen, materials, etc., to and from the site at such hours and by such routes as may be permitted by the competent authorities.	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A.	<u>MATERIALS AND WORKMANSHIP.</u> All materials and workmanship used in the execution of the work shall be of the best quality and description unless otherwise stated. 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 they are on site when required for use in the works. The Bills of Quantities shall not be used for the purpose of ordering materials.	
B.	<u>SIGN FOR MATERIALS SUPPLIED.</u> The Contractor will be required to sign a receipt for all articles and materials supplied by the Employer at the time of taking delivery thereof, as having received them in good order and condition, and will thereafter be responsible for any loss or damage and for replacements of any such loss or damage with articles and/or materials which will be supplied by the Employer at the current market prices including Customs Duty and V.A.T., all at the Contractor's own cost and expense, to the satisfaction of the Employer	
C.	<u>STORAGE OF MATERIALS</u> The Contractor shall provide at his own risk and cost where directed on the site weather proof lock-up sheds and make good damaged or disturbed surfaces upon completion of the works to the satisfaction of the Employer's Representative.	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A. <u>SAMPLES</u>	The Contractor shall furnish at his own cost any samples of materials or workmanship including concrete test cubes required for the works that may be called for by the Consultants, for his approval and until such samples are approved by the Consultants and the Employer's Representative, may reject any materials or workmanship not in his opinion to be up to approved samples. The Contractor shall arrange for the testing of such materials as he may at his discretion deem desirable, but the testing shall be made at the expense of the Contractor and not at the expense of the Employer's Representative. The Contractor shall pay for the testing in accordance with the current scale of testing charges laid down by the State Department for Public Works. The procedure for submitting samples of materials for testing and the method of marking for identification shall be as laid down by the Consultants and Employer Representative. The Contractor shall allow in his tender for such samples and tests except those in connection with nominated sub-contractors' work.	
B. <u>GOVERNMENT ACTS REGARDING WORK PEOPLE ETC.</u>	Allow for complying with all Government Acts, Orders and Regulations in connection with the employment of Labour and other matters related to the execution of the works. In particular the Contractor's attention is drawn to the provisions of the The Occupational Safety and Health Act (2007) and his tender must include for all costs arising or resulting from compliance with any Act, Order or Regulation relating to Insurances, pensions and holidays for workpeople or so the safety, health and welfare of the workpeople. The Contractor must make himself fully acquainted with current Acts and Regulations, including Police Regulations regarding the movement, housing, security and control of labour, labour camps , passes for transport, etc. It is most important that the Contractor, before tendering, shall obtain from the relevant Authority the fullest information regarding all such regulations and/or restrictions which may affect the organisation of the works, supply and control of labour, etc., and allow accordingly in his tender. No claim in respect of want of knowledge in this connection will be entertained.	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A.	<u>ACCESS TO SITE AND TEMPORARY ROADS.</u> Means of access to the Site shall be agreed with the Employer's Representative prior to commencement of the work and Contractor must allow for building any necessary temporary access for the transport of the materials, plant and workmen as may be required for the complete execution of the works. Upon completion of the works, the Contractor shall remove such temporary access and make good and reinstate all works and surfaces disturbed to the satisfaction of the Employer's Representative.	
B.	<u>AREA TO BE OCCUPIED BY THE CONTRACTOR</u> The area of the site which may be occupied by the Contractor for use of storage and for the purpose of erecting workshops, etc., shall be defined on site by the Employer's Representative.	
C.	<u>OFFICE ETC. FOR THE EMPLOYER'S REPRESENTATIVE</u> The contractor shall provide, erect and maintain where directed on site and afterwards dismantle the site office of the type noted in the Particular Preliminaries complete with furniture. The contractor shall also provide a strong metal trunk complete with strong hasp and staple fastening and two keys. He shall provide, erect and maintain a lock-up pedestal type water closet for sole use of the Engineer including making temporary connections to drain where applicable to the satisfaction of the Employer and Medical Officer of Health and shall provide the services of a cleaner and pay all conservancy charges and keep both office and closet in a clean and sanitary condition from the commencement to the completion of the works. The office and closet shall be completed before the contractor is permitted to commence works.	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A	<u>WATER AND ELECTRICITY SUPPLY FOR THE WORKS</u> The Contractor shall provide at his own risk and cost all necessary water, electric light and power required for use in the works. The Contractor must make his own arrangements for connection to the nearest suitable water main and for metering the water used. He must also provide temporary tanks and meters as required at his own cost and clear away when no longer required and make good on completion to the entire satisfaction of the Employer Representative. The Contractor shall pay all charges in connection herewith. No guarantee is given or implied that sufficient water will be available from mains and the Contractor must make his own arrangements for augmenting this supply at his own cost. <u>SUMMARY OF ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR THE CONSTRUCTION PHASE FOR EAKI (ITEM B1 - B22)</u>	
B.	<u>OCCUPATIONAL SAFETY AND HEALTH CONCERNS</u> The Contractor shall; 1 Fully comply with the Environmental Management and Coordination Act, 1999 and all other applicable guidelines; standards; regulations; and laws 2 Fully comply with National Environment Management Authority (NEMA) approval conditions outlined in EIA License No. NEMA/EIA/PSL/9005 dated 21st February 2020 and Certificate of Variation of EIA License No. NEMA/EIA/VC/1386 dated 14th May 2020. 3 Ensure that records on conditions of license / approval and project monitoring and evaluation shall be kept on the project site for inspection by NEMA's Environmental Inspectors. 4 Fully comply with NEMA's Improvement Orders. 5 Ensure strict adherence to the provisions of the Sustainable Waste Management Act, 2022 and the Environmental Management and Coordination (Waste Management) Regulations, 2006. 6 Ensure strict adherence to the provisions of the Environmental Management and Coordination (Noise and Excessive Vibration Pollution) Regulations of 2009. 7 Ensure strict adherence to the provisions of the Occupational Safety and Health Act, 2007. 8 Ensure strict adherence to the provisions of the Environmental Management and Coordination (Air Quality) Regulations, 2014.	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
9	Ensure that all workers are provided with adequate Personal Protection Equipment (PPE), clean sanitary facilities as well as adequate training.	
10	Ensure strict adherence to the developed Environmental Management Plan (EMP) for the construction phase.	
11	Design and implement a concise Traffic Management Plan (TMP) duly approved by the County Engineer.	
12	Establish and maintain a comprehensive labour management plan. This plan should be designed to protect the safety and human rights of all workers. It must incorporate Occupational Safety and Health strategy, Workman Compensation Insurance policy, a system of addressing workers' grievances, measures for preventing gender-based violence, as well as a comprehensive plan for preventing sexual harassment, exploitation and abuse.	
13	Ensure air pollution control measures are put in place to mitigate against dust during the construction phase.	
14	Ensure all waste material and debris is collected, re-used and where need be disposed of as per the Sustainable Waste Management Act, 2022 and the Environmental Management and Coordination (Waste Management) Regulations, 2006.	
15	Obtain the requisite approvals / permits from the Nairobi City County Government, the National Construction Authority, and all other relevant authorities prior to the commencement of works.	
	Ensure strict adherence to the provisions of the Persons with Disability (PWD) Act, 2003.	
17	Put in place a comprehensive water harvesting and storage scheme to augment the existing supply.	
18	Ensure consultative and Grievance Redress Mechanism (GRM) with project affected persons is developed during the construction phase.	
19	Develop and implement a comprehensive environmental, safety, security, and traffic management plans approved by the relevant agencies.	
20	Develop and implement a comprehensive waste oil and oil spillage management plan.	
21	Limit and restrict access to the construction site by an authorised persons and members of the public.	
22	Prepare and submit to the engineer weekly environmental audit and monitoring reports	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
	<u>ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN</u> <u>PRELIMINARIES FOR HEALTH AND SAFETY, AIR AND NOISE MONITORING & CONTROL, WASTE MANAGEMENT</u> B. <u>ENVIRONMENTAL & SOCIAL PERFORMANCE SECURITY</u> The Contractor shall find and submit an approved bank and who will be willing to be bound to the Government in an amount equal to One per cent (1%) of the Contract amount up to the date of completion as certified by the Employer's Representative and who will when and if called upon, sign a Performance Bank Guarantee to that effect on the relevant standard form included herein. (without the addition of any limitations) on the same day as the Contract Agreement is signed. A. <u>SANITATION OF THE WORKS</u> The sanitation of the works shall be provided, maintained and removed on completion by the Contractor to the satisfaction of the Engineers, health department and local Authorities. The sanitation shall be for the use by Employer's Representative, Consultants, Contractors and sub- Contractors workmen etc without charge. The toilet shall be enclosed plastered and painted masonry wall, corrugated sheets roofs, with concrete tiled floors to facilitate washing. Their location shall be agreed with the Engineers and the works shall not be commenced before the sanitary accommodation has been approved by the above mentioned authorities. The Contractor will be required to pay all conservancy charges and shall ensure clean daily maintenance and disinfecting of the latrines/toilet, and not less than once per week, the whole area shall be sprayed with disinfectant and insecticides and any temporary drains shall be removed and all works and surfaces disturbed made good and then the whole area disinfected and left clean and free from pollution to the satisfaction of the Engineer and local authorities. B. <u>SAFETY, HEALTH AND WELFARE OF WORKERS</u> The Contractor shall allow for providing for the safety, health and welfare of work people and for complying with any relevant Ordinances, Regulations or Union Agreement In addition to complying with the requirements of the Occupational Safety & Health Act 2007 and the Factories Act, the Contractor and Sub-Contractors shall be required to comply in all respects with the Factories (Building Operations and Work of Engineering Construction) rules together with the Construction Safety Plan in compliance with International Labour Organizations (ILO) Regulations. Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A.	SAFETY, HEALTH AND WELFARE OF WORKERS (CONT'D) The Contractor will further be required to identify a Site Safety Officer in accordance with the above Rules who will be responsible for the health and safety of workers on the site. The Contractor will also be required to provide approved good quality hard hats, gumboots and other necessary protective gear for all workers on site including Sub-Contractors' workers and also for the exclusive use by the Clerk of Works and representatives of the Employer and Consultants. The Tenderer's attention is drawn to the fact that the Employer reserves the right to hold back the amount priced against this Clause either in full or in part due to any non-performance on the Contractor's part of his obligations under this Clause. The tenderer's attention is further drawn to the fact that he is required to submit with his tender a detailed write-up on how he intends to implement the above Construction Safety Plan. It should be noted that this write-up will form a heavily weighted criteria in the evaluation of the tenders. Adequate temporary Notices and Signs shall be posted to indicate e.g. that "building operations are in progress" and "entry is at ones own risk" or "trespassers are liable to be prosecuted" or such other Notices and Signs as the Engineer may consider necessary from time to time. The design and location of such signs will be to the approval of the Engineer.	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A.	<u>PREVENTION OF DISTURBANCE AND NUISANCE</u> Tenderers should note that normal activities shall be continuing in the surrounding buildings during the construction period. Minimum disturbance by noise, dust, water or movement of vehicles, materials, labour or plant must be caused to the function of the existing adjacent buildings in the vicinity and the occupants and staff therein. The Contractor shall comply with all instructions issued by the Employer or Engineer with regard to minimizing such disturbances. The Contractor shall not directly or indirectly or otherwise by himself or through his agents cause nuisance. Should he do so he shall be directly responsible for such acts. The works and such sections of the site necessary shall be under the entire care and control of the contractor during the whole period of the contract and shall take all possible precautions to prevent any nuisance, inconvenience or injury to the holder or occupiers of the existing or surrounding properties and to the public generally, and shall at all times keep all paths and roads affected by the works in a safe and clear state, and shall use proper precautions to ensure the safety of all wheeled traffic and pedestrians.	
B.	<u>CLEANING, REMOVAL OF PLANT AND RUBBISH ETC</u> The Contractor shall upon completion of the works remove and clear away all temporary buildings, scaffolding, plant, rubbish and unused materials, surplus excavated materials and shall leave the whole of the site of the works in a clean and tidy state to the satisfaction of the Engineer, including clearing away and making good all traces of dirt. Particular care shall be taken in leaving windows, floors and fittings clean and the removal of all paint and cement stains therefrom. He shall also remove all rubbish and dirt from the site as it accumulates or as directed by the Engineer. The Contractor is to find his own dump and shall pay all charges in connection therewith.	500,000.00
C.	<u>AMBIENT AIR QUALITY AND NOISE MONITORING</u> The Contractor to carry out continuous monitoring of the ambient air quality and Noise measurements as well as vibration monitoring on quarterly basis during the construction phase and this should be done at different weather and seasons to ensure that all the weather patterns are taken into consideration during the monitoring process.	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A.	ENVIRONMENTAL MANAGEMENT PLAN EMP, Environmental and other related assesments	
B.	ENVIRONMENTAL AND SOCIAL (ES) PERFORMANCE SECURITY The Contractor shall be required to submit an Environmental and Social (ES) Performance Security for compliance with the Contractor's ES obligations	
C.	ENVIRONMENTAL AND SOCIAL ASSESSMENT AND AUDITS The Contractor shall as stated in the Specification or as instructed by the Engineer, cooperate with and allow appropriate opportunities for the Employer's Personnel and consultants to conduct any environmental and social assessment and audits after every 6 months since commencement of the project.	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A.	ADHERENCE TO CONSTRUCTION PHASE SAFETY AND HEALTH REQUIREMENTS:	
1	Ensure strict adherence to the provisions of the Occupational Safety and Health Act, 2007, and Work Injury Benefits Act, 2007.	
2	Register the workplace with Directorate of Occupational Safety and Health Services (DOSHS).	
3	Obtain and maintain a valid and adequate Work Injury Benefits Insurance (WIBA) Policy.	
4	Ensure abstracts of the Occupational Safety and Health Act, 2007, rules and notices are posted at strategic places at the workplace.	
5	Develop and implement a Safety and Health Management Plan (SHM) for the construction phase.	
6	Ensure the safety, health and welfare at work of all persons working at the workplace.	
7	Provide and maintain of plant and systems and procedures of work that are safe and without risks to health.	
8	Making arrangements for ensuring safety and absence of risks to health in connection with the use, handling, storage and transport of articles and substances.	
9	Provision of such information, instruction, training and supervision as is necessary to ensure the safety and health at work of every person employed.	
10	Maintenance of the workplace in a condition that is safe and without risks to health and the provision and maintenance of means of access to and egress from it that are safe and without such risks to health.	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
11	Provision and maintenance of a working environment for every person employed that is safe, without risks to health, and adequate as regards facilities and arrangements for the employees welfare at work.	
12	Informing all persons employed of any risks and imminent dangers.	
13	Ensuring that every person employed participates in the application and review of safety and health measures.	
14	Carry out appropriate risk assessments in relation to the safety and health of persons employed and, on the basis of these results, adopt preventive and protective measures to ensure that under all conditions of their intended use, all chemicals, machinery, equipment, tools and processes under the control of the occupier are safe and without risk to health and comply with the requirements of safety and health provisions of the Occupational Safety and Health Act, 2007.	
15	Prepare / and revise a written Safety and Health policy statement. And bring the Safety and Health policy statement and any revision of it to the notice of all employees.	
16	Employ full time safety and health officer(s).	
17	Establish and operationalize a safety and health committee at the workplace	
18	Not to charge employees for things done or provided to them in pursuance of the Occupational Safety and Health Act, 2007.	
19	Engage the services of a safety and health advisor to carry out a thorough safety and health audit of the workplace at least once in every period of twelve months.	
20	Notify the local occupational safety and health officer of any accident, dangerous occurrence, or occupational poisoning which has occurred at the workplace.	
21	Ensure that the workplace shall be kept in a clean state, and free from effluents arising from any drain, sanitary convenience or nuisance.	
22	Ensure that the workplace shall be well ventilated.	
23	Ensure that the workplace shall have sufficient and suitable lighting.	
24	Provide and maintain clean well light sufficient and suitable sanitary conveniences for both male and female workers.	
25	Ensure safe use of plant, machinery and equipment at the workplace.	
26	Engage the services of a DOSHS approved plant inspector to inspect and thoroughly examine every hoist or lift at the workplace at least once in every period of six months or after any modifications or extensive repairs or within a shorter period.	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
27	Ensure chains, ropes and lifting tackle are safely used at the workplace in line with the provisions of the Occupational Safety and Health Act, 2007.	
28	Ensure cranes and other lifting machines are safely used at the workplace in line with the provisions of the Occupational Safety and Health Act, 2007.	
29	Keep a register of chains, ropes and lifting tackle and lifting machines at the workplace.	
30	Ensure every ladder to be issued in a workplace shall be of good construction, sound material, and adequate strength and suitable for the purpose for which it is used and shall be properly maintained.	
31	Carry out annual fire safety audit.	
32	Ensure appropriate safety and health signage is conspicuously displayed at the workplace.	
33	Carry out regular workplace emergency drills.	
34	Control of workplace air pollution, noise and vibration.	
35	Provide and maintain an adequate supply of wholesome drinking water at suitable points conveniently accessible to all persons employed.	
36	Provide and maintain for the use of persons employed, adequate and suitable facilities for washing, which shall be conveniently accessible and shall be kept in a clean and orderly condition.	
37	Provide and maintain for the use of a person employed, adequate and suitable accommodation for clothing not worn during working hours.	
38	Provide and maintain so as to be readily accessible, a first aid box or cupboard as well as trained first aiders and a fire fighting team.	
39	Ensure inexperienced workers are trained and work under supervision.	
40	Provide free adequate protective clothing and appliances to workers.	
41	Carry out medical examination of the employees before they are employed, during their employment, and after the termination of their employment.	
42	Limit and restrict access to the construction site by an authorised persons and members of the public.	
43	Provide Personal Protective Equipment (P.P.E) to Employers representative, Employer's Personnel, Consultants and all visitors accessing the site.	
44	Prepare and submit to the engineer weekly safety and health audit and monitoring reports	
45	Undertake HIV/AIDS and STI awareness campaign via an approved service provider.	
46	Institute appropriate waste oil and oil spillage management plan.	
47	Sensitize workers on appropriate waste oil and oil spillage management.	
48	The contractor shall be required to have the following key personnel on site; a) Environmentalist, b) Sociologist, c) Safety, Health and Environment officer and a sexual abuse and sexual harassment prevention officer.	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A.	<u>SECURITY OF WORKS, ETC.</u> The Contractor shall be entirely responsible for the security of all the works stores, materials, plant, personnel, etc., both his own and sub-contractors' and must provide all necessary watching, lighting and other precautions as necessary to ensure security against theft, loss or damage and the protection of the public.	
B.	<u>SOLID WASTE MANAGEMENT</u> Comply with Environment Management and Coordination Act, 1999; Put in place effective waste management programme, Institute waste segregation; Ensure waste soils are dumped at NCC and NEMA approved dumpsites; Contract the services of a NCC and NEMA certified company to be responsible for disposal of waste.	
C.	<u>PREVENTION OF ENVIRONMENTAL POLLUTION</u> Comply with Environment Management and Coordination Act, 1999; Sensitization of workers on environmental conservation; Landscaping and re-vegetation at the tail end of the contract works.	
D.	<u>AIR POLLUTION</u> Institute effective dust suppression measures; Ensure all transport and construction equipment are in good serviceable condition.	
E.	<u>DISRUPTION OF LOCAL TRAFFIC FLOW</u> Implement the formulated traffic management plan for the construction phase; Transportation of construction materials and construction debris to and from site should be done during weekdays, off peak hours.	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A.	<u>SANITATION OF THE WORKS</u> The Sanitation of the works shall be arranged and maintained by the Contractor to the satisfaction of the Government and/or Local Authorities, Labour Department and the Employer's Representative	
B.	<u>SUPERVISION AND WORKING HOURS</u> The works shall be executed under the direction and to the entire satisfaction in all respects of the Employer Representative who shall at all times during normal working hours have access to the works and to the yards and workshops of the Contractor and sub-Contractors or other places where work is being prepared for the contract.	
C.	<u>PROVISIONAL SUMS.</u> 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 Measurement of BuildingWorks and Associated Civil Works for Eastern Africa. Such sums are net and no addition shall be made to them for profit.	
D.	<u>PRIME COST SUM</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 A6 (ii) of the Standard Method of Measurement of BuildingWorks and Associated Civil Works for Eastern Africa. Such sums are net and no addition shall be made to them for profit. Persons or firms nominated by the Architect to execute work or to provide and fix materials or goods as stated in Condition No. 5.0 of the FIDIC Conditions of Contract are described herein as Nominated Sub-contractors. Persons or firms so nominated to supply goods or materials are described herein as Nominated Suppliers.	
A.	<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 Employer's Representative order added to the Contract Sum. Such work shall be valued as described for Variations in Condition No. 13 of the Conditions of Contract.	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
B.	<u>ATTENDANCE UPON OTHER TRADESMEN, ETC.</u> The Contractor shall allow for the attendance of trade upon trade and shall afford any tradesmen or other persons employed for the execution of any work not included in this Contract every facility for carrying out their work and also for use of his ordinary scaffolding. The Contractor, however, shall not be required to erect any special scaffolding for them. The Contractor shall perform such cutting away for and making good after the work of such tradesmen or persons as may be ordered by the Employer's Representative and the work will be measured and paid for to the extent executed at rates provided in these Bills.	
E.	<u>PROGRESS CHART.</u> The Contractor shall provide within two weeks of Possession of Site and in agreement with the Employer's Representative a Progress Chart for the whole of the works including the works of Sub-Contractors; one copy to be handed to the Employer's Representative and a further copy to be retained on Site. Progress to be recorded and chart to be amended as necessary as the work proceeds.	
C.	<u>INSURANCE</u> The Contractor shall insure as required in Conditions No. 18 of the Conditions of Contract. No payment on account of the work executed will be made to the Contractor until he has satisfied the Employer's Representative either by production of an Insurance Policy or and Insurance Certificate that the provision of the foregoing Insurance Clauses have been complied with in all respects. Thereafter the Employer's Representative shall from time to time ascertain that premiums are duly paid up by the Contractor who shall if called upon to do so, produce the receipted premium renewals for the Employer's Representative's inspection.	
D.	<u>PROVISIONAL WORKS</u> All works described as "Provisional" in these Bills of Quantities is subject to remeasurement in order to ascertain the actual quantity executed for which payment will be made. All "Provisional" and other works 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 Employer's Representative. Immediately the work is ready for measuring, the Contractor shall give notice to the Project Engineer. If the Contractor makes default in these respects he shall, if the Employer's Representative so directs uncover the work to enable all measurements to be taken and afterwards reinstate at his own expense.	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A.	<u>ALTERATIONS TO BILLS, PRICING, ETC.</u> Any unauthorised alteration or qualification made to the text of the Bills of Quantities may cause the Tender to be disqualified and will in any case be ignored. The Contractor shall be deemed to have made allowance in his prices generally to cover any items against which no price has been inserted in the priced Bills of Quantities. All items of measured work shall be priced in detail and the Tenders containing Lump Sums to cover trades or groups of work must be broken down to show the price of each item before they will be accepted.	
B.	<u>BLASTING OPERATIONS</u> Blasting will only be allowed with the express permission of the Employer's Representative in writing. All blasting operations shall be carried out at the Contractor's sole risk and cost in accordance with any Government regulations in force for the time being, and any special regulations laid down by the Employer's Representative governing the use and storage of explosives.	
C.	<u>MATERIALS ARISING FROM EXCAVATIONS</u> Materials of any kind obtained from the excavations shall be the property of the Government. Unless the Employer's Representative directs otherwise such materials shall be dealt with as provided in the Contract. Such materials shall only be used in the works, in substitution of materials which the Contractor would otherwise have had to supply with the written permission of the Employer's Representative. Should such permission be given, the Contractor shall make due allowance for the value of the materials so used at a price to be agreed.	
D.	<u>PROTECTION OF THE WORKS.</u> Provide protection of the whole of the works contained in the Bills of Quantities, including casing , casing up, covering or such other means as may be necessary to avoid damage to the satisfaction of the Employer's Representative and remove such protection when no longer required and make good any damage which may nevertheless have been done at completion free of cost to the Government.	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
A. <u>REMOVAL OF RUBBISH ETC.</u>	Removal of rubbish and debris from the Buildings and site as it accumulates and at the completion of the works and remove all plant, scaffolding and unused materials at completion.	
B. <u>WORKS TO BE DELIVERED UP CLEAN</u>	Clean and flush all gutters, rainwater and waste pipes, manholes and drains, wash (except where such treatment might cause damage) and clean all floors, sanitary fittings, glass inside and outside and any other parts of the works and remove all marks, blemishes, stains and defects from joinery, fittings and decorated surfaces generally, polish door furniture and bright parts of metalwork and leave the whole of the buildings watertight, clean, perfect and fit for occupation to the approval of the Employer's Representative	
C. <u>FIRM PRICE CONTRACT</u>	Unless otherwise specifically stated in the Contract Data and/or Particular Preliminaries this is a firm price contract and the Contractor must allow in his tender rates for any increase in the cost of labour and/or materials during the currency of the contract.	
E. <u>MATERIALS ON SITE</u>	All materials for incorporation in the works must be stored on or adjacent to the site before payment is effected unless specifically exempted by the Employer's Representative.	
F. <u>CONTRACTOR'S SUPERINTENDENCE/SITE AGENT</u>	The contractor shall constantly keep on the works literate English speaking Agent or Representative, competent and experienced in the kind of work involved and shall give his whole time to the superintendence of the works. Such Agent or Representative shall receive on behalf of the contractor all directions and instructions from the Employer's Representative and such directions or instructions shall be deemed to have been given to the contractor in accordance with the Conditions of Contract	
	Carried to Collection	

