

PARTICULAR PRELIMINARIES

ITEM	DESCRIPTION	KSHS
	<p><u>BILL NO. 1; PARTICULAR PRELIMINARIES</u></p> <p><u>Definition of Terms</u></p> <p>PRICING ITEMS OF PRELIMINARIES</p> <p>A Prices SHALL BE INSERTED against items of “preliminaries” in the tenderer’s priced Bills of Quantities. The contractor is advised to read and understand all preliminary items.</p> <p>EMPLOYER</p> <p>B The "Employer" is MINISTRY OF AGRICULTURE, LIVESTOCK, FISHERIES AND COOPERATIVES; STATE DEPARTMENT FOR FISHERIES, AQUACULTURE AND THE BLUE ECONOMY - AQUACULTURE BUSINESS DEVELOPMENT PROGRAMME (ABDP) Represented by the THE PRINCIPAL SECRETARY</p> <p>The term "Employer" and "Government" wherever used in the contract document shall be synonymous</p> <p>PROJECT MANAGER</p> <p>C The term "P.M." wherever used in these Bills of Quantities shall be deemed to imply the Project Manager as defined in Condition 1 of the Conditions of Contract or such person or persons as may be duly authorised to represent him on behalf of the Government.</p> <p>ARCHITECT</p> <p>D The term "Architect" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is State Department of Public Works, P.O. Box 30743-00100, NAIROBI.</p> <p>QUANTITY SURVEYOR</p> <p>E The term "Quantity Surveyor" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is State Department of Public Works, P.O Box 30743-00100, NAIROBI.</p> <p>ELECTRICAL ENGINEER</p> <p>F The term "Electrical Engineer" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is State Department of Public Works, P.O. Box 30743-00100, NAIROBI.</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	KSHS
<p>A</p> <p>B</p> <p>C</p> <p>D</p> <p>E</p> <p>F</p> <p>G</p>	<p>MECHANICAL ENGINEER</p> <p>The term "Mechanical Engineer" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is State Department of Public Works, P.O. Box 30743-00100, NAIROBI.</p> <p>STRUCTURAL ENGINEER</p> <p>The term "Structural Engineer" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is State Department of Public Works, P.O. Box 30743-00100, NAIROBI.</p> <p>SCOPE OF THE CONTRACT</p> <p>The works to be carried out under this contract comprise of Construction of a Fish Storage Facility, Associated Civil Works and Laying of Infrastructure for Electrical (Conduits) & Mechanical Works (Pipework).</p> <p>DESCRIPTION OF THE WORKS</p> <p>The works comprise of erection of a Fish Storage Facility, associated Civil Works, and Laying of Infrastructure for Electrical (Conduits) & Mechanical Works (Pipework).</p> <p>MEASUREMENTS</p> <p>In the event of any discrepancies arising between the Bills of Quantities and the actual works, the site measurements shall generally take precedence. However, such discrepancies between any contract documents shall immediately be referred to the PROJECT MANAGER in accordance with Clause 12 of the Conditions of Contract. The discrepancies shall then be treated as a variation and be dealt with in accordance with Clause 12 of the said Conditions.</p> <p>LOCATION OF SITE</p> <p>The site for works is located within UHURU BUSINESS CENTRE, KISUMU COUNTY. The Tenderer shall be deemed to have visited the site and familiarised himself with all site conditions prior to submission of tenders. No claims arising from tenderer's failure to do so will be entertained.</p> <p>SIGNING OF THE TENDER DOCUMENTS</p> <p>The bidder shall append his / her signature and / or company's rubber stamp on the form of tender and grand summary pages of tender document.</p>	
	<i>Carried to collection</i>	

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	<p>DEMOLITIONS AND ALTERATIONS</p> <p>A The Contractor is to allow for all temporary protection required during the works including ordinary and special dust screens, hoardings, barriers, warning signs, etc as directed by the Project Manager and as necessary for the adequate propping and protection of existing property, finishes, workmen employed on the site, employer's agents and the public. Any damage or loss incurred due to the insufficiency of such protection must be made good by the Contractor. All protective devices are to be removed on completion of the works and any necessary making good consequent upon this is to be executed to the satisfaction of the Project Manager</p> <p>The works shall be propped, strutted and supported as necessary before any alteration or demolition work commences. Prices shall include for all cleaning and preparatory work to structure and finishes and for making good to all finishes on completion whether or not specifically described.</p> <p>Unless described as set aside for re-use all arising debris and surplus materials shall be carefully removed from building and carted away from site.</p> <p>The Contractor shall be entirely responsible for any breakage or damage which may occur to materials required for re-use during their removal unless it is certified by the Project Manager that such damage or breakage was inevitable as a result of the condition of the item concerned</p> <p>CLEARING AWAY</p> <p>B The Contractor shall remove all temporary works, rubbish, debris and surplus materials from the site as they accumulate and upon completion of the works, remove and clear away all plant, equipment, rubbish, unused materials and stains and leave in a clean and tidy state to the reasonable satisfaction of the Project Manager.</p> <p>The whole of the works shall be delivered up clean, complete and in perfect condition in every respect to the satisfaction of the Project Manager.</p> <p>CLAIMS</p> <p>C It shall be a condition of this contract that upon it becoming reasonably apparent to the Contractor that he has incurred losses and / or expenses due to any of the contract conditions, or by any other reason whatsoever, he shall present such a claim or intent to claim notice to the PROJECT MANAGER within the contract period. No claim shall be entertained upon the expiry of the said contract period.</p>	
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ITEM	DESCRIPTION	KSHS
	<p>PAYMENTS</p> <p>A The tenderer's attention is drawn to the fact that the Government shall not make advance payments but pays for work done and materials delivered to site: all in accordance with Clause 14 of the Conditions of Contract Agreement. In order to facilitate this, a list of the general component elements for the works is given at the summary page of these specifications and the tenderer is requested to break down his tender sum commensurate to the said elements</p> <p>PREVENTION OF ACCIDENT, DAMAGE OR LOSS</p> <p>B The Contractor is notified that these works are to be carried out on a restricted site where the client is going on with other normal activities. The Contractor is thus instructed to take reasonable care in the execution of the works as to prevent accidents, damage or loss and disruption of activities being carried out by the Client. The Contractor shall allow in his rates any expense he deemed necessary by taking such care within the site.</p> <p>WORKING CONDITIONS</p> <p>C The Contractor shall allow in his rates for any interference that he may encounter in the course of the works for the Client may in some cases ask the Contractor not to proceed with the works until some activities within the site are completed, as the facility will be operating as usual during the course of the contract.</p> <p>SIGNBOARD</p> <p>D Allow for providing, erecting, maintaining throughout the course of the Contract and afterwards clearing away a signboard as designed, specified and approved by the Project Manager.</p> <p>LABOUR CAMPS</p> <p>E The Contractor shall NOT be allowed to house labour on site. To allow for transporting workers to and from the site during the tenure of the contract.</p> <p>MATERIALS FROM DEMOLITIONS</p> <p>F Any reusable materials arising from demolitions and not re-used in this contract shall become the property of the Client. The Contractor shall allow in his rates the cost of transporting the such materials to the Client's stores.</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	KSHS
	<p>PRICING RATES</p> <p>A The tenderer shall include for all costs in executing the whole of the works, including transport, replacing damaged items, fixing, all to comply with the said Conditions of Contract.</p> <p>URGENCY OF THE WORKS</p> <p>B The Contractor is notified that these “works are urgent” and should be completed within the period stated in these Particular Preliminaries. The Contractor shall allow in his rates for any costs he/ she deems that he/she may incur by having to complete these works within the stipulated contract period.</p> <p>PAYMENT FOR MATERIALS ON SITE</p> <p>C All materials for incorporation in the works must be stored on site before payment is effected, unless specifically exempted by the Project Manager. This is to include materials of the Contractor, nominated sub-Contractors and nominated suppliers.</p> <p>EXISTING SERVICES</p> <p>D Prior to the commencement of any work, the Contractor is to ascertain from the relevant authority the exact position, depth and level of all existing services in the area and he/she shall make whatever provisions may be required by the authorities concerned for the support, maintenance and protection of such services.</p> <p>BID SECURITY</p> <p>E The Bidder shall furnish, as part of his bid, a security as specified in the tender advertisement.</p> <p>The bid security shall, at the bidder’s option, be in the form of a certified cheque, bank draft, standby letter of credit or guarantee from a reputable bank located in Kenya or insurance firm approved by the Government. The format of the bank guarantee shall be in accordance with the sample forms of bid security included in the post qualification forms, other formats may be permitted, subject to the prior approval of the Government. Letters of credit, Bank Guarantees issued as surety shall be valid for a period of One Hundred and Fifty (150) days from the date of Tender Opening.</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	KSHS
	<p>PERFORMANCE BOND</p> <p>A A performance bond equivalent to 5% of the contract sum will be required in accordance with Clause 48 of the Instructions to Tenderer's. No payment under the contract shall be made before the contractor submits a bond acceptable to the employer.</p> <p>TENDER DOCUMENTS</p> <p>B Tender documents are as listed in Clause 6 of the Instruction to Tenderers</p> <p>DELIVERY OF TENDER</p> <p>C The Tender documents above shall be delivered in one sealed and properly addressed envelope as specified in these Tender Documents and in the 'Tender Invitation Advertisement' and deposited at the address and time specified thereof.</p> <p>Tenders will be opened in the manner specified similarly. Tenders delivered/received later than the specified time will not be opened.</p> <p>VALUE ADDED TAX</p> <p>D The Contractor's attention is drawn to the Legal Notice in the Finance Act part 3 Section 21(b) operative from 1st September, 1993 which requires payment of VAT on all contracts. The Tenderer is required to allow for VAT for all items in the Bills of Quantities and no claim for VAT shall otherwise be entertained.</p> <p>INSURANCE</p> <p>E The Contractor shall insure as required in Clause 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 PROJECT MANAGER 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 PROJECT MANAGER 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 PROJECT MANAGER's inspection.</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	KSHS
	FIRM PRICE CONTRACT	
A	Unless otherwise specifically stated, 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.	
B.	Allow a Provisional Sum of Kenya Shillings Two Million Three Hundred Thousand only for Project Management Expenses including Subsistence Allowances, Airtime and Stationary for Project Management Officers from the State Department for Public Works & Clerk of Works expenses.	2,300,000.00
C.	Add contractor's profits ...5... %	
	TRANSPORT	
D	<p>The contractor shall provide transport from Nairobi (State Department of Public Works Headquarters) to Kisumu (Uhuru Business Centre) whenever instructed by the PM for the duration of the contract. The transport shall be in form of a nine (9) seater van (Nissan or equivalent).The vehicle, together with a licenced and competent driver, shall be available to the PM for the duration of the trip until released:</p> <p>The contractor shall ensure that the vehicle is properly licenced, comprehensively insured and in good state of maintenance.</p> <p>The Project Manager may reject an unsatisfactory vehicle or driver and order acceptable replacement.</p> <p><u>Reimbursement for transport shall be as follows:-</u></p> <p>By a rate per (3day) trip for providing a satisfactory vehicle together with a licenced, competent and acceptable driver and his subsistence allowances, adequate fuel for the trip as per tenderer's quoted rates below.</p> <p><i>Allow for providing a satisfactory vehicle together with a licenced and competent driver, adequate fuel for the 3 day trip and driver allowance for a total of 13 trips @ _____</i></p> <p><i>Allow a percentage for contractor's overhead costs and profits %</i></p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	KSHS
	<p><u>PARTICULARS OF INSERTIONS TO BE MADE IN APPENDIX TO CONTRACT AGREEMENT</u></p> <p>The following are the insertions to be made in the appendix to the Contract Agreement: -</p> <p>Period of Final Measurement 3 Months From Practical completion</p> <p>Defects Liability Period 6 Months from Practical completion</p> <p>Date for Possession To be agreed with the Project Manager</p> <p>Date for Completion 20 Weeks from date of Possession</p> <p>Liquidated and Ascertained At the rate of Kshs.. 20,000.00... per week or part thereof</p> <p>Period of Interim Certificates Monthly</p> <p>Period of Honouring Certificates 30 days</p> <p>Percentage of Certified Value Retained 10%</p> <p>Limit of Retention 5%</p> <p>Advance payment Not applicable</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	KSHS
	<p style="text-align: center;"><u>COLLECTION</u></p> <p>Brought forward from page PP/1</p> <p>Brought forward from page PP/2</p> <p>Brought forward from page PP/3</p> <p>Brought forward from page PP/4</p> <p>Brought forward from page PP/5</p> <p>Brought forward from page PP/6</p> <p>Brought forward from page PP/7</p> <p>Brought forward from page PP/8</p>	
	TOTAL FOR PARTICULAR PRELIMINARIES CARRIED TO GRAND SUMMARY	

