

BILLS OF QUANTITIES

PROPOSED KISUMU RESIDENCE RENOVATIONS WORKS

FOR

PEACE CORPS KENYA

ARCHITECT

AIA ARCHITECTS LTD

P. O. Box 13310-00100

NAIROBI, KENYA

QUANTITY SURVEYORS

GETSO CONSULTANTS LIMITED,

P.O. BOX 52979 – 00200,

NAIROBI, KENYA

SERVICE ENGINEERS

DITECH ENGINEERING SERVICES

P. O. Box 231-00507

VIWANDANI

STRUCTURAL ENGINEERS

APEX SYSTEMS CONSULTING GROUPS LTD

P. O. Box 38900-00100

NAIROBI, KENYA

SECTION NO. 1

PROPOSED KISUMU PEACE CORPS RESIDENCE RENOVATIONS

PRELIMINARIES

Item	Description	Shs.		
A	<p>THE PROJECT TEAM</p> <p>The “Employer”: Peace Corps Residence P. O. Box 1544 - 40100 NAIROBI</p> <p>The “Architect”: AIA Architects Limited P. O. Box 13310-00100 NAIROBI</p> <p>The "Quantity Surveyor" Getso Consultants Limited P. O. Box 52979 - 00200 NAIROBI</p> <p>The "Mechanical / Electrical Engineer" Ditech Engineering Limited P. O. Box 231-00507 VIWANDANI</p> <p>The "Structural/Civil Engineer" Apex Systems Consulting Groups Limited P. O. Box 38900-00100 NAIROBI</p> <p>The “Contractor”: The person or persons, partnership, firm or company whose tender (offer) for the work is accepted and who consequently enters into a written contract with the Employer to carry out the works.</p>			
TOTAL CARRIED TO COLLECTION				

Item	Description	Shs.		
A	<p>DESCRIPTION OF SITE</p> <p>The site for the works is in Kisumu. During the contract the contractor will be expected to take all necessary measures as directed by the architect to minimize any inconvenience to users of adjacent properties and their customers that may arise from the carrying out of the contract. It is a mandatory requirement that the tenderer visits the site before pricing the bills of quantities. Prior arrangements for the site visit shall be made by the client</p>			
B	<p>ACCESS TO SITE</p> <p>Access to site is through the designated entrances by the Client. No other entrance will be used by the Contractor unless expressly permitted by the Employer at his own discretion. The Contractor must allow for keeping clean at all times the existing access to the site.</p>			
C	<p>DRAWINGS</p> <p>The Contractor will be deemed to have examined the drawings before tendering and to have satisfied himself regarding their details and regarding the nature and extent of the works and the method of construction involved. No claims arising out of misapprehension in these respects will be allowed. Drawings may be seen by appointment at the offices of the Architect during normal working hours. The works are to be executed in accordance with the drawings referred to in the "List of Contract Drawings" contained in Appendix 'A' to these Bills of Quantities together with any drawings which may be supplied in amplification or amendment thereof.</p>			
D	<p>DESCRIPTION OF WORK AND SCOPE OF CONTRACT.</p> <p>The scope of the works in this contract involve renovations to completion of Main offices, Medical facility , Sick Bay and Gazebo in the designated space provided by the client. The works shall</p> <ul style="list-style-type: none"> • Builders works • Electrical Installations • Air conditioning Installations • Plumbing and Drainage Installations • Foul and Storm Drainage • Generator Installations <p>The standards of workmanship and materials used are expected to be of the highest levels achievable to be commensurate with the best standards in the building industry in Kenya.</p>			
TOTAL CARRIED TO COLLECTION				



Item	Description	Shs.		
A	<p><i>Description of work and scope of contract contd.</i> The Employer shall have the right under this contract to hire others to carry out work falling under the contract if the contractor fails to achieve the required standards of materials and workmanship.</p> <p>FORM OF CONTRACT The parties shall enter into a contract which shall be the STANDARD CONTRACT DOCUMENT PROVIDED BY THE CLIENT</p> <p>Contractors are expected to be familiar with the said form of contract. They shall, if necessary, seek clarifications from the Quantity Surveyor on any deletions, additions, or modifications made to the Standard Form as contained herein before they submit their tenders. No claims arising out of any deletion,</p>			
	<p>B CLAUSES OF THE STANDARD FORM OF CONTRACT The Contractor's attention is drawn to the clauses of the Conditions of Contract and deletions, additions and modifications thereto which shall be read as incorporated herein and he shall allow any sums which he considers necessary for the observance of such conditions.</p> <p>a Refer to Peace Corps Standard Contract Definitions</p> <p>b Refer to Peace Corps Standard Contract Interpretations</p> <p>a Refer to Peace Corps Standard Contract Language and Law</p> <p>b Refer to Peace Corps Standard Contract Project Managers Decisions</p> <p>c Refer to Peace Corps Standard Contract Delegation</p>			
TOTAL CARRIED TO COLLECTION				

Item	Description	Shs.		
	<i>Clauses of the Standard Form of Contract (Contd.)</i>			
a	Refer to Peace Corps Standard Contract Communication			
b	Refer to Peace Corps Standard Contract Sub-contracting			
c	Refer to Peace Corps Standard Contract Other Contractors			
d	Refer to Peace Corps Standard Contract Personnel			
e	Refer to Peace Corps Standard Contract Works			
f	Refer to Peace Corps Standard Contract Safety and Temporary Works			
g	Refer to Peace Corps Standard Contract Discoveries			
h	Refer to Peace Corps Standard Contract Work Program			
j	Refer to Peace Corps Standard Contract Possesion of Site			
k	Refer to Peace Corps Standard Contract Access to Site			
l	Refer to Peace Corps Standard Contract Instructions			
m	Refer to Peace Corps Standard Contract Extension or Acceleration of Completion Date			
n	Refer to Peace Corps Standard Contract Management Meetings			
TOTAL CARRIED TO COLLECTION				

Item	Description	Shs.		
	<i>Clauses of the Standard Form of Contract (Contd.)</i>			
a	Refer to Peace Corps Standard Contract Early Warnings			
b	Refer to Peace Corps Standard Contract Defects			
c	Refer to Peace Corps Standard Contract Bills of Quantities			
d	Refer to Peace Corps Standard Contract Variations			
e	Refer to Peace Corps Standard Contract Payment Certificates, Currency of Payments and Advance Payments Refer to Peace Corps Standard Contract			
f	Refer to Peace Corps Standard Contract Compensation Event Refer to Peace Corps Standard Contract			
g	Refer to Peace Corps Standard Contract Price Adjustment Refer to Peace Corps Standard Contract			
h	Refer to Peace Corps Standard Contract Retention			
j	Refer to Peace Corps Standard Contract Liquidated Damages			
k	Refer to Peace Corps Standard Contract Securities			
l	Refer to Peace Corps Standard Contract Day Works			
m	Refer to Peace Corps Standard Contract Liability and Insurance Refer to Peace Corps Standard Contract			
TOTAL CARRIED TO COLLECTION				

Item	Description	Shs.		
	<i>Clauses of the Standard Form of Contract (Contd.)</i>			
a	Refer to Peace Corps Standard Contract			
	Competition and Takeover			
b	Refer to Peace Corps Standard Contract			
	Fina Account			
c	Refer to Peace Corps Standard Contract			
	Termination			
d	Refer to Peace Corps Standard Contract			
	Payment upon Termination			
e	Refer to Peace Corps Standard Contract			
	Release of Performance Bond			
f	Refer to Peace Corps Standard Contract			
	Corrupt Gifts and Payment of Commissions			
g	Refer to Peace Corps Standard Contract			
	Settlement of Disputes			
A	SUFFICIENCY OF TENDER			
	<p>The contractor shall be deemed to have satisfied himself before tendering to the correctness and sufficiency of his Tender for the works and of rates and prices stated in the priced Bills of quantities, which rates and prices shall cover all his obligations under the contract and all matters and means necessary for the proper completion and maintenance of the Works. The rates and prices shall not be changed whatsoever after tender opening.</p>			
		TOTAL CARRIED TO COLLECTION		

Item	Description	Shs.		
A	<p>SAMPLES</p> <p>The Contractor shall furnish at the earliest possible opportunity before the relevant section of the work commences and at his cost, any samples of materials or workmanship that may be called for by the Architect for his approval and any further samples in the case of rejection until they are approved. Such samples, when approved, shall be the minimum standard for the work to which they apply.</p>			
B	<p>EXISTING SERVICES</p> <p>Prior to commencement of any work the contractor shall ascertain from the relevant authorities and from a keen observation of the building, the exact positions, depths and levels of all existing electric cables, water pipes and other services in the building and shall make whatever provisions may be necessary and those that may be required by the authorities concerned for the support and protection of such services. Any damage or disturbance caused to any service/installation shall be reported immediately to the Architect, the Employer and the relevant authority and shall be made good to their satisfaction at the Contractor's expense.</p> <p>In addition to the above requirement, the Contractor is required to program any disconnection and reconnection of services in search a manner that it shall not in any way affect the continuity of the operations of the buildings.</p>			
C	<p>MATERIALS, TOOLS, PLANT AND SCAFFOLDING</p> <p>The Contractor shall be responsible for the provision of all materials, scaffolding, tools, plant, transport and workmen required for the works except insofar as may be stated otherwise herein.</p> <p>All materials and workmanship used in the execution of the works shall be of the best quality and description. Any materials condemned by the Architect shall immediately be removed from the site at the Contractor's cost.</p> <p>All plant, tools and scaffolding shall comply with all regulations whether general or local which are in force throughout the period of the contract and shall be altered or adapted during the contract as may be necessary to comply with any amendments in or</p>			
D	<p>LOCAL REGULATIONS AND BY-LAWS</p> <p>The contractor is to comply with all regulations and by-laws of the Nairobi County Government including serving of notices and paying of fees where applicable.</p>			
TOTAL CARRIED TO COLLECTION				



Item	Description	Shs.		
A	<p>SUPERVISION The works shall be executed under the direction and to the entire satisfaction of the Architect who shall, at all times, have access to</p>			
B	<p>TRANSPORT TO AND FROM THE SITE The Contractor shall allow in his rates and prices for the transport of materials, workmen etc., to and from the site for the proposed works, at such hours and by such routes and means as are permitted by the authorities.</p>			
C	<p>FAIR WAGES The Contractor shall pay rates and wages and observe hours and conditions of labour not less favourable than the minimum rates of remuneration and minimum conditions of employment applicable within the jurisdiction of the Local Authority as stipulated by the</p> <p>The Contractor shall comply with the Regulation of Wages and Conditions of Employment Act, Building and Construction Industry</p> <p>Should a claim be made to the Employer alleging the Contractor's default in payment of Fair Wages of any Workman employed on the Contract and if proof thereof satisfactory to the Employer is furnished by the Labour Department, the Employer may, failing payment by the Contractor, pay the claim out of any money due or which may become due to the Contractor under the Contract.</p> <p>The Contractor shall furnish to the Architect if called upon to do so such particulars of the rates of wages, hours and conditions of labour referred to above.</p>			
D	<p>SECURITY OF THE WORKS The Contractor shall be entirely responsible for the security of the works, materials, plant, and personnel.</p>			
E	<p>PUBLIC AND PRIVATE ROADS, PAVEMENTS ETC. The Contractor shall make good at his own expense any damage he may cause to public and / or private roads and pavements in the course of executing this contract.</p>			
F	<p>POLICE REGULATIONS The Contractor shall comply with all instructions and regulations of the police Authorities and shall pay any fines and costs arising from non-compliance of the same which may arise in the course</p>			
TOTAL CARRIED TO COLLECTION				

Item	Description	Shs.		
A	<p>SPACE TO BE OCCUPIED BY THE CONTRACTOR</p> <p>The Contractor shall not occupy any space in the building other than the one he will be directly working on. The Contractor may use the open area within the Client's premises for his storage requirements. The architect will give directions to the contractor on which part of the open space he is allowed to use. The Contractor shall construct proper storage facilities for his materials and the salvage materials and remove them and make good at the end of the contract. The security of the works and the materials stored on site will be the responsibility of the contractor.</p>			
B	<p>PROGRESS SCHEDULE</p> <p>Immediately after signing the contract, the Contractor is to prepare a Time and Progress Chart showing the time and order in which he proposes to carry out the works within the total construction time stated in the contract. The chart shall show in detail the order in which each section, element or activity of the works is to be carried out.</p> <p>At the end of each week the Contractor shall mark on the chart in a different colour the actual time taken to complete the respective stages and sections of the work. The Contractor shall also show upon the chart or on a different sheet to be made available to the Architect and the Employer the anticipated weekly labour strength required (divided into labourers and craftsmen) and shall similarly</p> <p>The Contractor shall obtain the Architect's approval of the chart and then shall supply copies to the Architect, the Quantity Surveyor, the Engineer and the Employer, and he shall pin one copy upon the site where directed. He shall thereafter adhere strictly to the approved schedule. In the event of the work falling behind the approved programme for any reason whatsoever, the Contractor shall, within a week of the deviation becoming apparent, prepare a revised schedule showing how lost time</p> <p>Upon commencement of the works, the contractor shall be required, in addition to other requirements on the recording of progress contained herein, to compile and submit to the Architect and the Employer Site Weekly reports upon which shall be recorded daily activities on site including the labour and machinery (if any) on site, deliveries of materials on site and the</p>			
TOTAL CARRIED TO COLLECTION				

Item	Description	Shs.		
A	<p>OVERTIME The Contractor is required to execute the work with speed and dispatch to take as short a time on the project as possible. The Contractor may arrange overtime working with the Employer to achieve this. Any overtime payments should be allowed for in the rates and prices. No extra payment beyond the Contract Sum shall be allowed in connection thereto.</p>			
B	<p>WATER FOR THE WORKS The Contractor shall provide all water required for the works at his own cost.</p>			
C	<p>LIGHTING AND POWER The Contractor shall provide all temporary power as may be necessary from his own sources and at his own cost for the purpose of the works. He shall also pay all fees and costs and shall obtain all permits in connection therewith.</p>			
D	<p>SANITATION OF THE WORKS The Contractor shall make his own arrangements for sanitary conveniences for his workmen. Any arrangements so made shall be in conformity with the Public Health requirements for such facilities. He shall be solely liable for any infringement of the requirements.</p>			
E	<p>PROTECTING AND CLEANING THE WORK The Contractor shall cover up and protect all finished work liable to damage including provision of temporary roofs, gutters, drains, etc., as necessary until the completion of the works.</p> <p>In the event of any damage occurring to the works, materials, sewers, drains, gullies, paths or other works on the site in temporary possession of the contractor for the purpose of this Contract, either from the weather, want of proper protection, defects or insufficiency of the works or any other cause whatsoever during the progress of the works, the Contractor alone shall be responsible and shall, without extra charge, make</p>			
F	<p>PREVENTION OF NUISANCE The Contractor shall take all possible precautions to prevent any nuisance, inconvenience or injury to the occupiers/users of the building generally; users of the adjacent and neighbouring properties, and to the public, and shall use proper precautions to ensure the safety of all wheeled traffic and pedestrians.</p>			
TOTAL CARRIED TO COLLECTION				

Item	Description	Shs.		
	<p>All work operations which may produce undue levels of noise, dust, vibration, welding flashes or any other discomfort to the occupiers of the neighbouring buildings or the general public must be undertaken at suitable times which shall be determined in close liaison with the Architect and the Employer.</p> <p>A PREVENTION OF NOISE In addition to the above provision on nuisance, the Contractor shall keep the general noise emanating from the site operations at all times to a level that does not cause discomfort to the average person. He shall take all necessary measures to muffle the noise from his tools, equipment and workmen to the</p> <p>B REMOVAL OF PLANT, RUBBISH, ETC. The Contractor shall, upon completion of the Works, remove and clear away all plant, rubbish, cans and unused materials, and shall leave the building and generally the whole of the site of the works in a clean and tidy state to the satisfaction of the Architect and the Employer. During site operations, he shall also remove from the site all rubbish and dirt as it is produced to maintain the</p> <p>C TRAINING LEVY The Contractor's attention is drawn to Legal Notice No. 237 of October 1971, which requires payment by the Contractor of a Training levy on all contracts of more than Shs. 50,000.00 in value and he should allow in this section of these Bills of Quantities for all costs arising or resulting therefrom.</p> <p>C LABOUR AND PLANT RETURNS The Contractor shall deliver to the Architect detailed weekly returns showing the supervisory staff and the numbers of the several classes of labour and plant employed on the Works.</p> <p>D VISITORS BOOK AND SITE DIARY The Contractor shall keep on the site a visitors book for recording the names of all persons who visit the site for the purpose of the project. He shall also maintain on site a diary in which he shall record site activities on a daily basis and particularly any occurrence which bears on the progress of the works in any way. The visitors' book and the diary shall be surrendered to the Architect at the completion of the project or at any other time that</p>			
	TOTAL CARRIED TO COLLECTION			

Item	Description	Shs.		
A	<p>SAFETY, HEALTH AND WELFARE OF WORKPEOPLE The Contractor shall allow for providing for the safety, health and welfare of workpeople and for complying with any relevant Ordinances, Regulations and Union Agreements.</p>			
B	<p>WARRANTY AND PERFORMANCE STANDARDS The Contractor shall furnish the Employer with a general written warranty covering qualities of workmanship, materials and equipment, and be compelled thereby for a five year period after practical completion of the Contract, except for latent defects which shall be warranted for ten years. The Contractor must make good, at his own expense, such repairs and replacements as may be required as a consequence of negligent workmanship or defective material. The Contractor must also procure such warranties and guarantees as described in the specification section of these Bills of Quantities and relevant Codes of Practice. The Contractor must also comply with all tests of materials as required and/or as directed by the Architect.</p>			
C	<p>NATIONAL INSURANCE AND PENSIONS The Contractor shall allow for making any National Social Security Fund payments due in respect of workpeople.</p>			
TOTAL CARRIED TO COLLECTION				



Item	Description	Shs.		
A	<p>PROTECTION OF WORKS AND PERSONS</p> <p>The Contractor shall allow for the protection of his own and his Sub-Contractor's work liable to damage, including provision of temporary roofs, gutters, drains, etc., if necessary and shall case-up, cover or in other suitable ways protect all finished work liable to injury, to the satisfaction of the Architect until completion of the Contract. From the beginning to the completion of the works, the same shall be under the entire care and control of the Contractor, who shall take all possible precautions to prevent any nuisance, inconvenience or injury to the holders or occupiers of 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.</p> <p>The Contractor shall allow for providing all watching, lighting, barriers, covering open trenches and protection of the works, including Sub-Contract works as may be necessary for the safety of the works and for the protection of the public and his own and Sub-Contractor's employees. In the event of any damage or loss occurring to the works or to materials or to any sewers, gullies, drains, paths, or other works on the site in temporary possession of the Contractor for the purpose of this Contract either from the weather, want of proper protection, defects, theft, insufficiency of the works or any other cause whatsoever during the progress of the works, or for any accident or damage to property or persons by reason of the said works, the Contractor alone shall be responsible and shall without extra charge, make good all damage and pay all costs incurred.</p>			
B	<p>HOLIDAYS AND TRANSPORT FOR WORK PEOPLE</p> <p>The contractor shall allow for providing holidays and transport for workpeople and for complying with any relevant Ordinances, Regulations or Union Agreement.</p>			
C	<p>SITE OFFICES</p> <p>The Contractor must allow for erecting and maintaining on the site in such positions as may be directed, adequate site offices for the use of his own site staff and removing the same at completion and making good all surfaces disturbed. The site office shall be of sufficient size and shall have sufficient furniture to permit the Architect to hold site meetings in it.</p>			
TOTAL CARRIED TO COLLECTION				