Item	DESCRIPTION	Amount Kshs.
	<u>COLLECTION</u>	
	Brought Forward From Page GP / 1	
	Brought Forward From Page GP / 2	
	Brought Forward From Page GP / 3	
	Brought Forward From Page GP / 4	
	Brought Forward From Page GP / 5	
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	TOTAL FOR GENERAL PRELIMINARIES CARRIED TO GRAND SUMMARY 1	

VOLUME 2
BILL NO. 1
GENERAL REMEDIAL WORKS

PROPOSED CONSTRUCTION OF EAKI COMPLEX AT KNH GROUNDS NAIROBI, KENYA

Item	Description	Unit	Qty	Rate	Kshs	Cts
A	<u>BILL NO 1</u> <u>GENERAL REMEDIAL WORKS</u> <u>Security Room on Ground Floor</u> <u>Demolition of existing door</u> Carefully remove existing 900 x 2400mm high semi solid core flush door laminated with beech veneer both sides with frame including ironmongery and fixed to plastered and painted masonry wall and cart away <u>Making Good</u>	NO	1			
B	Make good door jambs with plaster and paint	LM	6			
C	<u>Fire escape door - Fire Rated Doors as supplied by ASSA ABLOY or other equal and approved</u> 900 X 2400mm high 90 minutes rated single leaf door ditto but without view panel (Security Room on Ground Floor)	NO	1			
	Carried to Collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Games Office Door</u>					
	<u>Demolition of existing aluminium door at the Games Office</u>					
A	Carefully remove existing 900 x 2400mm high powder coated aluminium casement door with frame including ironmongery and fixed to plastered and painted masonry wall and cart away	NO	1			
	<u>Making Good</u>					
B	Make good door jambs with plaster and paint	LM	6			
	<u>Mild steel door</u>					
C	900 x 2400mm high single leaf door comprising 900 x 2100mm opening leaf, 900 x 300mm permanent vent at top infilled with 5No 300 x 20mm diameter vertical welded, 50 x 100 x 3mm RHS frame, 50 x 100mm transome, 50 x 50 x 3mm stiles, top, middle, bottom rails lined with 16 gauge mild steel sheet all welded, complete with 20mm x 300mm long barrel bolt, staple and hasp for padlock, plate for lock (m/s) anchoring lags, apply primer before fixing to Architect's later detail	NO	1			
	<u>Supply and fix following ironmongery with matching screws as Union Catalogue or other equal and approved</u>					
D	3-Lever mortice lock ref. 2270 complete with lock furniture ref 687-24-02AS	NO	1			
E	38mm diameter x 59mm deep rubber door stop ref No.8400	NO	1			
	<u>Touch up primer after fixing and apply three coats gloss oil paint to metal</u>					
F	General surfaces of door	SM	4			
G	Surfaces between 200mm and 300mm girth	LM	6			
	Carried to collection					

PROPOSED CONSTRUCTION OF EAKI COMPLEX AT KNH GROUNDS NAIROBI, KENYA

[illegible]

Item	Description	Unit	Qty	Rate	Kshs	Cts
A	<u>DUCT PROOFING</u> <u>Metal Mesh Frameworks</u> Supply and install heavy duty mesh with and including 50 x 50 x 3mm RHS framing all to manufacture's instructions: including priming to Structural Engineer's satisfaction and three coats of first quality enamel paint 	SM	48			
	Carried to Collection					

PROPOSED CONSTRUCTION OF EAKI COMPLEX AT KNH GROUNDS NAIROBI, KENYA

[illegible]

BILL NO.2
BASEMENT WORKS

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>BILL NO .2</u>					
	<u>BASEMENT GRID T-Q, 15-16 STORAGE & STERILIZATION ROOM</u>					
	<u>ELEMENT NO. 1</u>					
	<u>DOORS</u>					
	<u>3mm thick moulded Powder Coated Aluminium Door Frame fixed to masonry, concrete, light weight partitions with and including fixing clips, bolts, screws, rivets to match in-built permanent ventilation to approval</u>					
A.	100 x 50mm frame with rounded edges/corners fixed to partitions walls to details	LM	46			
B.	100 x 50mm transome with 4 labours	LM	6			
C.	25 x 50mm moulded architrave	LM	46			
D.	20 x 40mm glazing bead	LM	26			
	<u>Laminated Flush doors</u>					
E.	1000 x 2100mm high semi-solid core flush door laminated with beech veneer both sides hardwood lipped all round with hardwood frame (D2d)	NO	1			
F.	1000 x 2100mm high solid core flush door laminated with beech veneer both sides hardwood lipped all round (D3)	NO	1			
G.	1000 x 2100mm high semi-solid core flush door laminated with beech veneer both sides hardwood lipped all round with handicapped accessories (D3c)	NO	2			
H.	900 x 2100mm high semi-solid core flush door laminated with beech veneer both sides hardwood lipped all round (D3d)	NO	5			
	<u>Laminated clear Glass</u>					
I.	8.38mm thick clear laminated glass and galzing with rubber gasket in panes exceeding 0.1sm but not exceeding 0.5sm	SM	1			
	Carried to Collection					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>Fire escape door- Fire Rated Doors as supplied by ASSA ABLOY or other equal and approved</u>					
A.	1600 x 2400mm high 60 minutes rated double leaf fire escape door with 1 No. 200 x 600mm high fire rate glass view window , 1.5 mm thick galvanised iron frame ,3mm thick hinges, non combustible rockwool and plasterboard, lined with vertically laid mahogany veneer , external door loser , spring lock with polished brass front , satin finish stainless steel push plate and kick plate , polished brass fixed handle, panic bolt, access locks, etc. , all to manufacturer's written specifications (FD3)	NO	5			
B.	1500 x 2400mm high 60 minutes rated double leaf fire escape door ditto but without view panel (FD3a)	NO	1			
	<u>Supply and fix the following ironmongery with matching screws to Union Catalogue or other equal and approved</u>					
C.	100mm satin stainless butt hinges with washers ref. HN-403030-SN	PRS	27			
D	Cylinder mortice deadlock ref. 2B22	NO	9			
E	Key and key cylinder lock ref. 2x18-SS	NO	9			
F	Euro-Escutheons ref.SSE-001-SS	PRS	9			
G	Rebate conversion set ref. 2772-SS	NO	9			
H	300 x 75mm stainless steel 'PUSH' plate ref. PSP-300-75-SS	NO	1			
J	3-Lever mortice dead lock ref.2188 complete with back fix pull handle ref. PHD-BF-225-19 SS	NO	9			
	<u>Supply and fix the following ironmongery with matching screws to Union Catalogue or other equal and approved- Cont'd</u>					
K	Stainless steel lever door handle on rose ref. QDT-001-SS	PRS	9			
L	Floor mounted door stop ref. DS-002-SS	NO	9			
M	200mm wide stainless steel kickplate ref. KP-200 x 800-SS	NO	2			
N	25mm wide x 300mm girth metal cramp once bent, twice drilled, one end screwed to timber frame and other split and built into wall	NO	9			
	Carried to Collection					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>Fan lights</u>					
A	5mm thick clear sheet glass and glazing with beads (m/s) in panes between 0,15m and 0.5sm	SM	1			
	<u>Prepare and apply three coats clear stained lacquer polyurathane matt to wood</u>					
B	General surfaces of door	SM	18			
	<u>Touch up primer after fixing and spray apply three coats gloss oil paint to metal</u>					
C	General surfaces both sides (Fire doors)	SM	23			
	Carried to collection					
	<u>COLLECTION</u>					
	From page 2C1-1					
	" " 2C1-2					
	" " 2C1-3					
	<u>ELEMENT NO.1</u>					
	<u>DOORS</u>					
	<u>TOTAL CARRIED</u>					
	<u>TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>ELEMENT NO.2</u>					
	<u>WINDOWS</u>					
	<u>Powder coated aluminium casement windows in 100 x 50 x 3mm back, top, transome, mullion. 50 x 25mm x 3mm casement frame, stiles. 15 x 10mm glazing beads, mosquito proofed permanent vents at top, fasteners, pop-up arm (sliding arm) ironmongery and glazing with approved adhesive, rubber gasket, weathering strip, including all necessary fixing to masonry/concrete</u>					
A.	1000mm wide x 1800mm high comprising 5No. 1175 x 1200mm top hung openable light, 5No. 1175 x 600mm fixed lights (W3a)	NO	5			
B.	1500mm wide x 1800mm high comprising 1No. 1173 x 1200mm top hung openable light, 1No. 1173 x 600mm fixed lights (W3b)	NO	1			
	<u>Glazing</u>					
C.	6.38mm thick laminated one way glass and glazing with gasket/ approved adhesive in panes between 0.5sm and 1.0sm	SM	12			
	<u>Precast concrete class 25/12 units bedded and jointed in cement/sand (1:40 mortar in :-</u>					
D.	300 x 100mm once weathered and throated window cill, complete with and including 25 x 3mm thick galvanised mild steel weather bar, stepped damp	LM	7			
	<u>Wrot Mahogany</u>					
E	75 x 25mm window board with rounded edge plugged	LM	7			
F	25mm quadrant	LM	7			
G	75 x 25mm lining all round	LM	7			
	Carried to Collection					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>Prime back of wood before fixing</u>					
A.	Surfaces not exceeding 100mm girth	LM	7			
B.	Surfaces between 100mm and 200mm girth	LM	14			
	<u>Prepare and apply three coats clear lacquer polyurathane matt to wood.</u>					
C.	Surfaces exceeding 100mm but not exceeding 200mm girth	LM	14			
	Carried to Collection					
	<u>COLLECTION</u>					
	From page 2C1-4					
	" " 2C1-5					
	<u>ELEMENT NO.2</u>					
	<u>WINDOWS</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>ELEMENT NO. 3</u>					
	<u>FINISHES</u>					
	<u>Internal Wall Finishes</u>					
	<u>2-coat plaster comprising 9mm cement/sand (1:4) and 3mm cement/lime (1:5) fine skimmer coat plaster steel trowelled hard and smooth to:-</u>					
A.	12mm thick to masonry walls internally	SM	351			
B.	Ditto to columns and beams	SM	11			
	<u>Approved acid-resistant non-slip matt porcelain floor tiles with rectified edges laid in straight continuous joints not exceeding 4mm wide both directions with manufacturer's approved adhesive, jointed and flush pointed with tinted and flexible epoxy grout in approved colour</u>					
C	600 x 600 x 10mm thick fixed onto prepared screed (m/s) - F3	SM	104			
D	125mm high x 8.4mm thick tile skirting to match - FB2	LM	76			
	<u>Ceiling Finishes</u>					
	<u>2-coat plaster comprising 9mm cement/sand (1:4) and 3mm cement/lime (1:5) fine skimmer plaster to:-</u>					
E	Soffits of suspended ground to second floor slabs exceeding 3.5m but not exceeding 5.0m high- C1	SM	104			
	<u>ELEMENT NO. 3</u>					
	<u>FINISHES</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

TOTAL CARRIED
TO SUMMARY

Item	Description	Unit	Qty	Rate	Shs	Cts
A	<u>ELEMENT NO. 5</u>	ITEM	1			
	<u>Inspect all architectural, mechanical, electrical and structural drawings as provided; allow for all builders work associated with all the specialist works</u>					
	Cut away fittings and pipework; form all holes, chases, etc and make good after the plumber, electrician and all other specialist works					
	TOTAL CARRIED TO SUMMARY					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>SUMMARY</u>					
1	Doors Page 2C1-3					
2	Windows Page 2C1-5					
3	Finishes Page 2C1-5					
4	Painting and Decorating Page 2C1-7					
5	Builders Work Page 2C1-8					
	TOTAL CARRIED TO GRAND SUMMARY					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>BILL NO. 3</u> <u>BASEMENT GRID R-P, 12-14 REFECTORY, SERVING & DISTRIBUTION ROOM</u> <u>ELEMENT NO. 1</u> <u>DOORS</u> <u>3mm thick moulded Powder Coated Aluminium Door Frame fixed to masonry, concrete, light weight partitions with and including fixing clips, bolts, screws, rivets to match in-built permanent ventilation to approval</u>					
A.	100 x 50mm frame with rounded edges/corners fixed to partitions walls to details	LM	22			
B	25 x 50mm moulded architrave	LM	22			
	<u>Laminated Flush doors</u>					
C	1600 x 2400mm high solid core double swing flush door in 2no equal leafs laminated with beech veneer both sides hardwood lipped all round with hardwood frame (D1c)	NO	1			
D	1000 x 2100mm high semi-solid core flush door laminated with beech veneer both sides hardwood lipped all round with hardwood frame (D2d)	NO	3			
	<u>Fire escape door- Fire Rated Doors as supplied by ASSA ABLOY or other equal and approved</u>					
E	63mm thick 1600 x 2400mm high 90 minutes rated double leaf fire escape door comprising 1.5mm thick galvanized iron frame, 3mm thick hinges, non combustible rockwool and plasterboard, lined with vertically laid mahogany veneer, 400 x 900mm high 26mm thick REI 60 fire rated glass view window, external door loser, spring lock with polished brass front, satin finish stainless steel push plate and kick plate, polished brass fixed handle, panic bolt, access locks, etc, all to manufacturer's written specifications (FD1)	NO	2			
F	1600 x 2400mm high 60 minutes rated double leaf fire escape door with 1 No. 200 x 600mm high fire rate glass view window , 1.5 mm thick galvanised iron frame ,3mm thick hinges, non combustible rockwool and plasterboard, lined with vertically laid mahogany veneer , external door loser , spring lock with polished brass front , satin finish stainless steel push plate and kick plate , polished brass fixed handle, panic bolt, access locks, etc. , all to manufacturer's written specifications (FD3)	NO	1			
	Carried to Collection					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>Supply and fix the following ironmongery with matching screws to Union Catalogue or other equal and approved</u>					
A	100mm satin stainless butt hinges with washers ref. HN-403030-SN	PRS	12			
B	Cylinder mortice deadlock ref. 2B22	NO	4			
C	Key and key cylinder lock ref. 2x18-SS	NO	4			
D	Euro-Escutheons ref.SSE-001-SS	PRS	4			
	<u>Supply and fix the following ironmongery with matching screws to Union Catalogue or other equal and approved- Cont'd</u>					
E	Rebate conversion set ref. 2772-SS	NO	4			
F	300 x 75mm stainless steel 'PUSH' plate ref. PSP-300-75-SS	NO	2			
G	3-Lever mortice dead lock ref.2188 complete with back fix pull handle ref. PHD-BF-225-19 SS	NO	4			
H	Stainless steel lever door handle on rose ref. QDT-001-SS	PRS	4			
J	Floor mounted door stop ref. DS-002-SS	NO	4			
K	200mm wide stainless steel kickplate ref. KP-200 x 800-SS	NO	2			
L	25mm wide x 300mm girth metal cramp once bent, twice drilled, one end screwed to timber frame and other split and built into wall	NO	4			
	<u>Fan lights</u>					
M	5mm thick clear sheet glass and glazing with beads (m/s) in panes between 0,15m and 0.5sm	SM	1			
	Carried to Collection					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>Prepare and apply three coats clear stained lacquer polyurathane matt to wood</u>					
A.	General surfaces of door	SM	10			
	<u>Touch up primer after fixing and spray apply three coats gloss oil paint to metal</u>					
B	General surfaces both sides (Fire doors)	SM	12			
	Carried to collection					
	<u>COLLECTION</u>					
	From page 2C2-1					
	" " 2C2-2					
	" " 2C2-3					
	<u>ELEMENT NO.1</u>					
	DOORS					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>ELEMENT NO.2</u>					
	<u>FINISHES</u>					
	<u>Internal Wall Finishes</u>					
	<u>2-coat plaster comprising 9mm cement/sand (1:4) and 3mm cement/lime (1:5) fine skim coat plaster steel trowelled hard and smooth to:-</u>					
A.	12mm thick to masonry walls internally	SM	186			
B.	Ditto to columns and beams	SM	64			
	<u>Cement/sand (1:4) wood float finish render</u>					
C.	10mm thick render to receive ceramic wall tiles	SM	45			
	<u>Approved matt finish ceramic wall tiles with rectified edges laid in horizontal format to 2100mm high above finished floor level with straight continuous joints not exceeding 2mm wide both directions with manufacturer's approved adhesive, jointed and flush pointed with tinted and flexible epoxy grout in approved colour including rounded aluminium edge strips to approval</u>					
D.	300 x 200 x 8mm thick tiles fixed onto prepared cement/sand backing (m/s)- WA3	SM	45			
	<u>Floor Finishes</u>					
	<u>Cement/sand (1:4) wood float finish render incorporating Double Strength Plus SRA hardener or other equal and approved</u>					
E.	30mm thick to receive 600 x 600mm acid-resistant porcelain tiles (m/s) - F3	SM	107			
F.	32mm thick to receive 300 x 300mm non-slip ceramic floor tiles (m/s) - F6	SM	49			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>Approved acid-resistant non-slip matt porcelain floor tiles with rectified edges laid in straight continuous joints not exceeding 4mm wide both directions with manufacturer's approved adhesive, jointed and flush pointed with tinted and flexible epoxy grout in approved colour</u>					
A.	600 x 600 x 10mm thick fixed onto prepared screed (m/s) - F3	SM	107			
B.	125mm high x 8.4mm thick tile skirting to match - FB2	LM	35			
	<u>Approved non-slip matt finish ceramic floor tiles with rectified edges laid in straight continuous joints not exceeding 4mm wide both directions with manufacturer's approved adhesive, jointed and flush pointed with tinted and flexible epoxy grout in approved colour</u>					
C.	330 x 330 x 8.4mm thick fixed onto prepared screed (m/s) - F6	SM	49			
	<u>Ceiling Finishes</u>					
	<u>Moisture resistance mineral wool ceiling panels as 'Mavroc-Constellation' or other equal and approved drop-in ceiling tiles fixed to fire rated 'OWAconstruct S3' exposed demountable butt-cut T24 suspension system comprising main tees and cross tees, 6mm diameter galvanized threaded rod hangers or approved alternative fixed to concrete, clips, bolts, etc. metal shadowline wall trim plugged and screwed at centres not exceeding 200mm to manufacturer's written instructions</u>					
D	600 x 600 x 15mm thick tiles in approved proprietary grid system - C3	SM	80			
	Carried to Collection					

Item	Description	Unit	Qty	Rate	Shs	Cts
A.	<u>The following ceiling finishes fixed onto and including 'OWA construct S3' exposed demountable butt-cut T24 suspension system comprising tee and cross tee, clips, bolts, etc., 6mm diameter galvanized threaded rod hangers or approved alternative fixed to concrete, metal shadow line edge cornice to manufacturer's written instructions</u>	SM	76			
	Approved mineral wool acoustic baffles as Armstrong or other equal and approved - C5					
	Carried to collection					
	<u>COLLECTION</u>					
	From Page 2C2-4					
	" " 2C2-5					
	" " 2C2-6					
	<u>ELEMENT NO. 2 FINISHES</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>ELEMENT NO. 3</u>					
	<u>PAINTING AND DECORATING</u>					
	<u>Internally</u>					
	<u>Prepare and apply two undercoats, one coat filler skimming between the undecoats and two final coats matt Emulsion with Teflon as Crown or other equal and approved incorporating additive for washable surface to:- WA1</u>					
A.	Plastered walls	SM	186			
B.	Ditto to beams and columns	SM	64			
	Carried to collection					
	<u>COLLECTION</u>					
	From Page 2-396					
	<u>ELEMENT NO. 3</u>					
	<u>PAINTING AND DECORATING</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Shs	Cts
A	<u>ELEMENT NO. 4</u> <u>BUILDER'S WORK IN CONNECTION WITH SPECIALIST SERVICES</u> <u>Inspect all architectural, mechanical, electrical and structural drawings as provided; allow for all builders work associated with all the specialist works</u> Cut away fittings and pipework; form all holes, chases, etc and make good after the plumber, electrician and all other specialist works	ITEM	1			
	<u>ELEMENT NO. 4</u> BUILDER'S WORK					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>SUMMARY</u>					
1	Doors Page 2C2-3					
2	Finishes Page 2C2-6					
3	Painting and Decorating Page 2C2-7					
4	Builders Work Page 2C2-8					
	TOTAL CARRIED TO GRAND SUMMARY					

Item	Description	Unit	Qty	Rate	Shs	Cts
A.	<u>BILL NO. 4</u> <u>BASEMENT GRID U-V, 15-16 PHARMACY STORAGE</u> <u>ELEMENT NO. 1</u> <u>DOORS</u> <u>Fire escape door- Fire Rated Doors as supplied by ASSA</u> <u>ABLOY or other equal and approved</u> 1600 x 2400mm high 60 minutes rated double leaf fire escape door with 1 No. 200 x 600mm high fire rate glass view window , 1.5 mm thick galvanised iron frame ,3mm thick hinges, non combustible rockwool and plasterboard, lined with vertically laid mahogany veneer , external door loser , spring lock with polished brass front , satin finish stainless steel push plate and kick plate , polished brass fixed handle, panic bolt, access locks, etc. , all to manufacturer's written specifications (FD3) <u>Touch up primer after fixing and spray apply three coats gloss oil paint to metal</u>	NO	1			
	B. General surfaces both sides (Fire doors)	SM	8			
	<u>ELEMENT NO.1</u> DOORS					
	<u>TOTAL CARRIED</u> <u>TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>ELEMENT NO. 2</u>					
	<u>FINISHES</u>					
	<u>Internal Wall Finishes</u>					
	<u>2-coat plaster comprising 9mm cement/sand (1:4) and 3mm cement/lime (1:5) fine skimmer coat plaster steel trowelled hard and smooth to:-</u>					
A.	12mm thick to masonry walls internally	SM	97			
	<u>Floor Finishes</u>					
	<u>Cement/sand (1:4) wood float finish render incorporating Double Strength Plus SRA hardener or other equal and approved</u>					
B	30mm thick to receive 600 x 600mm acid - resistant porcelain tiles (m/s) - F3	SM	50			
	<u>Approved acid-resistant non-slip matt porcelain floor tiles with rectified edges laid in straight continuous joints not exceeding 4mm wide both directions with manufacturer's approved adhesive, jointed and flush pointed with tinted and flexible epoxy grout in approved colour</u>					
C	600 x 600 x 10mm thick fixed onto prepared screed (m/s) - F3	SM	50			
D	125mm high x 8.4mm thick tile skirting to match - FB2	LM	27			
	<u>Ceiling Finishes</u>					
	<u>2-coat plaster comprising 9mm cement/sand (1:4) and 3mm cement/lime (1:5) fine skimmer plaster to:-</u>					
E	Soffits of suspended ground to second floor slabs exceeding 3.5m but not exceeding 5.0m high- C1	SM	50			
	<u>ELEMENT NO. 2</u>					
	<u>FINISHES</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>ELEMENT NO. 3</u> <u>PAINTING AND DECORATING</u> <u>Internally</u> <u>Prepare and apply two undercoats, one coat filler</u> <u>skimming between the undercoats and two final coats matt</u> <u>emulsion with Teflon as Crown or other equal and</u> <u>approved incorporating additive for washable surface to :-</u> <u>WA1</u>					
A.	Plastered walls	SM	97			
	<u>Prepare and apply one undercoat, one coat filler</u> <u>skimming and two final coats matt emulsion paint as</u> <u>Crown or other equal and approved to :- WA2</u>					
B.	Soffits of suspended slab	SM	50			
	<u>ELEMENT NO. 3</u> <u>PAINTING AND</u> <u>DECORATING</u>					
	<u>TOTAL CARRIED</u> <u>TO SUMMARY</u>					