GENERAL PRELIMINARIES

ITEM	DESCRIPTION	KSHS
	<p>BILL NO. 2; GENERAL PRELIMINARIES</p> <p>PRICING ITEMS OF PRELIMINARIES AND PREAMBLES</p> <p>A Prices will be inserted against items of Preliminaries in the Contractor's priced Bills of Quantities and Specification.</p> <p>The Contractor shall be deemed to have included in his prices or rates for the various items in the Bills of Quantities or Specification for all costs involved in complying with all the requirements for the proper execution of the whole of the works in the Contract.</p> <p>ABBREVIATIONS</p> <p>B Throughout these Bills, units of measurement and terms are abbreviated and shall be all the requirements for the proper execution of the whole of the works in the Contract.</p> <p><i>C.M.</i> Shall mean cubic metre</p> <p><i>S.M.</i> Shall mean square metre</p> <p><i>L.M.</i> Shall mean linear metre</p> <p><i>MM</i> Shall mean Millimetre</p> <p><i>Kg.</i> Shall mean Kilogramme</p> <p><i>No.</i> Shall mean Number</p> <p><i>Prs.</i> Shall mean Pairs</p> <p><i>B.S.</i> - Shall mean the British Standard Specification Published by the British Standards Institution, 2 Park Street, London W.I., England.</p> <p><i>Ditto</i> - Shall mean the whole of the preceding description except as qualified in the description in which it occurs.</p> <p><i>m.s.</i> Shall mean measured separately.</p> <p><i>a.b.d</i> Shall mean as before described.</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	KSHS
	<p>EXCEPTION TO THE STANDARD METHOD OF MEASUREMENT</p> <p>A <i>Attendance</i> ; Clause B19 (a) of the Standard Method of Measurement is deleted and the following clause is substituted:-</p> <p>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.</p> <p><i>Fix Only</i>:-</p> <p>"Fix Only" shall mean take delivery at nearest railway station (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.</p> <p>FORM OF CONTRACT</p> <p>B The Form of Contract shall be as stipulated in the Republic of Kenya's Standard Tender Document for Procurement of Building Works (2015 Edition) included herein</p> <p>Particulars of insertions to be made in the Appendix to the Contract Agreement will be found in the Particular Preliminaries part of these Bills of Quantities</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	KSHS
	<p>PLANT, TOOLS AND VEHICLES</p> <p>A Allow for providing all scaffolding, plant, tools and vehicles required for the works except in so far as may be stated otherwise herein and except for such items specifically and only required for the use of nominated Sub-Contractors as described herein. No timber used for scaffolding, formwork or temporary works of any kind shall be used afterwards in the permanent work.</p> <p>TRANSPORT</p> <p>B Contractor to 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.</p> <p>MATERIALS AND WORKMANSHIP</p> <p>C 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 ensure they are onsite when required for use in the works. The Bills of Quantities shall not be used for the purpose of ordering materials.</p> <p>SIGN FOR MATERIALS SUPPLIED</p> <p>D The Contractor will be required to sign a receipt for all articles and materials supplied by the PROJECT MANAGER at the time of taking deliver 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 PROJECT MANAGER 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 PROJECT MANAGER</p> <p>STORAGE OF MATERIALS</p> <p>E 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 to the satisfaction of the PROJECT MANAGER. Nominated Sub-Contractors are to be made liable for the cost of any storage accommodation provided especially for their use.</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	KSHS
	<p>SAMPLES</p> <p>A 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 PROJECT MANAGER for his approval until such samples are approved by the PROJECT MANAGER and the PROJECT MANAGER, may reject any materials or workmanship not in his opinion to be up to approved samples. The PROJECT MANAGER 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 PROJECT MANAGER. The Contractor shall pay for the testing in accordance with the current scale of testing charges laid down by the Ministry of Roads, Housing and Public Works.</p> <p>The procedure for submitting samples of materials for testing and the method of marking for identification shall be as laid down by the PROJECT MANAGER. The Contractor shall allow in his tender for such samples and tests except those in connection with nominated sub-contractors' work.</p> <p>GOVERNMENT ACTS REGARDING WORKPEOPLE, ETC</p> <p>B 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 Factory Act 1950 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.</p> <p>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.</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	KSHS
	<p>SECURITY OF WORKS, ETC</p> <p>A 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.</p> <p>PUBLIC AND PRIVATE ROADS</p> <p>B 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 PROJECT MANAGER</p> <p>EXISTING PROPERTY</p> <p>C 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 PROJECT MANAGER</p> <p>VISIT SITE AND EXAMINE DRAWINGS.</p> <p>D 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.</p> <p>ACCESS TO SITE AND TEMPORARY ROADS</p> <p>E Means of access to the Site shall be agreed with the PROJECT MANAGER prior to commencement of the work and Contractor must allow for building any necessary temporary access roads for the transport of the materials, plant and workmen as may be required for the complete execution of the works including the provision of temporary culverts, crossings, bridges, or any other means of gaining access to the Site. Upon completion of the works, the Contractor shall remove such temporary access roads; temporary culverts, bridges, etc., and make good and reinstate all works and surfaces disturbed to the satisfaction of the PROJECT MANAGER The Contractor should also allow for relocating existing fence (approx. 30 metres long).</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	KSHS
	<p>AREA TO BE OCCUPIED BY THE CONTRACTOR</p> <p>A 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 PROJECT MANAGER</p> <p>OFFICE FOR THE PROJECT MANAGER</p> <p>B The Contractor shall provide, erect and maintain where directed on site and afterwards dismantle the site office of the Ministry of Works standard type B, complete with furniture. He 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 type water or bucket closet for the sole use of the PROJECT MANAGER including making temporary connections to the drain where applicable to the satisfaction of Government and Medical Officer of Health and shall provide services of cleaner and pay all conservancy charges and keep both office and closet in a clean and sanitary condition from commencement to the completion of the works and dismantle and make good disturbed surfaces. The office and closet shall be completed before the Contractor is permitted to commence the works. The Contractor shall make available on the Site as and when required by the "PROJECT MANAGER" a modern and accurate level together with levelling staff, ranging</p> <p>WATER AND ELECTRICITY SUPPLY FOR THE WORKS</p> <p>C 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 PROJECT MANAGER . 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. Nominated Sub-contractors are to be made liable for the cost of any water or electric current used and for any installation provided especially for their own use.</p> <p>SANITATION FOR THE WORKS</p> <p>D 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 PROJECT MANAGER</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	KSHS
	<p>SUPERVISION AND WORKING HOURS</p> <p>A The works shall be executed under the direction and to the entire satisfaction in all respects of the PROJECT MANAGER 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.</p> <p>PROVISIONAL SUMS</p> <p>B The term "Provisional Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A7 (i) of the Standard Method of Measurement. Such sums are net and no addition shall be made to them for</p> <p>PRIME COST (OR P.C.) SUMS</p> <p>C The term "Prime Cost Sum" or "P.C. Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A7 (ii) of the Standard Method of Measurement. Persons or firms nominated by the PROJECT MANAGER to execute work or to provide and fix materials or goods are described herein as Nominated Sub-Contractors. Persons or firms so nominated to supply goods or materials are described herein as Nominated Suppliers.</p> <p>PROGRESS CHART</p> <p>D The Contractor shall provide within two weeks of Possession of Site and in agreement with the PROJECT MANAGER a Progress Chart for the whole of the works including the works of Nominated Sub-Contractors ; one copy to be handed to the PROJECT MANAGER and a further copy to be retained on Site. Progress to be recorded and chart to be amended as necessary as the work proceeds.</p> <p>ADJUSTMENT OF P.C. SUMS</p> <p>E In the final account all P.C. Sums shall be deducted and the amount properly expended upon the PROJECT MANAGER'S order in respect of each of them added to the Contract sum. The Contractor shall produce to the PROJECT MANAGER such quotations, invoices or bills, properly receipted, as may be necessary to show the actual details of the sums paid by the Contractor. Items of profit upon P.C. Sums shall be adjusted in the final account pro-rata to the amount paid. Items of "attendance"</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	KSHS