Item	Description	Shs.		
	<p>The Contractor shall also allow for providing the services of a sweeper, for keeping both office and closet in a clean and sanitary condition from the commencement to the completion of the works; and for dismantling at completion and making good all disturbed surfaces.</p> <p>A TELEPHONE The Contractor shall arrange for a working telephone facility to be permanently on site. The Contractor shall pay all charges for hire or purchase of equipment, licences connecting, rental and calls made.</p> <p>B SHEDS FOR STORAGE OF MATERIALS The Contractor shall provide, erect and maintain on the site, in such positions as may be directed, ample temporary watertight, lock-up sheds for the proper storage and protection of cement and other materials liable to damage, and shall remove same at completion and make good all surfaces disturbed. He shall also provide space for storage accommodation which Sub-Contractors may wish to erect for themselves.</p> <p>C NO WORKMEN TO BE HOUSED ON SITE No labour with the exception of a watchman may be housed on the site. The cost of transporting labour to and from the site or elsewhere will be deemed to included in the tender.</p> <p>D WORK TO BE OPENED UP AT THE REQUEST OF THE ARCHITECT The Contractor shall, at the request of the Architect open for inspection any work covered up, and, should the Contractor refuse or neglect to comply with such request, the Architect may employ workmen other than those employed by the Contractor to open up the same. If the said work has been covered up in contravention of the Architect's instructions, or if, on being opened up, it be found not in accordance with the drawings or Bills of Quantities or the instruction of the Architect, the expenses of opening and covering it up again whether done by the Contractor or by the Architect shall be borne by and be recoverable from the Contractor or may be deducted from any monies due to the Contractor.</p>			
TOTAL CARRIED TO COLLECTION				

Item	Description	Shs.		
A	<p>If the work has not been covered up in contravention of such instructions and be found in accordance with the said drawings and Bills of Quantities, then the expenses aforesaid shall be borne by the Employer, and be added to the Contract Sum; provided always that, in the case of foundations or of any other urgent work so opened up and requiring immediate attention, the Architect shall within a reasonable time after the work has been opened, make or cause to be made the inspection thereof, and at the expiration of such time, if such inspection shall not have been made the Contractor may cover up the same and shall not be required to open it up again for inspection except at the expense of the Employer.</p> <p>HOARDING</p> <p>The Contractor may be required by the architect or by the local bylaws to enhance the seclusion of the works by providing hoarding as necessary. The exact location of the hoarding is to be negotiated with the Local Authority by the Contractor who will also be responsible for paying any fees or taxes in respect of the hoarding, fencing and gates.</p> <p><i>Allow a provision for Hoarding in 2800 mm high single layer painted blockboard on 50 x 50 mm timber stud bearers at 600 mm centres both ways @ 200 Linear Metres</i></p> <p>The Contractor shall allow for thoroughly maintaining the hoarding and gates throughout the Contract and clearing away and making good disturbed ground on completion. All materials arising will remain the property of the Contractor and he should allow credit against this accordingly.</p>			
B	<p>SCAFFOLDING</p> <p>The Contractor shall allow for providing, erecting and dismantling all general scaffolding required for the works. The Contractor must allow here or in his rates for providing all special scaffolding required by his Sub-Contractors, other than Nominated Sub-Contractors carrying out works for which P.C. Sums are included in these Bills. Where the Contractor is required to provide special scaffolding for these latter Sub-Contractors, an item is included for pricing under the relevant P.C. Sum.</p>			
TOTAL CARRIED TO COLLECTION				

Item	Description	Shs.		
A	<p>SIGNBOARD</p> <p>The Contractor must allow for providing, erecting and maintaining a site signboard, the size, type of construction and lettering of which shall be to the Architect's design. The names of the Consultants are to be in lettering 50mm high. The board is to be fixed in an elevated position on the site where indicated by the Architect. On completion of the works, the notice board shall be removed and making good shall be carried out as necessary.</p>			
B	<p>WORKS TO BE DELIVERED UP CLEAN</p> <p>On completion of the Contract, the site and the works shall be cleared of all plant, scaffolding, rubbish and unused materials and shall be delivered up clean and in perfect condition in every respect to the satisfaction of the Architect. Particular attention is to be paid to leaving all windows and floors clean and removing all paint and cement stains.</p>			
C	<p>APPROVED SUBCONTRACTORS</p> <p>Where in these Bills of Quantities work is described to be executed by an approved Sub-Contractor, the firms appointed will be treated as Sub-Contractors employed by the Contractor and not as Nominated Sub-Contractors. The unit prices for such work must, therefore, include not only the Sub-Contractors' charges, but also the Contractor's overheads, profits and attendance. Such firms shall be classified on the Ministry of Works lists as suitable to undertake class "D" works and above.</p>			
D	<p>APPROVAL FOR EMPLOYMENT OF SUB-CONTRACTORS</p> <p>The Contractor will be required to obtain the approval of the Architect/Engineer in writing before employing any of his own (i.e. not nominated) Sub-Contractors for any portion of the work.</p>			
E	<p>EXISTING PROPERTY</p> <p>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 all damage arising from the execution of this Contract to the aforementioned, and he shall make good all such damage where directed at his own expense to the satisfaction of the Architect.</p>			
F	<p>TESTING</p> <p>Allow for all expenses in connection with the testing of materials as specified hereunder including the supply and preparation of materials to be tested, the cost of materials and their packing and conveyance to the nearest approved testing laboratory, laboratory charges, etc.</p>			
TOTAL CARRIED TO COLLECTION				

Item	Description	Shs.		
A	<p>WORK RE-MEASUREMENT</p> <p>All work in this contract shall be re-measured on completion and a final account of the contract prepared by the Quantity Surveyor. The contractor will be given the opportunity to be present for all re-measurements. The final contract sum will be based on the final re-measurements. The Contractor is therefore cautioned against using the bills of quantities for ordering of materials as the quantities may change in the course of the contract. Neither should the contractor use the Quantities in the Bills of Quantities for executing work on site. The use of the bills of quantities by the contractor for the above purposes shall be at the contractors own risk and no claims arising from any losses arising therefrom shall be accepted.</p>			
B	<p>DIRECT CONTRACTS</p> <p>Notwithstanding the foregoing conditions, the Employer 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. Sums shall be allowed.</p>			
C	<p>ADJUSTMENT OF PROVISIONAL SUMS</p> <p>In the final account all provisional sums shall be deducted and the value of the work properly executed in respect of them upon the architect's order added to the contract sum. Such work shall be valued as described for variations in the conditions of contract, but should any part of the work be executed by a nominated subcontractor, the value of such work or articles for the work to be supplied by a nominated sub-contractor, shall be treated as P.C sum and profit and attendance comparable to that contained in the priced bills of quantities for similar items added.</p>			
D	<p>CONTRACT COMPLETION PERIOD</p> <p>The contract completion period in accordance with the conditions of contract must be strictly adhered to. The "Architect" shall strictly monitor the Contractor's progress in relation to the progress chart and should it be found necessary, the "Architect" shall inform the Contractor in writing that his actual performance on site is not satisfactory.</p> <p>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</p>			
TOTAL CARRIED TO COLLECTION				



Item	Description	Shs.		
A	<p>PAYMENTS TO DOMESTIC SUBCONTRACTORS The Main Contractor shall be fully responsible for paying his Domestic Sub-Contractors but the employer reserves the right in very exceptional circumstances to make such payments direct in the interest of the project, where completion thereof might be jeopardised by any dispute between any of the Sub-Contractors involved.</p>			
B	<p>COPYRIGHT The Copyright of these documents is vested in the Quantity Surveyor for the project. This document shall not be reproduced in whole or in part without their written permission. It shall also not be used for any purpose other than for the works as measured and described in these Bills of Quantities for this contract.</p>			
TOTAL CARRIED TO COLLECTION				

Item	Description	Shs.		
<p><u>PROPOSED KISUMU PEACE CORPS RESIDENCE RENOVATIONS</u></p>				
<p>SECTION NO. 1 - PRELIMINARIES SUMMARY</p>				
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<p>TOTAL FOR PRELIMINARIES CARRIED TO MAIN SUMMARY</p>				

Item	Description	Qty	Unit	Credit (Kshs)	Debit (Kshs.)
	<p>BILL NO 01</p> <p><u>PS: The contractor is advised to read both Architectural and Structural drawings during quotation process. The bidder to include in their rates for any change in quantities.</u></p> <p>MAIN BUILDING</p> <p>ELEMENT NO 1: DEMOLITIONS</p> <p>Pricing Notes <u>Tenderers are strongly advised to read and understand the following notes before pricing this section. Any query on the notes should be referred to the Quantity Surveyor</u></p> <p>1 The unit of billing in this section is "item"</p> <p>2 Amounts for demolitions shall include the following in addition to what is described in the particular item:</p> <p>a) Making good i.e. re-instatement of any finishes and structures affected by the demolition work to the original state.</p> <p>b) Clearing debris with speed on a daily basis as they arise, cleaning of affected surfaces, and removal of the debris from site to Kisumu County Government approved dumping sites. Accumulation of debris within the site premises shall not be allowed.</p> <p>3 Demolition work shall be carefully executed with the particular aim of minimizing damage to adjacent finishes, structure, or components.</p> <p>4 The amounts quoted shall be deemed to be inclusive of all handling of the removed items and their removal from site.</p> <p>5 Amounts given should include for adequate temporary support and protection for the remaining elements of the buildings being demolished and to adjacent buildings and services.</p>				
	Carried to collection				

Item	Description	Qty	Unit	Credit (Kshs)	Debit (Kshs.)
1	All materials, components and fittings arising from the demolitions work shall become the property of the Contractor unless the Client specifically requests for them. The tenderer is therefore expected to give realistic credit in the appropriate column for items which have salvage value.				
2	Amount indicated will be adjusted against the approximate quantity shown in the brackets to reflect the actual quantity of demolition work executed.				
	<u>Measured Demolition Works</u>				
A	Carefully hack away existing floor tiles/screed ,cart away arising debris and prepare to receive new finish as directed on site (approximately 604 square metres)				
B	Carefully hack away existing wall tiles, cart away arising debris and prepare to receive new finish (approximately 313 square metres)				
C	Carefully demolish existing ceiling and cart away arisings from site (approximately 88 square metres)				
D	Carefully demolish existing roofing tiles/gci sheets with and including timber/steel trusses, battens and gutters; load and cart away arisings from site (approximately 245 square metres)				
E	Carefully hack away existing floor screed to flat roofs to approximately 32mm thick deep ,cart away arising debris and prepare to receive new finish as directed on site (approximately 64 square metres)				
F	Carefully demolish existing steel casement windows with and including burglar proofing and timber framings and cart away from site as directed (105 square metres)				
G	Carefully demolish existing steel grille doors sizes 5800 x 2700mm high and cart away from site as directed (2No)				
H	Carefully demolish existing external steel doors sizes 1100 x 2400mm high including hinges and iron mongeries; load and cart away from site as directed (2No)				
	Carried to collection				

Item	Description	Qty	Unit	Credit (Kshs)	Debit (Kshs.)
A	Carefully demolish existing timber flush doors sizes 900 x 2100mm high including hinges and iron mongeries; load and cart away from site as directed (2No)				
B	Allow for demolition of Low Level Cabinets, High Level cabinets and wardrobes to bedrooms including store shelvings; Hand over all the arisings to client (Item)				
C	Carefully demolish existing blockboards; load and cart away from site as directed (25 square metre)				
D	Carefully demolish existing plumbing fittings including wash hand basins, showers, WC's and Bathtabs including kitchen sinks and cart away as directed on site (Item)				
E	Allow sum for removal and decommissioning of existing hot water cylinders and keep the cylinders as directed on site (Item)				
	Carried to collection				
	<p>Collection</p> <p>Brought forward from page 1/1</p> <p>Brought forward from page 1/2</p> <p>Brought forward from page 1/3</p>				
	<p>Sub-Total</p> <p>Less Credit</p>				
	TOTAL FOR DEMOLITIONS CARRIED TO SUMMARY				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
ELEMENT NO 2: WALLING AND PARTITIONING WORKS					
Hardline walling					
	<u>Reinforced concrete class 25/20: vibrated: in.</u>				
A	Upstand beam to hardline areas including foamwork	3	Cm		
B	150mm Thick ramp but sloping at 10 degrees	10	Sm		
C	Ditto to landing	3	Sm		
Reinforcement					
	<u>Supply and fix the following square ribbed steel bar reinforcement to BS 4461 and KS 02-22:1976 including cutting, bending, tying, hooking and placing in position:-</u>				
D	Assorted bars	240	Kg		
Masonry walling					
	<u>Concrete block: Solid B.S 2028; type A; 7N per square millimetre; bedded and jointed in cement/sand (1:3) mortar</u>				
E	150mm Thick walling; reinforced with and including 32x2mm thick hoop iron strips every alternate course	50	Sm		
	<u>Gyproc standard drywall partition system consisting of 53 x 32 mm U section galvanized frame spaced at 450mm centres, clad both sides with one layer of 12.5mm tapered edge Rhinoboard with staggered joints between boards in-filled with 50mm thick as 'jumbolene' or other equal and approved acoustic mineral wool insulation (< 12Kg/C.M) to be fitted into cavity and fixed with drywall screws spaced at 220mm centres in accordance with the manufacturer's instructions.</u>				
F	100 mm thick gypsum partition infilled with acoustic mineral wool insulation complete with 12.5mm thick gypsum boards to both sides: tapering to joints to receive skimming and paint (m.s)	75	Sm		
TOTAL FOR WALLING CARRIED TO SUMMARY				Kshs	-

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	ELEMENT NO 03: ROOF				
	ROOF STRUCTURE				
	0.6mm Gauge 22 Saflock roofing sheets as supplied by ' SAFAL Building Systems of phone no. 0738331100 ' or other equal approved similar sheets: structure in Light Gauge Steel members: with and including all jointing and connections as per the Structural Engineer's details: with painted mild steel sheet gauge 18 gutter and down pipes: fascia board, barge boards and eaves all in painted steel including coffee tray and mosquito net under tacked: all to details.				
A	Roof: approximately 3000 mm from ground level	40	Sm		
B	Roof: approximately 6000 mm from ground level	158	Sm		
C	Ditto but approximately 9000mm high from ground	128	Sm		
	Sisalation				
D	Extra over for 10mm Thick Industrial Grade sisalation underlay: Super Polynum	326	Sm		
	Waterproofing				
	Cement and sand (1:4) screed on concrete: in				
E	32 mm thick finishing to receive APP Membrane laid on scrapped exposed slab (m/s)	53	Sm		
	Water Proofing Membrane				
	APP Membrane to weigh 4 kg/sq.mt (or 3 mm thick): stone chipped finish: 100 mm side laps and 150 mm end laps: bonding between layers: with and including bituminous primer and bonding to cement sand screed base (m/s): blow-torch applied: laid to falls				
F	To flat roof	53	Sm		
	Cement and sand (1:4) screed on concrete: in				
G	32 mm thick finishing screed to receive Eurocone tiles (m/s)	53	Sm		
	Carried to collection				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	<p>Supply and fix "Eorocon paving tiles as manufactured by "Kenya Builder's (K) Ltd" or equal and approved manufacturer, laid in approved patterns on prepared backings (m/s), include for matching grouts, spacers etc.</p> <p>300 x 300 x 25mm Thick tiles</p>	53	Sm		
Carried to collection					
<p><u>COLLECTION</u></p> <p>Brought forward from page 1/5</p> <p>Brought forward from page 1/6</p>					
TOTAL FOR ROOFING CARRIED TO SUMMARY				Kshs	