TOTAL CARRIED TO SUMMARY

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>SUMMARY</u>					
1	Doors	Page 2C3-1				
2	Finishes	Page 2C3-2				
3	Painting and Decorating	Page 2C3-3				
4	Builders Work	Page 2C3-4				
	TOTAL CARRIED TO GRAND SUMMARY					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>BILL NO.5</u> <u>BASEMENT GRID U-W, 12-15 LABS & OFFICES</u>					
	<u>ELEMENT NO. 1</u>					
	<u>DOORS</u>					
	<u>3mm thick moulded Powder Coated Aluminium Door Frame fixed to masonry, concrete, light weight partitions with and including fixing clips, bolts, screws, rivets to match in-built permanent ventilation to approval</u>					
A.	100 x 50mm frame with rounded edges/corners fixed to partitions walls to details	LM	41			
B.	100 x 50mm transome with 4 labours	LM	6			
C.	25 x 50mm moulded architrave	LM	41			
D.	20 x 40mm glazing bead	LM	34			
	<u>Laminated Flush doors</u>					
E.	1000 x 2100mm high semi-solid core flush door laminated with beech veneer both sides hardwood lipped all round with hardwood frame (D2d)	NO	2			
F.	1000 x 2100mm high solid core flush door laminated with beech veneer both sides hardwood lipped all round (D3)	NO	1			
G.	1500 x 2400mm high double leaf semi-glazed door each leaf comprising 1no 50 x 75mm ledge, 750 x 900mm high semi-solid core laminated lower panel, 750 x 1425mm high x 8.38mm thick clear laminated glass upper panel (D6)	NO	4			
	Carried to Collection					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>Fire escape door- Fire Rated Doors as supplied by ASSA ABLOY or other equal and approved</u>					
A.	63mm thick 1600 x 2400mm high 90 minutes rated double leaf fire escape door comprising 1.5mm thick galvanized iron frame, 3mm thick hinges, non combustible rockwool and plasterboard, lined with vertically laid mahogany veneer, 400 x 900mm high 26mm thick REI 60 fire rated glass view window, external door loser, spring lock with polished brass front, satin finish stainless steel push plate and kick plate, polished brass fixed handle, panic bolt, access locks, etc, all to manufacturer's written specifications (FD1)	NO	4			
B.	1600 x 2400mm high 60 minutes rated double leaf fire escape door with 1 No. 200 x 600mm high fire rate glass view window , 1.5 mm thick galvanised iron frame ,3mm thick hinges, non combustible rockwool and plasterboard, lined with vertically laid mahogany veneer , external door loser , spring lock with polished brass front , satin finish stainless steel push plate and kick plate , polished brass fixed handle, panic bolt, access locks, etc. , all to manufacturer's written specifications (FD3)	NO	5			
C.	1000 x 2400mm high 60 minutes rated single leaf door ditto (FD4b)	NO	1			
	<u>Supply and fix the following ironmongery with matching screws to Union Catalogue or other equal and approved</u>					
D.	100mm satin stainless butt hinges with washers ref. HN-403030-SN	PRS	21			
E	Cylinder mortice deadlock ref. 2B22	NO	7			
F	Key and key cylinder lock ref. 2x18-SS	NO	7			
G	Euro-Escutheons ref.SSE-001-SS	PRS	7			
H	Rebate conversion set ref. 2772-SS	NO	7			
J	300 x 75mm stainless steel 'PUSH' plate ref. PSP-300-75-SS	NO	4			
K	3-Lever mortice dead lock ref.2188 complete with back fix pull handle ref. PHD-BF-225-19 SS	NO	1			
	Carried to Collection					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>Supply and fix the following ironmongery with matching screws to Union Catalogue or other equal and approved- Cont'd</u>					
A	Stainless steel lever door handle on rose ref. QDT-001-SS	PRS	11			
B	225 x 19mm stainless steel back fix pull handle ref. PHD-BF-225-19 SS	PRS	1			
C	Silver door closer pwr 4 ref. 7772 SIL	NO	2			
D	Floor mounted door stop ref. DS-002-SS	NO	2			
E	200mm wide stainless steel kickplate ref. KP-200 x 800-SS	NO	8			
F	25mm wide x 300mm girth metal cramp once bent, twice drilled, one end screwed to timber frame and other split and built into wall	NO	7			
	<u>Prepare and apply three coats clear stained lacquer polyurathane matt to wood</u>					
G	General surfaces of door	SM	21			
	<u>Touch up primer after fixing and spray apply three coats gloss oil paint to metal</u>					
H	General surfaces both sides (Fire doors)	SM	8			
	Carried to collection					
	<u>COLLECTION</u>					
	From page 2C4-1					
	" " 2C4-2					
	" " 2C4-3					
	<u>ELEMENT NO.1</u>					
	<u>DOORS</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>ELEMENT NO.2</u>					
	<u>WINDOWS</u>					
	<u>Powder coated aluminium casement windows in 100 x 50 x 3mm back, top, transome, mullion. 50 x 25mm x 3mm casement frame, stiles. 15 x 10mm glazing beads, mosquito proofed permanent vents at top, fasteners, pop-up arm (sliding arm) ironmongery and glazing with approved adhesive , rubber gasket, weathering strip, including all necessary fixing to masonry/concrete</u>					
A	1500mm wide x 1800mm high comprising 1No. 1173 x 1200mm top hung openable light , 1No. 1173 x 600mm fixed lights (W3b)	NO	1			
	<u>Glazing</u>					
B	6.38mm thick laminated one way glass and glazing with gasket/ approved adhesive in panes between 0.5sm and 1.0sm	SM	3			
	<u>Wrot Mahogany</u>					
C	75 x 25mm window board with rounded edge plugged	LM	3			
D	25mm quadrant	LM	3			
	<u>Prime back of wood before fixing</u>					
E	Surfaces not exceeding 100mm girth	LM	3			
F	Surfaces between 100mm and 200mm girth	LM	3			
	<u>Prepare and apply three coats clear lacquer polyurathane matt to wood.</u>					
G	Surfaces exceeding 100mm but not exceeding 200mm girth	LM	3			
	<u>ELEMENT NO.2</u>					
	<u>WINDOWS</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>ELEMENT NO.3</u>					
	<u>FINISHES</u>					
	<u>Internal Wall Finishes</u>					
	<u>2-coat plaster comprising 9mm cement/sand (1:4) and 3mm cement/lime (1:5) fine skimmer coat plaster steel trowelled hard and smooth to:-</u>					
A.	12mm thick to masonry walls internally	SM	833			
	<u>Cement/sand (1:4) wood float finish render</u>					
B	10mm thick render to receive ceramic wall tiles	SM	33			
	<u>Approved matt finish ceramic wall tiles with rectified edges laid in horizontal format to 2100mm high above finished floor level with straight continuous joints not exceeding 2mm wide both directions with manufacturer's approved adhesive, jointed and flush pointed with tinted and flexible epoxy grout in approved colour including rounded aluminium edge strips to approval</u>					
C	300 x 200 x 8mm thick tiles fixed onto prepared cement/sand backing (m/s)- WA3	SM	33			
	<u>Floor Finishes</u>					
	<u>Cement/sand (1:4) wood float finish render incorporating Double Strength Plus SRA hardener or other equal and approved</u>					
D	30mm thick to receive 600 x 600mm acidf resistant porcelain tiles (m/s) - F3	SM	225			
E	32mm thick to receive 300 x 300mm non-slip ceramic floor tiles (m/s) - F6	SM	7			
	Carried to Collection					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>Approved acid-resistant non-slip matt porcelain floor tiles with rectified edges laid in straight continuous joints not exceeding 4mm wide both directions with manufacturer's approved adhesive, jointed and flush pointed with tinted and flexible epoxy grout in approved colour</u>					
A.	600 x 600 x 10mm thick fixed onto prepared screed (m/s) - F3	SM	225			
B.	125mm high x 8.4mm thick tile skirting to match - FB2	LM	129			
	<u>Approved non-slip matt finish ceramic floor tiles with rectified edges laid in straight continuous joints not exceeding 4mm wide both directions with manufacturer's approved adhesive, jointed and flush pointed with tinted and flexible epoxy grout in approved colour</u>					
C.	330 x 330 x 8.4mm thick fixed onto prepared screed (m/s) - F6	SM	7			
D.	125mm high x 8.4mm thick tile skirting to match - FB3	LM	16			
	<u>Ceiling Finishes</u>					
	<u>2-coat plaster comprising 9mm cement/sand (1:4) and 3mm cement/lime (1:5) fine skimmer plaster to:-</u>					
E	Soffits of suspended ground to second floor slabs exceeding 3.5m but not exceeding 5.0m high- C1	SM	20			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>Ceiling Finishes</u> <u>Gypsum mineral fibre drop-in ceiling tiles as 'Armstrong Optima' or other equal and approved with fine textured surface finish fixed to and including 'Trulok F15' suspension grid system comprising tee and cross tee, clips, bolts, etc., 6mm diameter galvanized threaded rod hangers or approved alternative fixed to concrete, metal shadow line edge cornice to manufacturer's written instructions</u>					
A.	1200 x 600 x 17mm thick tiles in approved proprietary grid system - C2 <u>Moisture resistance mineral wool ceiling panels as 'Mavroc-Constellation' or other equal and approved drop-in ceiling tiles fixed to fire rated 'OWAconstruct S3' exposed demountable butt-cut T24 suspension system comprising main tees and cross tees, 6mm diameter galvanized threaded rod hangers or approved alternative fixed to concrete, clips, bolts, etc. metal shadowline wall trim plugged and screwed at centres not exceeding 200mm to manufacturer's written instructions</u>	SM	80			
B.	600 x 600 x 15mm thick tiles in approved proprietary grid system - C3	SM	7			
	Carried to Collection					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>Gypsum mineral fibre drop-in ceiling tiles as 'Armstrong Dune' or other equal and approved with fissured finish fixed to 'Trulok F I 5' suspension system comprising tee and cross tee, clips, bolts, etc..6mm diameter galvanized threaded rod hangers or approved alternative fixed to concrete, metal shadow line edge cornice to manufacturer's written instructions</u>					
A.	600 x 600 x 17mm thick tiles in approved proprietary grid system - C4	SM.	47			
B.	Gypsum bulkhead comprising 12mm thick gypsum plasterboard fixed onto proprietary galvanized steel framing system at 600mm centres, all clips, bolts hangers a.b.d, joints tapped and skimmed to approval - hybrid ceiling for C4	SM	53			
	<u>Gypsum mineral fibre drop-in ceiling tiles as Armstrong, or other equal and approved with fissured finish fixed to Trulok F15' suspension system comprising tee and cross tee, clips, bolts, etc..6mm diameter galvanized threaded rod hangers or approved alternative fixed to concrete, metal shadowline edge cornice to manufacturer's -written instructions</u>					
C.	600 x 600mm perforated aluminium panels with fibreglass acoustic fleece as Armstrong or other equal and approved factory painted with polyster paint to approval - C8	SM	78			
	Carried to Collection					

Item	Description			Unit	Qty	Rate	Shs	Cts
	<u>COLLECTION</u>							
	From	Page	2C4-5					
	"	"	2C4-6					
	"	"	2C4-7					
	"	"	2C4-8					
	<u>ELEMENT NO. 3</u>		<u>TOTAL CARRIED</u>					
	<u>FINISHES</u>		<u>TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>ELEMENT NO. 4</u> <u>PAINTING AND DECORATING</u> <u>Internally</u> <u>Prepare and apply one undercoat, one coat filler</u> <u>skimming and two final coats matt emulsion paint as</u> <u>Crown or other equal and approved to :- WA2</u>					
A.	Plastered walls	SM	833			
	<u>ELEMENT NO. 4</u> <u>PAINTING AND</u> <u>DECORATING</u>					
	<u>TOTAL CARRIED</u> <u>TO SUMMARY</u>					

TOTAL CARRIED TO SUMMARY

Item	Description	Unit	Qty	Rate	Shs	Cts
	<u>SUMMARY</u>					
1	Doors					
2	Windows					
3	Finishes					
4	Painting and Decorating					
5	Builders Work					
	TOTAL CARRIED TO GRAND SUMMARY					

BILL NO. 3
HOSPITAL BUILDING
3RD & 4TH FLOOR

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>BILL NO 6</u>					
	<u>STRUCTURAL WORKS</u>					
	<u>ELEMENT NO. 1</u>					
	<u>SUPERSTRUCTURE CONCRETE (PROVISIONAL)</u>					
	<u>Vibrated reinforced concrete class 30/20 in:-</u>					
A.	Intermediate beams	CM	17			
	<u>High tensile steel reinforcement bars to BS 4461</u>					
	<u>Provisional</u>					
B.	Assorted reinforcement to Engineer's details	KG	2040			
	<u>Sawn formwork to:-</u>					
C.	Sides and soffits of intermediate beams	SM	106			
	<u>Expansion/Seismic Joint</u>					
D.	150 x 50mm thick seismic joint as Joint or other equal and approved comprising acid resistance flexible elastomer insert on aluminium profiled support system with perforated anchoring fins, elastic neoprene gasket, all accessories to approval	LM	360			
	<u>Joint cover</u>					
E.	300 x 3mm thick anodized aluminium joint cover as Joint or other equal and approved bent to profile and fixed onto masonry /concrete with proprietary bolts, double interlocking water tight elastic gasket , all accessories to approval (floor, ceiling, walls)	LM	720			
	<u>Fireproof sealant</u>					
F.	20mm thick x 20mm wide mineral fibre non-toxic expansion joint roll sealant fixed in accordance with manufacturer's instruction	LM	360			
	<u>ELEMENT NO.1</u>					
	<u>SUPERSTRUCTURE</u>					
	<u>CONCRETE</u>					
	<u>TOTAL CARRIED</u>					
	<u>TO SUMMARY</u>					