	<p>ADJUSTMENT OF P.C. SUMS. Ctd.....</p> <p>A Should the Contractor be permitted to tender and his tender be accepted of any work for which a P.C. Sum is included in these Bill of Quantities profit and attendance will be allowed at the same rate as it would be if the work were executed by a Nominated Sub-Contractor.</p> <p>ADJUSTMENT OF PROVISIONAL SUMS</p> <p>B In the final account all Provisional Sums shall be deducted and the value of the work properly executed in respect of them upon the PROJECT MANAGER's order added to the Contract Sum. Such work shall be valued as described for Variations, but should any part of the work be executed by a Nominated Sub-Contractor, the value of such work or articles for the work to be supplied by a Nominated Supplier, the value of such work or articles shall be treated as a P.C. Sum and profit and attendance comparable to that contained in the priced Bills of Quantities for similar items added.</p> <p>NOMINATED SUB-CONTRACTORS</p> <p>C When any work is ordered by the PROJECT MANAGER to be executed by nominated sub-contractors, the Contractor shall enter into sub-contracts and shall thereafter be responsible for such sub-contractors in every respect. Unless otherwise described the Contractor is to provide for such Sub-Contractors any or all of the facilities described in these Preliminaries. The Contractor should price for these with the nominated Sub-contract Contractor's work concerned in the P.C. Sums under the description "add for Attendance".</p> <p>DIRECT CONTRACTS</p> <p>D Notwithstanding the foregoing conditions, the Government reserves the right to place a "Direct Contract" for any goods or services required in the works which are covered by a P.C. Sum in the Bills of Quantities and to pay for the same direct. In any such instances, profit relative to the P.C. Sum the priced Bills of Quantities will be adjusted as described for P.C. Sums and allowed.</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	KSHS
	<p>ATTENDANCE UPON OTHER TRADESMEN, ETC</p> <p>A 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 PROJECT MANAGER and the work will be measured and paid for to the extent executed at rates provided in these Bills.</p> <p>PROVISIONAL WORK</p> <p>B All work 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 work liable to adjustment under this Contract shall left uncovered for a reasonable time to allow all measurements needed for such adjustment to be taken by the PROJECT MANAGER Immediately the work is ready for measuring, the Contractor shall give notice to the PROJECT MANAGER. If the Contractor makes default in these respects he shall if the PROJECT MANAGER so directs uncover the work to enable all measurements to be taken and afterwards reinstate at his own expense.</p> <p>ALTERATIONS TO BILLS, PRICING, ETC</p> <p>C 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.</p> <p>BLASTING OPERATIONS</p> <p>D Blasting will only be allowed with the express permission of the PROJECT MANAGER 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 PROJECT MANAGER governing the use and storage of explosives.</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	KSHS
	<p>MATERIALS ARISING FROM EXCAVATIONS</p> <p>A Materials of any kind obtained from the excavations shall be the property of the Government. Unless the PROJECT MANAGER 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 PROJECT MANAGER 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.</p> <p>PROTECTION OF THE WORKS</p> <p>B 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 PROJECT MANAGER 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.</p> <p>REMOVAL OF RUBBISH, ETC</p> <p>C 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.</p> <p>WORKS TO BE DELIVERED UP CLEAN</p> <p>D 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 PROJECT MANAGER</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	KSHS
	<p>GENERAL SPECIFICATION</p> <p>A 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, Public Works and Housing 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.</p> <p>MATERIALS ON SITE</p> <p>B 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 PROJECT MANAGER. This includes the materials of the Main Contractor, Nominated Sub-Contractors and Nominated Suppliers.</p> <p>HOARDING</p> <p>C The Contractor shall enclose all the site under construction with a hoarding 2400 mm high consisting of iron sheets gauge 30 on 100 x 50 mm 2nd grade treated sawn cypress timber posts firmly secured at 1800 mm centres with two 75 x 50 mm 2nd grade treated sawn cypress timber.</p> <p>CONTRACTOR'S SUPERINTENDENT/SITE AGENT</p> <p>D The Contractor shall constantly keep on the works a literate English speaking Agent or Representative, competent and experienced in the kind of work involved who shall be fully engaged to the superintendence of the works for the duration of the contract. Such Agent or Representative shall receive on behalf of the Contractor all directions and instructions from the Project Manager and such directions and instructions shall be deemed to have been issued to the Contractor in accordance with the Conditions of Contract.</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	KSHS
	<p style="text-align: center;"><u>COLLECTION</u></p> <p>Brought Forward From Page GP/ 1</p> <p>Brought Forward From Page GP/ 2</p> <p>Brought Forward From Page GP/ 3</p> <p>Brought Forward From Page GP/ 4</p> <p>Brought Forward From Page GP/ 5</p> <p>Brought Forward From Page GP/ 6</p> <p>Brought Forward From Page GP/ 7</p> <p>Brought Forward From Page GP/ 8</p> <p>Brought Forward From Page GP/ 9</p> <p>Brought Forward From Page GP/ 10</p> <p>Brought Forward From Page GP/ 11</p>	
	TOTAL FOR GENERAL PRELIMINARIES CARRIED TO GRAND SUMMARY	

PREAMBLES AND PRICING NOTES

PREAMBLES AND PRICING NOTES

GENERAL SPECIFICATION

The works under this contract shall be carried out in accordance with Ministry of Works General Specification 1976 Edition.

MANUFACTURER'S NAME and references are given as a guide to quality. Alternative manufacture of equal quality will be accepted at the discretion of the Architect.

EXCAVATION

Prices are to include for excavating in all materials met with except Rock as specified. Prices are also to include for planking and strutting, and for destroying all white ants' nests and keeping excavations free from water.

Insecticide Treatment

Treating surface of hardcore with approved insecticide shall include execution by any reputable supplier/manufacturer who shall give a ten year guarantee to the Employer.

CONCRETE WORK

Test Cubes

Allowance must be included in the tender for the preparation of concrete test cubes as required by the Engineer.

Precast Concrete Works

Prices are to include for handling reinforcement, and for bedding in cement mortar.

WALLING

Concrete Blocks

All concrete walling blocks are to be in metric sizes and to the specified quantities.

Wall reinforcement shall be hoop iron, one layer per 90mm thickness, and placed in the bed joint of alternate courses.

Samples

Prices are to include for packing and sending sample blocks to the approved Testing Laboratory.

PREAMBLES AND PRICING NOTES (CONT'D)

ROOFING

All roof materials shall be as specified in the Bills of Quantities, and laid in accordance with the manufacturer's instructions.

CARPENTRY AND JOINERY

Cypress

The grading rules for cypress shall be the same as those for podocarpus.

Laminated Plastic Sheeting

Shall be fixed with an approved waterproof adhesive.

Prices of Joinery

Shall include for pencil rounded arises; for protection against damage and for bedding frames and cills in cement mortar.

Plugged shall mean drilling walling or concrete with a drill and filling with proprietary plugs of the correct size

IRONMONGERY

Shall be as specified in the Bills of Quantities, or equal and approved.

Prices must include for removing and refixing during and after painting, for labelling all keys, and for fixing with matching screws.