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<p>ELEMENT NO 4: DOORS</p> <p>Contractor is advised to refer to Architects Schedules on doors</p> <p>Mul-T-Lock Security Doors</p> <p>Supply and fix approved security steel door: High security door model 730 as supplied by Mul-T-Lock Multi High Security Systems of Tel. No. 020-574251: to concrete or block work: door fabricated from steel and beech laminated: including frame, fixing lugs, security lock, door closer and all other necessary ironmongery:</p>				
A	1100 x 2100mm high double leaf door: (Entrance/Exit doors)	2	No		
B	900 x 2100mm high single leaf door: (Yard area)	1	No		
	<p>Steel glazed french door:</p> <p>100 x 50 x 3 mm RHS top, bottom rails and stiles: 16mm diameter solid circular sections horizontal and vertical intermediate bars at 200 mm centres horizontally and 200mm centres vertically: on 100 x 50 x 3 mm thick door frame fixed to wall openings with lugs: infilled with 6 mm thick tinted shatter proof glass: one coat prefabrication primer and three finishing coats in first grade super gloss paint; with and including all ironmongery as supplied by "Assa Abloy"</p>				
C	900 x 2100mm high single leaf door: (Safe, Volunteers door & Hardline areas)	4	No		
	<p>Server Room Door</p> <p>50 mm Thick solid core flush door infilled with fire resistant chip board to BS 459: infilled with 3mm thick steel plate and 3mm thick veneer facing to both sides: hardwood lipped edges with and including hardwood frames and iron mongery</p>				
D	Door leaf size 900 x 2400 mm high: on timber beads	1	No		
	Carried to collection				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	<p>Flush doors: B.S. 459</p> <p>950mm x 2100mm high solid particle door as supplied by "64 Door Factory" or other equal and approved: in composite wood door frame and pvc rubber seal: 3mm thick HDF pressed laminate on both sides:with and including ironmongery from "Assa Abloy"; all as per architect's schedule (1st floor offices,ground floor offices & Safe area)</p>	7	No		
	Carried to collection				
	<p><u>COLLECTION</u></p> <p>Brought forward from page 1/7</p> <p>Brought forward from page 1/8 Above</p>				
	TOTAL FOR DOORS CARRIED TO SUMMARY				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<p>ELEMENT NO.5: WINDOWS</p> <p>Contractor is advised to refer to Architects Schedules on Windows</p> <p><u>Powder coated aluminium windows: comprising 75 x 50mm frame all round: with and including 6mm thick laminated shatter proof glass as supplied by ' Hebatulla Brothers or Impala Glass': opening/fixing sections as per the window schedule; glazing beads and neoprene gasket: complete with iron mongery and mosquito gauze: fixing with aluminium screws: plugging or fixing to concrete, stonework or blockwork: sealing with mastic: oiling and adjusting on completion: all as per Architects design</u></p>				
A	Windows of all sizes	105	Sm		
	<p><u>Mild steel grilles: fabricated out of 16mm thick Round bars welded together to form a pattern as per architect's detail: maximum spacing of horizontal bars to be 200 mm centres and vertical bars to be spaced at 200 mm centres maximum: all welded to window framing: all welds ground smooth: one coat pre-fabrication primer and three coats of gloss oil paint: to</u></p>				
B	Windows of all sizes (Ground floor)	50	Sm		
	<p>Polycarbonate window egress</p>				
C	Supply and install window E-Gress as per Architects design and schedule	5	Sm		
	<p>Window Film</p>				
D	Supply and fix one way window filming to all windows as per '3M Tinting' specifications or other equal and approved supplier (Excluding windows at the back)	50	Sm		
	<p>Window Blinds</p>				
E	Supply and fix approved Vertical Blinds to windows as supplied by 'Vitendi Ltd' or other equal and approved suppliers	105	Sm		
TOTAL FOR WINDORS CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	ELEMENT NO 6: FINISHES				
	FLOOR FINISHES				
	Cement and sand (1:4) screed, to hacked floors; in				
A	30mm Thick finishing/levelling screed finished to receive Ceramics tiles (m.s)	65	Sm		
B	30mm Thick finishing/levelling screed finished to receive Porcelain tiles (m.s)	539	Sm		
	<u>450x450x6mm polished ceramic tiles to floors: Allow prime cost rate of Kshs.4000.00 per square metre inclusive of VAT for purchase: Add for transport, wastage, spacers, tile adhesive/ cement/ mortar and fixing :to regular pattern: bedding, grouting in matching cement, jointing and pointing in .:</u>				
C	Floor: fixing with approved quality adhesive	65	Sm		
D	Ditto 100 x 8 mm Thick skirtings	104	Lm		
	<u>600x600x6mm first quality porcelain tiles to floors: Allow prime cost rate of Kshs.5500.00 per square metre inclusive of VAT for purchase: Add for transport, wastage, spacers, tile adhesive/ cement/ mortar and fixing :to regular pattern: bedding, grouting in matching cement, jointing and pointing in .:</u>				
E	Floor: fixing with approved quality adhesive	539	Sm		
F	Ditto 100 x 8 mm Thick skirtings	395	Lm		
	Carried to colletion				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	Wall Finishes				
A	<p>Cement and sand (1:4): to walls: in</p> <p>10 mm Thick backing: to receive ceramic wall tiles</p> <p>300x300x6mm polished ceramic tiles to walls: Allow prime cost rate of Kshs.4000.00 per square metre inclusive of VAT for purchase: Add for transport, wastage, spacers, tile adhesive/ cement/ mortar and fixing :to regular pattern: bedding, grouting in matching cement, jointing and pointing in .:</p>	312	Sm		
B	<p>Wet areas walling</p> <p>Plaster:9mm first coat of cement/lime/putty/sand (1:2:9);3mm second coat of cement/lime putty/sand (1:1:6); steel trowelled;on masonry or concrete; to</p>	312	Sm		
C	<p>New masonry walling to hardline areas (both sides)</p> <p>Prepare surfaces and apply undercoat and two finishing coats silk emulsion paint as "Plascon Kansai" or other equal approved on plastered masonry or concrete surfaces: to</p>	100	Sm		
B	<p>New masonry walling to hardline areas (both sides)</p> <p>RE-DECORATION</p> <p>Rubbing down existing paint: prepare surfaces and apply three coat SILK VINYL paint as " Plascon Kansai" or other equal approved on plastered masonry or concrete surfaces: to</p>	100	Sm		
C	<p>Internal walls including beams and columns</p> <p>Rubbing down existing paint: prepare surfaces and apply 1 coat Plascon Alkali Resistant Primer followd by three coats of Plascon 100% Accrylic outdoor protector emulsion paint ; on plastered masonry or concrete surfaces: to</p>	1050	Sm		
D	External walling and beams	483	Sm		
	Carried to colletion				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
Outside Staircase finishes					
<u>Cement and sand (1:4) screed: on concrete: to</u>					
A	10 mm Thick: to landings: finished to receive ceramics tiles	5	Sm		
B	10 mm Thick: to 250 mm wide treads ditto	11	Lm		
C	20 mm Thick: to 150 mm high risers ditto	12	Lm		
<u>450x450x6mm polished ceramic tiles to floors: Allow prime cost rate of Kshs.4000.00 per square metre inclusive of VAT for purchase: Add for transport, wastage, spacers, tile adhesive/ cement/ mortar and fixing: to regular pattern: bedding, grouting in matching cement, jointing and pointing in :-</u>					
D	Floor: fixing with approved quality adhesive	5	Sm		
E	250mm Wide treads	11	Lm		
F	150mm High risers	12	Lm		
Ceiling Finishes					
Acoustic finishes					
<u>Armstrong "Acoustic " accessible tile system suspended ceilings: 600 x 600 x 15 mm thick fissured mineral fibre tiles: 20 x 7mm x 25 gauge epoxy acrylic protected tee clips at 600 mm centres located by pipped tabs into 38 x 26 mm x gauge 23 epoxy acrylic protected snap tee runners at 1200 mm centres in 3 metre lengths: jointed with 29 x 20 x 170 mm x 20 gauge hot dipped galvanised splice plates with 20 mm x 25 gauge two coat vinyl white painted channel edge trim: fixing with screws to backgrounds requiring plugging:-</u>					
G	Ceiling: over 300 mm wide	480	Sm		
Carried to colletion					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	<p>Gypsum Ceiling</p> <p><u>Gypsum board bulkhead ceiling: on and including steel channels and timber brandering as necessary: skimmed and painted: all to Architect's details</u></p> <p>12 mm thick board to ceiling</p>	206	Sm		
B	<p><u>Prepare surfaces and ROLLER apply undercoat and two finishing coats silk vinyl emulsion paint as " Kansai Plascon" or other equal and approved paint on Gypsum surfaces: to</u></p> <p>general surfaces of ceiling</p>	206	Sm		
	Carried to colletion				
	<p>Collection</p> <p>From page 1/10</p> <p>From page 1/11</p> <p>From page 1/12</p> <p>From page 1/13 Above</p>				
TOTAL FOR FINISHES CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
ELEMENT NO 07; JOINERY FIXTURES					
Cabinets					
A	Supply and fix 3000mm long x 2800mm high x 600mm deep wardrobe units in 18mm thick particle boards with and including 8mm thick dea laminated glass doors with 100 x 50mm thick soft wood frames all round; including drawers and partitions; Aluminium pile with center and end brackets/supports; including all fixing accessories with locks, specified stainless steel hinges and full extension slides and runners all with soft close mechanism as supplied by Kinetic Accessories.	4	No		
B	Supply and fix 2300mm long x 2800mm high x 600mm deep wardrobe units in 18mm thick particle boards with and including 8mm thick dea laminated glass doors with 100 x 50mm thick soft wood frames all round; including drawers and partitions; Aluminium pile with center and end brackets/supports; including all fixing accessories with locks, specified stainless steel hinges and full extension slides and runners all with soft close mechanism as supplied by Kinetic Accessories.	1	No		
C	Ditto but 3200mm Long	1	No		
D	Ditto but 4200mm Long	1	No		
E	Ditto but 4500mm long	1	No		
F	Allow for replacement of locks, handles and painting of existing joinery works in the kitchen and pantry area		Item		
TOTAL FOR JOINERY WORKS CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<u>SUMMARY</u>				
A	ELEMENT NO 01; DEMOLITIONS				
B	ELEMENT NO 02; WALLING & PARTITIONS				
C	ELEMENT NO 03; ROOFING WORKS				
D	ELEMENT NO 04; DOORS				
E	ELEMENT NO 05; WINDOWS				
F	ELEMENT NO 06; FINISHES				
G	ELEMENT NO 07; JOINERY FIXTURES				
	TOTAL BUILDERS WORKS TO MAIN BUILDING CARRIED TO MAIN SUMMARY			KSHS	

Item	Description	Qty	Unit	Credit (Kshs)	Debit (Kshs.)
	<p>BILL NO.02</p> <p>MEDICAL FACILITY AND VOLUNTEERS SEATING AREA</p> <p>ELEMENT NO 1: DEMOLITIONS</p> <p>Pricing Notes PS: The contractor is advised to read both Architectural and Structural drawings during quotation process. The bidder to include in their rates for any change in quantities.</p> <p>1 The unit of billing in this section is "item"</p> <p>2 Amounts for demolitions shall include the following in addition to what is described in the particular item:</p> <p>a) Making good i.e. re-instatement of any finishes and structures affected by the demolition work to the original state.</p> <p>b) Clearing debris with speed on a daily basis as they arise, cleaning of affected surfaces, and removal of the debris from site to Kisumu County Government approved dumping sites. Accumulation of debris within the site premises shall not be allowed.</p> <p>3 Demolition work shall be carefully executed with the particular aim of minimizing damage to adjacent finishes, structure, or components.</p> <p>4 The amounts quoted shall be deemed to be inclusive of all handling of the removed items and their removal from site.</p> <p>5 Amounts given should include for adequate temporary support and protection for the remaining elements of the buildings being demolished and to adjacent buildings and services.</p>				
	Carried to collection				

Item	Description	Qty	Unit	Credit (Kshs)	Debit (Kshs.)
1	All materials, components and fittings arising from the demolitions work shall become the property of the Contractor unless the Client specifically requests for them. The tenderer is therefore expected to give realistic credit in the appropriate column for items which have salvage value.				
2	Amount indicated will be adjusted against the approximate quantity shown in the brackets to reflect the actual quantity of demolition work executed.				
	<u>Measured Demolition Works</u>				
A	Carefully hack away existing floor/screed averagely 32mm deep ,cart away arising debris and prepare to receive new finish as directed on site (approximately 174 square metres)				139,200.00
B	Carefully hack away existing floor tiles, cart away arising debris and prepare to receive new finish (approximately 15 square metres)				
C	Carefully demolish existing roofing sheets with and including timber/steel trusses, battens and gutters; load and cart away arisings from site (approximately 125 square metres)				
D	Carefully hack away existing floor screed to flat roofs to approximately 32mm thick deep ,cart away arising debris and prepare to receive new finish as directed on site (approximately 26 square metres)				
E	Carefully demolish existing steel casement windows with and including burglar proofing and timber framings and cart away from site as directed (12 square metres)				
F	Carefully demolish existing external steel doors sizes 900 x 2400mm high including hinges and iron mongeries; load and cart away from site as directed (2No)				
G	Carefully demolish existing dog kennel and cart away all arisings as directed on site (Item)				
H	Carefully demolish existing masonry walling to create window/ door openings and partitioning walling; load and cart away all arisings as directed on site (45 square metres)				
	Carried to collection				



Item	Description	Qty	Unit	Credit (Kshs)	Debit (Kshs.)
A	Carefully demolish existing concrete slab; load and cart away all arisings as directed on site (10 square metres)				
B	Carefully demolish existing drains and channels and block as directed; load and cart away all arisings as directed on site				
Carried to collection					
<p>Collection</p> <p>Brought forward from page 2/1</p> <p>Brought forward from page 2/2</p> <p>Brought forward from page 2/3 Above</p>					
<p>Sub-Total</p> <p>Less Credit</p>					
TOTAL FOR DEMOLITIONS CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<u>ELEMENT 02 : SUBSTRUCTURES (VOLUNTEERS AREA & TOILET)</u>				
A	Excavate in patched concrete to reduce levels: average depth of 400mm starting from existing ground level	147	Sm		
	<u>CONCRETE</u>				
	<u>Mass concrete class 15/40 :in</u>				
B	50 mm Thick blinding to strip foundations	15	Sm		
	<u>Reinforced concrete class 25/20: vibrated: in.</u>				
C	Strip foundations	4	Om		
D	150mm Thick floor slab including slab to medical facility	40	Sm		
	<u>Sawn formwork: to</u>				
E	Sides: strip foundation	15	Sm		
	<u>Reinforcement</u>				
	<u>Supply and fix the following square ribbed steel bar reinforcement to BS 4461 and KS.02-22:1976 including cutting, bending, tying, hooking and placing in position:-</u>				
F	Assorted bars	360	Kg		
G	Mesh reinforcement No. A98 weighing 2.22 kg per square metre: in floor slab: including all necessary supports: allow for laps and bonding to existing slabs	40	Sm		
	<u>Walls</u>				
H	200 mm Thick natural local stone foundation walls: bedded and jointed in cement and sand (1:4) mortar	10	Sm		
	<u>HARDCORE</u>				
I	300 mm Selected hardcore filling of approved inert material in making up levels under floors: spread, leveled, well rammed and consolidated in 150 mm thick (maximum) layers	40	Sm		
	Carried to colletion				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	<p>HARDCORE</p> <p>Imported approved hardcore filling material in making up levels under floors: spread, leveled, well rammed and consolidated in 150 mm thick (maximum) layers (Medical center)</p>	25	Cm		
	<p>Blinding</p>				
B	50 mm Thick approved quality murrum blinding to surfaces of hardcore	40	Sm		
	<p>Anti-termite Treatment</p>				
C	Dagnet FT anti-termite chemical treatment: applied by Insecta ltd. or other approved professional pest control specialist: applied strictly in accordance with the manufacturer's instructions: 10 year guarantee	40	Sm		
	<p>DPM</p>				
D	Gauge 1000 polythene damp proof membrane	40	Sm		
	Carried to collection				
	<p>COLLECTION</p> <p>Brought forward from page 2/4</p> <p>Brought forward from page 2/5 Above</p>				
	TOTAL FOR SUBSTRUCTURES CARRIED TO SUMMARY				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
ELEMENT NO 3: WALLING AND PARTITIONING WORKS					
A	Reinforced concrete class 25/20 vibrated in. Ring beam	5	Cm		
Sawn formwork: to					
B	Sides and soffits of ring beam	47	Sm		
Reinforcement					
Supply and fix the following square ribbed steel bar reinforcement to BS 4461 and KS.02-22:1976 including cutting, bending, tying, hooking and placing in position:-					
C	Assorted bars	500	Kg		
Masonry walling					
Concrete block: Solid B.S 2028; type A; 7N per square millimetre; bedded and jointed in cement/sand (1:3) mortar					
D	150mm Thick walling; reinforced with and including 32x2mm thick hoop iron strips every alternate course	70	Sm		
E	Allow for repair of cracks along ring beam soffits and column surfaces to be repaired with expanded metal surfaces		Item		
GYPSUM WALING					
Gyproc standard drywall partition system consisting of 53 x 32 mm U section galvanized frame spaced at 450mm centres, clad both sides with one layer of 12.5mm tapered edge Rhinoboard with staggered joints between boards in-filled with 50mm thick as 'jumbolene' or other equal and approved acoustic mineral wool insulation (< 12Kg/C.M) to be fitted into cavity and fixed with drywall screws spaced at 220mm centres in accordance with the manufacturer's instructions.					
F	100 mm thick gypsum partition infilled with acoustic mineral wool insulation complete with 12.5mm thick gypsum boards to both sides: tapering to joints to receive skimming and paint (m.s)	95	Sm		
G	Ditto but with 4mm thick glass fixed to aluminum beading	25	Sm		
TOTAL FOR WALLING CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	ELEMENT NO 04: ROOF				
	ROOF STRUCTURE				
	0.6mm Gauge 22 Saflock roofing sheets as supplied by ' SAFAL Building Systems of phone no. 0738331100 ' or other equal approved similar sheets: structure in Light Gauge Steel members: with and including all jointing and connections as per the Structural Engineer's details: with painted mild steel sheet gauge 18 gutter and down pipes: fascia board, barge boards and eaves all in painted steel including coffee tray and mosquito net under tacked: all to details.				
A	Roof: approximately 3000 mm from ground level	156	Sm		
	Sisalation				
B	Extra over for 10mm Thick Industrial Grade sisalation underlay: Super Polynum	156	Sm		
	ROOFING TO VOLUNTEERS AREA				
C	Supply and fix water proofed Shed netting roof as 'TARPO' or other equal and approved; complete with steel frames and purlins with and including substructure works and all associated works as per engineers details	147	Sm		
TOTAL FOR ROOFING CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
ELEMENT NO 5: DOORS					
Steel glazed french door:					
<p>100 x 50 x 3 mm RHS top, bottom rails and stiles: 16mm diameter solid circular sections horizontal and vertical intermediate bars at 200 mm centres horizontally and 200mm centres vertically: on 100 x 50 x 3 mm thick door frame fixed to wall openings with lugs: infilled with 5 mm thick glass: one coat prefabrication primer and three finishing coats in first grade super gloss paint; with and including all ironmongery as supplied by Assa Abloy</p>					
A	1850 x 2100mm high double leaf door (Entrance/Exit door)	1	No		
B	1000 x 2100mm high single leaf door: (External doors)	3	No		
Flush doors: B.S. 459					
<p>950mm x 2100mm high solid particle door as supplied by "64 Door Factory" or other equal and approved: in composite wood door frame and pvc rubber seal: 3mm thick HDF pressed laminate on both sides: with and including ironmongery from "Assa Abloy", all as per architect's schedule</p>					
C		15	No		
TOTAL FOR DOORS CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<p>ELEMENT NO 6: WINDOWS</p> <p>Contractor is advised to refer to Architects Schedules on Windows</p> <p>Powder coated aluminium windows: comprising 75 x 50mm frame all round with and including 6mm thick laminated shatter proof glass as supplied by 'Hebatulla Brothers': opening/fixd sections as per the window schedule; glazing beads and neoprene gasket: complete with iron mongery: fixing with aluminium screws: plugging or fixing to concrete, stonework or blockwork: sealing with mastic: oiling and adjusting on completion: all as per Architects design</p>				
A	Windows of all sizes	30	Sm		
	<p>Mild steel grilles: fabricated out of 16mm thick Round bars welded together to form a pattern as per architect's detail: maximum spacing of horizontal bars to be 200 mm centres and vertical bars to be spaced at 200 mm centres maximum: all welded to window framing: all welds ground smooth: one coat pre-fabrication primer and three coats of gloss oil paint: to</p>				
B	Windows of all sizes	30	Sm		
	<p>Window Blinds</p>				
C	Supply and fix approved Vertical Blinds to windows as supplied by 'Vitendi Ltd' or other equal and approved suppliers	30	Sm		
TOTAL FOR WINDORS CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	ELEMENT NO 7: FINISHES				
	FLOOR FINISHES				
	Cement and sand (1:4) screed, to hacked floors; in				
A	30mm Thick finishing/levelling screed finished to receive Porcelain tiles (m.s)	120	Sm		
B	Ditto to receive ceramics floor tiles	30	Sm		
	600x600x6mm first quality porcelain tiles to floors: Allow prime cost rate of Kshs.5500.00 per square metre inclusive of VAT for purchase: Add for transport, wastage, spacers, tile adhesive/ cement/ mortar and fixing :to regular pattern: bedding, grouting in matching cement, jointing and pointing in :-				
C	Floor: fixing with approved quality adhesive	120	Sm		
D	Ditto 100 x 8 mm Thick skirtings	102	Lm		
	450x450x6mm polished ceramic tiles to floors: Allow prime cost rate of Kshs.4000.00 per square metre inclusive of VAT for purchase: Add for transport, wastage, spacers, tile adhesive/ cement/ mortar and fixing :to regular pattern: bedding, grouting in matching cement, jointing and pointing in :-				
E	Floor: fixing with approved quality adhesive	30	Sm		
F	Ditto 100 x 8 mm Thick skirtings	35	Lm		
	Wall Finishes				
	Cement and sand (1:4): to walls: in				
E	10 mm Thick backing: to receive ceramic wall tiles	160	Sm		
	300x300x6mm polished ceramic tiles to walls: Allow prime cost rate of Kshs.4000.00 per square metre inclusive of VAT for purchase: Add for transport, wastage, spacers, tile adhesive/ cement/ mortar and fixing :to regular pattern: bedding, grouting in matching cement, jointing and pointing in :-				
F	Wet areas walling	160	Sm		
	Carried to colletion				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	<p>Plaster; 9mm first coat of cement/lime/putty/sand (1:2:9); 3mm second coat of cement/lime putty/sand (1:1:6); steel trowelled; on masonry or concrete; to</p> <p>New masonry walling (both sides)</p>	140	Sm		
B	<p>Prepare surfaces and apply undercoat and two finishing coats silk emulsion paint as "Plascon Kansai" or other equal approved on plastered masonry or concrete surfaces: to</p> <p>New masonry walling to hardline areas (both sides)</p> <p>RE-DECORATION</p> <p>Rubbing down existing paint: prepare surfaces and apply three coat SILK VINYL paint as "Plascon Kansai" or other equal approved on plastered masonry or concrete surfaces: to</p>	140	Sm		
C	<p>Internal walling</p> <p>Rubbing down existing paint: prepare surfaces and apply 1 coat Plascon Alkali Resistant Primer followed by three coats of Plascon 100% Acrylic outdoor protector emulsion paint ; on plastered masonry or concrete surfaces: to</p>	130	Sm		
D	<p>External wallingn and beams</p> <p>Ceiling Finishes</p> <p>Accoustic finishes</p> <p>Armstrong "Acoustic" accessible tile system suspended ceilings: 600 x 600 x 15 mm thick fissured mineral fibre tiles: 20 x 7mm x 25 gauge epoxy acrylic protected tee clips at 600 mm centres located by pipped tabs into 38 x 26 mm x gauge 23 epoxy acrylic protected snap tee runners at 1200 mm centres in 3 metre lengths: jointed with 29 x 20 x 170 mm x 20 gauge hot dipped galvanised splice plates with 20 mm x 25 gauge two coat vinyl white painted channel edge trim: fixing with screws to backgrounds requiring plugging:-</p>	181	Sm		
E	<p>Ceiling: over 300 mm wide</p>	120	Sm		
	Carried to colletion				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	Gypsum Ceiling				
	<u>Gypsum board bulkhead ceiling: on and including steel channels and timber bandering as necessary: skimmed and painted: all to Architect's details</u>				
A	12 mm thick board to ceiling	30	Sm		
	<u>Prepare surfaces and ROLLER apply undercoat and two finishing coats silk vinyl emulsion paint as " Kansai Plascon" or other equal and approved paint on Gypsum surfaces: to</u>				
B	general surfaces of ceiling	30	Sm		
	Precast Concrete Paving (Externally)				
	<u>Filling and Treatment</u>				
C	200 mm Thick Hardcore base filling in making up levels well rolled and compacted to 95% maximum density : depositing and compacting in layers maximum 150mm thick	147	Sm		
D	50mm quarry dust bed on handpacked stones (m/s) to receive concrete paving blocks / concrete slab	147	Sm		
	<u>Precast concrete paving slabs</u>				
E	600 x 600 x 50 mm paving slabs: jointed and pointed in cement sand (1:3) mortar	147	Sm		
	Carried to collection				
	Collection				
	From page 2/11				
	From page 2/12				
	From page 2/13 Above				
TOTAL FOR FINISHES CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
ELEMENT NO 08; JOINERY FIXTURES					
VANITY TOPS					
Supply and fix 18mm Thick granite countertops and vanity cabinets plugged into the wall in 18mm thick Super White High Moisture Resistant particle board carcass with Melamine faced particleboards in Iceberg white for doors only ; rate including all the iron mongery and fixing accessories including specified stainless steel hinges and full extension slides and runners all with soft close mechanism as supplied by Kinetic Accessories					
A	1800mm long x 600mm wide	2	No		
B	800mm long x 600mm wide	6	No		
Low Level Cabinets					
C	Supply and fix Low Level Laboratory Cabinets size 600mm deep x 900mm high in 18mm thick Super White High Moisture Resistant particleboard carcass with Melamine faced particleboards in Iceberg white for doors only; rate including drawers, openable shelves and all the iron mongery and fixing accessories including specified stainless steel hinges and full extension slides and runners all with soft close mechanism, Clear shelf studs and connectors as supplied by Kinetic Accessories	6	Lm		
Pharmacy Counter					
D	Supply and fix 18mm thick, 600mm wide Kenya Black granite countertop on 150mm thick masonry walling (m/s) fixed with granite adhesive including polishing and bull nosing on all edges	3	Sm		
Laboratory Counter					
E	Supply and fix 20mm thick 'Bianco Alaska' Kalinga stone quartz surfaces slabs by "Classic Marble Company and distributed in Kenya by Crown Paints" : bedding, jointing and pointing in approved adhesive (1:4) on 150mm thick masonry walling (m/s) fixed with approved adhesive including polishing and bull nosing on all edges	3	Sm		
F	Extra over Kalinga stone slabs for making hole size 500 x 450mm	1	No		
Carried to collection					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	500 x 450mm Wide vulcathene lab sink	1	No		
B	Elbow action tap	1	No		
C	<p>High Level Cabinets</p> <p>Supply and fix high level cabinets size 500mm deep x 600mm high in 18mm Super white particle board carcass with Melamine faced particleboards in Iceberg white for doors only; rate including openable shelves and all the iron mongery and fixing accessories including specified stainless steel hinges and full extension slides and runners all with soft close mechanism, Clear shelf studs and connectors as supplied by Kinetic Accessories</p>	12	Lm		
	Carried to collection				
	<p>COLLECTION</p> <p>Brought forward from page 2/13</p> <p>Brought forward from page 2/14 Above</p>				
TOTAL FOR JOINERY WORKS CARRIED TO SUMMARY					



Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	SUMMARY				
A	ELEMENT NO 01; DEMOLITIONS				
B	ELEMENT NO 02; SUBSTRUCTURES				
C	ELEMENT NO 03; WALLING & PARTITIONS				
D	ELEMENT NO 04; ROOFING WORKS				
E	ELEMENT NO 05; DOORS				
F	ELEMENT NO 06; WINDOWS				
G	ELEMENT NO 07; FINISHES				
H	ELEMENT NO 08; JOINERY FIXTURES				
	TOTAL BUILDERS WORKS TO MEDICAL FACILITY & SICK BAY CARRIED TO SUMMARY			KSHS	

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<p>BILL NO 3</p> <p>PS: The contractor is advised to read both Architectural and Structural drawings during quotation process. The bidder to include in their rates for any change in quantities.</p> <p>GAZEBO AREA</p> <p>ELEMENT 01 : SUBSTRUCTURES</p>				
A	Excavate in red soil to reduce levels: average depth of 1200mm starting from existing ground level	101	Cm		
B	Excavate for strip foundation commencing from formation level and n.e	6	Cm		
C	Remove surplus spoil from site to an approved spoil heap	119	Cm		
D	Return fill and ram selected excavated materials	8	Cm		
E	Extra over all excavations and earthworks for breaking up rock all types at any point.	13	Cm		
F	Plank and strut to uphold sides of excavations: keep excavations free from all fallen material		Item		
G	Keep excavations free from general water		Item		
	<p>CONCRETE</p> <p><u>Mass concrete class 15/40 :in</u></p>				
H	50 mm Thick blinding to strip foundations	20	Sm		
	<p><u>Reinforced concrete class 25/20: vibrated: in.</u></p>				
I	Strip foundations	5	Cm		
	<p>Sawn formwork: to</p>				
J	Sides: strip foundation	42	Sm		
	Carried to colletion				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	Reinforcement				
	<u>Supply and fix the following square ribbed steel bar reinforcement to BS 4461 and KS 02-22:1976 including cutting, bending, tying, hooking and placing in position:-</u>				
A	Assorted bars	450	Kg		
	Walls				
B	200 mm Thick natural local stone foundation walls: bedded and jointed in cement and sand (1:4) mortar	47	Sm		
	HARDCORE				
C	Imported aproved hardcore filling inert material in making up levels under floors: spread, leveled, well rammed and consolidated in 150 mm thick (maximum) layers	67	Cm		
D	300 mm Selected hardcore filling of approved inert material in making up levels under floors: spread, leveled, well rammed and consolidated in 150 mm thick (maximum) layers	84	Sm		
	Blinding				
E	50 mm Thick approved quality murrum blinding to surfaces of hardcore	84	Sm		
	Anti-termite Treatment				
F	Dragnet FT anti-termite chemical treatment: applied by Insecta ltd. or other approved professional pest control specialist: applied strictly in accordance with the manufacturer's instructions: 10 year guarantee	84	Sm		
	DPM				
G	Gauge 1000 polythene damp proof membrane	84	Sm		
	<u>Precast concrete paving slabs around the gazebo</u>				
H	600 x 600 x 50 mm paving slabs: jointed and pointed in cement sand (1:3) mortar	40	Sm		
	Carried to colletion				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<p>COLLECTION</p> <p>Brought forward from page 3/1</p> <p>Brought forward from page 3/2 Above</p>				
	TOTAL FOR SUBSTRUCTURES CARRIED TO SUMMARY				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<u>ELEMENT NO 2: WALLING</u>				
	<u>Masonry walling.</u>				
	<u>Solid Bricks to B.S 2028; type A; 7N per square millimetre; bedded and jointed in cement/sand (1:3) mortar</u>				
A	150mm Thick walling; reinforced with and including 32x2mm thick hoop iron strips every alternate course	25	Sm		
B	Ditto to wall seating area	8	Sm		
	<u>In situ reinforced concrete class 25: in</u>				
C	150mm Thick sitting area (1no)	8	Sm		
	<u>Ribbed steel bar reinforcement to BS 4461 and KS 02-22:1976</u>				
	(Provisional)				
D	Assorted bars	140	Kg		
	<u>Sawn foamwork to:</u>				
E	Soffits of sitting area	8	Sm		
	<u>Pre-cast concrete copings; bedded and jointed in cement sand (1:3)</u>				
F	250 x 75mm one way copings; once weathered and throated	33	Lm		
	<u>Eucalyptus treated poles or other equal and approved timber columns</u>				
G	200mm Diameter x 3000mm high overall Gum pole column as supplied by " Sanyati Fencing Ltd of 0720621400" fixed to concrete base (m/s); all to structural Engineers details	16	No		
TOTAL FOR WALLING CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	<p>ELEMENT NO 03: ROOF</p> <p>ROOF STRUCTURE</p> <p>Asphalt Shingles roofing cover including Armourbase Eco Roof Underlayment as supplied by "Rexe Roofing" or other equal and approved similar cover : structure in 16no. EX 200mm treated eucalyptus gum poles as supplied by "Sanyati Fencing Ltd" to tension ring, main rafters, intermediate rafters and 2no. 150 x 500mm wide timber frame compressing ring ; with and including all jointing and connections as per the Structural Engineer's details: with painted mild steel sheet gauge 18 gutter and down pipes, fascia board, barge board and eaves finished with coffee tray and mosquito net under tacked: all to details.</p> <p>Roof: approximately 3000 mm from ground level</p>	270	Sm		
TOTAL FOR ROOFING CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	<p><u>ELEMENT NO 4: WINDOWS</u></p> <p><u>ROLL DOWN TARP SHUTTERS</u></p> <p>Contractor to allow for zipping and opening for the shutters</p> <p>Supply and install approved Rip Stop Roll Down Tarp Shutters as supplied by " East Africa Canvas Ltd" or other equal and approved suppliers with the top side fixed to Tension Ring (m/s).</p>	75	Sm		
	TOTAL FOR WINDORS CARRIED TO SUMMARY				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	ELEMENT NO 5: FINISHES				
	FLOOR FINISHES				
	Cement and sand (1:4) screed; to hacked floors; in				
A	30mm Thick finishing/levelling screed finished to receive Mazeras tiles (m.s)	84	Sm		
	MAZERAS FLOOR				
B	Supply and Fix 25mm Thick Regular cut mazeras laid on and including 20mm thick (minimum) cement sand (1:4) screed backing to the satisfaction of the Architect with and including all associated works, materials and labour.	84	Sm		
C	Ditto 100 x 8 mm Thick skirtings	33	Lm		
	Wall Finishes				
	<u>Plaster; 9mm first coat of cement/lime/putty/sand (1:2:9); 3mm second coat of cement/lime putty/sand (1:1:6); steel trowelled; on masonry or concrete; to</u>				
D	New masonry walling (both sides)	50	Sm		
	<u>Prepare surfaces and apply 1 coat Plascon Alkali Resistant Primer followed by three coats of Plascon 100% Acrylic outdoor protector emulsion paint ; on plastered masonry or concrete surfaces: to</u>				
E	New masonry walling (both sides)	50	Sm		
	Ceiling Finishes				
	<u>25mm Thick T & G Ceiling</u>				
F	Sawn cypress: second grade: clean: well seasoned and treated with approved wood presevative: pressure-impregated with celcure "A": with and including all jointing and connections as per the Structural Engineer's details	270	Sm		
	TOTAL FOR FINISHES CARRIED TO SUMMARY				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<u>SUMMARY</u>				
A	ELEMENT NO 01; SUBSTRUCTURES				
B	ELEMENT NO 02; WALLING				
C	ELEMENT NO 03; ROOFING WORKS				
D	ELEMENT NO 04; WINDOWS				
E	ELEMENT NO 05; FINISHES				
	TOTAL BUILDERS WORKS TO GAZEBO CARRIED TO MAIN SUMMARY			KSHS	

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	BILL NO 04				
	PS: The contractor is advised to read both Architectural and Structural drawings during quotation process. The bidder to include in their rates for any change in quantities.				
	UTILITIES ROOM				
	ELEMENT 01 : SUBSTRUCTURES				
A	Excavate in patched concrete to reduce levels: average depth of 400mm starting from existing ground level	37	Sm		
B	Excavate for column bases commencing from reduced level and not exceeding 1.50m deep	4	Cm		
C	Ditto to strip footing	15	Cm		
D	Return, fill and ram selected soil around foundations	8	Cm		
E	Remove surplus spoil from site to an approved place by Kisumu County Government	19	Cm		
F	Extra over all excavations and earthworks for breaking up rock of all types at any point	5	Cm		
G	Allow for Planking and strutting sides of excavations		item		
H	Allow for Keeping excavations free from all water: spring or running		Item		
	CONCRETE				
	<u>Mass concrete class 15/40 :in</u>				
I	50 mm Thick blinding to strip foundations	19	Sm		
J	Ditto to column bases	4	Sm		
	Carried to colletion				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<u>Reinforced concrete class 25/20: vibrated: in.</u>				
A	Strip foundations	5	Cm		
B	Column bases	1	Cm		
C	Substructural columns	1	Cm		
D	150mm Thick floor slab	37	Sm		
E	Ditto to ramp but sloping at 10 degrees	7	Sm		
F	Extra - over for 50mm thick powerfloated concrete to Architect's pattern:	37	Sm		
	<u>Sawn formwork: to</u>				
G	Sides: strip foundation	16	Sm		
H	Ditto to column bases	4	Sm		
I	Sides of substructural columns	4	Sm		
J	Edges of surface bed: over 150 mm but not exceeding 225 mm girth	27	Lm		
K	Ditto to edges of ramp	11	Lm		
	<u>Reinforcement</u>				
	<u>Supply and fix the following square ribbed steel bar reinforcement to BS 4461 and KS 02-22:1976 including cutting, bending, tying, hooking and placing in position:-</u>				
L	Assorted bars	700	Kg		
M	Mesh reinforcement No. A98 weighing 2.22 kg per square metre: in floor slab: including all necessary supports: allow for laps and bonding to existing slabs	44	Sm		
	<u>Walls</u>				
N	200 mm Thick natural local stone foundation walls: bedded and jointed in cement and sand (1:4) mortar	38	Sm		
	Carried to colletion				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	<p>HARDCORE</p> <p>300 mm Selected hardcore filling of approved inert material in making up levels under floors: spread, leveled, well rammed and consolidated in 150 mm thick (maximum) layers</p>	38	Sm		
B	<p>HARDCORE</p> <p>Imported approved hardcore filling material in making up levels under floors: spread, leveled, well rammed and consolidated in 150 mm thick (maximum) layers (Medical center)</p>	12	Cm		
C	<p>Blinding.</p> <p>50 mm Thick approved quality murrum blinding to surfaces of hardcore</p>	38	Sm		
D	<p>Anti-termite Treatment</p> <p>Dragnet FT anti-termite chemical treatment: applied by Insecta ltd. or other approved professional pest control specialist: applied strictly in accordance with the manufacturer's instructions: 10 year guarantee</p>	38	Sm		
E	<p>DPM</p> <p>Gauge 1000 polythene damp proof membrane</p>	38	Sm		
F	<p>Plinth Finishes</p> <p><u>25 mm Thick cement and sand (1:4) rendering: on concrete or stonework: wood float finished: to</u></p> <p>Plinths: externally</p> <p><u>Prepare surfaces and apply undercoat and two finishing coats black bitumastic or other equal approved water resistant paint: on rendered surfaces: to</u></p>	7	Sm		
G	<p>Plinths: externally</p>	7	Sm		
	Carried to colletion				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	COLLECTION				
	Brought forward from page 4/1				
	Brought forward from page 4/2				
	Brought forward from page 4/3				
	TOTAL FOR SUBSTRUCTURES CARRIED TO SUMMARY				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
ELEMENT NO 2: WALLING & CONCRETE SUPERSTRUCTURE					
<u>Reinforced concrete class 25/20: vibrated: in.</u>					
A	Columns	1	Cm		
B	Ring beam	2	Cm		
<u>Sawn formwork: to</u>					
C	Sides of columns	9	Sm		
D	Sides and soffits of ring beam	25	Sm		
<u>Reinforcement</u>					
<u>Supply and fix the following square ribbed steel bar reinforcement to BS 4461 and KS.02-22:1976 including cutting,bending,tying hooking and placing in position:-</u>					
E	Assorted bars	300	Kg		
<u>External walling</u>					
<u>Concrete block:Solid B.S 2028;type A ;7N per square millimetre; bedded and jointed in cement/sand (1:3) mortar</u>					
F	200mm Thick walling; reinforced with and including 32x2mm thick hoop iron strips every alternate course	72	Sm		
<u>Internal walling</u>					
<u>Concrete block:Solid B.S 2028;type A ;7N per square millimetre; bedded and jointed in cement/sand (1:3) mortar</u>					
G	200mm Thick walling; reinforced with and including 32x2mm thick hoop iron strips every alternate course	10	Sm		
H	Allow for making electrical cable trenches as per the desing		Item		
TOTAL FOR WALLING CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	<p>ELEMENT NO 03: ROOF</p> <p>ROOF STRUCTURE</p> <p>0.6mm Gauge 22 Saflock roofing sheets as supplied by 'SAFAL Building Systems of phone no. 0738331100' or other equal approved similar sheets: structure in Light Gauge Steel members: with and including all jointing and connections as per the Structural Engineer's details: with painted mild steel sheet gauge 18 gutter and down pipes: fascia board, barge boards and eaves all in painted steel including coffee tray and mosquito net under tacked: all to details.</p> <p>Roof: approximately 3000 mm from ground level</p>	40	Sm		
TOTAL FOR ROOFING CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<p>ELEMENT NO 4: DOORS</p> <p>Steel security doors</p> <p><u>mild steel louvered door comprising of 100x 50 x 3 mm hollow section frame all round and built into wall with 100 long 20x 20 x2 mm fish-tailed lugs, 100x 50 x3 mm stiles top, middle and bottom rails:50 x25x 3 mm hollow section verticals at 100 mm centres;5-lever mortice door lock with brass lever handle furniture:1 No. padlock hasps welded to door:all welded ;ground smooth finish:including metal primer and three coats super gloss paint as "Plascon Kansai paints" or any other equal and approved: to Architects detail:to pump house.</u></p>				
A	2000 x 2700mm high double leaf door:	2	No		
	TOTAL FOR DOORS CARRIED TO SUMMARY				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	<p>ELEMENT NO 5: WINDOWS</p> <p>Contractor is advised to refer to Architects Schedules on Windows</p> <p>Louvre block walling: minimum crushing strength 7kn/mm Bhimji Ramji or equal</p> <p>Louvered vents to all sizes</p>	9	Sm		
	TOTAL FOR WINDORS CARRIED TO SUMMARY				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	ELEMENT NO 6: FINISHES				
	FLOOR FINISHES				
	Cement and sand (1:4) screed; to hacked floors; in				
A	30mm Thick finishing/levelling screed finished to receive Ceramics tiles (m.s)	37	Sm		
	<u>450x450x6mm polished ceramic tiles to floors: Allow prime cost rate of Kshs.4000.00 per square metre inclusive of VAT for purchase: Add for transport, wastage, spacers, tile adhesive/ cement/ mortar and fixing to regular pattern: bedding, grouting in matching cement, jointing and pointing in .:</u>				
B	Floor: fixing with approved quality adhesive	37	Sm		
C	Ditto 100 x 8 mm Thick skirtings	30	Lm		
	Wall Finishes				
	Internal finishes				
	<u>Plaster:9mm first coat of cement/lime/putty/sand (1:2:9);3mm second coat of cement/lime putty/sand (1:1:6); steel trowelled; on masonry or concrete; to</u>				
D	Masonry and concrete surfaces internally	109	Sm		
	<u>Prepare surfaces and apply undercoat and two finishing coats silk emulsion paint as "Plascon Kansai" or other equal approved on plastered masonry or concrete surfaces: to</u>				
E	Masonry and concrete surfaces internally	109	Sm		
	Carried to colletion				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	External finishes				
	<u>Plaster:9mm first coat of cement/lime/putty/sand (1:2:9);3mm second coat of cement/lime putty/sand (1:1:6); steel trowelled;on masonry or concrete; to</u>				
A	Masonry and concrete surfaces externally	89	Sm		
	<u>Prepare surfaces and apply 1 coat Plascon Alkali Resistant Primer followed by three coats of Plascon 100% Accrylic outdoor protector emulsion paint ; on plastered masonry or concrete surfaces: to</u>				
B	Masonry and concrete surfaces externally	89	Sm		
	Precast Concrete Paving (Externally)				
	<u>Filling and Treatment</u>				
C	200 mm Thick Hardcore base filling in making up levels well rolled and compacted to 95% maximum density : depositing and compacting in layers maximum 150mm thick	17	Sm		
D	50mm quarry dust bed on handpacked stones (m/s) to receive concrete paving blocks / concrete slab	17	Sm		
	<u>Precast concrete paving slabs</u>				
E	600 x 600 x 50 mm paving slabs: jointed and pointed in cement sand (1:3) mortar	17	Sm		
	Carried to colletion				
	Collection				
	From page 3/9				
	From page 3/10 Above				
TOTAL FOR FINISHES CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<u>SUMMARY</u>				
A	ELEMENT NO 01; SUBSTRUCTURES				
B	ELEMENT NO 02; WALLING & PARTITIONS				
C	ELEMENT NO 03; ROOFING WORKS				
D	ELEMENT NO 04; DOORS				
E	ELEMENT NO 05; WINDOWS				
F	ELEMENT NO 06; FINISHES				
	TOTAL BUILDERS WORKS TO UTILITIES HOUSE CARRIED TO SUMMARY			KSHS	