TOTAL CARRIED
TO SUMMARY

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>BILL NO. 2</u>					
	<u>ARCHITECTURAL WORKS</u>					
	<u>ELEMENT NO.3</u>					
	<u>LIGHT WEIGHT PARTITIONS</u>					
	<u>Dry wall partition</u>					
A.	125mm thick composite partition comprising 2- layer plasterboard as Gyproc Rhino board each 12.5mm thick both sides, 3.5mm diameter screw fixed to both sides of DONN UltraSteel or equivalent galvanized steel profile guide studs 63.5 x 35mm friction fitted at centres not exceeding 600mm, 63.5 x 40mm galvanised steel floor, head tracks, 2No. continuous soundseal beads at junction with structure, 75mm thick glasswool acoustic infill, joints tapped and skimmed to approval (90min fire rating) WT1, WT1A	SM	2350			
	<u>Gypsum wall cladding</u>					
B.	12.5mm thick gypsum board cladding as Gyproc Rhino board to masonry/concrete walls (m/s) screw fixed a.b.d to 51 x 25mm DONN Ultra Steel or equivalent galvanized steel tracks, studs at centres not exceeding 600mm, joints tapped and skimmed to approval (90min fire rating) - WT2, WT6A, WT4A	SM	188			
C.	Ditto but in moisture resistant gypsum plasterboard	SM	47			
	<u>Aluminium Partitions - Laboratory Ground Floor (All Provisional)</u>					
	<u>Powder coated aluminium partitions in 100 x 50 x 3mm back, top, transome, mullion, 50 x 25mm x 3mm casement frame, stiles, 15 x 10mm glazing beads, mosquito proofed permanent vents at top, fasteners, pop-up arm (sliding arm) ironmongery and glazing with approved adhesive, rubber gasket, weathering strip, including all necessary fixing to masonry/concrete</u>					
D.	Aluminium partitions to Architect's details (Provisional)	SM	162			
	<u>ELEMENT NO.3</u>					
	<u>LIGHT WEIGHT</u>					
	<u>PARTITIONS</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>ELEMENT NO.4</u>					
	<u>DOORS</u>					
	<u>3mm thick moulded Powder Coated Aluminium Door Frame fixed to masonry, concrete, light weight partitions with and including fixing clips, bolt,screws, rivets to match in-built permanent ventilation to approval</u>					
A.	100 x 50mm frame with rounded edges/corners fixed to partitions walls to details	LM	723			
B.	25 x 50mm moulded architrave	LM	723			
C.	20 x 40mm glazing bead	LM	128			
	<u>Laminated Flush doors</u>					
D.	1600mm x 2400mm high solid core double swing flush door in 2no equal leafs laminated with beech veneer both sides hardwood lipped all around with and including 1no. 6mm thick x 200mm x 600mm clear glass view window each leaf, glazed with beads (D1)	NO	30			
E.	1600mm x 2100mm high solid core flush door in 2no leafs 800mm wide and 800mm wide respectively laminated with beech veneer both sides hardwood lipped all round (D1b)	NO	6			
F.	1600mm x 2400mm high solid core flush door in 2no leafs 800mm wide and 800mm wide respectively laminated with beech veneer both sides hardwood lipped all round (D1c)	NO	2			
G.	1000 x 2100mm high semi-solid core flush door laminated with beech veneer both sides hardwood lipped all round with handicapped accessories both internal and external (D2)	NO	40			
H.	1000 x 2100mm high semi-solid core flush door laminated with beech veneer both sides hardwood lipped all round with hardwood frame with handicapped accessories both external and internal (D2a)	NO	4			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Laminated Flush doors - Cont'd</u>					
A.	800 x 2100mm high semi-solid core flush door laminated with beech veneer both sides hardwood lipped all round with hardwood frame (D2b)	NO	20			
B.	1000 x 2100mm high semi-solid core flush door laminated with beech veneer both sides hardwood lipped all round with hardwood frame (D2c)	NO	8			
C.	900 x 2100mm high semi-solid core flush door laminated with beech veneer both sides hardwood lipped all round with hardwood frame (D2d)	NO	6			
D.	1000 x 2400mm high solid core flush door laminated with beech veneer both sides hardwood lipped all round (D3)	NO	35			
E.	1200 x 2400mm high double leaf MDF semi-solid core flush door laminated with beech veneer both sides hardwood lipped all round (DD1)	NO	4			
F.	1600 x 2400mm high solid core flush door in 2no equal leafs laminated with beech veneer both sides hardwood lipped all round (D5)	NO	8			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Laminated clear Glass</u>					
A.	6.38mm thick clear laminated glass and glazing with rubber gasket in panes exceeding 0.1sm but not exceeding 0.5sm	SM	10			
	<u>Service duct doors (Provisional)</u>					
B.	45 x 905 x 2100mm high equal double leaf duct door comprising 225 x 45mm wrot mahogany top and bottom rails, 2No. 100 x 45mm rebated stiles, 4No. 50 x 50mm bearers infilled with 25mm thick laminated (both sides) HDF hardwood lipped all round, ironmongery including hinges, locks, handles to details	NO	20			
	<u>Fire escape door - Fire Rated Doors as supplied by ASSA ABLOY or other equal and approved</u>					
C.	63mm thick x 1600 x 2400mm high 90 minutes rated double leaf fire escape door comprising 1.5mm thick galvanized iron frame, 3mm thick hinges, non combustible rockwool and plasterboard, lined with vertically laid mahogany veneer, 400 x 900mm high 26mm thick REI 60 fire rated glass view window, external door loser, spring lock with polished brass front, satin finish stainless steel push plate and kick plate, polished brass fixed handle, panic bolt, access locks, etc, all to manufacturer's written specifications (FD1)	NO	9			
D.	63mm thick x 1200 x 2400mm high 90 minutes rated double leaf fire escape door ditto (FD1b)	NO	6			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Fire escape door - Fire Rated Doors as supplied by ASSA ABLOY or other equal and approved Contd</u>					
A.	63mm thick x 1200 x 2400mm high 90 minutes rated double leaf fire escape door comprising 1.5mm thick galvanized iron frame, 3mm thick hinges, non combustible rockwool and plasterboard, lined with vertically laid mahogany veneer, 400 x 600mm high 26mm thick REI 60 fire rated glass view window, external door loser, spring lock with polished brass front, satin finish stainless steel push plate and kick plate, polished brass fixed handle, panic bolt, access locks, etc, all to manufacturer's written specifications (FD2b)	NO	1			
B.	1600 X 2400mm high 60 minutes rated double leaf fire escape door with 1No. 200 x 600mm high fire rated glass view window ditto (FD3)	NO	10			
C.	1200 X 2400mm high 90 minutes rated double leaf fire escape door with 1No. 200 x 600mm high fire rated glass view window ditto (FD3b)	NO	9			
D.	1000 X 2400mm high 90 minutes rated single leaf door ditto but without view panel (FD4)	NO	6			
E.	1600 X 2400mm high 60 minutes rated double leaf fire escape door with 1No. 200 x 600mm high fire rated glass view window ditto (FD4b)	NO	4			
	<u>Aluminium louver Door for the electrical ducts on the roof University Wing (Provisional)</u>					
F	1000 (average) x 3600mm high (average) aluminium louver door comprising 100 x 50 x 3mm thick frame, stiles step and bottom rail, heavy duty pin hinges, fixing lugs, infilled with 175mm x 16gauge twice bent	NO	2			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Supply and fix following ironmongery with matching screws to Assa Abloy or other equal and approved</u>					
A.	100mm satin stainless butt hinges with washers ref. HN-403030-SN	PRS	447			
B.	180 ⁰ floor spring hold open complete with ceiling pivot, all accessories ref. FSDU410U	PRS	192			
C.	Cylinder mortice deadlock ref. 2B22	NO	171			
D.	Cylinder mortice deadlock ref. 2B21	NO	42			
E.	Key and key cylinder lock ref. 2x18-SS	NO	171			
F.	Key and turn cylinder lock ref. 2x28-SS	NO	42			
G.	Euro-Escutheons ref, SSE-001-SS	PRS	171			
H.	Rebate conversion set ref. 2772-SS	NO	171			
I.	150mm satin flush bolts ref. DB-02-200-SS	NO	192			
J.	Dust Proof Cover for flush bolts	NO	192			
K.	300 x 75mm stainless steel 'PUSH' plate ref. PSP-300-75-SS	NO	182			
L.	Stainless steel indicator bolt ref. 08-8094-SS	NO	64			
M.	Stainless steel lever door handle on rose ref. QDT-001-SS	PRS	99			
N.	225 x 19mm stainless steel back fix pull handle ref. PHD- BF-225-19 SS	PRS	104			
O.	Silver door closer pwr 4 ref. 7772 SIL	NO	181			
P.	Floor or wall mounted door stop ref. DS-002-SS	NO	213			
Q.	Male/female/disabled/washrooms signage plates	NO	12			
R.	Stainless steel hat and coat hook ref. CH-39-SS	NO	64			
S.	Chrome coat hook for benches	NO	64			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Supply and fix following ironmongery with matching screws to Assa Abloy or other equal and approved - Cont'd</u>					
A.	200mm wide stainless steel kickplate ref. KP-200 x 800 - SS	NO	342			
B.	25mm wide x 300mm girth metal cramp once bent, twice drilled, one end screwed to timber frame and other split and built into wall	NO	978			
	<u>Prepare and apply three coats clear stained lacquer polyurathane matt to wood</u>					
C.	General surfaces of door	SM	847			
	<u>Touch up primer after fixing and spray apply three coats gloss oil paint to metal</u>					
D.	General surfaces both sides (Fire doors)	SM	179			
E.	Surfaces between 200mm and 300mm girth	LM	723			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>COLLECTION</u>					
	From page 2D-4					
	" " 2D-5					
	" " 2D-6					
	" " 2D-7					
	" " 2D-8					
	" " 2D-9					
	<u>ELEMENT NO.4</u>					
	<u>DOORS</u>					
	<u>TOTAL CARRIED</u>					
	<u>TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>ELEMENT NO. 5</u>					
	<u>WINDOWS</u>					
A.	Aluminium Louvre Vent Windows to Architect's details at Technical Room 4th floor (Provisional)	SM	112			
	<u>Zebra Rolling Blinds (Provisional) - NB: Bed Wards Only</u>					
B	Supply and fix High quality Double Layer Design complete with sheer and opaque strips roller blinds from 'Tile & Carpet Ltd' or other equal and approved system with opening and closing mechanism as per manufacturer's specifications subject to approval of sample by Project Manager	SM	1147			
	<u>In Prime Grade Hardwood (Provisional)</u>					
C	175 x 25mm window board, plugged, screwed and pelleted	LM	4580			
D	25 x 25mm quadrant beading; plugged	LM	4580			
	<u>Prepare and apply three coats polyurethane clear on woodwork</u>					
E	Window board/Beading over 100mm but not exceeding 200mm girth	LM	4580			
	<u>ELEMENT NO.5</u>					
	<u>WINDOWS</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>ELEMENT NO. 6</u>					
	<u>FINISHES</u>					
	<u>External Wall Finishes</u>					
	<u>Cement/sand (1:4) wood float finish render</u>					
A.	12mm thick render to masonry walls to receive paint	SM	40			
	<u>Internal Wall Finishes</u>					
	<u>2-coat plaster comprising 9mm cement/sand (1:4) and 3mm cement/lime (1:6) fine skimmer coat plaster steel trowelled hard and smooth to:-</u>					
B.	12mm thick to masonry walls internally	SM	5888			
C.	Ditto to columns and beams	SM	100			
D.	Ditto to lift shaft walls (both sides)	SM	281			
F.	Ditto to staircase walls (both sides)	SM	1780			
	<u>Cement/sand (1:4) wood float finish render</u>					
G.	10mm thick render to receive ceramic wall tiles	SM	1169			
H.	Ditto to receive granite wall tiles (lift lobby)	SM	590			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Approved matt finish ceramic wall tiles with rectified edges laid in horizontal format to 2100mm high above finished floor level with straight continuous Joints not exceeding 2mm wide both directions with manufacturer's approved adhesive, jointed and flush pointed with tinted and flexible epoxy grout in approved colour including rounded aluminium edge strips to approval</u>					
A.	300 x 200 x 8mm thick tiles fixed onto prepared cement/sand backing (m/s) - WA3	SM	1,169			
	<u>Approved polished granite wall tiles with rectified edges laid in horizontal format with straight continuous zero joints both directions with manufacturer's approved adhesive including rounded aluminium edge strips to approval</u>					
B.	250 x 330 x 10mm thick thick granite tiles fixed in zero joints with and including manufacturer's approved adhesive to rendered surfaces (m/s) with and including aluminium rounded edge strips	SM	590			
	<u>Floor Finishes</u>					
	<u>Cement/sand (1:4) wood float finish render incorporating Double Strength Plus SRA hardener or other equal and approved</u>					
D.	50mm thick monolithic screed with approved hardner steel trowelled hard and smooth (Data Cabinet F1*)	SM	13			
E.	125mm x 20mm thick skirting - FB1	LM	10			
F.	30mm thick to receive 600 x 600mm non-slip porcelain floor tiles (m/s) - F3* (Wards)	SM	2,804			
G.	Ditto to below basement western wing staircase	SM	29			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
A.	Ditto to receive 600 x 600mm non-slip acid-resistant porcelain tiles (m/s) - F3 (Staircases)	SM	296			
B.	32mm thick to receive 300 x 300mm non-slip ceramic floor tiles (m/s) - F6 (Wet Areas)	SM	602			
C.	30mm thick to receive 600 x 600mm non-slip external porcelain tiles (m/s) - Balcony facing sports field - F8	SM	415			
D.	Ditto to roof top area University wing at the staircase <u>Cement/sand (1:4) wood float finish render incorporating Double Strength Plus SRA hardener or other equal and approved</u>	SM	8			
E.	Ditto in 300mm (average) wide treads	LM	227			
F.	Ditto in 150mm high risers <u>Approved Non-slip matt porcelain floor tiles with rectified edges laid in straight continuous joints not exceeding 4mm wide both directions with manufacturer's approved adhesive. jointed and flush pointed with tinted and flexible epoxy grout in approved colour</u>	LM	227			
G.	600 x 600 x 10mm thick fixed onto prepared screed (m/s) - F3*	SM	2,804			
H.	Ditto at basement staircase western wing - F3* <u>Approved acid-resistant non-slip matt porcelain floor tiles with rectified edges laid in straight continuous joints not exceeding 4mm wide both directions with manufacturer's approved adhesive, ointed and flush pointed with tinted and flexible epoxy grout in approved colour</u>	SM	29			
J.	600 x 600 x 10mm thick fixed onto prepared screed (m/s) - F3	SM	296			
K.	Ditto in 300mm (average) wide treads	LM	227			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
A.	Ditto in 150mm high risers	LM	227			
B.	Ditto in 300mm (average) wide treads with 3No. anti-slip grooves to approval	LM	227			
C.	125mm high x 8.4mm thick tile skirting to match - FB2 <u>Approved non-slip matt finish ceramic floor tiles with rectified edges laid in straight continuous joints not exceeding 4mm wide both directions with manufacturer's approved adhesive. jointed and flush pointed with tinted and flexible epol--v grout in approved colour</u>	LM	1,144			
D.	330 x 330 x 8.4mm thick fixed onto prepared screed (m/s) F6 (Wet areas)	SM	602			
E.	330 x 330 x 8.4mm thick fixed onto prepared screed (m/s) F6 (Data Cabinet)	SM	13			
F.	125mm high x 8.4mm thick tile skirting to match - FB3 <u>Approved exterior non-slip matt porcelain floor tiles with rectified edges laid in straight continuous joints not exceeding 4mm wide both directions with manufacturer's approved adhesive. jointed and flush pointed with tinted and flexible epoxy grout in approved colour</u>	LM	220			
G.	600 x 600 x 10mm thick fixed onto prepared screed (m/s) - F8	SM	415			
H.	Ditto to roof top area University wing at the staircase	SM	8			
I.	125mm high x 8.4mm thick tile skirting to match - FB5 <u>Ceiling Finishes</u> <u>2-coat plaster comprising 9mm cement/sand (1:4) and 3mm cement/lime (1:5) fine skimmer Plaster to:-</u>	LM	367			
J.	Soffits of suspended third to roof slabs not exceeding 3.5m high - Cl	SM	164			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
A.	Soffits of staircase landing ditto	SM	163			
B.	Sloping soffits of staircase ditto	SM	131			
C.	Ditto open string of staircase 150mm to 225mm wide	LM	75			
	<u>Ceiling Finishes</u>					
	<u>Moisture resistance mineral wool ceiling panels as Mavroc-Constellation' or other equal and approved drop-in ceiling tiles fixed to fire rated 'OWAconstruct S3' exposed demountable butt-cut T24 suspension system comprising main tees and cross tees. 6mm diameter galvanized threaded rod hangers or approved alternative fixed to concrete, clips, bolts, etc. metal shadowline wall trim plugged and screwed at centres not exceeding 200mm to manufacturer's written instructions</u>					
D.	600 x 600 x 15mm thick tiles in approved proprietary grid system - C3	SM	430			
	<u>Gypsum mineral fibre drop-in ceiling tiles as 'Armstrong Dune' or other equal and approved with fissured finish fixed to 'Trulok F I 5' suspension system comprising tee and cross tee, clips, bolts, etc..6mm diameter galvanized threaded rod hangers or approved alternative fixed to concrete, metal shadow line edge cornice to manufacturer's written instructions</u>					
E.	600 x 600 x 17mm thick tiles in approved proprietary grid system - C4	SM.	1,535			
F.	Gypsum bulkhead comprising 12mm thick gypsum plasterboard fixed onto proprietary galvanized steel framing system at 600mm centres, all clips, bolts hangers a.b.d, joints tapped and skimmed to approval - hybrid ceiling for C4	SM	1,727			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>The following ceiling finishes fixed onto and including</u> <u>OWA construct S3' exposed demountable butt-cut T24</u> <u>suspension system comprising tee and cross tee. clips,</u> <u>bolts, etc., 6mm diameter galvanized threaded rod</u> <u>hangers or approved alternative fixed to concrete, metal</u> <u>shadow line edge cornice to manufacturer's written</u> <u>instructions</u>					
A.	Approved mineral wool acoustic baffles as Armstrong or other equal and approved - C5	SM	195			
B.	600 x 1200 x 17mm thick acoustic drop-in ceiling panels with bamboo effect as OWA or other equal and approved - C6	SM	1,172			
	Carried to Collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>COLLECTION</u>					
	From page 2D-12					
	" " 2D-13					
	" " 2D-14					
	" " 2D-15					
	" " 2D-16					
	" " 2D-17					
	<u>ELEMENT NO. 6</u>					
	<u>FINISHES</u>					
	<u>TOTAL CARRIED</u>					
	<u>TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>ELEMENT NO. 7</u>					
	<u>PAINTING AND DECORATING</u>					
	<u>Externally</u>					
	<u>Prepare and apply one acrylic based undercoat and three coats self-cleaning permaplast zero - VOC paint as Crown' or other equal and approved to:- EW1</u>					
A.	Plastered external walls	SM	40			
B.	Ditto to balcony walls on 3rd & 4th floor	SM	514			
C.	Ditto to soffits of suspended slab of balconies	SM	415			
D.	Ditto to beams of balcony	SM	54			
E.	Ditto to columns	SM	52			
F.	Ditto to coping	LM	187			
	<u>Internally</u>					
	<u>Prepare and apply two undercoats, one coat filler skimming between the undercoats and two final coats matt Emulsion with Teflon as Crown or other equal and approved incorporating additive for washable surface to:- WA1</u>					
G.	Plastered walls	SM	5888			
H.	Ditto to beams and columns	SM	200			
I.	Ditto to staircase walls	SM	1780			
	<u>Prepare and apply one undercoat, one coat filler skimming and two final coats matt emulsion paint as Crown or other equal and approved to:- WA2</u>					
J.	Soffits of suspended slab	SM	164			
K.	Soffits of staircase landing	SM	163			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
A.	Sloping soffits of staircase	SM	131			
B.	Ditto open string of staircase 150mm to 225mm wide	LM	75			
C.	Gypsum board ceiling	SM	3,262			
	<u>Decorative wall finish</u>					
D.	Special wall treatment/colour creation as 'Crown' or other equal and approved applied in accordance with manufacturer's specifications - WA6	SM	180			
	<u>Prepare and apply one undercoat, one coat filler</u> <u>skimming including mesh fibre tape at joints and two final</u> <u>coats silk vinyl zero VOC</u> <u>emulsion paint as Crown or other equal and approved to:-</u> <u>WA7</u>					
E.	Gypsum board partitions and claddings including mesh fibre tape at joints	SM	4700			
	<u>Prepare and apply one undercoat, one coat filler</u> <u>skimming and two final coats silk vinyl zero VOC</u> <u>emulsion paint as Crown or other equal and approved to:-</u> <u>WA7</u>					
F.	Plastered surfaces internally	SM	984			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	COLLECTION					
	From page 2D-19					
	" " 2D-20					
	<u>ELEMENT NO. 7</u>					
	<u>PAINTING AND</u>					
	<u>DECORATING</u>					
	<u>TOTAL CARRIED</u>					
	<u>TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>ELEMENT NO. 8</u> <u>FIXTURES AND FITTINGS - ALL PROVISIONAL</u> <u>The following in Nurse Stations</u> 6000 x 900 x 1100mm high comprising 150 x 50mm wrot celcured softwood bearer, 18mm thick particle board with HPL formica bottom, 50 x 50mm wrot softwood frame work, 22mm thick post formed particle board faced in timber effect melamine laminate finish front, counter, 32mm thick top with and including opening for wash hand basin, 25mm thick inclined particle board in white fromica to take electronics, wrot hardwood edgings, 20mm thick plastic edge band, to counter top, 12no 400mm wide x 150mm x 500mm deep drawers, 4no. CPU spaces, 50mm dia grommettes, 500mm wide x 600mm high cupboards, approved ironmongery, apply primer, two under coats and one gloss oil finishing coat to wood all to detail (NS1 - Plan - 1st Floor ICU Area) 10200 x 900 x 1100mm high comprising 150 x 50mm wrot celcured softwood bearer, 18mm thick particle board with HPL formica bottom, 50 x 50mm wrot softwood frame work, 22mm thick post formed particle board faced in timber effect melamine laminate finish front, counter, 32mm thick top wash hand basin, hardwood lipped all round, form opening for counter top wash hand basin, 25mm thick inclined particle board in white fromica to take electronics, wrot hardwood edgings, 20mm thick plastic edge band, to counter top, 9no 250mm wide x 125mm x 500mm deep drawers, 4no. CPU spaces, 50mm dia grommettes, 500mm wide x 600mm high cupboards, approved ironmongery, apply primer, two under coats and one gloss oil finishing coat to wood all to detail (Provisional) (NS2 - Plan - 1st Floor ICU Area) Carried to collection	NO	1			
		NO	2			