METALWORK

Generally

All steelwork shall be cleaned free from rust and primed one coat or red lead primer before being delivered to the site.

Prices for Metal Windows

To include for assembling parts, bedding and pointing in mastic, building in fixing lugs, and plugging as necessary.

PREAMBLES AND PRICING NOTES (CONT'D)

PLASTERWORK AND OTHER FINISHES

Generally

All plaster work and paving to be as described in the Specification and in the Bills of Quantities.

Pavings

Prices are to include for brushing concrete clean, wetting and coating with cement and sand grout (1:1).

GLAZING

Polished Plate Glass

Shall be general Glazing Quality.

Prime Rebates

Prices are to include for priming rebates before placing putty.

Broken or Scratched Glass

The contractor will be responsible at his own cost, for replacing any broken or scratched glass and handing over in perfect condition.

PAINTING

Generally

Note that the General Contractor is to provide scaffolding for all trades including painting.

Paint Category

Painting shall be applied in accordance with the manufacturer's instructions and to the required coats.

Prices

Prices are to include for all preparatory work, priming coats and for protecting other works and for cleaning up on completion. Prices for painting on galvanized metal are to include for mordant solution as necessary.

PREAMBLES AND PRICING NOTES (CONT'D)

PLUMBING AND ENGINEERING INSTALLATION INCLUDING SOLAR PANELS

Generally

All work shall be executed by an approved specialist and the General Contractor shall first obtain written approval from the Architect before engaging the specialist.

Description

The sizes given are the internal diameter. The words 'pipe' and 'tube' are synonymous.

Prices of Sanitary Fittings

To include for assembling and jointing parts, plugging as necessary, and all joints to services and wastes or soil pipes.

ROADS AND CAR PARKS

All work must be supervised by an experienced Road Engineer or Foreman.

LANDSCAPING

GARDENS

The area to be planted has already had the preliminary works, e.g. masonry walling, earth filling and grading done by the Main Contractor. This is some places will need to be excavated to remove the underlying stone filling and raking as necessary.

MAINTENANCE

The trees, grass and flowers will have to be watered and maintained until well established. The contractor is advised to include all this in his rates.

GRASS PLANTING IN THE WORKS

Grass planting over rock or compacted fill material

Where grass is to be established in areas where decomposed or solid rock or other fill material exists closer to the finished surface than 200mm, the following grass planting procedure will apply.

The rock will be removed to a depth of 200mm below the finished surface. The rock will then be ripped or otherwise broken up to a further depth of 150mm and lightly compacted; 200mm of

selected red soil will then be spread over the surface. The whole shall then be lightly rotated to obtain a homogenous mixture to a depth of 150mm. Prior to planting, the soil shall be raked and 50 gm. each per square metre of bone meal and hoof and horn meal shall be spread on the surface.

Planting of either Bradely grass, maadi River grass, Cape Royal grass or Kikuyu grass as required shall take place during a period of heavy rain, or, if this is not possible, with the approval of the Architect, after thorough soaking by prolong irrigation.

The grass shall be in cuttings of approximately 200mm long and shall be planted at 150mm intervals, 150mm buried in the soil. Planting shall be carried out with the aid of a wooden peg and the soil well rammed around the cuttings.

The grass shall be systematically watered, cut and weeded to maintain it in a healthy state throughout the maintenance period.

The rate for grass planting over rock shall include for the ripping of the rock, provision of grass and all subsequent materials, tools etc.

TREES AND PALMS PLANTING

The pits shall be 0.9 metre diameter x 0.9 metre deep. The sides shall be undercut and the soil mixture shall be as follows:

4 parts approved red soil

1-part sewage sludge

These shall be thoroughly mixed together on the mixing ground and specifically set aside for the purpose. The mixture shall be filled into the pits in 300mm layers, firming with hard earth rammers at each layer. The surface is to be shaped into a bowl-depression 200mm deep to assist in watering.

The tree plants are to be at least 0.9 metre high when brought to the works for planting.

In the two days before planting takes place, each pit is to be thoroughly soaked with 100 litres of water. The trees or palms shall be planted and stuck in an approved manner, well watered and maintained throughout the maintenance period.

The rates for tree planting shall include for provision of plants and materials described in this Clause.

PLANTING SHRUBS

Pits for shrubs shall be 750mm diameter x 750mm deep. They shall be excavated, refilled, planted, maintained and paid for in identical manner to trees and palms. All the shrubs are grouped together and the tenderer is to give a uniform rate that covers the cost of any of the shrubs.

PREAMBLES AND PRICING NOTES (CONT'D)

HERBACEOUS BORDER, PLANT BOXES AND SIMILAR AREAS

Plant boxes, herbaceous borders and similar areas shall be excavated, refilled, planted, maintained and paid for in an identical manner to trees and palms, excepting that four parts of forest soil shall be used in place of red soil and 50 gm each per square metre of bonemeal and hoof and horn meal shall be spread on the surface of the soil mixture before planting.

BOUGAINVILLEA HEDGES AND TABLES

Bougainvillea hedges and tables formed on fencing and fencing tables shall be planted between 100mm diameter cedar fence posts in a pit 0.75 metre deep and 0.75 metre diameter filled as described above.

For tables, one plant is to be planted every 10 square metres as directed by the Architect.

Bougainvillea hedges plants are to be planted at 2.0 metres intervals. The cedar posts are 600mm high and placed at 2.0 metres centres with barbed wire staked at the top.

The bougainvillea plants are to be attached to the fence wires and strained into a hedge or table in the course of the maintenance period to the approval of the Architect. The plant pits are to be excavated, refilled, planted, maintained and paid for in accordance with the requirements laid down for shrubs.

The rates for bougainvillea plants and hedges are tables shall also include for all the materials and operations described in this Clause. Fench for bougainvillea hedges are measured lineally and fence tables are measured superficially over the area formed by the outermost wires of the table.

STORAGE FACILITY

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>BILL NO. 3; BUILDERS WORKS</u>				
	<u>ELEMENT NO. 1</u>				
	<u>SUBSTRUCTURES (ALL PROVISIONAL)</u>				
	<u>NOTE; (I) All work measured under this element is up to and including the floor slab but excluding the finishes thereon.</u>				
	<u>Site Clearance</u>				
A	Clear the site of all bush scrub undergrowth and small trees grub up roots and cart away or burn all arising	295	SM		
B	Cut down trees of girth 300 - 600 mm; grub up roots and cart away arising from site	4	NO		
	<u>Excavations and earthworks</u>				
C	Excavate to reduce levels in normal soils not exceeding 1.5m deep and cart away surplus excavated materials from site	330	CM		
D	Excavate for strip foundation trenches not exceeding 1.5 metres deep commencing from reduced level	49	CM		
E	Ditto column bases	11	CM		
F	Extra over excavations for excavating in rock Irrespective of Class	78	CM		
G	Ditto in reinforced concrete (200mm thick slab and retaining wall)	50	CM		
H	Allow for keeping excavations free from mud and all water including spring and running water by pumping pailing or other approved means.		ITEM		
J	Allow for planking and strutting to sides of excavations		ITEM		
	<u>Disposal</u>				
K	Load surplus excavated material and cart away	236	CM		
	<u>Filling</u>				
L	Return fill and ram selected excavated material around foundations and levelling around building.	154	CM		
	<u>Hardcore</u>				
M	300mm thick hardcore filling including levelling and compacted in 150mm layers to approval	220	SM		
N	Murram filling compacted in 150mm layers to make up levels to approval	517	CM		
P	Form sinking in hardcore average 550mm wide by 100mm deep	8	LM		
Q	Handpack hardcore to form battering sides 200m girth (b.s.m)	16	LM		
	Carried to Collections				

PROPOSED FISH STORAGE FACILITY AT UHURU
BUSINESS CENTRE, KISUMU COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
A	<u>Blinding</u> 50mm Thick Quarry dust blinding to the surface of hardcore; rolled smooth	220	SM		
B	<u>Insecticide treatment</u> "TERMIDOL" or other equal and approved chemical insecticide treatment prepared and applied according to the manufacturer's printed instructions.	220	SM		
	<u>In-situ concrete work</u> <u>Mass concrete (1:3:6/38-38mm aggregate)</u>				
C	50mm Thick blinding under strip foundations	89	SM		
D	Ditto under column bases	16	SM		
	<u>Vibrated reinforced concrete (1:2:4/20 - 20mm aggregate)</u> <u>as described in:</u>				
E	Foundation strips	18	CM		
F	Column bases	6	CM		
G	Columns	2	CM		
H	Ground beam	13	CM		
J	150mm Thick ground floor slab	220	SM		
K	Mass concrete in generator plinth; 450mm deep	3	CM		
L	Mass concrete in ramp/steps	2	CM		
M	Thickening under slab average 550mm wide by 100mm deep	8	LM		
N	Extra over for forming channels in slab 300mm wide x 150mm deep (internal dimensions) including all necessary formwork	8	LM		
P	<u>Expansion joint</u> 25mm thick Aeroflex filler	2	SM		
Q	25x25mm "Expendite" sealer	8	LM		
R	<u>Grating</u> Fabricate, supply and fix the following aluminium grating framed with 32 x32 x 6mm angle section, 25 x 10mm flat bars welded together at 30mm centres; including assembly and laying to channel; overall size 400mm wide	8	LM		
	Carried to Collections				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>Damp proof membrane</u>				
A	1000 gauge polythene sheeting laid under concrete under concrete floor bed.	220	SM		
	<u>Steel reinforcement (Provisional)</u>				
	<u>Supply and fix steel bars reinforcement including bending, hooks, tying wire, cutting, spacer blocks and supporting all in position as described.</u>				
B	8mm diameter ribbed bars	642	KG.		
C	10mm ditto	320	KG.		
D	12mm ditto	730	KG.		
E	16mm ditto	515	KG.		
	<u>Steel reinforcement</u>				
F	B.R.C A142, steel mesh fabric reinforcement weighing 2.22 kg/m ² , measured nett including end and side laps	228	SM		
	<u>Sawn formwork as described to:</u>				
G	Vertical sides of strip foundations	59	SM		
H	Vertical sides of column bases	22	SM		
J	Vertical sides of columns	38	SM		
K	Vertical sides of ground beam	89	SM		
L	Vertical sides of plinth	3	SM		
M	<i>Vertical sides of ramps/steps</i>	8	SM		
N	Edge of ground floor slab 75-150mm high	68	LM		
	<u>Foundation walling</u>				
P	225mm thick rough chisel dressed natural stone walling bedded and jointed in cement and sand (1:3) mortar and reinforced with and including 20swg x 25mm wide hoop iron in every alternate course	356	SM		
	<u>Horizontal damp proof course ; one layer of 3 - ply bituminous felt or other equal and approved (measured nett - allow for laps)</u>				
Q	200mm wide levelled and bedded in cement and sand (1:3) mortar under walls	120	LM		
R	100mm ditto	9	LM		
	Carried to Collections				