Item	Description	Qty	Unit	Credit (Kshs)	Debit (Kshs.)
	<p>BILL NO.05</p> <p>GUARD HOUSE</p> <p>ELEMENT NO 1: DEMOLITIONS</p> <p>Pricing Notes</p> <p>PS: The contractor is advised to read both Architectural and Structural drawings during quotation process. The bidder to include in their rates for any change in quantities.</p> <p>1 The unit of billing in this section is "item"</p> <p>2 Amounts for demolitions shall include the following in addition to what is described in the particular item:</p> <p>a) Making good i.e. re-instatement of any finishes and structures affected by the demolition work to the original state.</p> <p>b) Clearing debris with speed on a daily basis as they arise, cleaning of affected surfaces, and removal of the debris from site to Kisumu County Government approved dumping sites. Accumulation of debris within the site premises shall not be allowed.</p> <p>3 Demolition work shall be carefully executed with the particular aim of minimizing damage to adjacent finishes, structure, or components.</p> <p>4 The amounts quoted shall be deemed to be inclusive of all handling of the removed items and their removal from site.</p> <p>5 Amounts given should include for adequate temporary support and protection for the remaining elements of the buildings being demolished and to adjacent buildings and services.</p>				
	Carried to collection				

Item	Description	Qty	Unit	Credit (Kshs)	Debit (Kshs.)
1	All materials, components and fittings arising from the demolitions work shall become the property of the Contractor unless the Client specifically requests for them. The tenderer is therefore expected to give realistic credit in the appropriate column for items which have salvage value.				
2	Amount indicated will be adjusted against the approximate quantity shown in the brackets to reflect the actual quantity of demolition work executed.				
	<u>Measured Demolition Works</u>				
A	Carefully demolish existing gate house and entrance gate, cart away arising debris (Approximately 20 floor square metre)				
	Carried to collection				
	<p>Collection</p> <p>Brought forward from page 5/1</p> <p>Brought forward from page 5/2</p>				
	<p>Sub-Total</p> <p>Less Credit</p>				
	TOTAL FOR DEMOLITIONS CARRIED TO SUMMARY				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<u>PS: The contractor is advised to read both Architectural and Structural drawings during quotation process</u>				
	<u>ELEMENT 02 : SUBSTRUCTURES</u>				
A	Excavate to reduce levels commencing from ground : average depth of 400mm starting from existing ground level	22	Sm		
B	Excavate for strip footing commencing from reduced level and not exceeding 1.50m deep	18	Cm		
C	Return, fill and ram selected soil around foundations	4	Cm		
D	Remove surplus spoil from site to an approved place by Kisumu County Government	23	Cm		
E	Extra over all excavations and earthworks for breaking up rock of all types at any point	5	Cm		
F	Allow for Planking and strutting sides of excavations		item		
G	Allow for Keeping excavations free from all water: spring or running		Item		
	<u>CONCRETE</u>				
	<u>Mass concrete class 15/40 :in</u>				
H	50 mm Thick blinding to strip foundations	15	Sm		
	<u>Reinforced concrete class 25/20: vibrated: in.</u>				
I	Strip foundations	4	Cm		
J	150mm Thick floor slab	22	Sm		
	<u>Sawn formwork: to</u>				
K	Sides: strip foundation	12	Sm		
L	Edges of surface bed: over 150 mm but not exceeding 225 mm girth	19	Lm		
	Carried to collection				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	Reinforcement Supply and fix the following square ribbed steel bar reinforcement to BS 4461 and KS.02-22:1976 including cutting, bending, tying, hooking and placing in position:-				
A	Assorted bars	400	Kg		
B	Mesh reinforcement No. A98 weighing 2.22 kg per square metre: in floor slab: including all necessary supports: allow for laps and bonding to existing slabs	22	Sm		
	Walls				
C	200 mm Thick natural local stone foundation walls: bedded and jointed in cement and sand (1:4) mortar	28	Sm		
	HARDCORE				
D	300 mm Selected hardcore filling of approved inert material in making up levels under floors: spread, leveled, well rammed and consolidated in 150 mm thick (maximum) layers	18	Sm		
	HARDCORE				
E	Imported approved hardcore filling material in making up levels under floors: spread, leveled, well rammed and consolidated in 150 mm thick (maximum) layers (Medical center)	7	Cm		
	Blinding				
F	50 mm Thick approved quality murrum blinding to surfaces of hardcore	18	Sm		
	Anti-termite Treatment				
G	Dragnet FT anti-termite chemical treatment: applied by Insecta ltd. or other approved professional pest control specialist: applied strictly in accordance with the manufacturer's instructions: 10 year guarantee	18	Sm		
	Carried to collection				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	<p>DPM</p> <p>Gauge 1000 polythene damp proof membrane</p>	18	Sm		
	<p>Plinth Finishes</p> <p><u>25 mm Thick cement and sand (1:4) rendering: on concrete or stonework: wood float finished: to</u></p>				
B	<p>Plinths: externally</p> <p><u>Prepare surfaces and apply undercoat and two finishing coats black bitumastic or other equal approved water resistant paint: on rendered surfaces: to</u></p>	7	Sm		
C	<p>Plinths: externally</p>	7	Sm		
	<p>Carried to collection</p>				
	<p>COLLECTION</p> <p>Brought forward from page 5/3</p> <p>Brought forward from page 5/4</p> <p>Brought forward from page 5/5 Above</p>				
	<p>TOTAL FOR SUBSTRUCTURES CARRIED TO SUMMARY</p>				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
ELEMENT NO 3: WALLING & CONCRETE SUPERSTRUCTURE					
<u>Reinforced concrete class 25/20: vibrated: in.</u>					
A	Ring beam	2	Cm		
Sawn formwork: to					
B	Sides and soffits of ring beam	19	Sm		
Reinforcement					
<u>Supply and fix the following square ribbed steel bar reinforcement to BS 4461 and KS 02-22:1976 including cutting, bending, tying, hooking and placing in position:-</u>					
C	Assorted bars	200	Kg		
External walling					
<u>Concrete block: Solid B.S 2028; type A; 7N per square millimetre; bedded and jointed in cement/sand (1:3) mortar</u>					
D	200mm Thick walling; reinforced with and including 32x2mm thick hoop iron strips every alternate course	50	Sm		
Internal walling					
<u>Concrete block: Solid B.S 2028; type A; 7N per square millimetre; bedded and jointed in cement/sand (1:3) mortar</u>					
G	200mm Thick walling; reinforced with and including 32x2mm thick hoop iron strips every alternate course	14	Sm		
	Carried to collection				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	<p>Aluminum Partition</p> <p>Supply and fix 8mm thick laminated glass partition with and including powder coated aluminium frames and wool pile: timber inserts including battens to top frame to match aluminium frames, rubber washleather gasket to hold glass: complete with silicon fille: all to architects detail</p> <p>Aluminum partition</p>	7	Sm		
	Carried to collection				
	<p>COLLECTION</p> <p>Brought forward from page 5/6</p> <p>Brought forward from page 5/ 7 Above</p>				
	TOTAL FOR WALLING CARRIED TO SUMMARY				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<p>ELEMENT NO 04: ROOF</p> <p>ROOF STRUCTURE</p> <p>0.6mm Gauge 22 Saflock roofing sheets as supplied by 'SAFAL Building Systems of phone no. 0738331100' or other equal approved similar sheets: structure in Light Gauge Steel members: with and including all jointing and connections as per the Structural Engineer's details: with painted mild steel sheet gauge 18 gutter and down pipes: fascia board, barge boards and eaves all in painted steel including coffee tray and mosquito net under tacked: all to details.</p>				
A	Roof: approximately 3000 mm from ground level	24	Sm		
	<p>Sisalation</p>				
B	Extra over for 10mm Thick Industrial Grade sisalation underlay: Super Polynum	24	Sm		
TOTAL FOR ROOFING CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<p>ELEMENT NO 5: DOORS</p> <p>Contractor is advised to refer to Architects Schedules on doors</p> <p>Mul-T-Lock Security Doors</p> <p><u>Supply and fix approved security steel door: High security door model 730 as supplied by Mul-T-Lock Multi High Security Systems of Tel. No. 020-574251: to concrete or block work: door fabricated from steel and beech laminated: including frame, fixing lugs, security lock, door closer and all other necessary ironmongery:</u></p> <p>A 1000 x 2100mm high single leaf door: (Mantrap doors)</p> <p>T & G doors: B.S. 459</p> <p>Single leaf T & G door overall size 950mm x 2100mm high: door leaf size 900x2100mm high: core in 75x38mm wrot softwood with and including 150x50mm thick door frames architraves, quadrant and associated ironmongeries; all as per architect's schedule</p> <p>Aluminium glazed doors</p> <p><u>Powder coated aluminium: hollow sections: glazed door: 100 x 45 x 3mm hollow section top rail and stiles: 150 x 45 x 3 mm hollow section bottom rail: infilled with and including 5 mm thick laminated glass panels: 20 x 20 mm glazing beads and rubber washleather gaskets including powder coated frames and associated ironmongery</u></p> <p>C 900 x 2100mm High</p>	2	No		
	<p>TOTAL FOR DOORS CARRIED TO SUMMARY</p>				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<p>ELEMENT NO 6: WINDOWS</p> <p>Contractor is advised to refer to Architects Schedules on Windows</p> <p><u>Powder coated aluminium windows: comprising 75 x 50mm frame all round: with and including 6mm thick laminated shatter proof glass as supplied by ' Hebatulla Brothers or Impala Glass': opening/fixed sections as per the window schedule; glazing beads and neoprene gasket: complete with iron mongery and mosquito gauze: fixing with aluminium screws: plugging or fixing to concrete, stonework or blockwork: sealing with mastic: oiling and adjusting on completion: all as per Architects design</u></p>				
A	Windows of all sizes (Fixed windows)	4	Sm		
B	Windows of all sizes (Openable windows)	1	Sm		
	<p><u>Mild steel grilles: fabricated out of 16mm thick Round bars welded together to form a pattern as per architect's detail: maximum spacing of horizontal bars to be 200 mm centres and vertical bars to be spaced at 200 mm centres maximum: all welded to window framing: all welds ground smooth: one coat pre-fabrication primer and three coats of gloss oil paint: to</u></p>				
C	Windows of all sizes	4	Sm		
	<p>Window Film</p>				
D	Supply and fix one way window filming to all windows as per '3M Tinting' specifications or other equal and approved supplier (Excluding bathroom windows)	4	Sm		
TOTAL FOR WINDORS CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	ELEMENT NO 7: FINISHES				
	FLOOR FINISHES				
	Cement and sand (1:4) screed; to hacked floors; in				
A	30mm Thick finishing/levelling screed finished to receive Ceramics tiles (m.s)	22	Sm		
	<u>450x450x6mm polished ceramic tiles to floors: Allow prime cost rate of Kshs.4000.00 per square metre inclusive of VAT for purchase: Add for transport, wastage, spacers, tile adhesive/ cement/ mortar and fixing</u> to regular pattern: bedding, grouting in matching cement, jointing and pointing in .:				
B	Floor: fixing with approved quality adhesive	22	Sm		
C	Ditto 100 x 8 mm Thick skirtings	30	Lm		
	Wall Finishes				
	Cement and sand (1:4): to walls: in				
D	10 mm Thick backing: to receive ceramic wall tiles	18	Sm		
	<u>300x300x6mm polished ceramic tiles to walls: Allow prime cost rate of Kshs.4000.00 per square metre inclusive of VAT for purchase: Add for transport, wastage, spacers, tile adhesive/ cement/ mortar and fixing</u> to regular pattern: bedding, grouting in matching cement, jointing and pointing in .:				
E	Wet areas walling	18	Sm		
	<u>Plaster:9mm first coat of cement/lime/putty/sand (1:2:9);3mm second coat of cement/lime putty/sand (1:1:6); steel trowelled;on masonry or concrete;</u> to				
F	Masonry and concrete surfaces internally	70	Sm		
	Carried to collection				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	<p>Prepare surfaces and apply undercoat and two finishing coats silk emulsion paint as "Plascon Kansai" or other equal approved on plastered masonry or concrete surfaces: to</p> <p>Masonry and concrete surfaces internally</p> <p>External finishes</p> <p>Plaster: 9mm first coat of cement/lime/putty/sand (1:2:9); 3mm second coat of cement/lime putty/sand (1:1:6); steel trowelled; on masonry or concrete; to</p>	70	Sm		
B	<p>Masonry and concrete surfaces externally</p> <p>Prepare surfaces and apply 1 coat Plascon Alkali Resistant Primer followed by three coats of Plascon 100% Acrylic outdoor protector emulsion paint ; on plastered masonry or concrete surfaces: to</p>	60	Sm		
C	<p>Masonry and concrete surfaces externally</p> <p>Ceiling Finishes</p> <p>Accoustic finishes</p> <p>Armstrong "Acoustic " accessible tile system suspended ceilings: 600 x 600 x 15 mm thick fissured mineral fibre tiles: 20 x 7mm x 25 gauge epoxy acrylic protected tee clips at 600 mm centres located by pipped tabs into 38 x 26 mm x gauge 23 epoxy acrylic protected snap tee runners at 1200 mm centres in 3 metre lengths: jointed with 29 x 20 x 170 mm x 20 gauge hot dipped galvanised splice plates with 20 mm x 25 gauge two coat vinyl white painted channel edge trim: fixing with screws to backgrounds requiring plugging:-</p>	60	Sm		
D	<p>Ceiling: over 300 mm wide</p>	22	Sm		
	Carried to colletion				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<p>Collection</p> <p>From page 5/11</p> <p>From page 5/12</p>				
TOTAL FOR FINISHES CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<u>SUMMARY</u>				
A	ELEMENT NO 01; DEMOLITIONS				
B	ELEMENT NO 02; SUBSTRUCTURES				
C	ELEMENT NO 03; WALLING & PARTITIONS				
D	ELEMENT NO 04; ROOFING WORKS				
E	ELEMENT NO 05; DOORS				
F	ELEMENT NO 06; WINDOWS				
G	ELEMENT NO 07; FINISHES				
	TOTAL BUILDERS WORKS TO GUARD HOUSE CARRIED TO SUMMARY			KSHS	

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<p>BILL NO.06</p> <p>PS: The contractor is advised to read both Architectural and Structural drawings during quotation process. The bidder to include in their rates for any change in quantities.</p> <p>UTILITIES ROOM</p> <p>ELEMENT 01 : SUBSTRUCTURES</p>				
A	Excavate in patched concrete to reduce levels: average depth of 400mm starting from existing ground level	14	Sm		
B	Excavate for strip footings commencing from reduced level and not exceeding 1.50m deep	10	Cm		
C	Return, fill and ram selected soil around foundations	3	Cm		
D	Remove surplus spoil from site to an approved place by Kisumu County Government	10	Cm		
E	Extra over all excavations and earthworks for breaking up rock of all types at any point	2	Cm		
F	Allow for Planking and strutting sides of excavations		item		
G	Allow for Keeping excavations free from all water: spring or running		Item		
	<p>CONCRETE</p> <p><u>Mass concrete class 15/40 :in</u></p>				
H	50 mm Thick blinding to strip foundations	9	Sm		
	Carried to colletion				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<u>Reinforced concrete class 25/20: vibrated: in.</u>				
A	Strip foundations	3	Cm		
B	150mm Thick floor slab	14	Sm		
	Sawn formwork: to				
C	Sides: strip foundation	7	Sm		
D	Edges of surface bed: over 150 mm but not exceeding 225 mm girth	14	Lm		
	Reinforcement				
	<u>Supply and fix the following square ribbed steel bar reinforcement to BS 4461 and KS 02-22:1976 including cutting, bending, tying, hooking and placing in position:-</u>				
E	Assorted bars	300	Kg		
F	Mesh reinforcement No. A98 weighing 2.22 kg per square metre: in floor slab: including all necessary supports: allow for laps and bonding to existing slabs	14	Sm		
	Walls				
G	200 mm Thick natural local stone foundation walls: bedded and jointed in cement and sand (1:4) mortar	17	Sm		
	HARDCORE				
H	300 mm Selected hardcore filling of approved inert material in making up levels under floors: spread, leveled, well rammed and consolidated in 150 mm thick (maximum) layers	12	Sm		
	HARDCORE				
H	Imported approved hardcore filling material in making up levels under floors: spread, leveled, well rammed and consolidated in 150 mm thick (maximum) layers (Medical center)	4	Cm		
	Carried to collection				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	<p>Blinding.</p> <p>50 mm Thick approved quality murrum blinding to surfaces of hardcore</p>	12	Sm		
B	<p>Anti-termite Treatment</p> <p>Dragnet FT anti-termite chemical treatment: applied by Insecta ltd. or other approved professional pest control specialist: applied strictly in accordance with the manufacturer's instructions: 10 year guarantee</p>	12	Sm		
C	<p>DPM</p> <p>Gauge 1000 polythene damp proof membrane</p>	12	Sm		
D	<p>Plinth Finishes</p> <p><u>25 mm Thick cement and sand (1:4) rendering: on concrete or stonework: wood float finished: to</u></p> <p>Plinths: externally</p> <p><u>Prepare surfaces and apply undercoat and two finishing coats black bitumastic or other equal approved water resistant paint: on rendered surfaces: to</u></p>	4	Sm		
E	<p>Plinths: externally</p>	4	Sm		
	<p>Carried to colletion</p>				
	<p>COLLECTION</p> <p>Brought forward from page 6/1</p> <p>Brought forward from page 6/2</p> <p>Brought forward from page 6/3</p>				
	<p>TOTAL FOR SUBSTRUCTURES CARRIED TO SUMMARY</p>				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
ELEMENT NO 2: WALLING & CONCRETE SUPERSTRUCTURE					
<u>Reinforced concrete class 25/20: vibrated: in.</u>					
A	Ring beam	1	Cm		
Sawn formwork: to					
B	Sides and soffits of ring beam	12	Sm		
Reinforcement					
<u>Supply and fix the following square ribbed steel bar reinforcement to BS</u>					
<u>4461 and KS 02-22:1976 including cutting, bending, tying, hooking and</u>					
<u>placing in position:-</u>					
C	Assorted bars	100	Kg		
External walling					
<u>Concrete block: Solid B.S 2028; type A; 7N per square millimetre; bedded</u>					
<u>and jointed in cement/sand (1:3) mortar</u>					
D	200mm Thick walling; reinforced with and including 32x2mm thick hoop iron strips every alternate course	33	Sm		
TOTAL FOR WALLING CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	<p>ELEMENT NO 03: ROOF</p> <p>ROOF STRUCTURE</p> <p>0.6mm Gauge 22 Saflock roofing sheets as supplied by 'SAFAL Building Systems of phone no. 0738331100' or other equal approved similar sheets: structure in Light Gauge Steel members: with and including all jointing and connections as per the Structural Engineer's details: with painted mild steel sheet gauge 18 gutter and down pipes: fascia board, barge boards and eaves all in painted steel including coffee tray and mosquito net under tacked: all to details.</p> <p>Roof: approximately 3000 mm from ground level</p>	17	Sm		
TOTAL FOR ROOFING CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<p>ELEMENT NO 4: DOORS</p> <p>Steel security doors</p> <p><u>mild steel louvered door comprising of 100x 50 x 3 mm hollow section frame all round and built into wall with 100 long 20x 20 x2 mm fish-tailed lugs, 100x 50 x3 mm stiles top, middle and bottom rails:50 x25x 3 mm hollow section verticals at 100 mm centres;5-lever mortice door lock with brass lever handle furniture:1 No. padlock hasps welded to door:all welded ;ground smooth finish:including metal primer and three coats super gloss paint as "Plascon Kansai paints" or any other equal and approved: to Architects detail:to pump house.</u></p>				
A	2000 x 2700mm high double leaf door:	2	No		
	TOTAL FOR DOORS CARRIED TO SUMMARY				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	<p>ELEMENT NO 5: WINDOWS</p> <p>Contractor is advised to refer to Architects Schedules on Windows</p> <p>Louvre block walling: minimum crashing strength 7kn/mm Bhimji Ramji or equal</p> <p>Louvered vents to all sizes</p>	6	Sm		
TOTAL FOR WINDORS CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	ELEMENT NO 6: FINISHES				
	FLOOR FINISHES				
	Cement and sand (1:4) screed; to hacked floors; in				
A	30mm Thick finishing/levelling screed finished to receive Ceramics tiles (m.s)	14	Sm		
	<u>450x450x6mm polished ceramic tiles to floors: Allow prime cost rate of Kshs.4000.00 per square metre inclusive of VAT for purchase: Add for transport, wastage, spacers, tile adhesive/ cement/ mortar and fixing to regular pattern: bedding, grouting in matching cement, jointing and pointing in .:</u>				
B	Floor: fixing with approved quality adhesive	14	Sm		
C	Ditto 100 x 8 mm Thick skirtings	13	Lm		
	Wall Finishes				
	Internal finishes				
	<u>Plaster:9mm first coat of cement/lime/putty/sand (1:2:9);3mm second coat of cement/lime putty/sand (1:1:6); steel trowelled;on masonry or concrete; to</u>				
D	Masonry and concrete surfaces internally	39	Sm		
	<u>Prepare surfaces and apply undercoat and two finishing coats silk emulsion paint as "Plascon Kansai" or other equal approved on plastered masonry or concrete surfaces: to</u>				
E	Masonry and concrete surfaces internally	39	Sm		
	Carried to colletion				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	External finishes				
	<u>Plaster:9mm first coat of cement/lime/putty/sand (1:2:9);3mm second coat of cement/lime putty/sand (1:1:6); steel trowelled;on masonry or concrete; to</u>				
A	Masonry and concrete surfaces externally	39	Sm		
	<u>Prepare surfaces and apply 1 coat Plascon Alkali Resistant Primer followed by three coats of Plascon 100% Accrylic outdoor protector emulsion paint ; on plastered masonry or concrete surfaces: to</u>				
B	Masonry and concrete surfaces externally	39	Sm		
	Precast Concrete Paving (Externally)				
	<u>Filling and Treatment</u>				
C	200 mm Thick Hardcore base filling in making up levels well rolled and compacted to 95% maximum density : depositing and compacting in layers maximum 150mm thick	16	Sm		
D	50mm quarry dust bed on handpacked stones (m/s) to receive concrete paving blocks / concrete slab	16	Sm		
	<u>Precast concrete paving slabs</u>				
E	600 x 600 x 50 mm paving slabs: jointed and pointed in cement sand (1:3) mortar	16	Sm		
	Carried to colletion				
	Collection				
	From page 6/8				
	From page 6/9 Above				
TOTAL FOR FINISHES CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<u>SUMMARY</u>				
A	ELEMENT NO 01; SUBSTRUCTURES				
B	ELEMENT NO 02; WALLING & PARTITIONS				
C	ELEMENT NO 03; ROOFING WORKS				
D	ELEMENT NO 04; DOORS				
E	ELEMENT NO 05; WINDOWS				
F	ELEMENT NO 06; FINISHES				
	TOTAL BUILDERS WORKS TO PUMP HOUSE CARRIED TO SUMMARY			KSHS	