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>The following in Nurse Stations - Cont'd</u>					
A.	3300 x 900 x 1100mm high comprising 150 x 50mm wrot celcured softwood bearer, 18mm thick particle board with HPL formica bottom, 50 x 50mm wrot softwood frame work, 22mm thick post formed particle board faced in timber effect melamine laminate finish front, counter, 32mm thick top, hardwood lipped all round, form opening for counter top wash hand basin, 25mm thick inclined particle board in white fromica to take electronics, wrot hardwood edgings, 20mm thick plastic edge band, to counter top, 6no 250mm wide x 125mm deep x 500mm long drawers, 2no. CPU spaces, 50mm dia grommettes, 500mm wide x 600mm high cupboards, approved ironmongery, apply primer, two under coats and one gloss oil finishing coat to wood all to detail (NS3 - Plan - 2nd Floor)	NO	2			
B.	3000 x 600 x 900mm high comprising 150 x 50mm wrot celcured softwood bearer, 18mm thick particle board with HPL formica bottom, 50 x 50mm wrot softwood frame work, 32mm thick post formed particle board faced in timber effect melamine laminate finish top, hardwood lipped all round, 25mm thick particle board in white fromica fascia, wrot hardwood edgings, 20mm thick plastic edge band to counter top, 2no 25mm thick plastic edge band to counter top, 1000mm wide x 600mm high cupboards with 2no doors, approved ironmongery, apply primer, two under coats and one gloss oil finishing coat to wood all to detail (NS3 - Plan - 2nd Floor)	NO	2			
C.	3000mm x 300mm deep x 600mm high level cupboard comprising 18mm MDF bottom, middle, top, back plugged to wall board, 18mm MDF board faced with timber effect melamine laminate finish, wrot celcured softwood bearers, apply wood primer, undercaots and three coats gloss oil paint to wood (NS3 - Plan - 2nd Floor)	NO	2			
	Carried to Collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
A.	5650 x 900 x 1100mm high comprising 150 x 50mm wrot celcured softwood bearer, 18mm thick particle board with HPL formica bottom, 50 x 50mm wrot softwood frame work, 22mm thick post formed particle board faced in timber effect melamine laminate finish front, counter, 32mm thick top, opening for wash hand basin, 25mm thick inclined particle board in white fromica to take electronics, wrot hardwood edgings, 20mm thick plastic edge band, to counter top, 9no 400mm wide x 150mm x 500mm deep drawers, 3No. CPU spaces, 50mm dia grommettes, 500mm wide x 600mm high cupboards, approved ironmongery, apply primer, two under coats and one gloss oil finishing coat to wood all to detail (Room 2-38 - 2nd Floor) NS6	NO	1			
B.	3600 x 600 x 900mm high comprising 150 x 50mm wrot celcured softwood bearer, 18mm thick particle board with HPL formica bottom, 50 x 50mm wrot softwood frame work, 32mm thick post formed particle board faced in timber effect melamine laminate finish top, hardwood lipped all round, 25mm thick particle board in white fromica fascia, wrot hardwood edgings, 20mm thick plastic edge band to counter top, 2no 25mm thick blockboard partitions, 1000mm wide x 600mm high cupboards with 2no doors, approved ironmongery, apply primer, two under coats and one gloss oil finishing coat to wood all to detail (NS4 - Plan - 3rd & 4th Floor)	NO	3			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>The following in Nurse Stations (Cont'd)</u>					
A.	3600mm x 300mm deep x 600mm high level cupboard comprising 18mm MDF bottom, middle, top and back plugged to wall, board, 18mm MDF board faced with timber effect melamine laminate finish, wrot celcured softwood bearers, apply wood primer, undercaots and three coats gloss oil paint to wood (NS4 - Plan - 3rd & 4th Floor)	NO	3			
B.	3900 x 900 x 1100mm high comprising 150 x 50mm wrot celcured softwood bearer, 18mm thick particle board with HPL formica bottom, 50 x 50mm wrot softwood frame work, 22mm thick post formed particle board faced in timber effect melamine laminate finish front, counter, 32mm thick top, hardwood lipped all round, form opening for counter top wash hand basin, 25mm thick inclined particle board in white fromica to take electronics, wrot hardwood edgings, 20mm thick plastic edge band, to counter top, 6no 250mm wide x 125mm deep x 500mm long drawers, 2no. CPU spaces, 50mm dia grommettes, 500mm wide x 600mm high cupboards, approved ironmongery, apply primer, two under coats and one gloss oil finishing coat to wood all to detail (NS4 - Plan - 3rd & 4th Floor)	NO	3			
C.	4500 x 900 x 1100mm high comprising 150 x 50mm wrot celcured softwood bearer, 18mm thick particle board with HPL formica bottom, 50 x 50mm wrot softwood frame work, 22mm thick post formed particle board faced in timber effect melamine laminate finish front, counter, 32mm thick top, hardwood lipped all round, wrot hardwood edgings, form opening for counter top wash hand basin, 20mm thick plastic edge band, to counter top, 6no 400mm wide x 125mm x 500mm deep drawers, 2no. CPU spaces, 50mm dia grommettes, 500mm wide x 600mm high cupboards, approved ironmongery, apply primer, two under coats and one gloss oil finishing coat to wood all to detail (NS5 - Plan - Waiting/ control room Ground Floor)	NO	1			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>The following in Nurse Stations - Cont'd</u>					
A.	2 -Piece 5000mm long comprising 2700 x 900 x 1100mm high and 2300 x 900 x 1100mm high comprising 150 x 50mm wrot celcured softwood bearer, 18mm thick particle board with HPL formica bottom, 50 x 50mm wrot softwood frame work, 22mm thick post formed particle board faced in timber effect melamine laminate finish front, counter, 32mm thick top, hardwood lipped all round, 25mm thick inclined particle board in white fromica to take electronics, wrot hardwood edgings, 20mm thick plastic edge band, to counter top, 9no 250mm wide x 125mm deep x 500mm long drawers, 4no. CPU spaces, 500mm wide x 600mm high cupboards, approved ironmongery, apply primer, two under coats and one gloss oil finishing coat to wood all to detail (NS6 - Plan - 2nd, 3rd, 4th Floors)	NO	3			
B.	9268 x 900 x 1100mm high comprising 150 x 50mm wrot celcured softwood bearer, 18mm thick particle board with HPL formica bottom, 50 x 50mm wrot softwood frame work, 22mm thick post formed particle board faced in timber effect melamine laminate finish front, counter, 32mm thick top, hardwood lipped all round, wrot hardwood edgings, 20mm thick plastic edge band, to counter top, 6no 250mm wide x 125mm deep x 600mm long drawers, 2no. CPU spaces, 50mm dia grommettes, 500mm wide x 600mm high cupboards, approved ironmongery, apply primer, two under coats and one gloss oil finishing coat to wood all to detail (NS7 - Plan - Dialysis Ground Floor)	NO	2			
C.	7950 x 900 x 1100mm high comprising 150 x 50mm wrot celcured softwood bearer, 18mm thick particle board with HPL formica bottom, 50 x 50mm wrot softwood frame work, 22mm thick post formed particle board faced in timber effect melamine laminate finish front, counter, 32mm thick top, hardwood lipped all round, wrot hardwood edgings, 20mm thick plastic edge band, to counter top, 6no 250mm wide x 125mm deep x 600mm long drawers, 2no. CPU spaces, 50mm dia grommettes, 500mm wide x 600mm high cupboards, approved ironmongery, apply primer, two under coats and one gloss oil finishing coat to wood all to detail (NS8 - Plan - Dialysis Ground Floor)	NO	2			
D.	1800 x 600 x 900mm high desk ditto (Ground Floor - Grid V-15)	NO	1			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Reception Counter Desks</u>					
A.	5850 x 900 x 1100mm high curved to radius comprising 50 x 100mm wrot celcured softwood plinth bearer, 18mm thick particle board with HPL formica bottom, 50 x 50mm wrot softwood frame work, 12mm primed and painted MDF rear cover under and top, with and including metallic effect aluminium finish on 12mm MDF cladding curved to profile, 20mm polished 1st quality granite slab, 20 x 20mm granite fascia, 20 x 300mm granite top all with rounded edges on 18mm thick blockboard, 100mm high stainless steel skirting on softwood bearer, 3no CPU cage, 50mm dia grommettes, 9no. drawers, prepare and apply primer two under coats and one gloss oil finishing coat to wood (Reception Desk - RC-05 - 2nd Flr)	NO	1			
B.	5600 x 900 x 1100mm high curved to radius comprising 50 x 100mm wrot celcured softwood plinth bearer, 18mm thick particle board with HPL formica bottom, 50 x 50mm wrot softwood frame work, 12mm primed and painted MDF rear cover under counter and top, with and including metallic effect aluminium finish on 12mm MDF cladding curved to profile, 20mm polished 1st quality granite slab, 20 x 20mm granite fascia, 20 x 300mm granite top all with rounded edges on 18mm thick blockboard, 100mm high stainless steel skirting on softwood bearer, 1no CPU cage, 50mm dia grommettes, 3no. drawers, prepare and apply primer two under coats and one gloss oil finishing coat to wood (Room 3-40 - 3rd Floor) (Grid Q-14)	NO	1			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Reception Counter Desks - Cont'd</u>					
A.	3805 x 900 x 1100mm high curved to radius comprising 50 x 100mm wrot celcured softwood plinth bearer, 18mm thick particle board with HPL formica bottom, 50 x 50mm wrot softwood frame work, 12mm primed and painted MDF rear cover under counter and top, with and including metallic effect aluminium finish on 12mm MDF cladding curved to profile, 20mm polished 1st quality granite slab, 20 x 20mm granite fascia, 20 x 300mm granite top all with rounded edges on 18mm thick blockboard, 100mm high stainless steel kiriting on softwood bearer, 2no CPU cage, 50mm dia grommettes, 6no. drawers, prepare and apply primer two under coats and one gloss oil finishing coat to wood (Waiting Area - RC - 04 - 1st Floor)	NO	1			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Reception Counter Desks - Cont'd</u>					
A.	2650 x 900 x 1100mm high curved to radius comprising 50 x 100mm wrot celcured softwood plinth bearer, 18mm thick particle board with HPL formica bottom, 50 x 50mm wrot softwood frame work, 12mm primed and painted MDF rear cover under counter and top, with and including metallic effect aluminium finish on 12mm MDF cladding curved to profile, 20mm polished 1st quality granite slab, 20 x 20mm granite fascia, 20 x 300mm granite top all with rounded edges on 18mm thick blockboard, 100mm high stainless steel skirting on softwood bearer, 2no CPU cage, 50mm dia grommettes, 6no. drawers, prepare and apply primer two under coats and one gloss oil finishing coat to wood (Reception Counter - RC - 07 - 1st & 4th Flr Control Desk)	NO	3			
	<u>Laboratory Benches (Provisional)</u>					
B.	750mm wide x 850mm high Laboratory Benches as 'Xuechenglab' or other equal and approved comprising 12.7mm thick phenolic resin (solid core physiochemical) board, fixed type box cabinet to support the worktop made up of 1.2mm thick galvanized steel sheet with surface treated by pickling and phosphating and electrostatic coated by epoxy resin powder , damping hinge with opening angle of 90 or 110 degrees , U type alum alloy handle	LM	48			
C.	Allow Kshs. 6,000,000 Provisional Sum for overseas factory inspection to cater for 6 no. persons for Laboratory Benches	Sum				
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
A.	<u>Custom made Bedward Lockers on 3rd & 4th floor</u>	NO	24			
	3-column overall size 1575mm (average) wide x 375mm deep x 3000mm high custom made steel lockers comprising 6 no 525 x 375 x 1500mm high locker with 1no division on upper compartment and lower compartment, powder coated steel finish colour to match wall finish, apply prime coating antimicrobial/antibacterial powder coating, key locking system, handles incorporating locking mechanism to approval, perforations and ventilations 100mm high plinth, to Architect's details (3rd & 4th Floor)					
	Carried to Collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
A.	2-column overall size 1050mm (average) wide x 375mm deep x 3000mm high custom made steel lockers comprising 4 no 525 x 375 x 1500mm high locker with 1no division on upper compartment and lower compartment, powder coated steel finish colour to match wall finish, apply prime coating antimicrobial/antibacterial powder coating, key locking system, handles incorporating locking mechanism to approval, perforations and ventilations 100mm high plinth, to Architect's details (3rd & 4th Floor)	NO	18			
	<u>Custom Made Ward Lockers in Existing 1st and 2nd Floors</u>					
B.	3-column overall size 1575mm (average) wide x 375mm deep x 3000mm high custom made steel lockers comprising 6 no 525 x 375 x 1500mm high locker with 1no division on upper compartment and lower compartment, powder coated steel finish colour to match wall finish, apply prime coating antimicrobial/antibacterial powder coating, key locking system, handles incorporating locking mechanism to approval, perforations and ventilations 100mm high plinth, to Architect's details (Ground, 1st, 2nd Floor)	NO	26			
C.	2-column x 1050mm (average) wide x 375mm deep x 3000mm high custom made steel lockers comprising 4 no 525 x 375 x 1500mm high locker with 1no division on upper compartment and lower compartment, powder coated steel finish colour to match wall finish, apply prime coating antimicrobial/antibacterial powder coating, key locking system, handles incorporating locking mechanism to approval, perforations and ventilations 100mm high plinth, to Architect's details (Ground, 1st, 2nd Floor)	NO	4			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>The following in 6No. In-built low level kitchen worktop and cupboards (Total Length 36Lm Provisional)</u>					
	<u>Concrete (1:3:6)</u>					
A.	100mm thick plinth	SM	22			
	<u>Sawn formwork to:-</u>					
B.	Edges of plinth 75-150mm high	LM	30			
	<u>Cement/sand (1:3) in:-</u>					
C.	40mm thicl floor screed steel trowelled hard and smooth	SM	22			
	<u>Wrot hardwood in:-</u>					
D.	50 x 50mm frame with three labours plugged	LM	60			
E.	50 x 25mm bearers	LM	372			
	<u>18mm thick post-formed medium density fibre (MDF) board laminated both sides in:-</u>					
F.	Door size 450 x 490mm high with hardwood lipping all round	NO	66			
G.	Shelves	SM	22			
H.	Top	SM	30			
I.	Sides/divisions	SM	43			
J.	100mm wide x 18mm thick fascia	LM	30			
K.	Form or leave 450 x 450mm hole in 18mm thick MDF board	NO	6			
L.	Chase 50 x 50mm deep into wall for building in granite slab top (m/s) and make good to match	LM	30			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Approved first quality polished granite slab in:-</u>					
A.	20mm thick chamfered slab fixed with an approved adhesive on MDF backing (m/s)	SM	22			
B.	100mm high skirting	LM	30			
	<u>Ironmongery as "ASSA ABLOY" or other equal and approved</u>					
C.	Approved magnetic ball catch	NO	147			
D.	Approved malpha hinges	PRS	66			
E.	100mm long aluminium D-door pull handle	NO	66			
F.	50mm long aluminium barrel bolt	NO	147			
G.	Drawer size 400 x 550 x 150mm deep comprising 20mm MDF laminate front and 12mm sides and back, 6mm thick plywood bottom tongued in all round, 38 x 25mm drawer stopper including easy pull track rollers	NO	66			
	<u>Painting</u>					
	<u>Prepare and spray paint three coats of gloss oil paint as 'Crown' or equal and approved to:-</u>					
H.	Surfaces of wood 100mm to 200mm girth	LM	369			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>High level kitchen Cupboards</u>					
A.	300mm wide x 600mm high cupboard comprising 50 x 50mm wrot softwood frame plugged, 50 x 25mm softwood bearers, 18mm thick MDF board with melamine laminate to doors including decorative moulding, shelves, divisions, complete with piano hinges, kimbs, ball catches, apply three coats, clear lacquer polyurathane matt, to Architect's details	LM	24			
	<u>Counter Tops for Laboratories tops, Servery, etc.</u>					
B.	800mm (average) wide x 1000mm (average) high tops comprising, 100mm thick mass concrete plinth finished in 40mm thick cement/sand (1:4) screed steel trowelled hard and smooth, 75mm thick concrete 20/20 top slab with mesh A142 reinforcement including opening for sinks, computer cables, etc. as necessary finished in 20mm thick polished granite slab, 75mm fascia, with coved edges, 100mm thick masonry front and support walls at 1500mm centres plastered and ceramic tiled both sides, to Architect's detail (Labs) (Provisional)	LM	48			
C.	900mm ditto kitchen on existing masonry wall (Basement)	LM	8			
	<u>The following in shelves at stores, pharmacy, etc.</u>					
	<u>Mild steel including cutting, drilling, welding a.b.d</u>					
D.	25 x 25 x 2mm thick RHS posts built 100mm deep into concrete	LM	1900			
E.	Ditto bearers welded	LM	3000			
	<u>Laminated blockboard</u>					
F.	25mm thick hardwood lipped screwed to steel members (m/s)	SM	360			
	<u>Touch up primer after fixing, apply three coats gloss oil paint as 'Crown' or other equal and approved to:-</u>					
G.	Surfaces not exceeding 100mm girth	LM	4900			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Prepare and apply stainer and three coats gloss oil paint as 'Crown' or approved equivalent to:-</u>					
A.	General surfaces	SM	720			
	<u>The following in waiting room benches</u>					
	<u>Mild steel including cutting, drilling, welding a.b.d</u>					
B.	25 x 25 x 3mm thick SHS bearers, stands	LM	71			
	<u>Wrot mahogany</u>					
C.	100 x 25mm thick timber slats screwed to mild steel (m/s)	LM	96			
D.	50 x 25mm ditto fascia	LM	24			
E.	150 x 25mm ditto fascia for hooks	LM	24			
	<u>Touch up primer after fixing, apply three coats gloss oil paint as 'Crown' or other equal and approved to:-</u>					
F.	General surfaces of steel works	SM	7			
	<u>Prepare and apply stainer and three coats 2-pack clear varnish as 'Crown' or approved equivalent to :-</u>					
G.	General timber surfaces	SM	36			
	<u>Silicone Cap</u>					
H.	Silicone leg cap to architects approval	NO	36			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Corridor Fenders</u>					
	<u>'Gerflor' or approved equivalent wall protection, hand rails to approval</u>					
	<u>Third to 4th Floor</u>					
A.	30 x 90mm moulded smooth ground anti-bacterial PVC hand rail fixed to and including 2-point self-locking perforated aluminium brackets screwed to wall at 800mm centres, wall return curved ends,etc. in accordance with manufacturer's specifications to approval	LM	360			
B.	200 x 25mm thick smooth ground anti-bacterial PVC crash rail with 2 labours, fixed to masonry/dry wall with and including continuous aluminium rail bracket, bevelled end pieces, in approved colour to manufacturer's specifications to approval	LM	360			
C.	45mm wing width x 2.5mm thick round smooth ground anti-bacterial PVC corner protector fixed onto and including continuous pre-drilled aluminium core to manufacturer's specifications -1050mm high	LM	300			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
A.	<u>The following in duct covers</u>					
	1200mm girth (average) duct covers comprising 9mm thick gypsum plasterboard fixed with and including 51 x 25mm DONN ultra steel galvanised steel tracks at 600mm centres a.b.d., joints tapped and skimmed, painted to approval	LM	320			
	<u>The following in downpipe covers</u>					
	<u>Mild steel including cutting, drilling, welding a.b.d</u>					
	B. 50 x 25 x 2mm thick RHS posts fixed to concrete/ masonry with and including bolts, plates	LM	172			
C.	50 x 25 x 2mm thick bearers welded	LM	58			
D.	<u>Eurobond or other equal and approved aluminium composite panels fixed to bearers (m/s) with and including approved clips</u>					
	4mm thick fixed to bearers (m/s)	SM	35			
E.	<u>Touch up primer after fixing, apply three coats gloss oil paint as 'Crown' or other equal and approved to:-</u>					
	Surfaces between 100mm and 200mm girth	LM	230			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
A.	<u>Vanity tops</u>					
	550mm wide x 850mm high top comprising 75mm thick concrete 20/20 top slab with mesh A142 reinforcement including opening for sinks, computer cables, etc. as necessary finished in 20mm thick polished granite slab and 75mm fascia with coved edges, 100mm thick masonry support walls at 1500mm centres plastered and ceramic tiled both sides, to details (3rd & 4th Floor)	LM	22			
	<u>Stainless steel railing</u>					
	<u>Staircases</u>					
B.	950mm high stainless steel railing, ground smooth comprising 50mm diameter x 4mm thick handrail fixed to 50mm diameter stainless steel balusters with approved clips at centres not exceeding 1000mm rawl bolted onto concrete floor (m/s) including base plate, cap, infilled with and including 10mm diameter solid top, intermediate, bottom rails fixed onto balusters with approved clips, all curving to radii where applicable to Manufacturer's details (Staircases)	LM	108			
	<u>Handrail</u>					
C.	50mm diameter stainless steel handrail, smooth ground welded onto 20mm diameter x 150mm girth wall bracket rawl bolted onto concrete or masonry (m/s) including plate, cap, all curving to radii where applicable to Manufacturer's details	LM	246			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>View Windows and service hatch</u>					
A.	1500 x 1500mm fixed light view window comprising 75 x 75 x 3mm thick standard section aluminium casement window frame mullions, transomes, infilled with and including 8mm thick toughened glass and glazing with 25 x 25mm aluminium beads	NO	10			
	<u>Privacy Ward Curtain Rails</u>					
B.	The Qurail system 4100 cubical curtain track to NEN1010 standard in RAL 9010 white 34mm x 15mm track weighing 405g/m for masonry or concrete wall or ceiling mounting	LM	1241			
	<u>Hospital Screen on Castors</u>					
C.	4-Part overall 2000 x 1800mm hospital curtain screen on castors comprising stainless steel frame ,plastic non transparent washable frame retardant curtain to orthodynamic standard or equal and approved	NO	40			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>COLLECTION</u>					
	From Page 2D-22					
	" " 2D-23					
	" " 2D-24					
	" " 2D-25					
	" " 2D-26					
	" " 2D-27					
	" " 2D-28					
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	" " 2D-35					
	" " 2D-36					
	" " 2D-37					
	" " 2D-38					
	" " 2D-39					
	<u>ELEMENT NO. 8</u>					
	<u>FIXTURES AND JOINERY</u>					
	<u>TOTAL CARRIED</u>					
	<u>TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
A	<u>ELEMENT NO. 9</u> <u>BUILDER'S WORK IN CONNECTION WITH SPECIALIST SERVICES</u> <u>Inspect all architectural, mechanical, electrical and structural drawings as provided; allow for all builders work associated with all the specialist works</u> Cut away fittings and pipework; form all holes, chases, etc and make good after the plumber, electrician and all other specialist works	ITEM	1			
	<u>ELEMENT NO. 9</u> <u>BUILDER'S WORK</u>					

TOTAL CARRIED
SUMMARY

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>SUMMARY</u>					
1	Superstructure Concrete From Page 2D-1					
2	Masonry Walling From Page 2D-2					
3	Light Weight Partitions From Page 2D-3					
4	Doors " " 2D-10					
5	Windows " " 2D-11					
6	Finishes " " 2D-18					
7	Painting and Decorating " " 2D-21					
8	Fixture and Joinery " " 2D-40					
9	Builder's Work " " 2D-41					
	<u>BILL NO. 2</u> <u>TOTAL CARRIED TO</u>					
	<u>ARCHITECTURAL WORKS</u> <u>SUMMARY</u>					

BILL NO. 4
EXTERNAL WORKS OUTSIDE PLOT BOUNDARY

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>BILL NO. 7</u>					
	<u>EXTERNAL WORKS OUTSIDE PLOT BOUNDARY</u>					
	<u>ALL PROVISIONAL</u>					
	<u>DRIVE AND PARKING</u>					
	<u>Excavating and Earthworks</u>					
A.	Excavate to reduce levels not exceeding 1.50 metres deep starting from ground level	CM	1245			
B.	Extra over for excavating in rock irrespective of depth	CM	830			
C.	Load and cart away excavated materials to Local Authority's approved sites and pay all charges	CM	1245			
D.	Level and compact bottom of excavation to 100% M.D.D. (AASHTO T99)	SM	830			
E.	Approved imported subgrade filling class S5 (CBR>30%) rolled and compacted in layers not exceeding 150mm thick to 95% MDD (AASHTO T99)	CM	1245			
F.	Cut & strip tarmac and 125mm base (920sm)	Item	1			
G.	125mm thick graded crushed stones class A (0/30mm) rolled and compacted - to receive bitumen (m/s)	SM	830			
H.	250mm thick murram sub-base compacted to 95% MDD (AASHTO T99)	SM	830			
I.	150mm thick hand packed stones rolled and compacted - to receive concrete blocks (m/s)	SM	830			
	<u>Precast concrete Bamburi blox paving or other equal or approved</u>					
J.	210 × 125 × 80mm thick heavy-duty concrete paving blocks on and including 50mm thick sand bed laid to Engineer's approval	SM	830			
K.	Extra over for curve cutting	LM	80			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Kerbs and Channels</u>					
A.	125 × 250mm precast concrete 20/12mm half battered kerb and channel bedded and jointed in cement/sand (1:4) mortar on and including 100mm thick × 425mm girth mass concrete (1:3:6) bed and haunching to back, all necessary formwork, excavations and disposal to Engineer's details	LM	180			
B.	Ditto curved to radii	LM	80			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Kerbs and Channels (Cont'd)</u>					
A.	125 × 100mm precast concrete 20/12mm channel block bedded and jointed in cement/sand (1:4) mortar on and including 100mm thick × 225 girth mass concrete (1:3:6) bed and haunching to back, excavations and disposal, to details	LM	300			
B.	Ditto curved to radii	LM	80			
C.	450 × 250mm high quadrant	NO	1			
	<u>Road marker paint to BS 2523 and BS 3262 Part 1 specifications</u>					
D.	100mm wide yellow road marker paint for parking	LM	100			
E.	Black and/or white marker road paint to kerbs	LM	180			
	<u>Kenya National Highways Authority</u>					
F.	Allow for permits for KENHA to construct drive, parking and walkway outside plot boundary	Item	1			
	Carried to Collection					
	<u>COLLECTION</u>					
	From page 2E1-1					
	From page 2E1-2					
	" " 2E1-3					
	<u>DRIVE AND PARKING</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>BILL NO. 8</u>					
	<u>WALKWAYS/FOOT PATHS (APPROX. 120M LONG X 1.2M WIDE)</u>					
	<u>Excavating and Earthworks</u>					
A.	Excavate to reduce levels not exceeding 1.50 metres deep starting from ground level	CM	220			
B.	Load and cart away excavated materials to the Local Authority's approved sited and pay all charges	CM	220			
C.	Level and compact bottom of excavation to 100% M.D.D.	SM	150			
D.	Approved imported subgrade filling rolled and compacted in layers not exceeding 300mm thick to 98% BS	CM	220			
E.	100mm thick hand-packed stones compacted to approve ditto	SM	150			
	<u>Precast concrete Bamburi blox paving or other equal or approved</u>					
F.	210 × 125 × 60mm thick medium-duty concrete paving blocks on and including 50mm thick sand bed laid to Engineer's approval	SM	150			
G.	Extra over for curve cutting	LM	3			
	<u>Kerbs</u>					
H.	125 × 250mm precast concrete 20/12mm half-battered kerb bedded and jointed in cement/sand (1:4) mortar on and including 100mm thick × 375 girth mass concrete (1:3:6) bed and haunching to back, all necessary formwork, excavations and disposal to Engineer's details	LM	120			
I.	Ditto curved to radii	LM	25			
	<u>FOOTPATH/</u>					
	<u>WALKWAY</u>					
	<u>TOTAL CARRIED</u>					
	<u>TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>BILL NO. 9</u>					
	<u>STORM WATER DRAINAGE OUTSIDE PLOT BOUNDARY</u>					
	<u>Demolition</u>					
A.	Carefully demolish existing IBD and stone pitch and cart away debris (128LM)	Item	1			
	<u>Trench excavations</u>					
B.	Excavate trench not exceeding 1.5m deep for 400mm diameter concrete drain pipe, part refill, part load and cart away to approve dump sites	LM	130			
C.	Extra over for excavating in rock irrespective of depth	CM	117			
D.	Ditto for 200mm diameter UPVC drain pipe	LM	30			
	<u>Precast concrete class 20/12mm jointed in cement/sand (1:3) mortar in:-</u>					
E.	450mm diameter drain pipe laid on mass concrete (1:3:6) base (m/s)	LM	130			
	<u>UPVC underground pipe class 4 1 in:-</u>					
F.	200mm diameter drain pipe	LM	30			
	<u>Mass concrete 15/32 bed and surround in:-</u>					
G.	150mm thick type 'C' to 450mm diameter drain pipe including all necessary formwork	LM	130			
H.	Ditto for 200mm diameter pipe	LM	30			
	Carried to Collection					

<u>Open channels</u>					
<u>Vibrated reinforcement concrete class 25/20 in:-</u>					
A.	150mm thick channel bottom slab - outside plot	SM	7		
B.	Ditto walls	SM	5		
<u>High tensile steel reinforcement to BS 4461</u>					
C.	Assorted reinforcements to Engineer's details	KG	300		
<u>Sawn formwork to:-</u>					
D.	Sides and soffits of slabs and walls	SM	34		
E.	Leave or make 300 × 50mm recess on concrete wall	LM	20		
<u>Cement/sand (1:3) mortar in channel finishes</u>					
F.	50mm (average) thick waterproofed screed steel trowelled and hard and smooth laid to falls	SM	7		
Carried to Collection					

	<u>The following in 2No. Headwalls</u>				
A.	Excavate trench not exceeding 1.50 metres deep starting from ground level, part refill, part load, and cart away a.b.d	CM	6		
	<u>Mass concrete (1:3:6)</u>				
B.	Strip foundations	CM	1		
	<u>Sawn formwork to:-</u>				
C.	Edges of footing 75mm to 150mm high	LM	14		
	<u>Natural stone wall bedded and jointed in cement/sand (1:4) mortar (12mm joints) reinforced with 25mm wide hoop iron every alternate course</u>				
D.	200mm thick	SM	21		
	<u>Cement/sand (1:4) render</u>				
E.	12mm thick render to masonry walls	SM	21		
	<u>Stone Pitching bedded and jointed in cement/sand (1:3) mortar</u>				
F.	100mm thick stone pitching to end of drain in Engineer's approved selected stone	SM	24		
	<u>Mass Concrete (1:3:6) Dishing</u>				
G.	75mm thick dishing around culvert inlet	SM	6		
	<u>Road gulley/sumps</u>				
H.	450 × 450 × 600mm deep (internal dimensions) road gulley comprising 200mm thick concrete (1:3:6) base, 200mm thick concrete (1:2:4) walls reinforced with A142 mesh, render to wall internally, leave opening on wall for connection pipe, all necessary formwork, excavation, disposal and connection to pipe, 450 × 450mm cast iron gulley grating including 50 × 50 × 6mm angle frame embedded in concrete, to details.	NO	12		
	Carried to Collection				

	<u>Manholes</u>				
	A. 650mm long × 450mm wide not exceeding 1500mm deep (internal dimensions) inspection chamber comprising 200mm thick mass concrete (1:3:6) base slab and benching, 150mm thick reinforced concrete cover slab reinforced with Y-8 bars at 100mm centres both ways, 150mm thick natural stone wall, 12mm thick sulphate resistant plaster and 20mm thick screed to benching, dishing out concrete bench to form channel for cast iron manhole cover (m/s) and frame fixed to stop slab with mild steel lags, step irons at 300mm centres	NO	5		
	<u>Manhole Cover</u>				
	B. 600 × 450mm heavy-duty cast iron manhole cover with frame including bedding frame in concrete, grease air seal	NO	5		
	<u>Mild steel grating</u>				
	C. 500mm wide channel grating in mild steel comprising 50mm × 50mm × 8mm thick frame infilled with 30mm wide × 8mm thick flats welded at 40mm centres, fabricated in 3000mm lengths to Engineer's details	LM	20		
	D. 50mm × 50mm × 8mm thick angle frame fixed to concrete wall at 1000mm centres	LM	42		
	<u>Touch up primer after fixing and apply three coats gloss oil paint to metal</u>				
	E. General surfaces of grating	SM	20		
	F. Surfaces not exceeding 100mm girth	LM	0		
	<u>Connecting to County Storm water system</u>				
	G. Allow for connecting to Local Authority's storm water system and pay all charges	Item	1		
	Carried to Collection				

TOTAL CARRIED
TO SUMMARY

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>BILL NO. 10</u>					
	<u>LANDSCAPING</u>					
	Ground Preparation					
1	Clear the site of all existing unwanted materials and scarify oversite commencing from existing road reduced levels, average 150 mm deep to allow for water seepage and retention remove all hardened ground, weeds and any deleterious materials; including carting away all arising wastes, soil haulage, raking and fine levelling of the ground.	SM	3,000			
2	Supply and apply "Aquasorb" or equivalent soil wetter compound to manufacturers specifications at a ratio of 70gms per cubic meter of soil.	KG	30			
3	Supply and install well composted cow/ goat manure to be mixed with the top 100mm top soil ratio 1:2.	CM	99			
4	Supply and install 50mm layer of well compacted river sand	CM	150			
5	Supply, plant, water, weed and tend well the undermentioned grass species till full establishment. grass should also be rolled with a light weight roller to even out 'bumpy' areas. This should be carried out two weeks after installation. Carpet grass (Pennisetum clandestinum) laid in batches of 600X600mm	SM	3,000			
6	Supply and install fertilizer 4:1:3 N:P2O5:K2O applied at a rate of circa 500Kg/ha or approved equal to manufacturer's printed instructions and specifications	Bags	10			
7	Allow for supply of water for irrigation using water bowsers during planting	Litres	10,000			
	<u>LANDSCAPING</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