PROPOSED FISH STORAGE FACILITY AT UHURU
BUSINESS CENTRE, KISUMU COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>Plinth area finishes</u>				
A	12mm Thick cement and sand (1:3) wood float render to plinth area	21	SM		
B	Prepare and apply three coats black bitumastic paint to rendered area	21	SM		
	<i>Carried to collection below</i>				
	<u>COLLECTION</u>				
	Brought Forward from Page No. F		1		
	Brought Forward from Page No. F		2		
	Brought Forward from Page No. F		3		
	Brought Down from		Above		
	<u>TOTAL FOR ELEMENT NO. 1</u>				
	<u>SUBSTRUCTURES</u>				
	<i>CARRIED TO SUMMARY</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>ELEMENT NO.2</u>				
	<u>REINFORCED CONCRETE FRAME</u>				
	<u>Vibrated reinforced concrete (1:2:4/20 - 20mm aggregate) as described in:-</u>				
A	Ring beams	13	CM		
B	Columns	3	CM		
C	Suspended slabs, thickness 150mm (freezer room)	16	SM		
	<u>Steel reinforcement (Provisional)</u>				
	<u>Supply and fix steel bars reinforcement including bending, hooks, tying wire, cutting, spacer blocks and supporting all in position as described.</u>				
D	8mm diameter ribbed bars	459	KG.		
E	10mm diameter	245	KG.		
F	12mm diameter	460	KG.		
G	16mm diameter	514	KG.		
H	20mm diameter	0	KG.		
	<u>Sawn formwork as described to:</u>				
J	Sides of ringbeam	163	SM		
K	Sides of columns	36	SM		
L	Soffites of suspended slabs	16	SM		
M	Edges of suspended slabs 150-225mm	16	LM		
	<u>TOTAL FOR ELEMENT NO. 2</u>				
	<u>R.C. SUPERSTRUCTURE</u>				
	<u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>ELEMENT NO. 3</u>				
	<u>WALLING</u>				
	<u>External walls</u>				
	<u>Approved load bearing machine cut natural stone walling bedded and jointed in cement sand (1:3) mortar with 20 mm wide hoop irons in every alternate course.</u>				
A	200mm thick	120	SM		
B	200mm thick concrete louvre blocks	14	SM		
C	Labour and materials for eaves filling 200 x 200mm high	68	LM		
D	Extra over for mosquito gauze fixed on louvred walling	14	SM		
	<u>Internal walls</u>				
	<u>Approved load bearing machine cut natural stone walling bedded and jointed in cement sand (1:3) mortar with 20 mm wide hoop irons in every alternate course.</u>				
E	200mm thick	165	SM		
F	100mm thick with 20mm wide hoop irons in every course.	22	SM		
	<u>TOTAL FOR ELEMENT NO.3</u>				
	<u>WALLING</u>				
	<i>CARRIED TO SUMMARY</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>ELEMENT NO 4</u>				
	<u>ROOFING AND RAIN WATER DISPOSAL</u>				
	<u>Construction</u>				
	<u>Treated sawn cypress: moisture content not exceeding 12% including templates, fillets, nailing, straps, splices and hoisting 3.00 meters above ground level in:</u>				
	<u>Trusses</u>				
A	150×50mm Rafters.	90	LM		
B	150×50mm Tie beams.	75	LM		
C	100×50mm King posts.	15	LM		
D	100×50mm Ties & Struts.	95	LM		
E	100x100x2mm thick mild steel angle cleat painted with twin coats of red lead before fixing.	20	NO		
	<u>Independent members</u>				
F	150×50mm Hip rafters.	103	LM		
G	150×50mm Valley rafters.	37	LM		
H	150×50mm Jack/Common rafters.	63	LM		
J	225×50mm Ridge boards.	13	LM		
K	75×50mm Purlins.	340	LM		
L	Wall plates bolted with and including 12mm diameter black bolts and washers and holes included at 1200mm centres, size 100x50mm.	114	LM		
	<u>Roof covering</u>				
M	IT4 gauge 28 box profile Galvanized Corrugated Iron sheets as "Galsheet Resincot" or equal and approved hoisted to position and fixed to purlins with J-bolts (rate inclusive)	320	SM		
N	Ditto ridge cap cover to match	13	LM		
P	Ditto hip cap cover to match	52	LM		
Q	Ditto valley piece	18	LM		
R	Extra over raking cutting iron sheets to profile of valleys and hips	140	LM		
	Carried to Collections				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>Eaves Construction</u>				
A	Heavy gauge UPVC ceiling fixed on timber branderling (m.s)	45	SM		
B	UPVC cornice; 100mm wide	150	LM		
C	Extra over eaves boarding for galvanised insect wire gauze size 300 x 200mm including 40 x 20mm beading frame	5	NO		
	<u>Sawn celcured second grade cypress in;</u>				
D	50 x 50mm branderling	73	LM		
E	75 x 50mm ditto	78	LM		
F	200 x 25mm general grade cypress fascia/verge board	75	LM		
	<u>RAIN WATER DISPOSAL.</u>				
G	250 x 200mm 24 gauge light pressed prepainted galvanised mild steel/Aluzinc purpose made box gutter ready primed; jointed with mastic and fixed to fascia with brackets at approved intervals	75	LM		
H	Extra over gutter for outlet	8	NO		
J	Extra over gutter for mitred ends	8	NO		
K	100mm diameter 24 gauge light pressed prepainted galvanised mild steel/Aluzinc purpose made ready primed down pipe jointed with mastic and fixed to wall with brackets at approved intervals	24	LM		
L	Extra over downpipe for swan neck	8	NO		
M	Ditto; shoe.	8	NO		
	<u>Prepare and apply one undercoat and two finishing coats of premium quality pinotex paint to</u>				
N	Timber surfaces of fascia and verge boards,200-300mm girth.	75	LM		
	<u>Prepare and apply etching primer and one undercoat and two finishing coats</u>				
P	Bituminous paint to galvanized gutters internally	53	SM		
Q	Oil paint to galvanized gutters and downpipes externally	60	SM		
	<i>Carried to collection below</i>				
	<u>COLLECTION</u>				
	Brought Forward from Page No. F		7		
	Brought Down from		Above		
	<u>TOTAL FOR ELEMENT NO. 4</u>				
	<u>ROOFING AND RAINWATER DISPOSAL</u>				
	<u>CARRIED TO SUMMARY</u>				