Item	Description	Qty	Unit	Credit (Kshs)	Debit (Kshs.)
	<p>BILL NO.07</p> <p>EXTERNAL WORKS</p> <p>ELEMENT NO 1: DEMOLITIONS</p> <p>Pricing Notes</p> <p>PS; The contractor is advised to read both Architectural and Structural drawings during quotation process. The bidder to include in their rates for any change in quantities.</p> <p>1 The unit of billing in this section is "item"</p> <p>2 Amounts for demolitions shall include the following in addition to what is described in the particular item:</p> <p>a) Making good i.e. re-instatement of any finishes and structures affected by the demolition work to the original state.</p> <p>b) Clearing debris with speed on a daily basis as they arise, cleaning of affected surfaces, and removal of the debris from site to Kisumu County Government approved dumping sites. Accumulation of debris within the site premises shall not be allowed.</p> <p>3 Demolition work shall be carefully executed with the particular aim of minimizing damage to adjacent finishes, structure, or components.</p> <p>4 The amounts quoted shall be deemed to be inclusive of all handling of the removed items and their removal from site.</p> <p>5 Amounts given should include for adequate temporary support and protection for the remaining elements of the buildings being demolished and to adjacent buildings and services.</p>				
	Carried to collection				

Item	Description	Qty	Unit	Credit (Kshs)	Debit (Kshs.)
1	All materials, components and fittings arising from the demolitions work shall become the property of the Contractor unless the Client specifically requests for them. The tenderer is therefore expected to give realistic credit in the appropriate column for items which have salvage value.				
2	Amount indicated will be adjusted against the approximate quantity shown in the brackets to reflect the actual quantity of demolition work executed.				
	<p><u>Measured Demolition Works</u></p> <p>A Carefully demolish existing masonry walling/ mesh grilles approximately 223metres and 2.70m high and cart away all arisings(602 square metres)</p> <p>B Allow for uprooting of roots and cart away all arisings as directed on site</p> <p>C Carefully demolish existing landscaped area; load arisings and cart away as directed on site (Approximately 170 Sm)</p>				
	Carried to collection				
	<p><u>Collection</u></p> <p>Brought forward from page 7/1</p> <p>Brought forward from page 7/2</p>				
	Sub-Total				
	Less Credit				
	TOTAL FOR DEMOLITIONS CARRIED TO SUMMARY				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	ELEMENT 02 : BOUNDARY WALLING				
	<u>Substructures</u>				
A	Excavate for column bases; not exceeding 1500mm from ground level	69	Cm		
B	Excavate foundation trenches commencing from reduced level: not exceeding 1.5 m deep	168	Cm		
C	Return, fill and ram selected soil in foundations	107	Cm		
D	Remove surplus spoil from site to an approved site	60	Cm		
E	Extra over all excavations and earthworks for breaking up rock at any point	25	Cm		
F	Ditto to prooting of roots	30	Cm		
	<u>Concrete</u>				
	<u>Mass concrete class Q (Mix 1:4:8) :in</u>				
G	50 mm Thick blinding to column bases	55	Sm		
H	Ditto to strip foundation	134	Sm		
	<u>Reinforced concrete mix 1:2:4: vibrated: in.</u>				
I	Column bases	14	Cm		
J	Columns below ground	4	Cm		
K	Ground beam	20	Cm		
	<u>Sawn formwork: to</u>				
L	Sides of column bases	62	Sm		
M	Sides of columns	67	Sm		
N	Strip foundation footings	112	Sm		
O	Sides of ground beam	212	Sm		
	Carried to colletion				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	Expansion Joint				
A	25mm thick "Styrofoam" filler between walls, columns etc	5	Sm		
B	20 x 10mm deep Hot applied sealant "Bitubond"	5	Sm		
	Reinforcement				
	High tensile, ribbed bar reinforcement to BS 4449				
C	Assorted bars	3800	Kg		
	Walling				
	Approved local natural stone walls of strength 7Kn/mm ² : bedded, jointed and pointed in cement sand (1:3) mortar: flush vertical and horizontal keyed joints every side: maximum height of 200mm per stone: with and including hoop iron reinforcement every course as per detail				
D	200 mm Thick walls	267	Sm		
	Superstructures				
	Walling				
	Approved machine cut stone walls of strength 7Kn/mm ² : bedded, jointed and pointed in cement sand (1:3) mortar: flush vertical and horizontal keyed joints every side: maximum height of 200mm per stone: with and including hoop iron reinforcement every course as per detail				
E	200 mm Thick walls	614	Sm		
	Expansion Joint				
F	25mm thick "Styrofoam" filler between walls, columns etc	10	Sm		
G	20 x 10mm deep Hot applied sealant "Bitubond"	10	Sm		
	Carried to colletion				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<u>Reinforced concrete mix 1:2:4 vibrated in</u>				
A	Columns	8	Cm		
B	Ring Beam	9	Cm		
	<u>Sawn formwork to</u>				
C	Sides of columns	152	Sm		
D	Sides and soffits of beams	134	Sm		
	<u>High tensile, square twisted bar reinforcement to BS 4449</u>				
E	Assorted bars	2161	Kg		
	<u>Pre-cast concrete copings; bedded and jointed in cement sand (1:3)</u>				
F	300 x 75mm one way copings; once weathered and throated	223	Lm		
G	450 x 450 x 100 mm high Copings; four times weathered and throated: with a 100mm diameter decorative spherical feature on top	69	No		
	<u>Gate</u>				
H	Supply and fix mild steel gate size 5000 x 3000mm high as per architect's drawing	1	No		
	Razor Wire				
I	Supply and install approved spiral razor wire to boundary wall, complete with and including supports, warning signs, and all other accessories in accordance with manufacturer's printed instructions	223	Lm		
	Carried to colletion				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
ELEMENT NO.3: DRIVEWAY, PARKING AND PATHWAYS					
Excavations					
A	Excavate to reduce levels not exceeding 1500mm deep: average depth of 1200mm starting from existing ground level	803	Cm		
B	Remove surplus spoil from site to approved spoil heaps on site	803	Cm		
C	Keep excavations free from all water: spring or running		Item		
Filling and Treatment					
D	Imported approved Hardcore base filling in making up levels well rolled and compacted to 95% maximum density : depositing and compacting in layers maximum 150mm thick	642	Cm		
E	300 mm Thick Hardcore base filling in making up levels well rolled and compacted to 95% maximum density : depositing and compacting in layers maximum 150mm thick	803	Sm		
F	50mm quarry dust bed on handpacked stones (m/s) to receive concrete paving blocks / concrete slab	803	Sm		
G	Approved herbicide treatment to quarry dust bed: with 20 years guarantee	803	Sm		
DRIVEWAY					
<u>Bamburi Special Products Ltd. concrete paving blocks: or other equal approved : to diplomat pattern: laid and compacted with and including approved sand to manufacturer's specifications</u>					
H	80mm thick heavy duty blocks: CABRO BLOCKS: to prepared sub-base (m/s): to parking: laid to falls not exceeding 15 degrees from horizontal	527	Sm		
<u>Precast concrete paving slabs</u>					
I	600 x 600 x 50 mm paving slabs: jointed and pointed in cement sand (1:3) mortar	145	Sm		
Carried to collection					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	Kerbs and channel size 250 x 125mm and 125 x 125 respectively: splayed: B.S. 340: bedding, jointing and pointing in cement/sand mortar 1:3; including all necessary excavation, disposal and formwork: laid on and including 100mm thick plain insitu concrete class 20/ (20) haunched base and back 375mm wide: as shown in attached drawing	350	Lm		
B	Ditto but curved	20	Lm		
C	Kerb size 250 x 125mm: splayed: B.S. 340: bedding, jointing and pointing in cement/sand mortar 1:3; including all necessary excavation, disposal and formwork: laid on and including 100mm thick plain insitu concrete class 20/ (20) haunched base and back 375mm wide	300	Lm		
D	Fabricate supply, and install 100mm diameter class 'C' black pipe bollards; brackets welded at the base anchored into mass concrete class 20; overall size 1200mm long with 800mm protruding from ground; filled with concrete class 15 and a 1:3 cement mortar elliptical coping; including all excavations, concrete bases, anchorage and paintwork; to engineer's details	21	No		
	Carried to collection				
	<p>COLLECTION</p> <p>Brought forward fro page 7/7</p> <p>Brought forward fro page 7/8 Above</p>				
	TOTAL FOR DRIVEWAY AND PATHWAYS CARRIED TO SUMMARY				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	ELEMENT NO 04; STORM DRAINAGE				
	<u>Excavations including maintaining and supporting sides and keeping free from water, mud and fallen materials</u>				
A	Excavate trench: part backfill and remove surplus spoil plank and strut sides of excavations: keep excavations free of surface water: not exceeding 1.5 metres deep from existing ground level: average 1000 mm deep: for 200 mm diameter pipe: backfill and cart away surplus spoil	240	Cm		
	<u>Mass concrete class Q (Mix 1:3:6) :in</u>				
B	Sorrounds to pipes	15	Cm		
	<u>uPVC heavy gauge pipes: jointing to manufacturer's instructions</u>				
C	200mm diameter: Underground quality pipe: in trench	42	Lm		
	Catchpit manholes				
	<u>Consisting of 150mm thick class 20(20) bed, 200mm thick reinforced concrete class 'Q' benching and walling and channelling for 200mm diameter pipe' 15mm cement/ sand (1:3) rendering to sides and bottom, including all necessary excavation, formwork, approved filling and cart away, with concrete cover and steel gratings</u>				
D	1000 x 1000 mm internal dimensions: 1200 mm average depth to invert	13	No		
	Headwalls				
E	230mm Thick x 1700mm long x 1900mm High; complete with all excavations and foundations	2	No		
	TOTAL FOR STORM DRAINAGE CARRIED TO SUMMARY				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
ELEMENT NO 05; INTERNAL FOUL DRAINAGE (PROVISIONAL)					
A	Excavate trench: part backfill and remove surplus spoil plank and strut sides of excavations: keep excavations free of surface water: not exceeding 1.5 metres deep from existing ground level: average 1000 mm deep: for 160 mm diameter pipe: backfill and cart away surplus spoil	168	Lm		
<u>SDR 34 UPVC heavy gauge pipes: jointing to manufacturer's instructions</u>					
B	160mm diameter: Underground quality pipe: in trench	168	Lm		
<u>Extra for:</u>					
C	Socket plugs	16	No		
D	Sweeping bend	16	No		
<u>Mass concrete class Q (Mix 1:3:6) in</u>					
E	Sorrounds to pipes	23	Cm		
Manholes					
<u>Consisting of 150mm thick class 20(20) bed, 150mm thick reinforced concrete class 'Q' benching and channelling for 200mm diameter pipe' 15mm cement/ sand (1:3) rendering to sides and bottom, including all necessary excavation, formwork, approved filling and cart away, with heavy duty cast iron cover</u>					
F	750 x 600 mm internal dimensions: 1200 mm average depth to invert	16	No		
Sundries					
<u>Labour and materials:</u>					
G	Build in ends of pipes to manholes 225mm internal diameter	28	No		
TOTAL FOR INTERNAL FOUL DRAINAGE CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<u>ELEMENT NO 06; EXTERNAL FOUL DRAINAGE (PROVISIONAL)</u>				
	<u>CONTRACTOR TO ESTABLISH NEAREST CONNECTION POINT</u>				
A	Excavate trench: part backfill and remove surplus spoil plank and strut sides of excavations: keep excavations free of surface water: not exceeding 1.5 metres deep from existing ground level: average 1500 mm deep: for 450 mm diameter pipe: backfill and cart away surplus spoil	800	Lm		
	<u>Concrete Piping</u>				
B	300mm Diameter concrete piping with and including bedding concrete and 150mm thick surround class 20/15 with and including BRC Mesh A142, all granular compacted fill as detailed on engineers drawings.	800	Lm		
	<u>Extra for:</u>				
C	Socket plugs	54	No		
D	Sweeping bend	54	No		
	<u>Manholes</u>				
	<u>Consisting of 150mm thick class 20(20) bed, 150mm thick reinforced concrete class 'Q' benching and channelling for 200mm diameter pipe, 15mm cement/ sand (1:3) rendering to sides and bottom, including all necessary excavation, formwork, approved filling and cart away, with heavy duty cast iron cover</u>				
E	800 x 800 mm internal dimensions: 1500 mm average depth to invert	27	No		
	<u>Sundries</u>				
	<u>Labour and materials:</u>				
F	Build in ends of pipes to manholes 300mm internal diameter	34	No		
G	Allow provisional sum (Allowable item) of Kenya Shillings 500,000.00 for making good to damaged tarmac roads and connection to sewer		Item		
	TOTAL FOR EXTERNAL FOUL DRAINAGE CARRIED TO SUMMARY				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
	<u>ELEMNT NO.07: PLANTERS</u>				
	<u>Substructures</u>				
A	Excavate foundation trenches commencing from reduced level: not exceeding 1.5 m deep	21	Om		
B	Remove surplus spoil from site to an approved site	21	Om		
	<u>Concrete</u>				
	<u>Mass concrete class Q (Mix 1:4:8) in</u>	15	Sm		
C	50 mm Thick blinding to barriers	32	Sm		
	<u>Reinforced concrete mix 1:2:4 vibrated in</u>				
D	Strip footing	8	Om		
E	200mm Thick walling	88	Sm		
	<u>Sawn formwork to</u>				
F	Sides of walling	176	Sm		
G	Strip foundation footings	27	Sm		
	<u>High tensile, square twisted bar reinforcement to BS 4449</u>				
H	Assorted bars	2560	Kg		
TOTAL FOR BARRIERS CARRIED TO SUMMARY					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
ELEMENT NO.08; LANDSCAPING WORKS					
Pricing to include watering of all grass, plants and hedges until well established					
SOFT LANDSCAPING					
A	Excavate in red soil/patched concrete to reduce levels average 350mm deep and cart away debris	966	Cm		
B	Load the sub-base excavated from patched concrete areas and cart away	966	Cm		
Levelling Area to be planted grass					
C	Adding Red soil on all areas to be planted grass and plants and leveling to achieve gradient for all lawn areas and mounds	1160	Cm		
Application of Red soil/Manure mix					
D	Supply Red soil and Farm yard manure, mix thoroughly (ratio 3:1) and spread the mixture over all areas to be landscaped; Average depth =200mm. soil (red soil) Tobacco / cow dung& compost manure mix	387	Cm		
Installation of Lawn Grass					
E	Supply, store in approved condition and plant approved grass at 50mm centers both ways	1931	Sm		
SHRUBS					
E	Copper leaf green	25	No		
F	Copper leaf red	120	No		
G	Agave	9	No		
H	Shell Ginger	45	No		
I	Miniature Bamboo	18	No		
J	Bougainvillia Orange	45	No		
K	Bougainvillia Red	30	No		
L	Bougainvillia Yellow	45	No		
	Carried to collection				

<i>Item</i>	<i>Description</i>	<i>Qty</i>	<i>Unit</i>	<i>Rate (Kshs)</i>	<i>Amount (Kshs.)</i>
A	Yesterday, Today and Tommorrow	15	No		
B	Pampass Grass	12	No		
C	Curculigo	53	No		
D	Lemon Grass	8	No		
E	Fire Bush	50	No		
F	False Bird of Paradise	25	No		
G	Chinese Hibiscus	51	No		
H	Iris	151	No		
I	Malvaviscus	40	No		
J	Fountain Grass Bronze	45	No		
K	Fountain Grass Green	22	No		
L	New Zealand Flax Bronze	20	No		
M	New Zealand Flax Green	30	No		
N	New Zealand Flax Variagated	52	No		
O	Flame Vine	80	No		
P	Thuja	1	No		
	<u>GROUND COVERS</u>				
Q	African Lily	267	No		
R	Chinese Grass Red	150	No		
S	Chinese Grass Purple	180	No		
T	Barleria	314	No		
	Carried to collection				

<i>Item</i>	<i>Description</i>	<i>Qty</i>	<i>Unit</i>	<i>Rate (Kshs)</i>	<i>Amount (Kshs.)</i>
A	Spider Plant	148	No		
B	Giant Cigar Plant	60	No		
C	Ice Plant	110	No		
D	Snow in the mountain	50	No		
E	Blue Daze	56	No		
F	Trailing Lantana Purple	189	No		
G	Trailing Lantana White	215	No		
H	Trailing Lantana Yellow	167	No		
I	Lavender	16	No		
J	Blue Lily Turf Green	62	No		
K	Blue Lily Turf Variagated	152	No		
L	Dipladenia	40	No		
M	Mondo Grass	42	No		
N	Ruelia	120	No		
O	Madagascar Periwinkle	135	No		
P	Wedelia	360	No		
	TREES				
Q	Bottle Brush	2	No		
R	Golden Palm	14	No		
S	Red Euphorbia	3	No		
T	Thika Palm	2	No		
	Carried to collection				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
A	Jacaranda	3	No		
B	Snow in summer	2	No		
C	Frangipani	3	No		
D	Ashok tree	17	No		
E	Royal Palm	10	No		
F	Brazilian Pepper Tree	2	No		
G	Potted bamboo plants (refer to drawing)	8	No		
	<u>Concrete Seating benches</u>				
H	2000mm long x 400mm wide x 400mm high insitu concrete benches along walkways (Refer to drawing)	4	No		
I	1800mm long x 400mm high concrete curved seating areas in insitu concrete and finished with ceramics tiles and 400 mm high masonry walling finished with mazeras internally and externally (Refer to drawing)	8	No		
J	Maintanance six (6) months	6	Mths		
	Carried to collection				
	<u>COLLECTION</u>				
	Brought forward from page 7/13				
	Brought forward from page 7/14				
	Brought forward from page 7/15				
	Brought forward from page 7/16 Above				
	TOTAL FOR LANDSCAPING WORKS CARRIED TO SUMMARY				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs.)
SUMMARY					
A	ELEMENT NO 01; DEMOLITIONS				
B	ELEMENT NO 02; BOUNDARY WALLING				
C	ELEMENT NO 03; DRIVEWAY AND PATHWAYS				
D	ELEMENT NO 04; STORM DRAINAGE				
E	ELEMENT NO 05; INTERNAL FOUL DRAINAGE				
F	ELEMENT NO 06; EXTERNAL FOUL DRAINAGE				
G	ELEMENT NO 07; CONCRETE BARRIERS				
H	ELEMENT NO 08; LANDSCAPING WORKS				
TOTAL FOR EXTERNAL WORKS CARRIED TO SUMMARY				KSHS	