BILL NO. 5
EXTERNAL WORKS WITHIN PLOT BOUNDARY

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>BILL NO. 11</u>					
	<u>RAISING THE MILD STEEL GATES</u>					
	<u>Mild Steel Hinged Gates</u>					
A.	1,200 × 1,000mm high single leaf mild steel gate comprising 2No. 50 × 75 × 2mm RHS stiles, 50 × 50 × 2mm thick top, bottom, and 2No. Intermediate rails, infilled with 4mm thick plate welded to rails 15 × 15mm solid bars welded to rails at 100mm centres on alternate sides per leaf. 2No. tower bolts with staple and hasp for padlock, 1.5 pairs heavy-duty pin hinges fixed to reinforced concrete columns (m/s), to Architect's details	NO	4			
	<u>Mild Steel Sliding Gates</u>					
B	5000 × 1000mm high (max height) sliding mild steel gate comprising 100 × 50 × 2mm RHS stiles at 200mm centres, top and bottom rails infilled with 15 × 15mm solid bars at 100mm centres, tower bolts with staple and hasp for padlock, 2No. sliding gear at top and side comprising sliding rail, wheels, etc. fixed to reinforced concrete columns (m/s), to Architect's details (Main Entrance)	NO	1			
C	Ditto but 5000 x 1000 (Main Exit)	NO	1			
D	Ditto but 6000 x 1000 (Luggage Gate and Staff Gate)	NO	2			
	<u>RAISING OF GATES</u> <u>TOTAL CARRIED</u> <u>TO SUMMARY</u>					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>BILL NO. 12</u>				
	<u>ENTRANCE & REAR CANOPY (PROVISIONAL)</u>				
	<u>Preamble on ALL structural works; Tenderer to include costs associated with these specifications in their rates.</u>				
1	All structural steel to be grade 43A				
2	All connections to be 8mm continuous fillet weld unless shown otherwise				
3	All welds to be dislagged and wire brushed				
4	All bolts to be grade 8.8 unless otherwise stated				
5	All dimensions to be confirmed on site before fasbrication				
6	Shop drawings to be approved by the structural engineer				
7	All steel work to be wire brushed and ro receive one coat anti-rust zinc chromate primer before erection and touch up; and three coats of enamel gloss paint after erection				
	<u>Structural steel sections drilled, welded and bolted as necessary complete with plates, bolts, cleats etc with and including one coat zinc chromate primer, two undercoats and one coat oil paint full gloss; including all necessary cutting; to Structural Engineer's satisfaction and approval</u>				
A	Rolled Hollow Steel sections members, size 50 x 50 x 3mm SHS Column, 4.43 Kg/lm - External Members	LM	456		
B	Rolled Hollow Steel sections members, size 50 x 25 x 2mm RHS Column, 2.2 Kg/lm - Internal Members	LM	192		
C	Rolled Hollow Steel sections members, size 200 x 200 x 4mm SHS Column, 25.12 Kg/lm	LM	150		
	<u>Alucobond Cladding</u>				
D	4mm thick aluminium alucobond cladding complete with 50 x 50 x 3mm thick RHS framing at 600mm centres both ways	SM	60		
	<u>Covering</u>				
E	15mm thick toughened glass; fixed to angle section purlins with and including all the necessary fixing accessories	SM	120		
	TOTAL TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>ENTRANCE & REAR CANOPY (PROVISIONAL)</u>				
	<u>Preamble on ALL structural works; Tenderer to include costs associated with these specifications in their rates.</u>				
1	All structural steel to be grade 43A				
2	All connections to be 8mm continuous fillet weld unless shown otherwise				
3	All welds to be dislagged and wire brushed				
4	All bolts to be grade 8.8 unless otherwise stated				
5	All dimensions to be confirmed on site before fasbrication				
6	Shop drawings to be approved by the structural engineer				
7	All steel work to be wire brushed and ro receive one coat anti-rust zinc chromate primer before erection and touch up; and three coats of enamel gloss paint after erection				
	<u>Structural steel sections drilled, welded and bolted as necessary complete with plates, bolts, cleats etc with and including one coat zinc chromate primer, two undercoats and one coat oil paint full gloss; including all necessary cutting; to Structural Engineer's satisfaction and approval</u>				
A	Rolled Hollow Steel sections members, size 50 x 50 x 3mm SHS Column, 4.43 Kg/lm - External Members	LM	380		
B	Rolled Hollow Steel sections members, size 50 x 25 x 2mm RHS Column, 2.2 Kg/lm - Internal Members	LM	160		
C	Rolled Hollow Steel sections members, size 200 x 200 x 4mm SHS Column, 25.12 Kg/lm	LM	100		
	<u>Alucobond Cladding</u>				
D	4mm thick aluminium alucobond cladding complete with 50 x 50 x 3mm thick RHS framing at 600mm centres both ways	SM	50		
	<u>Covering</u>				
E	15mm thick toughened glass; fixed to angle section purlins with and including all the necessary fixing accessories	SM	80		
	TOTAL TO SUMMARY				

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2F3 / 1

BILL NO. 6
SPORTS FIELDS

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>BILL NO. 14</u>					
	<u>SPORTS FIELDS - 2No. Volleyball Courts</u>					
	<u>Excavating and Earthworks</u>					
A.	Excavate to reduce levels not exceeding 1500mm deep, load and cart away to local Authority's approved dump sites - Volleyball field	CM	428			
	Load and cart away excavated materials to Local Authority's approved sites and pay all charges	CM	428			
	Extra over for excavation in rocks	CM	214			
B.	Level and compact bottom of excavations to 98% M.D.D.	SM	1292			
	<u>Filling</u>					
C.	Approved imported sub-grade filling to make up ground, rolled and compacted in layers not exceeding 300mm thick - Volleyball field	CM	356			
D.	225 mm approved subbase compacted to 98% BS in two layers (Volley ball)	SM	1633			
E.	150 mm hand packed stone (Volley ball)	SM	1633			
F.	50mm thick compacted stone dust blinding	SM	1633			
	<u>Vibrated and reinforced insitu concrete class 25 in:-</u>					
G	100mm thick Concrete	SM	1292			
	<u>Fabric Mesh Reinforcement to BS 4483</u>					
H	B.R.C mesh A. 142 to B.S. 4483 in concrete surface bed with 300mm side and end laps (measured nett - allow for laps)	SM	1292			
	<u>Powerfloat finish</u>					
J	Powerfloat finish treated with and including SIKA floor-cure hard 24 anti dust concrete hardening additive : applied strictly in accordance with manufacturer's printed instructions: including all necessary surface preparation : apply smooth machine power float finish to:-	SM	1292			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Field Marking Paint (Provisional)</u>					
A	100mm wide field marking with turf manufacturer's approved marking paint	LM	254			
	<u>Net Posts - 4No.</u>					
B	Excavate 300mm diameter x 900mm deep pits for goal posts, part refill, part cart away	NO	4			
	<u>Mass concrete 15/20 in:-</u>					
C	300mm diameter x 650mm deep surround to posts	NO	4			
	<u>Galvanized mild steel works including all welding, metal cramps, factory primed before fixing</u>					
D	150mm diameter x 3mm thick post to details - 13.97kg/m (4No.)	LM	14			
E	20mm diameter solid net hooks curved and welded to details	NO	8			
	<u>Touch up primer after fixing and apply three coats gloss oil paint to metal</u>					
F	General surfaces externally	SM	4			
	<u>UV Protected nylon net</u>					
G	11000mm long x 1000mm high Approved box UV- protected nylon nets complete with vinyl tape edge trims, clips for hooks all necessary accessories to manufacturer's specifications	NO	2			
	<u>Fibre Glass Antenna</u>					
H	1800mm long x 10mm dia fixed to post	NO	4			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Prepare and apply primer and three coat gloss oil finishing coat to metal</u>					
A.	Surface exceeding 200 mm but not exceeding 300mm girth	LM	12			
	<u>Technical Bench 2No. Each 4500mm long</u>					
	<u>Earthworks</u>					
B.	300mm thick murram base	SM	88			
	<u>Precast concrete 25/12 paving slabs on bedded and jointed in cement/sand (1:3) mortar</u>					
C.	600 x 600 x 50mm thick slabs on 50mm stone dust	SM	88			
D.	125 x 100mm road channel block on and including mass concrete bed and surround excavation disposal	LM	39			
	<u>Team Bench</u>					
E.	Excavate 300mm dia x 600mm deep pit for posts	NO	12			
	<u>Mass concrete (1:3:6) in</u>					
F.	300 dia x 600mm deep bed and haunch for posts	NO	12			
G.	200mm dia x 450mm ditto for bench props	NO	12			
	<u>Protective Shield</u>					
H.	6mm thick clear perspex cladding fixed to steel frame work once cranked to form canopy/roof	SM	104			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Mild Steel Welded</u>					
A.	3550 x 75 x 50 x 4 mm RHS post cranked to radius set into concrete (7.34kg/m)	LM	45			
B.	75 x 50 x 4mm RHS posts	LM	10			
C.	50 x 50 x 4 mm RHS bearer welded (5.78kg/m) (4No.)	LM	35			
D.	50 x 50 x 4 mm RHS ditto for seat (5.78kg/m)	LM	16			
E.	50 x 50 x 3mm SHS props	NO	12			
	<u>Wrot hardwood</u>					
F.	600 x 100 x 38mm slatted seat fixed to bearer with and including sunk dome head black bolts	SM	8			
	<u>Paint and Decorating</u> <u>Prepare and apply one coat red oxide prime and two gloss oil finishing coat to metal</u>					
G.	Surfaces exceeding 100 mm but not exceeding 200 mm girth	LM	98			
	<u>Prepare and apply three coats clear lacquer polyurathane matt to wood</u>					
H.	General surfaces externally	SM	8			
	<u>Umpire seat (Provisional)</u>					
I.	2500 mm high umpire steel seat to Architect's detail complete with priming and painting	NO	2			
	<u>The following in 4 No. Bases for Field Flood Lights (Provisional)</u>					
J.	Excavate pit not exceeding 1.5 m deep	CM	20			
K.	Extra over for excavating rock	CM	16			
L.	Return fill and ram selected excavated material	CM	16			
M.	Load and cart away	CM	4			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Mass concrete class 15 in</u>					
A.	50 mm thick blinding	SM	6			
	<u>Vibrated reinforced concrete class 25/20 in</u>					
B.	Base	CM	3			
	<u>High tensile steel reinforcement</u>					
C.	T10 bars	KG	60			
	<u>Sawn formwork to</u>					
D.	Sides of bases	SM	9			
	<u>Anchorage treated against rust.</u>					
	<u>Provide and fix 16no 24mm x dia x 450mm long anchor bolts complete with head nuts washers, 50 x 50 x 12mm thick anchor plate, base, strutting plate to Engineers detail</u>					
E.	24mm x 450mm long bolt complete with head, nuts, washers	NO	64			
F.	50 x 50 x 12mm stiffener welded to base plate and pole	NO	64			
G.	750 x 750 x 12mm base plate on once drilled for 24mm diameter bolt set in concrete base	NO	4			
	<u>Anti Rust Treatment</u>					
H.	Prepare and apply anti-rust treatment to steel bolts and plates	SET	64			
I.	Ditto to base plate	SM	5			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>SURFACE DRAINAGE AND KERB</u>					
	<u>Excavation and Earthwork</u>					
A.	Excavate trench not exceeding 1500 mm deep and 450mm deep for 750 x 150mm shallow Invert block drain, part refill, part load and cart away	LM	80			
B.	Extra over for excavating in all types of rock irrespective of depth	CM	20			
	<u>Precast concrete class 25/12 in bedded and jointed in cement/sand (1:4) mortar</u>					
C.	750 mm wide x 600 mm long x 150 mm thick shallow drain laid on compacted murram bed	LM	115			
D.	125 x 250 mm half battered kerb	LM	115			
E.	300 mm diameter half round invert block drain laid on and including 100 mm thick compacted murram bed	LM	0			
F.	225 x 75 mm thick side slabs ditto	LM	0			
	<u>Mass concrete class 20/20 in</u>					
G.	1135 mm girth x 100 mm thick bed and haunch to kerb and shallow drain	LM	115			
H.	325 mm girth x 100 mm thick bed and haunch to kerb only	LM	0			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>GRASS PLANTING</u>					
	<u>Supply and lay</u>					
A.	300mm thick layer well manured red coffee soil	SM	2000			
B.	Approved grass sudd, well water till fully established	SM	2000			
	<u>Supply and plant trees</u>					
C.	Approved bottle brush tree, well manure, water till fully established, include excavate 600mm dia x 600mm deep pit, well maured red soil,	NO	10			
	<u>Maintenance</u>					
D.	Provide maintenace and well water till fully established whole landscaped area	Month	6			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>COLLECTION</u>					
	From Page 2G1-1					
	" " 2G1-2					
	" " 2G1-3					
	" " 2G1-4					
	" " 2G1-5					
	" " 2G1-6					
	" " 2G1-7					
	<u>SPORTS FIELD</u> <u>TOTAL CARRIED TO</u>					
	<u>VOLLEY BALL PITCH 2 NO</u> <u>GRAND SUMMARY</u>					

BILL NO. 7
SERVICE HOUSES

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>BILL NO. 15 : SERVICE HOUSES</u>					
	<u>WASTE MANAGEMENT HOUSE - ALL PROVISIONAL</u>					
	<u>10M WIDE X 10M LONG</u>					
	<u>ELEMENT NO.1</u>					
	<u>SUBSTRUCTURE (All Provisional)</u>					
	<u>Excavation and Earthworks</u>					
	<i>Note: Include Plunking and strutting and keeping excavation free of water in earth work rates</i>					
A.	Bulk excavation to reduce levels not exceeding 1500mm deep	CM	100			
B.	Excavate foundation trench not exceeding 1.50 metres deep starting from reduced level	CM	10			
C.	Excavate for column bases not exceeding 1.50 metres deep starting from stripped level	CM	29			
D.	Extra over for excavating in rock irrespective of depth	CM	16			
E.	Return fill and ram selected excavated materials around foundations	CM	39			
F.	Load and cart away excess excavations as directed	CM	100			
	<u>Filling</u>					
G.	Approved imported hardcore filling rolled and consolidated in layers not exceeding 300mm thick	CM	110			
H.	300mm thick hand packed hardcore filling rolled and compacted in layers not exceeding 150mm thick	SM	100			
I.	50mm thick murrum blinding	SM	100			
J.	Treat surface of hardcore with "Termidor" insecticide to manufacturers specification and provide 10 years guarantee certificate	SM	100			
K.	1000 gauge polythene sheet damp proof membrane on blinded hardcore	SM	100			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Concrete Works</u>					
	<u>Mass concrete class 15/20 in :-</u>					
A.	50mm blinding to strip foundation	SM	41			
B.	Ditto to column bases	SM	19			
	<u>Vibrated reinforced concrete class 25/20 in:-</u>					
C.	150mm thick floor slab	SM	100			
D.	150mm thick floor ramp with tamped concrete finish	SM	9			
E.	Strip foundation	CM	4			
F.	Column Bases	CM	6			
G.	Columns	CM	2			
H.	200 x 200mm edge thickening for ramp	LM	9			
	<u>High tensile steel reinforcement to BS 4461</u>					
I.	8mm diameter	KG	95			
J.	10mm diameter	KG	182			
K.	12mm diameter	KG	427			
L.	16mm diameter	KG	168			
	<u>Sawn formwork to :-</u>					
M.	Sides of strip foundation	SM	18			
N.	Sides of column bases	SM	29			
O.	Sides of columns	SM	18			
P.	Edges of slab exceeding 150mm but not exceeding 225mm high	LM	92			
Q.	Edges of ramp exceeding 150mm but not exceeding 225mm high	LM	92			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
A.	<u>Natural stone wall bedded and jointed in cement/sand (1:3) mortar reinforced with 40mm hoop iron every alternate course</u>	SM	98			
	200mm thick					
B.	<u>Three ply hessian based bituminous felt horizontal damp proof course to BS 743, Type A weighing 3.8kg/m² bedded on cement/sand (1:3) mortar</u>	LM	92			
	200mm wide					
	Carried to collection					
	<u>COLLECTION</u>					
	From page 2H1-1					
	" " 2H1-2					
	" " 2H1-3					
	<u>ELEMENT NO.1</u>					
	<u>SUBSTRUCTURE</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