PROPOSED FISH STORAGE FACILITY AT UHURU
BUSINESS CENTRE, KISUMU COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>ELEMENT NO. 5</u> <u>EXTERNAL FINISHES</u> <u>Wall Finishes</u> <u>Render</u> A 12mm thick cement and sand rendering (1:4) to masonry walls, beams and columns; wood floated finish <u>Painting and decorations</u> <u>Prepare and apply one undercoat and two finishing coats exterior quality "Ruff N Tuff" paint or equal and approved on :-</u> B Fair faced surfaces of walls	164	SM		
		164	SM		
	<u>TOTAL FOR ELEMENT NO. 5</u> <u>EXTERNAL WALL FINISHES</u> <i>CARRIED TO SUMMARY</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>ELEMENT NO. 6</u>				
	<u>INTERNAL WALL FINISHES</u>				
	<u>Plaster; 15mm thick, 2 No. coatwork, 12mm first coat of cement sand (1:3); 3mm second coat of cement and lime putty (1:9); steel trowelled to masonry walls;</u>				
A	Surfaces of walls, columns and beams; internally	502	SM		
	<u>Painting and decorations</u>				
	<u>Prepare and apply one undercoat and two finishing coats silk vinyl paint on:-</u>				
B	Plastered surfaces of walls, columns and beams	502	SM		
	<u>Tile finish</u>				
C	25mm thick cement/sand backing (1:3) to receive ceramic wall tiles (m.s)	105	SM		
D	250 x 300 x 6mm thick coloured ceramic wall tiles pointed in white cement and fixed with an approved adhesive	105	SM		
E	20 x 3mm coloured metal tile edging (provisional)	21	LM		
F	Extra over 300mm wide border tile to approval	45	LM		
	<u>TOTAL FOR ELEMENT NO. 6</u>				
	<u>INTERNAL WALL FINISHES</u>				
	<u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>ELEMENT NO. 7</u>				
	<u>FLOOR FINISHES</u>				
	<u>Tile finish</u>				
	<u>Insitu ement and sand (1:3) screeded beds; wood float finish on concrete background:</u>				
A	32mm thick to receive ceramic tiles.	31	SM		
B	300x300x8mm premium quality non-slip ceramic floor tiles; approved pattern and colour; fixed on and including cement slurry and grouting joints with coloured cement	31	SM		
C	Extra over for decorative tile in diferrent colour to approval 300mm wide laid in approved pattern	12	LM		
D	100x8mm ceramic tile skirting	12	LM		
	<u>Terrazzo finish</u>				
E	40mm thick terrazzo finish comprising 20mm thick cement and sand (1:3) screed and 20mm thick terrazzo paving ground smooth and polished	187	SM		
F	32x3mm plastic dividing strips	281	LM		
G	100x20mm terrazzo skirting.	189	LM		
	<u>TOTAL FOR ELEMENT NO. 7</u>				
	<u>FLOOR FINISHES</u>				
	<u>CARRIED TO SUMMARY</u>				

**PROPOSED FISH STORAGE FACILITY AT UHURU
BUSINESS CENTRE, KISUMU COUNTY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>ELEMENT NO. 8</u>				
	<u>CEILING FINISHES</u>				
	<u>Plaster; 15mm thick, 2 No. coatwork, 12mm first coat of cement sand (1:3); 3mm second coat of cement and lime putty (1:9); steel trowelled to;</u>				
A	Soffits of suspended concrete ceiling	16	SM		
	<u>UPVC ceiling</u>				
B	Heavy gauge UPVC ceiling fixed on timber brandering (m.s)	196	SM		
C	UPVC cornice; 100mm wide	201	LM		
	<u>Sawn celcured second grade cypress in;</u>				
D	50 x 50mm brandering	315	LM		
E	75 x 50mm ditto	341	LM		
	<u>TOTAL FOR ELEMENT NO. 8</u>				
	<u>CEILING FINISHES</u>				
	<u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>ELEMENT NO. 9</u>				
	<u>WINDOWS</u>				
	<u>Precast concrete units; mix 1:1.5:3 (12mm aggregates); Vibrated; reinforced with 2 No. 8mm mild steel bars.</u>				
A	150x50mm cill; weathered, throated and grooved for water bar (m/s). <u>Sundries.</u>	14	LM		
B	Form 20x20mm thick vertical groove in concrete or blockwork for water bar.	14	LM		
C	50x2mm PVC water bar to approval; set in groove	14	LM		
	<u>Curtain rod</u>				
D	Supply and fix double metal curtain rods from "Challenge Engineering" or other equal and approved comprising of 25mm diameter wrought iron front, 16mm diameter rear rail complete with fixing brackets, curtain holding rings and decorative end stops and all necessary paintwork	9	LM		
	<u>Prime grade wrot mahogany</u>				
E	75 x 25mm window board with one labour.	9	LM		
F	25mm quadrant bead	9	LM		
	<u>Painting</u>				
G	Knot prime and stop and apply three coats of gloss oil paint to timber surfaces not exceeding 100mm girth	9	LM		
	<u>Supply and fix standard composite section steel casement windows fabricated in 4 mm thick "Z" and angle sections, 25x4mm flat burglar proof bars from an approved steel manufacturer with brass handles, stays and steel hinges; permanent vents along top full lengths; fixed with lugs built into concrete or blockwork; pointed externally in mastic oil and finished with one coat calcium plumbate primer.</u>				
H	Windows 2000 x 1500mm high (W1)	2	NO		
J	Windows 1800 x 1500mm high (W2)	1	NO		
K	Windows 1000 x 1500mm high (W4)	1	NO		
L	Windows 800 x 1000mm high (W5)	6	NO		
M	Windows 500 x 2100mm high (W7)	1	NO		
N	Windows 1600 x 1500mm high (W8)	1	NO		
	Carried to Collections				

PROPOSED FISH STORAGE FACILITY AT UHURU
BUSINESS CENTRE, KISUMU COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>Prepare and apply one coat touch up primer, one undercoat and two finishing coats of approved premium quality oil paint on metal surfaces.</u>				
A	Window surfaces (measured on both sides)	37	SM		
	<u>Approved clear sheet glass</u>				
B	5mm glass and glazing to metal with aluminium glazing beads and tack-on rubber wash leather in panes not exceeding 0.1 square meter	14	SM		
	<u>Approved obscure sheet glass</u>				
C	5mm glass and glazing to metal with aluminium glazing beads and tack-on rubber wash leather in panes not exceeding 0.1 square meter	5	SM		
	<i>Carried to collection below</i>				
	<u>COLLECTION</u>				
	Brought Forward from Page No. F		13		
	Brought Down from				
	<u>TOTAL FOR ELEMENT NO. 9</u>				
	<u>WINDOWS</u>				
	<i>CARRIED TO SUMMARY</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<p><u>ELEMENT NO. 10</u></p> <p><u>DOORS</u></p> <p><u>Galvanised mild steel doors</u></p> <p><u>Standard doors complete with hinges, lock, bolts etc. assembled, once shop primed and fixed to opening including cutting and pinning lugs to concrete or blockwork surround and bedding frame in cement and sand (1:4) mortar (Glazing excluded)</u></p> <p><u>Mild steel doors comprising 40x25x3mm hollow (RHS) section stiles, bottom and top rails and intermediate rails and stiles, ends welded and angles cut, mitred and welded and both sides covered with 16 gauge sheet welded to framing ; 600mm high and the rest left opening for glazing; all welding ground to smooth finish;</u></p> <p>A Mild steel double leaf door comprising of 2No. Equal openable leafs size 1200x2100mm; 2400x300mm high Fanlight in 4mm thick clear glass (m.s); overall size 2400 x 2400mm high (DO5)</p> <p>B Ditto size 1500 x 2400mm high comprising of 2No. Equal openable leafs size 750x2100mm; 1500x300mm high Fanlight in 4mm thick clear glass (m.s) (DO2)</p> <p>C Ditto but single leaf size 1200 x 2400mm high comprising of 1No. openable leaf size 1200x2100mm; 1200x300mm high Fanlight in 4mm thick clear glass (m.s) (DO3)</p> <p>D Ditto but single leaf size 1100 x 2400mm high comprising of 1No. openable leaf size 1100x2100mm; 1100x300mm high Fanlight in 4mm thick clear glass (m.s) (DO3)</p> <p>E Ditto leaf size 900 x 2400mm high comprising of 1No. openable leaf size 900x2100mm; 900x300mm high Fanlight in 4mm thick clear glass (m.s) (DOO2)</p> <p><u>Roller shutter doors</u></p> <p>F Roller shutter door overall size 3000 x 2100 mm high complete with all accessories</p> <p><u>Flush doors</u></p> <p>G 45mm thick solid core flush door overall size 900x2100mm high faced with quality mahogany veneer on both sides and hardwood beaded all round (DO2)</p>				
	Carried to Collection				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>Flush doors cont'd</u>				
A	45mm thick semi-solid core flush door overall size 800x2400mm high with 800x300mm fan lights at top left open for glazing fixed with mahogany beads; faced with quality mahogany veneer on both sides and hardwood beaded all round (DO1)	4	NO		
B	45mm thick semi-solid core flush door overall size 1000x2400mm high with 1000x300mm fan lights at top left open for glazing fixed with mahogany beads; faced with quality mahogany veneer on both sides and hardwood beaded all round (DO1-PWDs)	1	NO		
	<u>Wrot mahogany backs primed before fixing in aluminium wood primer:</u>				
C	150 x 50 mm frame primed back once rebated	36	LM		
D	Ditto transome	7	LM		
E	100 x 50 mm frame primed back once rebated	28	LM		
F	Ditto transome	4	LM		
G	45 x 25 mm architrave with one labour	64	LM		
H	25mm quadrant	64	LM		
	<u>Ironmongery as per Union Catalogue</u>				
J	Five-lever steel door lock with lever furniture approval	8	NO		
K	Three-lever cylinder door lock with satin anodized aluminium (SAA) set lever furniture to the Architect's approval	7	NO		
L	Two lever bathroom lock set with aluminium lever handles	5	NO		
M	38mm rubber door stop fixed with rawl bolt	23	NO		
N	100mm pressed brass butt hinges	18	Prs		
P	Overhead door closer; cat. No. 8823	13	NO		
Q	Aluminium coat hooks	5	NO		
R	Aluminium kick plate size 800 x 300mm	4	NO		
S	Aluminium kick plate size 1000 x 300mm	1	NO		
	<u>Carried to Collection</u>				