PROPOSED REFURBISHMENT OF PEACE CORPS PREMISE IN KISUMU

BILLS OF QUANTITIES FOR ELECTRICAL INSTALLATIONS

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
1.0	BILL NO. 1: INCOMING SERVICES				
1.1	<u>POWER</u>				
1.1.1	<u>POWER FROM UTILITY</u>				
a	Medium duty pvc pipes as under:				
i	2*150mm diameter pvc ducts.	95	lm		
ii	Trenching and back filling : 450mm*600mm(d) (by MC)	95	lm		
iii	Pre Cast slabs	285	no.		
b	Electrical chambers for measuring: 1200*1200*900(d) complete with 18kg medium duty cast iron manhole cover. (by MC)	1	no		
1.1.2	<u>POWER RETICULATION</u>				
i	150mm diameter pvc ducts.	65	lm		
ii	100mm diameter pvc ducts.	140	lm		
iii	Trenching and back filling : 450mm*600mm(d) (by MC)	205	lm		
iv	Pre Cast slabs	615	no.		
b	Electrical chambers for measuring:				
i	1200*1200*900(d) complete with 18kg medium duty cast iron manhole cover. (by MC)	2	no		
ii	750*750*600(d) complete with 18kg medium duty cast iron manhole cover. (by MC)	15	no		
iii	600*600*600(d) complete with 18kg medium duty cast iron manhole cover. (by MC)	2	no		
1.2	<u>LOW VOLTAGE SERVICES:</u>				
	Medium duty pvc pipes as under:				
a	<u>Low voltage incomer</u>				
i	75 mm diameter ducts	113	lm		
ii	Trenching and back filling : 450mm*600mm(d) (by MC)	113	lm		
iii	Pre Cast slabs	339	no.		
b	Inspection chambers size: 450*450*500(d) (internal dimensions) with purpose made concrete cover (by MC)	8	no		
	Total for Bill 01: incoming power supply (to collection page.)				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
2.0	BILL NO 2:GENERATOR INSTALLATION				
	100KVA, 415/240V 50HZ GENERATOR SET				
i	Supply and fix Diesel Engine Standby Generator set with standby rating of 100KVA, 415/240V, 50HZ, 3 phase c/w Automatic Changeover switch, Control panel with Digital Display, instrumentation, hours run recorder, base tank for 8 hour operation weather proof and sound attenuation canopy, heavy duty battery, fitted with DSE 6010 MKII, attachments and accessories as FG Wilson .	1	no		
iii	Control cables comprising wiring in 4c 2.5 mm ² insulated PVC /SWA/PVC copper cables.	20	lm.		
iv	Automatic Transfer Switch (ATS), complete with suitable rated MCCBs and contactors for automatic change over operation but with an option for manual selection of the Generators (Client Procured) (100kVA Rating)	1	no		
v	Incomer from Generators to Main switch board as				
a	50 sq. mm 4c pvc/swa/pvc copper cable	25	lm		
vi	Associated fittings:				
a	Cable glands	10	no		
b	Cable lugs	10	no		
vii	Generator earthing: Genset earthing comprising 450*450mm copper mesh, 8 way Earth Bar With Double Disconnecting Link, 16mm Earth Rod and Clamp Earthing copper flat bar, mixtures of charcoal and argonite, in 750*750*1500mm deep excavation complete with test chamber to achieve impedance less than 10 ohms, to be covered with medium duty cast iron cover	1	item		
Total for generator Electrics to collection page					

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
3.0	BILL NO 3:POWER STABILIZER & UPS				
3.1	100KVA, 415/240V 50HZ AUTOMATIC VOLTAGE REGULATOR Full Solid State Microprocessor 100KVA Automatic Voltage Regulator, AVR, wired before main distribution board in the power room, with the following characteristics:-Power Supply: 3-phase, 415/240V 50Hz Operation: Individual phases to be regulated independently Output Voltage Tolerance: + 25% of nominal supply voltage Output: + 1% of 415/240V. as Sollatel or equal approved	1	no		
3.2	100KVA, 415/240V 50HZ UPS				
i	100kVA 415V Integrated Parallel UPS, Start-up 5x8 with 20-160kVA robust,3 phase UPS power protection, load crest factor 3:1 Model APC Located at the Power Room	1	no.		
ii	100kVA 415V (TNS) External Bypass Unit	1	no.		
Total for Bill No.3 Power Stabilizer and UPS to collection page					

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
4.0	BILL NO. 4: LOW VOLTAGE SWITCH BOARD				
4.1	Main Power switching panel: Located at the Power Room Standards: To be in accordance with IEC 60439-1, or VDE 0660 Part 500/11.84 and particular meet all tests as required by the standard. The panel construction to be as FORM 2B in accordance with IEC 439 PART 1. Panel to be modular type with facilities for future expansion by way of add on modules. IP protection of live parts to be IP44 The following components will form part of the bulk switching and metering sub panel.				
a	Panel housing with all internal support and reinforcement structures to house all switchgear and metering equipment; and space for supply utility metering equipment. Approximate panel size: Depth of panel:- 600 mm Height:- 1000 mm Width:- 1200 mm	1	item		
b	Space for 3 fuses and meters	9	item		
c	Mains Incomer bus MCCBs: 200 A, 65kA 3P MCCB as Eaton LG series	2	no.		
c1	Incomer Bus bars:				
i	Mains bus bars as 150A, 20*10 mm HADC copper bus bars complete with support brackets.	1	no.		
ii	Protection of bus comprising: Merlin Gerlin Surge arrester 65kA surge arrester, connection cables in 16 sq. mm earth and 63A Tp mcb C60 range.	1	no.		
d	Control:				
i	Mains sensing / change over controller as MERLIN GERIN or equal and approved with the following features: Automatic operation of generator and step loading breakers Generator on / off control Monitoring normal source and generator supply Circuit breaker and power status indicators.				
ii	ATS controller for change over and step loading control, with status indicators and operating on 240 volts as MERLIN GERLIN code: AU or eaqual and approved.	1	item		
iii	150A TPN Automatic by-pass switch 3P+N accross the AVR.	1	item		
e	Out goers from bus bars: all adjustable				
i	40 A, 35kA 3P MCCB as Eaton EG Series or equal and approved	3	no.		
ii	50 A, 35kA 3P MCCB as Eaton EG Series or equal and approved	2	no.		
iii	100 A, 35kA 3P MCCB as Eaton JG Series or equal and approved	1	no.		
	Total carried forward to next page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
	Total brought forward from previous page				
iv	125 A, 35kA 3P MCCB as Eaton JG Series or equal and approved	1	no.		
f	200 Amps Phase sequence corrector module 50-60Hz as Siemens or equal and approved	1	no.		
g	50*50 mm PVC trunking to accommodate all cables within the panel	1	item		
h	Interconnecting cables: Allow for all interconnecting cable jumpers as detailed in drawing no. E03/40-2	1	item		
i	Fire section:				
i1	Chamber for KPLC cut put fuses and meter	1	item		
i2	Out goers: 30A TP isolators as hager make or equal and approved	2	no.		
i3	30A 4P class AC3 changeover contactors with electrical & mechanical interlock	1	item		
j4	30 A, 25kA 3P MCCB as Eaton EG Series or equal and approved	1	no.		
j	<u>Cable Trays/ Trunking</u> 50*50mm UPVC cable tray for control cable 100*50mm UPVC power cable tray	1 1	item item		
k	Earthing:				
i	Main earthing bar in 30*10 mm copper tape with porcelain insulators and provisions for connections to:Water system, Cooking gas system, Main power ,switching panel earth system.	1	item		
l	Consumers main earth comprising 450*450mm copper mesh, 8 way Earth Bar With Double Disconnecting Link, 16mm Earth Rod and Clamp Earthing copper flat bar, mixtures of charcoal and argonite, in 750*750*1500mm deep excavation complete with test chamber to achieve impedance less than 1 ohm, to be covered with medium duty cast iron cover	1	item		
m	630Amps Phase sequence corrector module 50-60Hz 3 Phase 380V Rated as Siemens or equal and approved	1	no.		
	Total for Switchboard 1				
	Total for Bill 04:Low Voltage Siwtchboard (to collection page.)				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
5.0	BILL NO. 5: SITE ELECTRICAL SERVICES				
5.1	Outgoing power cables from Main LV switchboard:				
a	<u>GAZEBO</u>				
i	6 sq. mm 4c pvc/swa/pvc EDB GZ	55	lm.		
b	<u>MEDICAL CENTER</u>				
i	10 sq. mm 4c pvc/swa/pvc EDB MC	53	lm.		
c	<u>MAIN OFFICE BLOCK</u>				
i	35 sq. mm 4c pvc/swa/pvc EDB G1 Ground Floor	80	lm.		
ii	10 sq. mm 4c pvc/swa/pvc EDB 11 First Floor	5	lm.		
iii	6 sq. mm 2c pvc/swa/pvc CU 21 Second Floor	5	lm.		
iv	6 sq. mm 2c pvc/swa/pvc CU 1 (Main Gate)	105	lm.		
v	6 sq. mm 4c pvc/swa/pvc EDB E Water Pump Room	15	lm.		
vi	6sq. mm 4c pvc/swa/pvc EdB S1	55	lm.		
5.2	EXTERNAL SECURITY LIGHTING				
1.0	Switching:				
a	Control photocell as: MK cat 1746 complete with 20A 3 pole contactor make: Telemecanique and 6A switch in PVC box External cables & photocell control complete with 1A coil protection mcb and galvanised / painted enclosure box size: 250*250*100(d)	2	lm		
2.0	Lighting fitting columns:				
i	8 meter high, conical tapered Octagonal hot dip galvanised steel column with 300*115 access opening & cover for light type S2	1	no.		
ii	6 meter high, conical tapered Octagonal hot dip galvanised steel column with 300*115 access opening & cover for light type S1	4	no.		
b	Wiring within the lighting columns:				
i	Termination at 10Amps mcb	5	no.		
ii	Wiring within the lighting columns in 3*1.5 sq mm sc pvc copper cables	40	lm		
3.0	Concrete bases for Lighting columns	5	no.		
4.0	Light fittings:				
	Take delivery and install light fittings complete with lamps as detailed in the light fitting schedule and below:				
i	Type: B1	13	no		
ii	Type: B2	2	no		
iii	Type: G1	9	no		
iv	Type: S1	4	no		
v	Type: S2	1	no		
vi	Type: W1.2	7	no		
vii	Type: W1.3	24	no		
	Total carried forward to next page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
	Total brought forward from previous page				
5.3	External Services				
5.3.1	<u>Junction Box</u> IP66 Grey/White Junction Box, Weatherproof Square Outdoor Junction Box with 8 Cable Entries. 200mm by 100mm with all fitting accessories	4	no.		
5.3.3	External Sockets				
a	<u>Power Cable</u> 6 sq. mm 2c pvc/swa/pvc from EdB S2 600mm deep in pvc sleeves	300	lm.		
b	<u>Mounting Structure</u> Garden Post Support Receptacle for Outdoor socket Fixture 600mm, Black	8	no.		
c	<u>Power Socket:</u> Basically a power point shall be understood to comprise of a twin 13A SP socket point BS standard with earth completely wired in the receptacle box inclusive of 2 Gang/twin Mounting Box 35mm Depth socket outlet plate and all other mounting accessories. All outlets to be "MK " or equal and approved. And weatherproof				
i	13Amps twin socket outlets comprising of conduit, cable, and all accessories as described above	8	no.		
5.3.3	Cable Interconnections				
a	Cables				
i	Walk way/Garden lights/street Lighting in 6 sq. mm 2c pvc/swa/pvc cables in 600 mm deep trench and wired for switching via photocell / contactor & manual override.	737	lm		
ii	Perimeter wall mounted security lighting in 6 sq. mm 2c pvc/swa/pvc cables concealed in 25mm dia. Inclusive of Pvc Conduits and mounting accessories.	234	lm		
iii	Earthing of columns with 2.5sq mm sc pvc/swa/pvc cable 16mm diameter stainless steel Rod, 3.6 m long 16mm Earth Rod Clamp	5 5 5	no. no. no.		
iv	Photocell Cabling with 2.5sq mm 4c pvc/swa/pvc cable from EdB S1 to conntactors d1, d2 & d3	30	lm.		
v	Cable Markers Cable markers in accordance with specifications	18	no		
b	Trenching				
a	Medium duty pvc pipes as under:				
i	25mm diameter pvc pipe	147.4	lm		
b	Trenching and back filling : 450mm*600mm(d)	147.4	lm		
	Total for Bill 05 : Site Electrical Services (to collection page)				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
6.0	BILL No. 6:SERVICE BUILDINGS				
6.1	SWITCHROOM AND GENERATOR ROOM				
a	<u>Distribution boards:</u> For supply and installation of sub distribution boards, inclusive of all circuit breakers. All distribution boards as Hager or equal and approved.				
c	6 way CU Distribution board with 100 Amps isolator.	1	no.		
d	Mcb's, make Hager, 6KA,Hager EN 60898-1 to IEC 898 & 947.2				
i	10 Amps sp	2	no.		
ii	16 Amps sp	2	no.		
e	<u>Lighting & Power:</u> <u>Lighting:</u> Supply, install, connect and set to work rigid pvc super high impact screwed conduit installed in walls/roof slabs with wiring in pvc insulated cables complete with all accessories as specified and indicated on the drawings:- All switches and accessories to be "MK " rated 10A; 6 kAmps or equal and approved and in accordance with B.S. 3676. Basically a lighting point shall be understood to comprise a 20mm White Marshall Tufflex PVC conduit, and 1.5 sq mm 3c pvc copper cables inclusive of all accessories and wired for one way or two way switching				
i	General purpose lighting point comprising conduit, cable and all accessories as described above for one or two way switching.	3	no.		
b	<u>Switches:</u> 1 gang 1 way switch	2	no.		
f	<u>Power:</u> Basically a power point shall be understood to comprise of a twin 13A SP socket outlet BS standard with earth completely wired in 3*2.5mm sq PVC insulated copper cable, Marshall Tufflex 25mm PVC conduit, White 2 Gang/twin Mounting Box 35mm deep flush mounted metallic back box, double gang Depth socket outlet plate and inclusive of all accessories. All outlets to be as "MK" or equal and approved				
i	13 Amps twin socket outlets comprising of conduit, cable, and all accessories as described above.	4	no.		
ii	13 Amps twin socket outlets comprising of conduit, cable, and all accessories as described above, weather proof	2	no.		
	Total carried forward to next page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
	Total brought forward from previous page				
g	<u>Light fittings:</u> Supply and install basic light fittings complete with lamps as per schedule of schedule of fittings:				
i	Type F2	3	no.		
ii	Type W9	4	no.		
h	Fire alarm points comprising 25 mm conduit, draw wire and end box and blanked.	2	no.		
i	Access control points comprising 25 mm conduit, draw wire and end box and blanked.	2	no.		
Total for TX Room/ Genset and Power Room to collection page)					

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
6.2	WASHROOMS				
a	<u>Distribution boards:</u> For supply and installation of sub distribution boards, inclusive of all circuit breakers. All distribution boards as Hager or equal and approved.				
b	6 way SP CU with 100 Amps isolator.	1	no.		
c	Mcb's, make Hager, 6KA, Hager EN 60898-1 to IEC 898 & 947.2				
i	10 Amps sp	1	no.		
ii	20 Amps sp	2	no.		
iii	16 Amps sp	1	no.		
d	<u>Lighting & Power:</u> <u>Lighting:</u> Supply, install, connect and set to work rigid pvc super high impact screwed conduit installed in walls/roof slabs with wiring in pvc insulated cables complete with all accessories as specified and indicated on the drawings:- All switches and accessories to be "MK " rated 10A; 6 kAmps or equal and approved and in accordance with B.S. 3676. Basically a lighting point shall be understood to comprise a 20mm White Marshall Tufflex PVC conduit, and 1.5 sq mm 3c pvc copper cables inclusive of all accessories and wired for one way or two way switching				
i	General purpose lighting point comprising conduit, cable and all accessories as described above for one or two way switching.	15	no.		
b	<u>Switches:</u> 1 gang 1 way switch 1 gang 2 way switch	8 2	no. no.		
f	<u>Power:</u> Basically a power point shall be understood to comprise of a twin 13A SP socket outlet EU standard with earth completely wired in 3*2.5mm sq PVC insulated copper cable, Marshall Tufflex 25mm PVC conduit, White 2 Gang/twin Mounting Box 35mm deep flush mounted metallic back box, double gang Depth socket outlet plate and inclusive of all accessories. All outlets to be as "MK" or equal and approved				
i	13 Amps twin socket outlets comprising of conduit, cable, and all accessories as described above for raw power	5	no.		
ii	20 Amps DP switch with neon indicator as 'MK' Drawn in 3*2.5sq mm pvc copper cable in 25mm pvc conduit together with all accessories for Pumps	4	no.		
f	<u>Light fittings:</u> Supply and install basic light fittings complete with lamps as per schedule of schedule of fittings:				
i	Type B4	5	no.		
ii	Type F5	1	no.		
ii	Type W2	4	no.		
	Total for Washrooms to collection page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
6.3	<u>GATE / HOUSE;</u>				
a	<u>Distribution boards:</u> For supply and installation of sub distribution boards, inclusive of all circuit breakers. All distribution boards as Hager or equal and approved.				
b	4 way TP EDB with 100 Amps isolator.	1	no.		
c	Mcb's, make Hager, 6KA, Hager EN 60898-1 to IEC 898 & 947.2				
i	10 Amps sp	1	no.		
ii	20 Amps sp	2	no.		
iii	16 Amps sp	1	no.		
d	<u>Lighting & Power:</u> <u>Lighting:</u> Supply, install, connect and set to work rigid pvc super high impact screwed conduit installed in walls/roof slabs with wiring in pvc insulated cables complete with all accessories as specified and indicated on the drawings:- All switches and accessories to be "MK " rated 10A; 6 kAmps or equal and approved and in accordance with B.S. 3676. Basically a lighting point shall be understood to comprise a 20mm White Marshall Tufflex PVC conduit, and 1.5 sq mm 3c pvc copper cables inclusive of all accessories and wired for one way or two way switching				
i	General purpose lighting point comprising conduit, cable and all accessories as described above for one or two way switching.	2	no.		
b	<u>Switches:</u> 1 gang 1 way switch	1	no.		
f	<u>Power:</u> Basically a power point shall be understood to comprise of a twin 13A SP socket outlet BS standard with earth completely wired in 3*2.5mm sq PVC insulated copper cable, Marshall Tufflex 25mm PVC conduit, White 2 Gang/twin Mounting Box 35mm deep flush mounted metallic back box, double gang Depth socket outlet plate and inclusive of all accessories. All outlets to be as "MK" or equal and approved				
i	13 Amps twin socket outlets comprising of conduit, cable, and all accessories as described above for raw power	3	no.		
ii	13 Amps twin socket outlets comprising of conduit, cable, and all accessories as described above for clean power	1	no.		
iii	13 Amps twin socket outlets comprising of conduit, cable, and all accessories as described above for raw power, weather proof	2	no.		
ii	20 Amps DP switch with neon indicator as 'MK' Drawn in 3*2.5sq mm pvc copper cable in 25mm pvc conduit together with all accessories for Pumps	1	no.		
	Total carried forward to next page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
	Total brought forward from previous page				
g	<u>Light fittings:</u> Supply and install basic light fittings complete with lamps as per schedule of schedule of fittings:				
i	Type D3	4	no.		
ii	Type D4	4	no.		
iii	Type F2	6	no.		
iv	Type W9	2	no.		
h	Fire alarm points comprising 25 mm conduit, draw wire and end box and blanked.	3	no.		
i	Camera points comprising 25 mm conduit, draw wire and end box and blanked.	3	no.		
j	Access control points comprising 25 mm conduit, draw wire and end box and blanked.	2	no.		
Total for Gate house 1&3 to collection page					