SUPERSTRUCTURE CONCRETE TO SUMMARY

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>ELEMENT NO. 3</u>					
	<u>WALLING</u>					
	<u>External walls</u>					
	<u>Precast concrete class 25/12 including all necessary formwork, fair finish to all exposed surfaces, hoisting, bedding and jointing in cement/sand (1:3) mortar in cement/sand (1:4) mortar (12mm joints) reinforced with 40mm wide hoop iron every alternate course</u>					
A.	200mm thick precast concrete vent blocks	SM	168			
B.	Extra over for key pointing in horizontal recessed joits and flush vertical joints	LM	168			
C.	350 x 100mm (average) thick once weathered and throated coping to wall	LM	62			
	<u>Machine cut natural stone wall bedded and jointed in cement/sand (1:4) mortar (12mm joints) reinforced with 40mm wide hoop iron every alternate course</u>					
E.	200mm thick gable wall	SM	18			
F.	Extra over for key pointing in horizontal recessed joits and flush vertical joints	LM	90			
	<u>ELEMENT NO. 3</u>					
	<u>WALLING</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>ELEMENT NO. 4</u>					
	<u>ROOF CONSTRUCTION</u>					
	<u>Roof cover</u>					
A.	26 gauge IT5 roofing sheets as MRM or other equal and approved fixed onto steel roof structure (m/s) with manufacturer's approved self drilling screws, bolts to approval	SM	125			
B.	Extra over for ridge cap to match	LM	30			
C.	600mm girth x 26gauge plain sheet flashing built into wall	LM	5			
	<u>Thermal insulation</u>					
D.	Jumbolene' code RF 155or equal and approved heavy duty roof sisilation fixed to roof structure with approved wire fixing system	SM	125			
	<u>Framed steel including all necessary cutting, welding (6mm thick fillet weld), drilling, grinding and two coats calcium plumbate primer before fixing as described to BS 4360, hoisting 6000mm high above ground</u>					
	<u>The following in 11No.Truss Spanning 15000 x 2400mm high</u>					
E.	Trusses spanning 15000mm (average) x 2400mm high comprising 100 x 50 x 6mm thick x 6.67kg/lm angle rafters, tie beam infilled with 50 x 50 x 6mm thick x 4.50kg/lm angle struts and ties (11No.)	KG	1504			
F.	100 x 50mm x 6mm thick king post welded to base and top plates (m/s) (11No.)	KG	150			
G.	75 x 50 x 6mm thick RHS to purlins	KG	345			
H.	110 x 30 x 6 x 120mm long angle cleat welded to trusses (m/s) and once drilled for 12mm diameter bolts (m/s) (for holding purlins)	NO	40			
I.	250 x 250 x 12mm thick mild steel plate welded to RHS (m/s) 4 times drilled for 16mm diameter bolts (m/s) (for holding trusses at ends)	NO	20			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
A.	200mm (average) x 200mm (average) x 8mm thick mild steel plate welded to RHS (m/s) 2 times drilled for 11mm diameter bolts (m/s) (for bracing)	NO	130			
B.	16mm diameter x 200mm long anchor bolts grade 8.8 holding-down bolts complete with head nuts, washers, 50 x 50 x 6mm anchor plate, setting into concrete, grouted in 1:11/4:2 concrete (10mm aggregate) after erection	NO	520			
C.	16mm diameter x 150mm bolts grade 8.8 complete with head nuts and washers	NO	520			
	<u>Touch primer after fixing, apply two undercoats and one gloss oil finishing coat to metal:-</u>					
D.	General surfaces of roof structure	SM	124			
	<u>Wrot celcured prime grade cypress</u>					
E.	200 x 38mm fascia board	LM	55			
	<u>Rainwater goods</u>					
F.	200 x 200 x 14 gauge galvanised iron box pre-painted gutter fixed with mild steel flat brackets at 1000mm centres	LM	35			
G.	100 x 100mm box down pipe fixed to wall with and including hold fasts at 1000mm centres	LM	36			
	<u>Extra over for :-</u>					
H.	100 x 100mm box shoe	NO	6			
I.	100mm diameter fulbora outlet	NO	6			
	Carried to collection					
	<u>COLLECTION</u>					
	From page 2H1-6					
	" " 2H1-7					
	<u>ELEMENT NO.4</u>					
	<u>ROOF</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>ELEMENT NO. 5</u>					
	<u>DOORS</u>					
	<u>Mild steel door</u>					
A.	2400 x 2400mm high equal double leaf door comprising 2 No 50 x 25 x3mm RHS stiles, top, bottom, 4 No. middle rails,infilled with 16gauge x 70mm wide louvres weldedat 40mm cetres, complete with 3No. Heavy duty pin hinges, staple and hasp for padlock complete with 50 x 50 x 3mm angle frame fixed to masonry with metal cramps to details	NO	1			
	<u>Touch up primer after fixing and apply three coats gloss oil paint to metal</u>					
B.	General surfaces of door	SM	12 0			
	<u>ELEMENT NO. 5</u>					
	<u>DOORS</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>ELEMENT NO.7</u>					
	<u>FINISHES</u>					
	<u>Cement/sand (1:4) external wall finishes</u>					
A.	12mm thick render to masonry and concrete externally	SM	186			
B.	12mm thick render to reveals of niches not exceeding 300mm wide around windows	LM	8			
C.	12mm thick render to plinth	SM	28			
	<u>Internal wall finishes</u>					
	<u>Cement, lime, sand plaster</u>					
	<u>Cement/lime/sand (1:1:6) fine plaster to walls and beams internally</u>					
D.	12mm thick fine plaster to walls and beams internally	SM	38			
F.	12mm thick fine plaster to beams	SM	81			
G.	20 x 100 mm thick skirting	LM	88			
	<u>Floor Finishes</u>					
H.	Power float concrete floor finish with hardner laid to falls where applicable polished to architect's approval	SM	100			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Ceiling</u>					
	<u>Cement/lime/sand (1:1:6) fine plaster to walls and beams internally</u>					
A.	12mm thick to sides and soffits of gutters exceeding 5.0m but not exceeding 6.5m high	SM	54			
	<u>Paving around the building</u>					
B.	300mm thick approved imported murram compacted in layers not exceeding 150mm thick	SM	56			
	<u>Precast concrete paving slabs bedded and jointed in cement/sand (1:4) mortar</u>					
C.	600 x 600 x 50mm thick slabs on prepared screed (m/s)	SM	56			
	<u>Stormwater drainage around buildings</u>					
D.	Excavate trench for 300mm diameter open drain part refill part cart away	LM	94			
	<u>Approved 1st Quality polished granite slab</u>					
E.	25mmthick	SM	10			
	<u>Precast concrete class 25/12 bedded and jointed in cement/sand (1:4) mortar in:</u>					
F.	150mm diameter half round invert block drain jointed in cement/sand (1:3), laid on and including 75mm thick compacted murram base, all necessary formwork	LM	94			
G.	600mm long ditto to connect sump to IBD	LM	4			
H.	450 x 450 x 300mm (internal dimension) deep concrete class 20/20mm sump complete with 16gauge mild steel plate cover	NO	6			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>COLLECTION</u>					
	From page 2H1-9					
	" " 2H1-10					
	<u>ELEMENT NO. 7</u>					
	<u>FINISHES</u>					
	<u>TOTAL CARRIED</u>					
	<u>TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>ELEMENT NO. 8</u>					
	<u>PAINTING AND DECORATING</u>					
	<u>Externally</u>					
	<u>Prepare and apply two undercoats and three coats plastic Ruff and Tuff paint to:</u>					
A.	Rendered surfaces	SM	206			
B.	Plastered niches and reveals not exceeding 300mm wide	LM	8			
	<u>Internally</u>					
	<u>Prepare and apply two coats skimmer between coats and three coats silk viny paint to:-</u>					
C.	Plastered walls columns and beams	SM	96			
	<u>Prepare and apply three coats plastic emulsion paint to:-</u>					
D.	Sides and soffits of gutter beam exceeding 5.0 but not exceeding 6.5m high	SM	54			
	<u>Prepare and apply two coats black bituminous paint to:</u>					
E.	Rendered plinth externally	SM	28			
	<u>ELEMENT NO. 8</u>					
	<u>PAINTING AND</u>					
	<u>DECORATING</u>					
	<u>TOTAL CARRIED</u>					
	<u>TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>ELEMENT NO. 10</u> <u>ELECTRICAL AND MECHANICAL BUILDER'S WORK-</u> <u>ALL PROVISIONAL</u> <u>Inspect all architectural, mechanical, electrical and structural</u> <u>drawings as provided; allow for all builders work associated with</u> <u>all the specialist works</u> Cut away fittings and pipework; form all holes, chases, etc and make good after the plumber, electrician and all other specialist works	ITEM	1			
	<u>ELEMENT NO. 10</u> <u>BUILDER'S WORK</u>					
	<u>TOTAL CARRIED TO</u> <u>SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>WASTE MANAGEMENT HOUSE SUMMARY</u>					
	<u>ELEMENT</u>					
1	Substructure From Page 2H1-3					
2	Superstructure " " 2H1-4					
3	Walling " " 2H1-5					
4	Roof " " 2H1-7					
5	Doors " " 2H1-8					
6	Finishes " " 2H1-11					
7	Painting and Decorating " " 2H1-12					
8	Builder's Work " " 2H1-13					
	<u>WASTE MANAGEMENT HOUSE</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>BILL NO. 165</u>					
	<u>BOILER HOUSE- ALL PROVISIONAL</u>					
	<u>10M LONG X 10M WIDE</u>					
	<u>ELEMENT NO.1</u>					
	<u>SUBSTRUCTURE (All Provisional)</u>					
	<u>Excavation and Earthworks</u>					
	<i>Note: Include Plunking and strutting and keeping excavation free of water in earth work rates</i>					
A.	Excavate to reduce levels not exceeding 1.50 metres starting from ground level	CM	65			
B.	Excavate foundation trench not exceeding 1.50 metres deep starting from reduced level	CM	26			
C.	Excavate for column bases not exceeding 1.50 metres deep starting from stripped level	CM	27			
D.	Extra over for excavating in rock irrespective of depth	CM	16			
E.	Return fill and ram selected excavated materials around foundations	CM	10			
F.	Load and cart away excess excavations as directed	CM	43			
G.	Level and compact bottom of excavations and trenches	CM	108			
	<u>Filling</u>					
H.	Approved imported hardcore filling rolled and consolidated in layers not exceeding 300mm thick	CM	45			
I.	300mm thick hand packed hardcore filling rolled and compacted in layers not exceeding 150mm thick	SM	100			
J.	50mm thick murrum blinding	SM	100			
K.	Treat surface of hardcore with "Termidor" insecticide to manufacturers specification and provide 10 years guarantee certificate	SM	108			
L.	1000 gauge polythene sheet damp proof membrane on blinded hardcore	SM	104			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Concrete Works</u>					
	<u>Mass concrete class 15/20 in :-</u>					
A.	50mm blinding to strip foundation	SM	18			
B.	Ditto to column bases	SM	18			
	<u>Vibrated reinforced concrete class 25/20 in:-</u>					
C.	200mm thick floor slab	SM	104			
D.	200mm thick ramp	SM	7			
E.	Strip foundation	CM	5			
F.	Column Bases	CM	5			
G.	200 x 200mm columns	CM	1			
	<u>High tensile steel reinforcement to BS 4461</u>					
H.	8mm diameter	KG	60			
I.	10mm diameter	KG	1240			
J.	12mm diameter	KG	940			
K.	16mm diameter	KG	95			
	<u>Fabric mesh</u>					
L.	Fabric mesh reinforcement Ref. No. A193 (measured net) (No allowance for laps)	SM	112			
	<u>Sawn formwork to :-</u>					
M.	Sides of strip foundation	SM	13			
N.	Sides of column bases	SM	14			
O.	Sides of columns	SM	8			
P.	Edges of ramp exceeding 150mm but not exceeding 225mm high	LM	8			
Q.	Edges of slab exceeding 150mm but not exceeding 225mm high	LM	40			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
A.	<u>Natural stone wall bedded and jointed in cement/sand (1:3) mortar reinforced with 40mm hoop iron every alternate course</u>	SM	40			
	200mm thick					
B.	<u>Three ply hessian based bituminous felt horizontal damp proof course to BS 743, Type A weighing 3.8kg/m² bedded on cement/sand (1:3) mortar</u>	LM	38			
	200mm wide					
	Carried to collection					
	<u>COLLECTION</u>					
	From page 2H2-1					
	" " 2H2-2					
	" " 2H2-3					
	<u>ELEMENT NO.1</u>					
	<u>SUBSTRUCTURE</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>ELEMENT NO. 2</u>					
	<u>SUPERSTRUCTURE CONCRETE</u>					
	<u>Vibrated reinforced concrete class 25/20 in :-</u>					
A.	Beams	CM	7			
B.	Column	CM	3			
C.	150mm thick gutter base and upstand	SM	16			
	<u>High tensile steel reinforcement bars to BS 4461</u>					
D.	8mm diameter	KG	480			
E.	12mm diameter	KG	288			
F.	16mm diameter	KG	830			
	<u>Sawn formwork to:-</u>					
G.	Sides of beams	SM	88			
H.	Sides of columns	SM	43			
I.	Sides and soffits of gutter exceeding 5.0 metres but not exceeding 6.5 metres high	SM	26			
	<u>A.P.P. water proofing membrane weighing 4.5 Kg/sm mineral finished laid to manufacturer's instructions</u>					
J.	A.P.P. waterproof membrane laid to manufacturer's written instructions on and including one coat bituminous anti-dust verdict primer to slab to gutter slab	SM	6			
K.	Ditto on upstands	SM	19			
	<u>Fullbora</u>					
L.	100mm diameter cast iron fullbora outlets	NO	4			
M.	Labour for working around fullbora outlet	NO	4			
	<u>ELEMENT NO.2</u> <u>TOTAL CARRIED</u>					
	<u>SUPERSTRUCTURE CONCRETE</u> <u>TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>ELEMENT NO. 3</u>					
	<u>WALLING</u>					
	<u>External walls</u>					
	<u>Precast concrete class 25/12 including all necessary formwork, fair finish to all exposed surfaces, hoisting, bedding and jointing in cement/sand (1:3) mortar in cement/sand (1:4) mortar (12mm joints) reinforced with 40mm wide hoop iron every alternate course</u>					
A.	200mm thick precast concrete vent blocks	SM	172			
B.	350 x 100mm (average) thick once weathered and throated coping to wall	LM	40			
	<u>Internal walls</u>					
	<u>Machine cut natural stone wall bedded and jointed in cement/sand (1:4) mortar (12mm joints) reinforced with 40mm wide hoop iron every alternate course</u>					
C.	200mm thick parapet screen wall	SM	38			
D.	Extra over for key pointing in horizontal recessed joits and flush vertical joints	LM	38			
	<u>ELEMENT NO. 3</u>					
	<u>WALLING</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>ELEMENT NO. 4</u>					
	<u>ROOF CONSTRUCTION</u>					
	<u>Roof cover</u>					
A.	26 gauge IT5 roofing sheets as MRM or other equal and approved fixed onto steel roof structure (m/s) with manufacturer's approved self drilling screws, bolts to approval	SM	110			
B.	Extra over for ridge cap to match	LM	10			
	<u>Thermal insulation</u>					
C.	Jumbolene' code RF 155or equal and approved heavy duty roof sisilation fixed to roof structure with approved wire fixing system	SM	110			
	<u>Framed steel including all necessary cutting, welding (6mm thick fillet weld), drilling, grinding and two coats calcium plumbate primer before fixing as described to BS 4360, hoisting 6000mm high above ground</u>					
	<u>The following in 3No. Truss Spanning 9600mm x 1300mm high</u>					
D.	Trusses spanning 9600mm (average) x 1300mm high comprising 100 x 50 x 6mm thick x 6.67kg/lm angle rafters, tie beam infilled with 50 x 50 x 6mm thick x 4.50kg/lm angle struts and ties (3No.)	KG	728			
E.	100 x 50mm x 6mm thick king post welded to base and top plates (m/s) (3No.)	KG	41			
F.	75 x 50 x 6mm thick RHS to purlins	KG	215			
G.	110 x 30 x 6 x 120mm long angle cleat welded to trusses (m/s) and once drilled for 12mm diameter bolts (m/s) (for holding purlins)	NO	12			
H.	250 x 250 x 12mm thick mild steel plate welded to RHS (m/s) 4 times drilled for 16mm diameter bolts (m/s) (for holding trusses at ends)	NO	6			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
A.	200mm (average) x 200mm (average) x 8mm thick mild steel plate welded to RHS (m/s) 2 times drilled for 11mm diameter bolts (m/s) (for bracing)	NO	39			
B.	16mm diameter x 200mm long anchor bolts grade 8.8 holding-down bolts complete with head nuts, washers, 50 x 50 x 6mm anchor plate, setting into concrete, grouted in 1:11/4:2 concrete (10mm aggregate) after erection	NO	156			
C.	16mm diameter x 150mm bolts grade 8.8 complete with head nuts and washers	NO	156			
	<u>Touch primer after fixing, apply two undercoats and one gloss oil finishing coat to metal:-</u>					
D.	General surfaces of roof structure	SM	37			
	<u>Rainwater goods</u>					
E.	200 x 200 x 22 gauge galvanised iron box pre-painted gutter fixed with mild steel flat brackets at 1000mm centres	LM	40			
F.	100 x 100mm box down pipe fixed to wall with and including hold fasts at 1000mm centres	LM	24			
	<u>Extra over for :-</u>					
G.	100 x 100mm box shoe	NO	4			
H.	100mm diameter fulbora outlet	NO	4			
	Carried to collection					
	<u>COLLECTION</u>					
	From page 2H2-6					
	" " 2H2-8					
	<u>ELEMENT NO.4</u>					
	<u>TOOF</u>					
	<u>TOTAL CARRIED</u>					
	<u>TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>ELEMENT NO. 5</u>					
	<u>DOORS</u>					
	<u>Mild steel Louvre door</u>					
A.	2400 x 2400mm high equal double leaf door comprising 2 No 50 x 25 x3mm RHS stiles, top, bottom, 4 No. middle rails,infilled with 16gauge x 70mm wide louvres weldedat 40mm cetres, complete with 3No. Heavy duty pin hinges, staple and hasp for padlock complete with 50 x 50 x 3mm angle frame fixed to masonry with metal cramps to details	NO	1			
	<u>Touch up primer after fixing and apply three coats gloss oil paint to metal</u>					
B.	General surfaces of door	SM	12			
	<u>ELEMENT NO. 5</u>					
	<u>DOORS</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>ELEMENT NO.7</u>					
	<u>FINISHES</u>					
	<u>Cement/sand (1:4) external wall finishes</u>					
A.	12mm thick render to masonry and concrete columns, beams externally	SM	103			
B.	12mm thick render to reveals of niches not exceeding 300mm wide around doors	LM	8			
C.	12mm thick render to plinth	SM	12			
	<u>Internal wall finishes</u>					
	<u>Cement, lime, sand plaster</u>					
	<u>Cement/lime/sand (1:1:6) fine plaster to walls and beams internally</u>					
D.	12mm thick fine plaster to walls	SM	38			
E.	12mm thick fine plaster to columns	SM	17			
F.	12mm thick fine plaster to beams	SM	48			
G.	20 x 100 mm thick skirting	LM	38			
	<u>Floor Finishes</u>					
H.	Power float concrete floor finish with hardner laid to falls where applicable polished to architect's approval	SM	100			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Ceiling</u>					
	<u>Cement/lime/sand (1:1:6) fine plaster to walls and beams internally</u>					
A.	12mm thick to soffits of gutter slab exceeding 5.0 but not exceeding 6.5 metres high	SM	18			
	<u>Paving around the building</u>					
B.	300mm thick approved imported murram compacted in layers not exceeding 150mm thick	SM	24			
	<u>Precast concrete paving slabs bedded and jointed in cement/sand (1:4) mortar</u>					
C.	600 x 600 x 50mm thick slabs on prepared screed (m/s)	SM	24			
	<u>Stormwater drainage around buildings</u>					
D.	Excavate trench for 300mm diameter open drain part refill part cart away	LM	48			
	<u>Approved 1st Quality polished granite slab</u>					
E.	25mmthick <u>cement/sand (1:4) mortar in:</u>	LM	48			
F.	150mm diameter half round invert block drain jointed in cement/sand (1:3), laid on and including 75mm thick compacted murram base, all necessary formwork	LM	48			
	Carried to collection					
	<u>COLLECTION</u>					
	From page 2H2-9					
	" " 2H2-10					
	<u>ELEMENT NO. 7</u> <u>FINISHES</u>					
	<u>TOTAL CARRIED</u> <u>TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>ELEMENT NO. 8</u>					
	<u>PAINTING AND DECORATING</u>					
	<u>Externally</u>					
	<u>Prepare and apply undercoats and three coats plastic emulsion paint to:</u>					
A.	Rendered surfaces	SM	103			
B.	Plastered niches and reveals not exceeding 300mm wide	LM	8			
	<u>Internally</u>					
	<u>Prepare and apply three coats silk vinyl paint to:-</u>					
C.	Plastered walls and beams	SM	103			
	<u>Prepare and apply three coats plastic emulsion paint to:-</u>					
D.	Plastered soffits of ceiling	SM	18			
	<u>Prepare and apply two coats black bituminous paint to:</u>					
E.	Rendered plinth externally	SM	12			
	<u>ELEMENT NO. 8</u>					
	<u>PAINTING AND</u>					
	<u>DECORATING</u>					
	<u>TOTAL CARRIED</u>					
	<u>TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>ELEMENT NO. 10</u> <u>ELECTRICAL AND MECHANICAL BUILDER'S WORK-</u> <u>ALL PROVISIONAL</u> <u>Inspect all architectural, mechanical, electrical and structural</u> <u>drawings as provided; allow for all builders work associated with</u> <u>all the specialist works</u> Cut away fittings and pipework; form all holes, chases, etc and make good after the plumber, electrician and all other specialist works	ITEM	1			
	<u>ELEMENT NO. 10</u> <u>BUILDER'S WORK</u>					
	<u>TOTAL CARRIED TO</u> <u>SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>BOILER HOUSE SUMMARY</u>					
	<u>ELEMENT</u>					
1	Substructure	From	Page	2H2-3		
2	Superstructure	"	"	2H2-4		
3	Walling	"	"	2H2-5		
4	Roof	"	"	2H2-7		
5	Doors	"	"	2H2-8		
6	Finishes	"	"	2H2-11		
7	Painting and Decorating	"	"	2H2-12		
8	Builder's Work	"	"	2H2-13		
	<u>BOILER HOUSE</u>			<u>TOTAL CARRIED TO SUMMARY</u>		

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>BILL NO. 17</u>					
	<u>SCREEN WALL- ALL PROVISIONAL</u>					
	<u>Waste Management & Boiler Area</u>					
	<u>Mild steel works including all necessary cutting, welding, grinding and two coats calcium plumbate primer before fixing as described to BS 4360</u>					
A.	3000mm high Mild steel weld mesh wall comprising 50 x 50 x 3mm thick RHS posts fixed onto concrete with bolts, plates at centres not exceeding 900mm, including 50 x 25 x 3mm thick rails welded at 900mm centres, infilled with and including 81/2 gauge galvanized weld mesh welded to posts, rails, all plates, cleats, bolts, curving to radii, etc. to details - Boiler & Waste Management Area - WT10	LM	100			
B.	2400 x 2400mm high equal double leaf door comprising 2 No. 50 x 25 x 3mm RHS stiles, top, bottom, 4 No. middle rails, lined with 3mm thick plates (both sides) welded, complete with 3No. Heavy duty pin hinges each leaf, staple and hasp for padlock complete with 50 x 50 x 4mm angle frame fixed to concrete column with metal cramps to detail	NO	1			
	<u>LPG Tank Area</u>					
C.	1500mm high Mild steel weld mesh wall comprising 50 x 50 x 3mm thick RHS posts fixed onto concrete with bolts, plates at centres not exceeding 900mm, including 50 x 25 x 3mm thick rails welded at 900mm centres, infilled with and including 81/2 gauge galvanized weld mesh welded to posts, rails, all plates, cleats, bolts, curving to radii, etc. to details - Boiler & Waste Management Area - WT10 - LPG Tank adjoining Chiller Area	LM	30			
D.	1000 x 1500mm high equal double leaf door comprising 2 No. 50 x 25 x 3mm RHS stiles, top, bottom, 4 No. middle rails, lined with 3mm thick plates (both sides) welded, complete with 3No. Heavy duty pin hinges for each leaf, staple and hasp for padlock complete with 50 x 50 x 4mm angle frame fixed to concrete column with metal cramps to details	NO	1			
	<u>Touch up primer after fixing and apply three coats gloss oil paint to metal</u>					
E.	General surfaces externally	SM	705			
	<u>SCREEN WALL</u>					
	<u>TOTAL CARRIED TO SUMMARY</u>					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>BILL NO. 18</u>					
	<u>RELOCATION OF EXISTING WALKWAYS/FOOT PATHS AT THE SERVICE HOUSE AREA (APPROX. 40M LONG X 2.7M WIDE)</u>					
	<u>Demolition</u>					
A.	Carefully remove and store for reuse existing concrete paving blocks, kerbs to walkway (Approx 40m long x 2.7m wide)	Item	1			
B.	Carefully cut existing manhole concrete cover slab and wall to reduce height to flash with walkway, make good	Item	1			
C.	Carefully relocate 10 no external lights including excavations, mass concrete 20/20mm base and surround, cable trench, make good disturbed areas	Item	1			
	<u>Excavating and Earthworks</u>					
D.	Excavate to reduce levels not exceeding 1.50 metres deep starting from ground level	CM	86			
E.	Load and cart away excavated materials to the Local Authority's approved sited and pay all charges	CM	86			
F.	Level and compact bottom of excavation to 100% M.D.D.	SM	108			
G.	Approved imported subgrade filling rolled and compacted in layers not exceeding 300mm thick to 98% BS	CM	32			
H.	300mm thick hand-packed hardcore filling rolled and compacted in layers not exceeding 150mm thick	SM	108			
	<u>Precast concrete Bamburi blox paving or other equal or approved</u>					
I.	Take from store and fix 210 × 125 × 60mm thick medium-duty concrete paving blocks on and including 50mm thick sand bed laid to Engineer's approval	SM	80			
J.	Supply and fix 210 × 125 × 60mm thick medium-duty concrete paving blocks on and including 50mm thick sand bed laid to Engineer's approval (Provisional)	SM	20			
K.	Extra over for curve cutting	LM	16			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Kerbs</u>					
A.	Take from store and fix 125 × 250mm precast concrete 20/12mm half-battered kerb bedded and jointed in cement/sand (1:4) mortar on and including 100mm thick × 375 girth mass concrete (1:3:6) bed and haunching to back, all necessary formwork, excavations and disposal to Engineer's details	LM	64			
B.	Supply and fix 125 × 250mm precast concrete 20/12mm half-battered kerb bedded and jointed in cement/sand (1:4) mortar on and including 100mm thick × 375 girth mass concrete (1:3:6) bed and haunching to back, all necessary formwork, excavations and disposal to Engineer's details (Provisional)	LM	16			
C.	Ditto curved to radii	LM	16			
	<u>Manhole covers to BS 497 and BS 556</u>					
D.	600 × 450mm heavy-duty cast iron double seal manhole cover with frame including bedding frame in concrete, grease air seal	NO	1			
	Carried to collection					
	<u>Collection</u>					
	From Page 2H4-1					
	' " 2H4-2					
	<u>RELOCATION OF FOOTPATH</u> <u>TOTAL CARRIED</u>					
	<u>WALKWAY</u> <u>TO SUMMARY</u>					

BILL NO. 8
SIGNAGE

**PROPOSED RESEARCH AND TEACHING COMPLEX FOR THE EAST AFRICAN KIDNEY INSTITUTE
AT KENYATTA HOSPITAL GROUNDS.**

VOLUME 6: ART, BRANDING AND SIGNAGE WORKS

Item	Specification	Quantity	Rate	Total
1	Main entrance pylon signage at the main gate Approx. 2.6 meters height LED lit signage.	1		
2	Rooftop Signage , (Name of the institution)-Lecture hall. Approx. 20 meters length, with a height of 0.8m per letter and approx. 26 letters, 3D logo acrylic mold LED lit signage.	1		
3	Institute name and a Main entrance signage Approx. 10 meters length space, 3D logo acrylic mold LED lit signage.	3		
4	3D logo acrylic mold LED lit signage at the main reception wall, installed as per GD's specification.	1		
7	Basement Door Signages , 480x90mm engraved on a brushed silver aluco Sheet and stuck with a double tape as per the Graphic's Designer's specifications.	100		
5	Basement Directional Signages 1000mmx30mm high res print matte sticker on a white perspex 4mm (color to be approved by client). Hanged on the walk ways. Installed as per the Designer's specifications.	18		
6	Ground Floor Door Signages , 480x90mm engraved on a brushed silver aluco sheet and stuck with a double tape as per the Graphic's Designer's specifications.	190		
8	Ground Floor Directional Signages , 1000mmx30mm high res print matte sticker on a white perspex 4mm (color to be approved by client). Hanged on the walk ways. Installed as per the Designer's specifications.	28		
	Carried to Collection			

**PROPOSED RESEARCH AND TEACHING COMPLEX FOR THE EAST AFRICAN KIDNEY INSTITUTE
AT KENYATTA HOSPITAL GROUNDS.**

VOLUME 6: ART, BRANDING AND SIGNAGE WORKS

Item	Specification	Quantity	Rate	Total
9	1st Floor Door Signages , 480x90mm engraved on a brushed silver aluco sheet and stucked with a double tape as per the Graphic's Designer's specifications.	150		
10	1st Floor Directional Signages , 1000mmx30mm high res print matte sticker on a white perspex 4mm (color to be approved by client). Hanged on the walk ways. Installed as per the Designer's specifications.	18		
12	2nd Floor Door Signages , 480x90mm engraved on a brushed silver aluco sheet and stucked with a double tape as per the Graphic's Designer's specifications.	130		
13	2nd Floor Directional Signages , 1000mmx30mm high res print matte sticker on a white perspex 4mm (color to be approved by client). Hanged on the walk ways. Installed as per the Designer's specifications.	18		
15	3rd Floor Door Signages , 480x90mm engraved on a brushed silver aluco sheet and stucked with a double tape as per the Graphic's Designer's specifications.	130		
16	3rd Floor WC push and pull , 100mmx300mm engraved on a brushed silver aluco sheet and stucked with a double tape as per the Graphic's Designer's specifications.	8		
17	3rd Floor Directional Signages , 1000mmx30mm high res print matte sticker on a white perspex 4mm (color to be approved by client). Hanged on the walk ways. Installed as per the Designer's specifications.	18		
	Carried to Collection			

**PROPOSED RESEARCH AND TEACHING COMPLEX FOR THE EAST AFRICAN KIDNEY INSTITUTE
AT KENYATTA HOSPITAL GROUNDS.**

VOLUME 6: ART, BRANDING AND SIGNAGE WORKS

Item	Specification	Quantity	Rate	Total
18	4th Floor Door Signages , 480x90mm engraved on a brushed silver aluco sheet and stucked with a double tape as per the Graphic's Designer's specifications.	95		
19	4th Floor WC push and pull , 100mmx300mm engraved on a brushed silver aluco sheet and stucked with a double tape as per the Graphic's Designer's specifications.	8		
20	4th Floor Directional Signages , 1000mmx30mm high res print matte sticker on a white perspex 4mm (color to be approved by client). Hanged on the walk ways. Installed as per the Designer's specifications.	20		
20	Floors information boards , 1500mmx900mm high res print matte sticker on a white perspex 4mm (color to be approved by client), or engraved on a brushed silver aluco sheet Hanged on the entry points of each floor. Installed as per the Designer's specifications.	6		
21	Wall art 1000mmx600mm printed on canvas and mounted on wooden frame. Ground flr-36 pcs, 1st flr-36 pcs, 2nd flr-20 pcs, 3rd flr-20 pcs and 4th flr-15 pcs.	127		
22	Asset Tags and Labelling of EAKI phase ii equipments under additional funding.	2000		
22	Asset Tag and Labelling of EAKI furniture.	2,000		
23	Service Charters, english and swahili 841x1189mm A0 Aluminium Round Corner thick back Snapper frame with Banner Satin 150gsm matt finish Printed inserts. Installed as per the Designer's specifications.	14		
24	Roll banner with the mission, vision, mandate and Strategic goals Broadbase banner, heavy and printed on satin banner.	14		
	Carried to Collection			