PROPOSED FISH STORAGE FACILITY AT UHURU
BUSINESS CENTRE, KISUMU COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>Prepare and apply two undercoats stainer and two finishing coats of</u>				
A	Timber door general surfaces	44	SM		
B	Ditto 200 to 300mm girth.	36	LM		
C	Ditto 100 to 200mm girth.	28	LM		
D	Ditto; not exceeding 100mm girth	128	LM		
	<u>Touch up primer and apply one undercoat and two finishing coats of 1st quality oil paint to:-</u>				
E	General surfaces of metal doors	53	SM		
	<u>Glazing</u>				
F	5mm thick clear sheet glass in panes not exceeding 0.5 sm.	10	SM		
G	20 x 20mm wrot mahogany glazing bead.	11	LM		
	<i>Carried to collection below</i>				
	<u>COLLECTION</u>				
	Brought Forward from Page No. C	15			
	Brought Forward from Page No. C	16			
	Brought Down from Above				
	<u>TOTAL FOR ELEMENT NO. 10</u>				
	<u>DOORS</u>				
	<i>CARRIED TO SUMMARY</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<u>ELEMENT NO. 11</u> <u>BALUSTRADING</u> <u>Balustrading; purpose made; all welded; mild steel; comprising 50mm external diameter x 2mm thick (CHS) hand rail; 25x25mm (SHS) mid rails with 10x10mm infills to pattern; balusters comprising 25x25mm SHS; with one end cranked and built into reinforced concrete (m/s) at 845mm centers; 25x25mm (SHS) infills with both ends welded to mid rails at 140 mm centers; all as per architect's detail in:-</u>				
A	Entrance ramp railing; overall 900mm high	10	LM		
	<u>Touch up primer and apply one undercoat and two finishing coats of 1st quality oil paint to:-</u>				
B	General surfaces of balustrding (b.s.m)	18	SM		
	<u>TOTAL FOR ELEMENT NO. 11</u> <u>BALUSTRADING</u> <u>CARRIED TO SUMMARY</u>				

**PROPOSED FISH STORAGE FACILITY AT UHURU
BUSINESS CENTRE, KISUMU COUNTY**

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CIVIL WORKS

PROPOSED CONSTRUCTION OF FISH STORAGE FACILITY AT UHURU BUSINESS CENTRE, KISUMU
CIVIL WORKS

BILL NO 1: FOUL WATER DRAINAGE

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (KSH)
	<u>Excavations</u>				
1.01	Excavate trench for 160mm diameter pipe and bed under, not exceeding 1.50m deep from ground level average depth 1.0m	CM	22		
1.02	Ditto but excavation in concrete slab (Provisional)	CM	10		
	<u>PIPE WORK</u>				
1.03	Provide, lay and joint 160mm diameter UPVC pipe (Class 41 Golden brown) including 100mm approved material bedding and 150mm surround to detail (50) 5310 'F'.	LM	30		
	<u>MANHOLES</u>				
	<u>The following in Manholes complete with:-</u>				
	Construct rectangular manholes with concrete (1:3:6) to base and bedding,(1:2:4) to cover slabs including screeding, 190mm thick solid concrete block walling plastered to the inside with water proofing cement, medium duty CI manhole covers and frames, malleable step irons; including excavations of pits, parts return fill and ram and part cart away, All necessary formwork.				
1.04	Manhole type 'B' 1000mm deep from invert level.	NO	2		
1.05	Ditto type 'C' 1.5m deep	NO	2		
1.06	Allow for connection of sewer to existing manhole	ITEM	1		
	TOTAL CARRIED TO SUMMARY PAGE				

PROPOSED CONSTRUCTION OF FISH STORAGE FACILITY AT UHURU BUSINESS CENTRE, KISUMU
CIVIL WORKS

BILL NO 2: STORM WATER DRAINAGE

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (KSH)
	<u>OPEN STORM WATER DRAINAGE</u>				
	<u>INVERT BLOCK DRAIN</u>				
2.01	Excavate trench for 600x270mm external dim. pcc IBD n.e. 1.0m (av. depth 0.6m) incl. trimming sides to slopes and disposal of excess material to detail (50) 5329B.	CM	30		
2.02	Ditto but not exceeding 1.5m, (av. depth 1.0m) ditto to detail (50) 5329 'B'.	CM	30		
2.03	Extra over all excavations for excavating in concrete.	CM	10		
2.04	Return fill and ram selected materials	CM	25		
2.05	Load and cart away surplus excavated materials.	CM	30		
2.06	Provide, lay and compact 100mm approved murram bed and on sloping sides for the invert block drain width to detail (50) 5329 'B'.	SM	45		
2.07	Provide, lay and joint 600x270mm external dimensions pcc IBD to detail (50) 5329 'B'.	LM	75		
2.08	Extra over for 1x1 side slabs to detail.	LM	25		
2.09	Ditto but 2x2 side slabs ditto.	LM	25		
	Allow for connection to existing storm water drain	ITEM	1		
	<u>Paving around the Building</u>				
2.1	Level the area around the building to receive paving slabs	SM	123		
2.11	Provide, place and compact 100mm thick murram to make up levels round the building.	SM	123		
2.12	Provide and place 50mm thick quarry dust as blinding for laying paving slabs.	SM	123		
2.13	Provide, lay and joint 600x600x50mm pcc paving slabs.	SM	123		
	TOTAL CARRIED TO COLLECTION				

PROPOSED CONSTRUCTION OF FISH STORAGE FACILITY AT UHURU BUSINESS CENTRE, KISUMU
CIVIL WORKS

BILL NO 3: ACCESS ROAD

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (KSH)
	<u>ROAD WORKS</u>				
3.01	Demolition of existing road krebs to create access	ITEM	1		
3.02	Excavate for driveway , parking and drainage areas to formation level ,average depth 0.95m	CM	50		
3.03	Load and cart away surplus excavated materials.	CM	50		
3.04	Provide, lay and compact approved filling materials in layers not exceeding 150mm to make up levels to formation level, average fill , 0.5m	CM	25		
3.05	Trim and compact formation to correct levels, cross-falls, and longitudinal falls	SM	50		
3.06	Provide, lay and compact approved gravel material (CBR >30) 150mm thick as road sub-base to 98% BS.	CM	15		
3.07	Apply approved herbicide to the trimmed surfaces.	SM	50		
3.08	Provide, lay and compact 200mm thick handpacked stones as road	CM	10		
3.09	Provide and lay 50mm thick quarry dust as blinding to receive	SM	50		
3.1	Provide, lay and compact 80mm thick heavy duty interlocking paving blocks min strength 49N/mm2	SM	50		
3.11	Prepare and pour 225x100mm and 350x100mm concrete class 15, mix 1:3:6 to excavated place as bedding and haunching respectively for the kerb stone.	CM	1		
3.12	Provide, lay and joint along the edge of the road 125x250mm pre-cast concrete kerb all to detail (50) 5332A.	LM	15		
	TOTAL CARRIED TO COLLECTION				

ITEM	DESCRITPION	UNIT	QTY	RATE	AMOUNT (KSH)
	SUMMARY PAGE				
1	Bill NO. 1 Foul Water Drainage				
2	Bill NO. 2 Storm Water Drainage				
3	Bill NO. 3 Access Road (Road Works)				
4	Provisional Sum of Ksh 100,000 for any additional works				100,000.00
TOTAL CARRIED TO COLLECTION					

MECHANICAL WORKS

PROPOSED FISH MARKET AT UHURU BUSINESS MARKET COMPLEX.

MECHANICAL BILL OF QUANTITIES FOR PHASE I WORKS.

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	INTERNAL PLUMBING <i>Supply, deliver and install PPR or chlorinated polyvinyl chloride (CPVC) pipes, tubing and fittings as described herein and as shown on the drawings. The pipes shall be produced as per SDR 11 and shall meet and may exceed the requirements as of ASTM D 2846, current European standards for CPVC installations and to the Engineers approval. All joints shall be assembled employing solvent cements that meet or exceed the requirements of ASTM F442 and ASTM F441. Rates must allow for all Metal/plastic threaded adaptors where required for the connection of sanitary fixtures, valves, sockets, sliding and fixed joints, support raceways, isolating sheaths, elastic materials, expansion arms and bends, crossovers, couplings, clippings, connectors, joints etc. as required in the running lengths of pipework and also where necessary, for pipe fixing clips, holder bats plugged and screwed for the proper and satisfactory functioning of the system. The pipes will be pressure tested before the plastering of wall commences and as per the manufacturers recommended testing pressures.</i>				
	CPVC Pipework				
A	25mm diameter pipework	40	Lm		
B	32mm diameter pipework	50	Lm		
	Bends				
C	25mm diameter bend	8	No.		
D	32mm diameter bend	4	No.		
	Tees				
E	25mm diameter equal tee	8	No.		
F	32mm diameter equal tee	4	No.		
	Reducers				
G	25 x 20mm diameter reducer	12	No.		
H	32 x 25mm diameter reducer	8	No.		
	Valves				
I	25mm gate valve	2	No.		
J	32mm gate valve	4	No.		
	Unions				
K	20mm diameter pipe unions	6	No.		
L	25mm diameter pipe unions	8	No.		
M	32mm diameter pipe unions	4	No.		
	Adaptor / Brass Female Threaded				
N	20mm brass threaded male adapter	8	No.		
O	20mm brass threaded female adapter	6	No.		
P	25mm brass threaded male adapter	6	No.		
Q	32mm brass threaded male adapter	2	No.		
	Flexible Tubing + Angle Valve				
R	15mm diameter x 450mm long flexible connectors complete with integral chrome plated angle valve. To be as Cobra or equal and approved.	10	No.		
	Pipe Across Road				
U	Allo for connecting pipe across a cabro-block road with a span of 12m. The road has to be cut and a 32mm GI pipe installed to deliver water to the site.	12	Lm		
Total carried forward to Page 2					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	Total brought forward from Page 1				
	<u>FOUL WATER DRAINAGE</u>				
	<i>Supply and fix uPVC soil system to BS 4660 and BS 4515 and MuPVC waste systems to BS 5255 with screwed and socketed joints to BS 21. Solvent welded joints shall be as per the system's manufacturer's written instructions. Tenderers must allow in their pipework prices for all the couplings, clippings, connectors, joints etc. for the proper and satisfactory functioning of the system.</i>				
	<u>MuPVC and uPVC Waste and Soil pipework</u>				
A	150mm diameter heavy gauge golden brown UPVC pipe	68	Lm		
B	100mm diameter heavy gauge golden brown UPVC pipe	24	Lm		
C	100mm diameter heavy gauge grey mUPVC pipe	24	Lm		
D	50mm ditto	12	Lm		
E	40mm ditto	12	Lm		
F	32mm ditto	12	Lm		
	<u>Bends</u>				
G	100mm diameter long radius bend	4	No.		
H	100mm diameter sweep bend	4	No.		
I	50mm ditto	4	No.		
J	40mm ditto	8	No.		
K	32mm ditto	8	No.		
	<u>Tees</u>				
L	50mm diameter sweep tee	6	No.		
M	40mm ditto	4	No.		
N	32mm ditto	2	No.		
	<u>Access Caps</u>				
O	50mm diameter access cap	4	No.		
P	40mm ditto	4	No.		
Q	32mm ditto	2	No.		
	<u>WC Connectors</u>				
R	100mm diameter WC connector	4	No.		
	<u>Reducers</u>				
S	50 x 32mm diameter reducer	6	No.		
T	50 x 40mm ditto	4	No.		
U	40 x 32mm ditto	4	No.		
	<u>Floor Traps</u>				
V	Four-way floor trap with 50mm diameter outlet and 100mm cover grating	4	No.		
	<u>Gully Traps</u>				
W	Standard 300 x 300 x 450mm masonry gully trap complete with 125mm thick reinforced concrete cover.	4	No.		
	<u>Inspection Chamber</u>				
X	Standard 600 x 450 x (600-750)mm inspection chamber complete with heavy duty Cast Iron cover as 'East african Foundry' or approved equivalent.	5	No.		
	<u>Weathering Slates and Vent Cowl</u>				
Y	100mm diameter weathering slate and apron.	4	No.		
Z	100mm diameter vent cowl	4	No.		
	<u>Excavation</u>				
AA	Excavate trench for 100mm pipe not exceeding 1500mm deep and average 250mm deep, part return in, fill & surplus cart away.	72	Lm		
Total for Mechanical Works for Phase 1 carried forward to Summary Page					

ELECTRICAL WORKS

PROPOSED FISH STORAGE FACILITY AT UHURU BUSINESS CENTRE, KISUMU - KISUMU COUNTY

ELECTRICAL INSTALLATION WORKS

FIRST FIX WORKS ONLY

Item	Description	Qty	Unit	Rate Kshs	Cost Kshs
	SUPPLY, DELIVER, INSTALL, TEST AND COMMISSION THE FOLLOWING:-				
	LIGHTING POINTS AND SWITCHES				
1.01	Conduiting in 20mmØ HG/PVC for Lighting outlet points complete with draw wire and all necessary accessories but excluding cabling and fittings.	43	No.		
	POWER POINTS				
1.02	Conduiting in 25mmØ HG/PVC for power outlet points complete with draw wire and all necessary accessories but excluding cabling and fittings.	14	No.		
1.03	Conduiting in 25mmØ HG/PVC for Fire alarm control panel outlet points complete with draw wire and all necessary accessories but excluding cabling and fittings.	1	No.		
1.04	Conduiting in 25mmØ HG/PVC for Fans outlet points complete with draw wire and all necessary accessories but excluding cabling and fittings.	1	No.		
1.05	Conduiting in 25mmØ HG/PVC for Hand drier outlet points complete with draw wire and all necessary accessories but excluding cabling and fittings.	2	No.		
1.06	Conduiting in 32mmØ HG/PVC for Cooker Unit outlet points complete with draw wire and all necessary accessories but excluding cabling and fittings.	1	No.		
1.07	Conduiting in 32mmØ HG/PVC for TPN Isolator outlet points complete with draw wire and all necessary accessories but excluding cabling and fittings.	5	No.		
1.08	Conduiting in 25mmØ HG/PVC for C.C.T.V & Access control points complete with draw wire and all necessary accessories but excluding cabling and fittings.	10	No.		
1.09	100A, 6-Way, TPN DB surface/flush mounted as EATON or approved equivalent	1	No.		
1.10	300x300x75mm recessed galvanised sheet steel draw boxes compete with powder coated cover and all other necessary accessories	2	No.		
1.11	50mmØ PVC HG conduit for submains cabling	30	LM		
1.12	2x32mmØ PVC HG conduit linking the Draw Boxes	50	LM		
1.13	2x38mmØ PVC HG conduit linking the Draw Boxes	50	LM		
Total Carried Forward to Next Page					

Item	Description	Qty	Unit	Rate Kshs	Cost Kshs
	Sub-Total Brought forward from previous page				
1.15	PMHC-600 x 600 x 600 mm deep manhole with concrete metal cover	2	Item		
1.30	Standard Cable Loop Box (CLB) corrosion and rust proof finishing and painted. to Engineer's approval	3	No.		
1.31	Allow a Provisional Sum of Kshs. Fifty Thousand (50,000.00) only for samples inspection and approvals by the Electrical Engineers at the contractor's yard or warehouse before delivery on site as well as various testing and commissioning of the installed system by the Electrical Engineers	1	Item		
1.32	Standard dual tariff weather proof meter box fabricated from steel sheet 16SWG corrosion and rust proof finishing and painted. complete with meter viewing Perspex windows to Engineer's approval	1	No.		
1.37	Trenching at an average depth of 750 mm laying, tiling with Hatari tiles and back filling of the trenches for the above cable	35	M		
	i) Cable route markers marked DANGER-HATARI to approval	2	No.		
	ii) 100mm uPVC duct at 600mm below ground level across drive ways and concrete areas, c/w necessary accessories to Engineer's approval	10	M		
	FIRE ALARM SYSTEM				
1.38	Conduiting in 20mmØ HG/PVC for Fire Alarm outlet points complete with draw wire and all necessary accessories but excluding cabling and fittings.	43	No.		
1.40	Allow for testing and labelling ALL the conduits under this section including all the incoming and outgoing circuits as per the specifications to Engineer's approval.	1	Item		
1.41	Allow 4 sets of "As installed" drawings	1	Item		
	TOTAL COST FOR ELECTRICAL INSTALLATION WORKS (FIRST FIX ONLY) CARRIED TO MAIN WORKS GRAND SUMMARY PAGE				

TOTAL AMOUNT IN WORDS

.....
.....
.....

TENDERER'S NAME & STAMP

SIGNATURE **DATE**.....

P.I.N No.,..... **V.A.T CERTIFICATE No.**.....

WITNESS..... **ADDRESS**.....

SIGNATURE OF WITNESS..... **DATE**.....

PROVISIONAL SUMS

**PROPOSED FISH STORAGE FACILITY AT UHURU
BUSINESS CENTRE, KISUMU COUNTY**

ITEM	DESCRIPTION	AMOUNT
	<u>BILL NO. 5</u> <u>PROVISIONAL SUMS</u> <u>The following provisional sums are to be measured and priced in accordance with the rates contained in these Bills of Quantities or pro-rata thereto, or remeasured on completion or deducted in whole if not required;</u>	
A	Allow a provisional sum of KSh. One Million (KSh 1,000,000.00) Only for Contingencies	1,000,000.00
	TOTAL FOR PROVISIONAL SUMS CARRIED TO GRAND SUMMARY	

GRAND SUMMARY

**PROPOSED FISH STORAGE FACILITY AT UHURU
BUSINESS CENTRE, KISUMU COUNTY**

	<u>PROPOSED FISH STORAGE FACILITY AT UHURU BUSINESS CENTRE, KISUMU COUNTY</u>			
	<u>GRAND SUMMARY</u>			
ITEM	DESCRIPTION	PAGE	FOR TENDERER USE ONLY	FOR OFFICIAL USE ONLY
			KSHS.	KSHS.
1	PARTICULAR PRELIMINARIES	PP/9		
2	GENERAL PRELIMINARIES	GP/12		
3	BUILDER'S WORKS; STORAGE FACILITY	F 19		
4	CIVIL WORKS	CIV 4		
5	MECHANICAL WORKS	2		
6	ELECTRICAL WORKS	H/9		
7	PROVISIONAL SUMS	PS/1		
	GRAND TOTAL TAKEN TO FORM OF TENDER	KSHS		

Amount in Words; Kenya Shillings

.....**Cents**.....

Tenderer's Name

Tenderer's Signature & Stamp

Address

.....

Date

Witness's Name

Witness's Signature

Address

.....

Date