**PROPOSED RESEARCH AND TEACHING COMPLEX FOR THE EAST AFRICAN KIDNEY INSTITUTE
AT KENYATTA HOSPITAL GROUNDS.**

VOLUME 6: ART, BRANDING AND SIGNAGE WORKS

Item	Specification	Quantity	Rate	Total
25	Mandate and strategic goals snapper frames 594x841mm A1 Aluminium Round Corner thick back Snapper frame with Banner Satin 150gsm matt finish Printed inserts. Installed as per the Designer's specifications.	14		
26	Wall mural branding at the reception and waiting areas, some section of walk ways and strategic walls in all floors approx: 240 square meter. Printed on premium intercoat/oracal latex matte sticker and or creation of concept ideation and painted by fine artist as per the theme of each floor.	1		
1	Provision of EAKI logo design development, brand manual and artworks development.	1		
	Carried to Collection			-
	Collection			
	From Page SG / 1			-
	From Page SG / 2			-
	From Page SG / 3			-
	From Page SG / 4			-
	Total carried to Grand Summary			-

DAY WORKS & SCHEDULE OF RATES

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>BILL NO. 19</u> <u>DAY WORKS</u> <u>DAY WORKS</u> <u>(ALL PROVISIONAL)</u> <u>LABOUR</u> <u>Payment of labour authorised by the Project Manager to be employed on Day works will be the net amount of wages paid in respect of such labour in accordance with the rates to be inserted below by the Contractor, plus the percentage addition also to be inserted by the Contractor</u> The rates inserted against each category of labour will be deemed to be the hourly wages paid to workmen and charge hands working with their gangs, inclusive of allowances for housing, holidays with pay, annual leave, sick leave, safari allowances and all other Allowances required by Government enactments concerning regulations of wages and conditions of employment. The percentage addition on net amount of wages defined above will be deemed to cover:- supply, transport about the site use, maintenance and removal of ordinary hand tools and equipment used in Dayworks (such as picks, shovels, barrows, ladders, handsaws, bar benders, buckets, trestles, stages, scaffolding, hoses, rubber boots, special clothing, Tarpaulins and all items of a like nature), insurance, superintendence (including wages of foremen), water supply, artificial lighting, overheads, head office site staff and Establishment charges, profit, and establishment charges, profit, and all other liabilities and obligations whatsoever. Carried to collection					-

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Net Amount of wages</u>					
A.	Labourer	Hrs	10			
B.	General Tradesmen, category learner	Hrs	10			
C.	Do. - Ungraded	Hrs	10			
D.	Do. - Grade III trade tested	Hrs	10			
E.	Do. - Grade II trade tested	Hrs	10			
F.	Do. - Grade I grade tested	Hrs	10			
G.	Light plant operator (compressors, mixers, tractors, rollers, etc.)	Hrs	10			
H.	Heavy plant operator (D7 tractors, graders, excavators, etc.)	Hrs	10			
I.	Junior headman	Hrs	10			
J.	Senior headman	Hrs	10			
	Sub- total of Net Amount of Wages					
	Allow a percentage addition on net amount of wages to cover tools, insurance, etc. as defined above			%		
	Carried to Collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>MATERIALS</u> <u>Payments for materials authorised by the Project Manager to be used in Dayworks will be the approved net cost of supply and delivery to site of such materials, plus the percentage Addition to be inserted below by the Contractor. The 'approved net cost of supply and delivery to site of materials' (covered by a provisional sum below) shall mean the approved invoiced cost, including delivery to site after deduction of trade discounts, but without deduction of cash discounts not exceeding 2.5% which shall be retained by the contractor or in the case of materials supplied from the Contractor's stock current prices plus justifiable charges for handling and delivery to site. Where the materials are not in the work, 50% only of such cost will be allowed for use and waste</u> <u>The percentage addition on net cost of materials as defined above will be deemed to cover insurances, overheads head office, site staff and establishment charges, profit and all other liabilities and obligation whatsoever</u>					
A.	Include the Provisional sum Kenya Shillings Hundred Thousand (KShs 100,000.00) for the approved net cost of supply and delivery to site of materials to be used in Dayworks.	SUM			100,000.00	
B.	Allow percentage addition on net cost of materials to cover insurances, overhead charges, profit etc., as defined above.		%			
	Carried to collection			Kshs.		

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>PLANT</u> <u>Payment for the use of heavy plant (such as compressed air equipment, concrete mixers, pumps, excavators and the like) authorised by the Architect to be used in Dayworks will be the approved net hire charges, plus the percentage addition to be inserted below by the Contractor. The ' approved net hire charges' of heavy plant (covered by a provisional sum below) shall mean the approved invoiced hire charges including delivery to site, and subsequent removal, after deduction of trade discounts but without deduction of cash discounts not exceeding 2.5% which shall be retained by the Contractor. or, in the case of use of the Contractor's own heavy plant, current hire charges plus justifiable charges for handling, delivery to and removal from the site.</u> <u>The percentage addition on net hire charges for heavy plant as defined above will be deemed to cover insurances, overheads, head office, site staff and establishment charges, profit, maintenance costs, fuel and all other liabilities and obligations whatsoever.</u>					
A.	Include the Provisional sum Kenya Shillings One Hundred Thousand (KShs 100,000.00) for the approved net hire charges of heavy plant to be used in Dayworks	SUM			100,000.00	
B.	Allow percentage addition on net hire charges of heavy plant to cover insurances overhead charges, profit, etc., as defined above.		%			
	Carried to collection			Kshs.		

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>DIRECT CHARGES</u>					
	<u>Payment for direct charges authorised by the Architect to be incurred in Dayworks will be the approved net cost of such direct charges plus the percentage addition to be inserted below by the Contractor. The ' approved net cost of direct charges' (covered by a provisional sum below) shall mean the approved invoiced cost of work executed by the Sub-Contractors or specialists after deduction of trade discounts but without deduction of cash discounts not exceeding 2.5% which shall be retained by the Contractor.</u>					
	<u>The percentage addition on net cost of direct charges as defined above will be deemed to cover insurances, overheads, head office, site staff and establishment charges, profit, attendance and all other liabilities and obligations whatsoever.</u>					
A.	Include the Provisional sum Kenya Shillings One Hundred Thousand (KShs 100,000.00) for the approved net cost of direct charges incurred in Dayworks.	SUM			100,000.00	
B.	Allow percentage addition on net cost of direct charges to cover, profit, etc., as defined above.		%			
C.	Include the Provisional sum Kenya Shillings One Hundred Thousand (KShs 100,000.00) for the approved net cost of direct charges incurred in Demolition and making good of masonry walls.	SUM			100,000.00	
D.	Allow percentage addition on net cost of direct charges to cover, profit, etc., as defined above.		%			
E.	Include the Provisional sum Kenya Shillings One Hundred Thousand (KShs 100,000.00) for the approved net cost of direct charges incurred in Demolition and making good gypsum partitions	SUM			100,000.00	
F.	Allow percentage addition on net cost of direct charges to cover, profit, etc., as defined above.		%			
G.	Include the Provisional sum Kenya Shillings Two Hundred Thousand (KShs 200,000.00) for the approved net cost of direct charges incurred in Core Drilling in concrete works	SUM			200,000.00	
H.	Allow percentage addition on net cost of direct charges to cover, profit, etc., as defined above.		%			
	Carried to collection			Kshs.		

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>SCHEDULE OF RATES</u>					
	<u>The Unit Rates shall be applied on when authorized variation of specifications works merits to apply these rates.</u>					
	<u>Note: The contractor shall price, extend and carry forward to the Grand Summary Page the totals of the schedule of rates</u>					
	<u>Fabric mesh</u>					
A.	Fabric mesh reinforcement Ref. No. A142 (measured net) (No allowance for laps)	SM	1			
	<u>Fine chisel dressed natural stone wall bedded and jointed in cement/sand (1:3) mortar reinforced with 25mm wide x 3mm thick hoop iron every alternate course</u>					
B.	200mm thick	SM	1			
	<u>Machine dressed natural stone wall cladding in zero joints on prepared plaster (m/s) with approved fixing adhesive</u>					
C.	50mm thick	SM	1			
	<u>Mazeras stone wall cladding in zero joints on prepared plaster (m/s) with approved adhesive</u>					
D.	50mm thick	SM	1			
	<u>Vibrated reinforced concrete class 20/20 in:-</u>					
E.	Columns/beams	CM	1			
	<u>Penetron waterproofing applied to manufacturer's instructions and provide 10 year guarantee to:-</u>					
F.	Concrete surfaces	SM	1			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Roof cover</u>					
A.	24 gauge pre-painted IT5 profile roofing sheets on steel roof construction (m/s) with and including self drilling screws	SM	1			
B.	28 gauge ditto	SM	1			
	<u>Rainwater goods</u>					
C.	100mm diameter heavy gauge Upvc down pipe fixed to wall with and including hold fasts at 1000mm centres	LM	1			
	<u>Mild steel Rainwater goods</u>					
D.	200 x 150mm x 16gauge mild steel gutter lined with two coats bituminous paint fixed to wall with and including hold brackets at 1000mm centres	LM	1			
E.	100mm dia x 16gauge mild steel down pipe fixed to wall with and including hold fasts at 1000mm centres	LM	1			
	<u>Dry wall Partition</u>					
F.	100mm thick composite partition comprising 1 - layer plasterboard as Gyproc Rhino board 12.5mm thick both sides, 3.5mm diameter screw fixed to both sides of DONN UltraSteel or equivalent galvanized steel profile guide studs 75 x 45mm friction fitted at centres not exceeding 600mm, 75 x 45mm galvanized steel floor, head tracks, 2No. continuous soundseal beads at junction with structure, 75mm thick glasswool accoustic infill, joints tapped and skimmed to approval (90min fire rating) - WT3	SM	1			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
A.	150mm thick composite partition comprising 1 - layer plasterboard as Gyproc Rhino board on one side and 1- layer moisture resistant plasterboard each 12.5mm thick, 3.5mm diameter screw fixed to both sides of DONN UltraSteel or equivalent galvanized steel profile guide studs 103 x 50mm friction fitted at centres not exceeding 600mm, 103 x 50mm galvanized steel floor, head tracks, 2No. continuous soundseal beads at junction with structure, 100mm thick glasswool acoustic infill, joints tapped and skimmed to approval (90min fire rating) - WT3B	SM	1			
B.	500mm thick composite partition in 2No. Parallel parts creating 423mm cavity each comprising 1 -layer moisture resistant plasterboard as Gyproc Rhino board 12.5mm thick, 3.5mm diameter screw fixed to DONN UltraSteel or equivalent galvanized steel profile guide studs 63.5 x 35mm friction fitted at centres not exceeding 600mm, 63.5 x 35mm galvanized steel floor, head tracks, 2No. continuous soundseal beads at junction with structure, (90min fire rating) - WT3A	SM	1			
	<u>Gypsum wall cladding</u>					
B.	12.5mm thick gypsum board cladding as Gyproc Rhino board to masonry/concrete walls (m/s) screw fixed a.b.d to 51 x 25mm DONN Ultra Steel or equivalent galvanized steel tracks, studs at centres not exceeding 600mm, joints tapped and skimmed to approval (90min fire rating) - WT2, WT6A, WT4A	SM	1			
C.	Ditto but in moisture resistant gypsum plasterboard	SM	1			
	<u>Glazed dry wall partition</u>					
D.	125mm thick partition comprising 2 -layer plasterboard as Gyproc Rhino board each 12.5mm thick both sides, 12.5mm niche covers, 3.5mm diameter screw fixed to both sides of DONN UltraSteel or equivalent galvanized steel profile guide studs 63.5 x 35mm friction fitted at centres not exceeding 600mm, 63.5 x 40mm galvanized steel floor, head tracks, 2No. continuous soundseal beads at junction with structure, 75mm thick glasswool acoustic infill, joints tapped and skimmed to approval, incorporating 1350mm intermediate glazed part comprising 8mm thick laminated clear glass on 50 x 50 x 3mm thick profiled powder coated aluminium bearers and frames at 900mm centres, glazing beads, rubber gasket, one way micro film on glass as 'Tirupati' or equal and approved to Architect's details (90min fire rating) - WT5	SM	1			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
A.	3-Lever mortice dead lock ref. 2188 complete with back fix pull handle ref. PHD-BF-225-19 SS	NO	1			
B.	Stainless steel indicator bolt ref. ER-TT & IB-004	NO	1			
	<u>Steel Windows</u>					
	<u>The following in purpose made steel casement windows in heavy duty 45 x 45 x 4mm thick mullions, transomes infilled in 40mm x 4mm thick 'T' and 'Z' section bearers, in-built mosquito proof gauze permanent vents hood with at top, high quality heavy duty polished brassironmongery to M/s Kensmetal Ltd or other equal and approved fasteners, window stays,fixing lags, and apply primer before fixing, (burglar proofing m/s)</u>					
C.	3000 x 1500mm high comprising 2No. 600 x 1000mm high sliding sashes, rest fixed lights	NO	1			
	<u>Mild Steel Burglar Proofing</u>					
D.	20mm diameter mild steel burglar proofing welded at centres not exceeding 150mm to form pattern, fixed to masonry/ concrete including forming opening for fastener and stay reach all to details	SM	1			
	<u>Glazing</u>					
E.	8mm thick clear laminated sheet glass and glazing with putty in panes exceeding 0.1sm but not exceeding 0.5sm	SM	1			
F.	6mm thick clear float glass and glazing with beads	SM	1			
G.	15mm thick clear glass panels affixed using necessary accessories	SM	1			
H.	Ditto to clear tuff glass panels	SM	1			
I.	Ditto to bronze reflective glass panels	SM	1			
J.	Ditto to bronze reflective tuff glass panels	SM	1			
	<u>Approved polished terrazo paving with and including plastic dividing strips</u>					
K.	15mm thick onto prepared screed (m/s)	SM	1			
L.	20 x 100mm thick skirting with rounded top and coved junction with floor	LM	1			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Approved polished granolithic paving with and including plastic dividing strips</u>					
A.	15mm thick onto prepared screed (m/s)	SM	1			
B.	20 x 100mm thick skirting with rounded top and coved junction with floor	LM	1			
	<u>Chipboard ceiling fixed to branderling (m/s) all necessary cutting, trimming and filling all joints</u>					
C.	9mm thick	SM	1			
	<u>Softboard ceiling fixed to branderling (m/s) all necessary cutting, trimming and filling all joints</u>					
D.	12mm thick	SM	1			
	<u>Heavy duty Polyvinyl chloride floor tiles fixed with approved adhesive to Dunlop (K) Ltd. Manufacturers or equal and approved</u>					
E.	2.0 mm thick	SM	1			
	<u>Medium Density Fibre Board</u>					
F.	Ordinary MDF board not exceeding 25mm thick softwood lipped all round	SM	1			
G.	MDF board veneered to one face hardwood lipped all round	SM	1			
H.	Ditto veneered both sides	SM	1			
	<u>Reflective glass film as 'Tirupati' or other equal and approved (Provisional)</u>					
I.	Supply and fix one-way reflective film onto glazed doors to client's approval	SM	1			
	<u>Approved 1st Quality polished granite slab</u>					
J.	25mmthick	SM	1			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>Automatic sensor sliding glass door</u>					
A.	1000 x 2400mm high x 10mm thick frameless toughened glass door complete with and including top and bottom sliding rail, locking devices, sensors, all electrical components, accessories, etc. to details (basement floor)	NO	1			
	<u>Fan lights</u>					
B.	5mm thick clear sheet glass and glazing with beads (m/s) in panes between 0.15sm and 0.5sm	SM	1			
	<u>Vinyl Wall Sheeting</u>					
C.	Vinyl wall sheeting laid seamlessly from floor finish to wall, vertically up to prescribed height with proprietary packing piece at floor-wall junction with Manufacturer's approved adhesive -WA4	SM	1			
	<u>Decorative Vinyl Wall Covering</u>					
D.	1300mm wide 'Pleso-healthcare' by 'Vescom' or equal and approved vinyl wall coating comprising vinyl finishing coat printed with water-based inks in a subdued two-coloured travertine design on woven cotton backing fixed with Manufacturer's approved adhesive - WA5	SM	1			
	<u>Tamped Concrete Ramp Finish</u>					
E.	Ramp finish with 50mm wide non-slip grips channels at 150mm centres	SM	1			
	<u>Polyflor or other equal and approved Electro Static Dissipative (ESD) homogeneous vinyl sheet flooring laid with weld joints with approved acrylic adhesive and fitted with radiused coved junction skirting</u>					
F.	3mm thick flooring onto prepared screed (m/s) - F7	SM	1			
G.	250mm high skirting laid extending seamlessly from floor with proprietary packing piece accessory at floor-wall junction - FB4	LM	1			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
A.	<u>Gypsum mineral fibre drop-in ceiling tiles as 'Armstrong Optima' or other equal and approved with fine textured surface finish fixed to and including 'Trulok F15' suspension grid system comprising tee and cross tee. clips. bolts, etc., 6mm diameter galvanised threaded rod hangers or approved alternative fixed to concrete, metal shadow line edge cornice to manufacturer's written instructions</u> 1200 x 600 x 17mm thick tiles in approved proprietary grid system - C2 <u>Vinyl faced gypsum ceiling panels or other equal and approved face-covered with white embossed vinyl drop-in cetlin 2- tiles fixed to and including fire rated OWA construct S3' exposed demountable butt-cut T24 suspension system comprising main tees, cross tees, 6mm diameter galvanized threaded rod hangers or approved alternative fixed to concrete, clips. bolts. etc. metal OWAconstruct edge trim shadow line wall trim plugged and screwed at centres not exceeding 200mm to manufacturer's written instructions</u>	SM	1			
B.	1200 x 600 x 12.5mm thick tiles in approved proprietary grid system - C2a <u>Gypsum mineral fibre drop-in ceiling tiles as Armstrong, or other equal and approved with fissured finish fixed to Trulok F15' suspension system comprising tee and cross tee, clips. bolts. etc., 6mm diameter galvanized threaded rod hangers or approved alternative fixed to concrete, metal shadowline edge cornice to manufacturer's -written instructions</u>	SM	1			
C.	600 x 600mm perforated aluminium panels with fibreglass acoustic fleece as Armstrong or other equal and approved factory painted with polyster paint to approval - C7a	SM	1			
D.	Ditto but with bioguard - C7	SM	1			
E.	Ditto but with bioguard - C8	SM	1			
F.	9.5mm thick skimmed gypsum board non-magnetic ceiling - C9	SM	1			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
A	950mm high stainless steel railing, ground smooth comprising 50mm diameter x 4mm thick handrail fixed to 50mm diameter stainless steel balusters with approved clips at centres not exceeding 1000mm rawl bolted onto concrete floor (m/s) including base plate, cap, infilled with and including 900 x 725 x 12mm thick toughened clear glass fixed with stainless steel glass patch fitting, including all drilling, all curving to radii where applicable to Manufacturer's details (Main staircase)	LM	1			
B	800mm high ditto terraces and verandahs	LM	1			
	<u>Bituminous macadam paving</u>					
C.	125mm thick dense bitumen macadam base-course (0/30mm) compacted and laid to falls to Engineer's details	SM	1			
D.	50mm thick asphalt concrete surfacing (SUPERPAVE) Type I, 0/20mm binder course with 10/14mm single seal surface dressing and double seal surface dressed shoulders comoacted and laid to falls to Engineer's details	SM	1			
E.	MC - 70 prime coat spray applied to sub-grade (m/s) to approval	SM	1			
F.	50/70 penetration grade bitumen for asphalt concrete and surface dressing	SM	1			
G.	K1-70 cationic emulsion tack coat on bitumen surfacing (m/s) to approval	SM	1			
	Carried to collection					

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>COLLECTION</u>					
	From page 2J-1					
	" " 2J-2					
	" " 2J-3					
	" " 2J-4					
	" " 2J-5					
	" " 2J-6					
	" " 2J-7					
	" " 2J-8					
	" " 2J-9					
	" " 2J-10					
	" " 2J-11					
	" " 2J-12					
	" " 2J-13					
	<u>DAY WORKS</u>					
	AND SCHEDULE OF RATES					
	<u>TOTAL CARRIED</u>					
	<u>TO SUMMARY</u>					

PROVISIONAL SUMS

PROPOSED CONSTRUCTION OF EAKI COMPLEX AT KNH GROUNDS NAIROBI, KENYA

Item	Description	Unit	Qty	Rate	Kshs	Cts
	<u>BILL NO. 20</u> <u>PROVISIONAL SUMS</u>					
	<u>PROVISIONAL SUMS</u>					
A.	<u>Fluctuations</u> Provide the Provisional Sum of Kenya Shillings One Hundred Million for Fluctuations	Sum			100,000,000.00	
C.	<u>Imaging Rooms</u> Provide the Provisional Sum of Kenya Shillings Two Million for finishes in the Imaging Room i.e. MRI and X ray Rooms	Sum			2,000,000.00	
H.	<u>Changing Rooms</u> i. Provide the Provisional Sum of Kenya Shillings Two Million Five Hundred Thousand for Changing Room Lockers	Sum			2,500,000.00	
ii.	Provide the Provisional Sum of Kenya Shillings Six Hundred Thousand for Changing Room Benches	Sum			600,000.00	
I.	<u>Making Good works</u> i. Provide the Provisional Sum of Kenya Shillings One Million for repairing aluminium doors on 3rd and 4th floor	Sum			1,000,000.00	
ii.	Provide the Provisional Sum of Kenya Shillings One Million Five Hundred Thousand for core-drilling to balconies	Sum			1,500,000.00	
	<u>TOTAL CARRIED</u>				107,600,000.00	
	<u>PROVISIONAL SUMS TO GRAND SUMMARY</u>					

VOLUME 2 SUMMARY

ITEM	DESCRIPTION	PAGE	AMOUNT KSHS
2	<u>PROPOSED CONSTRUCTION OF EAST AFRICA'S KIDNEY</u> <u>INSTITUTE COMPLEX AT KENYATTA NATIONAL</u> <u>HOSPITAL (KNH) GROUNDS NAIROBI, KENYA</u> <u>ADDITIONAL FINANCING</u> VOLUME 2 - SUMMARY		
2.1	Particular Preliminaries	PP/ 12	
2.2	General Prelimaries	GP/ 21	
2.3	General Remedial Works	2B/ 5	
2.4	Basement Works		
	1. Basement Sterilization Room Grid T-Q, 15-16	2C1-9	
	2. Basement Refectory,serving & Distribution Room Grid R-P, 12-14	2C2-9	
	3. Basement Pharmacy Storage Grid U-V, 15-16	2C3-5	
	4. Basement Labs & Offices Grid U-W, 12-15	2C4-12	
2.5	Main Building - Third & Fourth Floor	2D-42	
2.6	External Works Outside Plot boundary		
	1. Drive and Parking - Opp Traffic Police	2E1-3	
	2. Walkways and Foot paths	2E2-1	
	3. Storm water Drainage	2E3-1	
	4. Landscaping	2E4-1	
2.7	External Works Within Plot boundary		
	1. Raising Gates	2F1-1	
	2. Entrance & Exit Canopies	2F2-1	
	3. Earthworks (Moving Soil Heap & Level)	2F3-1	
2.8	Sports Fields		
	1. 2 No. Volleyball Pitch	2G1-8	
2.9	Services Houses		
	1. Waste Management House	2H1-14	
	2. Boiler House	2H2-14	
	3. Screen Walls For Sevice Houses	2H3-1	
	4. Relocation of existing walkway - Services House Area	2H4-2	
2.10	Signage	SG / 4	
2.11	Sub-Total		
2.12	Day Works & Schedule of Rates	2J-14	
2.13	Provisional Sum	2K-1	107,600,000.00
2.14	TOTAL CARRIED TO GRAND SUMMARY		