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
6.4	Water Pump room				
	<u>Distribution boards:</u> For supply and installation of sub distribution boards, inclusive of all circuit breakers. All distribution boards as Hager or equal and approved.				
a1	4 way TP EDB with 100 Amps isolator.	1	no.		
a2	Mcb's, make Hager, 6KA, Hager EN 60898-1 to IEC 898 & 947.2				
i	10 Amps sp	1	no.		
ii	20 Amps sp	2	no.		
iii	30 Amps sp	1	no.		
iv	20 Amps tp	1	no.		
	<u>Lighting & Power:</u>				
b	<u>Lighting:</u>				
b1	Supply, install, connect and set to work rigid pvc super high impact screwed conduit installed in walls/roof slabs with wiring in pvc insulated cables complete with all accessories as specified and indicated on the drawings:- All switches and accessories to be "MK " rated 10A; 6 kAmps or equal and approved and in accordance with B.S. 3676. Basically a lighting point shall be understood to comprise a 20mm White Marshall Tufflex PVC conduit, and 1.5 sq mm 3c pvc copper cables inclusive of all accessories and wired for one way or two way switching				
i	General purpose lighting point comprising conduit, cable and all accessories as described above for one or two way switching.	2	no.		
b2	<u>Switches:</u> 1 gang 1 way switch	1	no.		
c	<u>Power:</u> Basically a power point shall be understood to comprise of a twin 13A SP socket outlet BS standard with earth completely wired in 3*2.5mm sq PVC insulated copper cable, 25mm PVC conduit, White 2 Gang/twin Mounting Box 35mm deep flush mounted metallic back box, double gang Depth socket outlet plate and inclusive of all accessories. All outlets to be as "MK" or equal and approved				
i	13 Amps twin socket outlets comprising 2.5 sq. mm pvc cables drawn in 25mm diameter conduit and all other accessories.	2	no.		
ii	20 Amps DP switched outlets with neon indicator comprising of 3*2.5 sq. mm pvc cables drawn in 25mm diameter conduit and all other accessories dp outlet to extract fan	1	no.		
iii	20 Amps DP switched outlets with neon indicator comprising of 3*2.5 sq. mm pvc cables drawn in 25mm diameter conduit and all other accessories dp outlet to water booster pump	1	no.		
	Total carried forward to next page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
	Total brought forward from previous page				
d	Other power circuits;				
i	2.5mm sq. pvc/swa/pvc 4 core copper cables to submersible pump	10	lm		
ii	<u>Isolators</u>				
	20 Amps TP	1	no		
iii	2.5mm sq. pvc/swa/pvc 4 core copper cables to circulation pump	10	lm		
iv	<u>Isolators</u>				
	20 Amps TP	1	no		
e	Fire pumps:				
i	10 mm sq. pvc/swa/pvc 4c copper cables from switchboard to isolator.	75	lm		
ii	20A TP isolator as ABB or equal and approved	1	no		
f	<u>Light fittings:</u>				
	Supply and install the Light fitting				
	as detailed in the light fitting schedule and below:				
i	Type F2	2	no.		
	Total For Water Pump room to collection page				
	Total for bill No. 6: Services building to collection page page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
7.0	BILL NO. 7: INTERNAL INSTALLATIONS TO MAIN OFFICE				
7.1	GROUND FLOOR				
a	<u>Cable carriers:</u>				
a1	<u>Vertical Cable Trays</u>				
i	300mm*50 mm Perforated Cable Tray With 1.2 mm Thickness and Coating, Hot Dip Galvanized Cable Tray as 'CABROFIL" or equal and approved complete with supports and all accessories.(Power Vertical Tray)	5	lm		
ii	200mm*50 mm Perforated Cable Tray With 1.2 mm Thickness and Coating, Hot Dip Galvanized Cable Tray as 'CABROFIL" or equal and approved complete with supports and all accessories.(Low Voltage Vertical Tray)	5	lm		
a2	<u>Horizontal Cable Trays</u>				
i	300mm*50 mm Perforated Cable wire Tray as 'CABROFIL" or equal and approved complete with supports and all accessories.	15	lm		
ii	200mm*50 mm Perforated Cable wire Tray as 'CABROFIL" or equal and approved complete with supports and all accessories.	30	lm		
iii	150mm*50 mm Perforated Cable wire Tray as 'CABROFIL" or equal and approved complete with supports and all accessories.	10	lm		
a3	<u>Trunking System</u>				
i	<u>Internal Horizontal and Vertical Trunking</u> 220 mm x 65mm extra large dado trunking, 3 deep Compartments with electromagnetic shielding (conductive spray shielding) to run in the offices to work stations as "Sterling-" or equal and approved.	130	lm		
ii	<u>Low Voltage Services Trunking</u> 25mm x 25mm PVC surface trunking for speaker points, Fire alarm points Sirens and Magneti call button, as per drawings. as "MK" or equal and approved. Inclusive of all fitting accessories.	128	no.		
iii	<u>Trunking accessories comprising of:</u>				
i.	Twin socket boxes complete with frame for power outlets	55	no.		
ii.	Single socket boxes complete with frame for data outlets	55	no.		
iii.	End caps	13	no		
iv.	Corner bends	26	no		
v.	Flat Tee	20	no		
	Total carried forward to next page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
	Total brought forward from previous page				
b	<u>Internal Power switching panel Board:</u>				
b1	To be in accordance with IEC 61439-1, 2 4 Way 3 Pole Distribution Board rated 150A fitted completely with a 150A TP MCCB 50kA, terminal capacity 35 sq mm. Protector pan assembly type; TP+N pan assemblies, complete with earth/neutral bars, (range 150A (15*10mm)). Enclosure dimension 540(H)*420(W)*132(D) with all mounting kits to be Eaton make or equal and approved.	1	no.		
b2	<u>Outgoing MCCBs</u>				
i	50A SP, 35kA MCCB isolators as EATON EG Series or equal and approved.	2	no.		
ii	50A TP, 35kA MCCB isolators as EATON EG Series or equal and approved.	1	no.		
iii	100 A TP, 35kA MCCB isolators as EATON JG Series or equal and approved.	1	no.		
c	<u>Cables:</u>				
i	6 sq. mm 2c pvc/swa/pvc CU G1.1	18	lm.		
ii	6 sq. mm 2c pvc/swa/pvc CU 21.1	21	lm.		
iii	6 sq. mm 4c pvc/swa/pvc EDB 11.1	15	lm.		
iv	10 sq. mm 4c pvc/swa/pvc EDB G1	5	lm.		
d	<u>Distribution boards:</u>				
	For supply and installation of sub distribution boards, inclusive of all circuit breakers. All distribution boards as Hager or equal and approved.				
i	6 way SP consumer unit (UPS) with 100 Amps isolator. CU. G1.1	1	no.		
ii	9 way SP consumer unit with 100 Amps isolator. CU.21.1	1	no.		
iii	8 way TP Electrical Distribution Board with 100 Amps isolator. EDB 11	1	no.		
iv	8 way TP Electrical Distribution Board with 100 Amps isolator. EDB G1	1	no.		
e	<u>Mcbcs, make Hager, 6KA,Hager EN 60898-1 to IEC 898 & 947.2</u>				
i	10 Amps sp	10	no.		
ii	20 Amps sp	15	no.		
iii	30 Amps sp	8	no.		
iii	45 Amps sp	1	no.		
f	<u>Lighting & Power:</u>				
f	<u>Lighting:</u>				
	Supply, install, connect and set pvc insulated cables in existing conduits in the roof slab and other necessary installation in trunking with wiring in pvc insulated cables complete with all accessories as specified and indicated on the drawings:- All switches and accessories to be "MK " rated 10A; 6 kAmps or equal and approved and in accordance with B.S. 3676. Basically a lighting point shall be understood to comprise a 25mm White Marshall Tufflex Trunking below the basement roof soffit in areas with no lighting point in the basement roof slab, and 1.5 sq mm 3c pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. Runing in existing conduits to switches and to lighting points via trunking inclusive of all accessories and wired for one way or two way switching				
f1	General purpose lighting point comprising conduit, cable and all accessories as described above for one or two way switching.	75	no.		
	Total carried forward to next page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
	Total brought forward from previous page				
f2	<u>Switches</u>				
i	Presence detector switches 10 meter range complete with 10 Amps 3 pole AC2 contactors as ABB	2	no.		
ii	1 gang 2 way switch	22	no.		
iii	2 gang 2 way switch	10	no.		
g	<u>Power:</u>				
	Basically a power point shall be understood to comprise of cables, socket outlet plate and inclusive of all accessories. All outlets to be as "MK" or equal and approved				
i	13 Amps twin Shuttered socket outlets comprising 3*2.5 sq. mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. drawn in trunking and all other accessories.	45	no.		
ii	20 Amps DP switched socket outlets comprising 3*2.5 sq. mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. drawn in 25mm pvc marshall tuflex white conduit in wall to hand driers and all other accessories.	2	no.		
iii	20 Amps DP switched socket outlets comprising 3*2.5 sq. mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. drawn in 25mm pvc marshall tuflex white conduit in wall to Air conditioning Units and all other accessories.	9	no.		
iv	20 Amps DP switched socket outlets comprising 3*2.5 sq. mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. drawn in 25mm pvc marshall tuflex white conduit in wall to General Units and all other accessories.	3	no.		
v	45 Amps DP switched socket outlets comprising 2*6 sq.+4E mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. to Cooker Unit and all other accessories.	1	no.		
h	<u>Light fittings:</u>				
	Supply and install basic lamp holder & testing lamp as detailed in the light fitting schedule and below: <u>Light fitting type</u>				
i	Type B4	8	no.		
i	Type D1.1	9	no.		
ii	Type D2.1	3	no.		
iii	Type F2	5	no.		
iv	Type F3	4	no.		
v	Type F4	4	no.		
vi	Type F4.1	6	no.		
vii	Type F5	25	no.		
viii	EXIT	5	no.		
ix	Type W1.1	10	no.		
i	<u>Fire Alarm Points</u>				
	Fire alarm points in 25mm Ø Marshall tuflex pvc trunking and accessories for fire alarm points and fitting of trunking, as per drawings.	12	no.		
	Total for Ground Floor to collection page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
7.2	First FLOOR				
a	<u>Cable carriers:</u>				
a1	<u>Vertical Cable Trays</u>				
i	300mm*50 mm Perforated Cable Tray With 1.2 mm Thickness and Coating, Hot Dip Galvanized Cable Tray as 'CABROFIL" or equal and approved complete with supports and all accessories.(Power Vertical Tray)	3	lm		
ii	200mm*50 mm Perforated Cable Tray With 1.2 mm Thickness and Coating, Hot Dip Galvanized Cable Tray as 'CABROFIL" or equal and approved complete with supports and all accessories.(Low Voltage Vertical Tray)	3	lm		
a2	<u>Horizontal Cable Trays</u>				
i	300mm*50 mm Perforated Cable wire Tray as 'CABROFIL" or equal and approved complete with supports and all accessories.	5	lm		
ii	150mm*50 mm Perforated Cable wire Tray as 'CABROFIL" or equal and approved complete with supports and all accessories.	15	lm		
a3	<u>Trunking System</u>				
i	<u>Internal Horizontal and Vertical Trunking</u> 220 mm x 65mm extra large dado trunking, 3 deep Compartments with electromagnetic shielding (conductive spray shielding) to run in the offices to work stations as "Sterling-" or equal and approved.	115	lm		
ii	<u>Low Voltage Services Trunking</u> 25mm x 25mm PVC surface trunking for speaker points, Fire alarm points Sirens and Magneti call button, as per drawings. as "MK" or equal and approved. Inclusive of all fitting accessories.	93	no.		
iii	<u>Trunking accessories comprising of:</u>				
i.	Twin socket boxes complete with frame for power outlets	42	no.		
ii.	Single socket boxes complete with frame for data outlets	42	no.		
iii.	End caps	15	no		
iv.	Corner bends	21	no		
v.	Flat Tee	17	no		
	Total carried forward to next page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
	Total brought forward from previous page				
b	<u>Distribution boards:</u> For supply and installation of sub distribution boards, inclusive of all circuit breakers. All distribution boards as Hager or equal and approved.				
i	8 way TP Electrical Distribution Board with 100 Amps isolator. EDB 11	1	no.		
c	Mcb's, make Hager, 6KA, Hager EN 60898-1 to IEC 898 & 947.2				
i	10 Amps sp	8	no.		
ii	20 Amps sp	12	no.		
iii	30 Amps sp	7	no.		
	<u>Lighting & Power:</u>				
f	<u>Lighting:</u> Supply, install, connect and set pvc insulated cables in existing conduits in the roof slab and other necessary installation in trunking with wiring in pvc insulated cables complete with all accessories as specified and indicated on the drawings:- All switches and accessories to be "MK " rated 10A; 6 kAmps or equal and approved and in accordance with B.S. 3676. Basically a lighting point shall be understood to comprise a 25mm White Marshall Tufflex Trunking below the basement roof soffit in areas with no lighting point in the basement roof slab, and 1.5 sq mm 3c pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. Running in existing conduits to switches and to lighting points via trunking inclusive of all accessories and wired for one way or two way switching				
f1	General purpose lighting point comprising conduit, cable and all accessories as described above for one or two way switching.	45	no.		
	Total carried forward to next page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
	Total brought forward from previous page				
f2	<u>Switches</u>				
i	1 gang 2 way switch	15	no.		
ii	2 gang 2 way switch	6	no.		
g	<u>Power:</u> Basically a power point shall be understood to comprise of cables, socket outlet plate and inclusive of all accessories. All outlets to be as "MK" or equal and approved				
i	13 Amps twin Shuttered socket outlets comprising 3*2.5 sq. mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. drawn in trunking and all other accessories.	39	no.		
ii	20 Amps DP switched socket outlets comprising 3*2.5 sq. mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. drawn in 25mm pvc marshall tuflex white conduit in wall to hand driers and all other accessories.	2	no.		
iii	20 Amps DP switched socket outlets comprising 3*2.5 sq. mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. drawn in 25mm pvc marshall tuflex white conduit in wall to Air conditioning Units and all other accessories.	6	no.		
iv	20 Amps DP switched socket outlets comprising 3*2.5 sq. mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. drawn in 25mm pvc marshall tuflex white conduit in wall to General Units and all other accessories.	3	no.		
h	<u>Light fittings:</u> Supply and install basic lamp holder & testing lamp as detailed in the light fitting schedule and below: <u>Light fitting type</u>				
i	Type B4	4	no.		
i	Type D1.1	7	no.		
iii	Type F2	5	no.		
iv	Type F3	3	no.		
v	Type F4	4	no.		
vii	Type F5	22	no.		
viii	EXIT	3	no.		
ix	Type FL1	6	no.		
ii	<u>Fire Alarm Points</u> Fire alarm points in 25mm Ø Marshall tuflex pvc trunking and accessories for fire alarm points and fitting of trunking, as per drawings.	13	no.		
	Total for First Floor to collection page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
7.3	Second FLOOR				
a	<u>Cable carriers:</u>				
a1	<u>Vertical Cable Trays</u>				
i	100mm*50 mm Perforated Cable Tray With 1.2 mm Thickness and Coating, Hot Dip Galvanized Cable Tray as 'CABROFIL" or equal and approved complete with supports and all accessories.(Power Vertical Tray)	3	lm		
ii	100mm*50 mm Perforated Cable Tray With 1.2 mm Thickness and Coating, Hot Dip Galvanized Cable Tray as 'CABROFIL" or equal and approved complete with supports and all accessories.(Low Voltage Vertical Tray)	3	lm		
a2	<u>Horizontal Cable Trays</u>				
i	150mm*50 mm Perforated Cable wire Tray as 'CABROFIL" or equal and approved complete with supports and all accessories.	15	lm		
a3	<u>Trunking System</u>				
i	<u>Internal Horizontal and Vertical Trunking</u> 220 mm x 65mm extra large dado trunking, 3 deep Compartments with electromagnetic shielding (conductive spray shielding) to run in the offices to work stations as "Sterling-" or equal and approved.	40	lm		
ii	<u>Low Voltage Services Trunking</u> 25mm x 25mm PVC surface trunking for speaker points, Fire alarm points Sirens and Magneti call button, as per drawings. as "MK" or equal and approved. Inclusive of all fitting accessories.	12	no.		
iii	<u>Trunking accessories comprising of:</u>				
i.	Twin socket boxes complete with frame for power outlets	15	no.		
ii.	Single socket boxes complete with frame for data outlets	15	no.		
iii.	End caps	6	no		
iv.	Corner bends	8	no		
v.	Flat Tee	3	no		
Total carried forward to next page					

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
	Total brought forward from previous page				
b	<u>Distribution boards:</u> For supply and installation of sub distribution boards, inclusive of all circuit breakers. All distribution boards as Hager or equal and approved.				
i	9 way SP Consumer Unit with 100 Amps isolator. CU 21	1	no.		
c	Mcb's, make Hager, 6KA, Hager EN 60898-1 to IEC 898 & 947.2				
i	10 Amps sp	2	no.		
ii	20 Amps sp	7	no.		
iii	30 Amps sp	3	no.		
	<u>Lighting & Power:</u>				
f	<u>Lighting:</u> Supply, install, connect and set pvc insulated cables in existing conduits in the roof slab and other necessary installation in trunking with wiring in pvc insulated cables complete with all accessories as specified and indicated on the drawings:- All switches and accessories to be "MK " rated 10A; 6 kAmps or equal and approved and in accordance with B.S. 3676. Basically a lighting point shall be understood to comprise a 25mm White Marshall Tufflex Trunking below the basement roof soffit in areas with no lighting point in the basement roof slab, and 1.5 sq mm 3c pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. Running in existing conduits to switches and to lighting points via trunking inclusive of all accessories and wired for one way or two way switching				
f1	General purpose lighting point comprising conduit, cable and all accessories as described above for one or two way switching.	20	no.		
	Total carried forward to next page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
	Total brought forward from previous page				
f2	<u>Switches</u>				
i	1 gang 2 way switch	5	no.		
ii	2 gang 2 way switch	1	no.		
g	<u>Power:</u> Basically a power point shall be understood to comprise of cables, socket outlet plate and inclusive of all accessories. All outlets to be as "MK" or equal and approved				
i	13 Amps twin Shuttered socket outlets comprising 3*2.5 sq. mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. drawn in trunking and all other accessories.	15	no.		
ii	20 Amps DP switched socket outlets comprising 3*2.5 sq. mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. drawn in 25mm pvc marshall tuflex white conduit in wall to hand driers and all other accessories.	2	no.		
iii	20 Amps DP switched socket outlets comprising 3*2.5 sq. mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. drawn in 25mm pvc marshall tuflex white conduit in wall to Air conditioning Units and all other accessories.	3	no.		
iv	20 Amps DP switched socket outlets comprising 3*2.5 sq. mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. drawn in 25mm pvc marshall tuflex white conduit in wall to General Units and all other accessories.	2	no.		
h	<u>Light fittings:</u> Supply and install basic lamp holder & testing lamp as detailed in the light fitting schedule and below: <u>Light fitting type</u>				
i	Type B4	2	no.		
ii	Type D1.1	2	no.		
iii	Type F3	2	no.		
iv	Type F5	15	no.		
v	EXIT	1	no.		
ii	<u>Fire Alarm Points</u> Fire alarm points in 25mm Ø Marshall tuflex pvc trunking and accessories for fire alarm points and fitting of trunking, as per drawings.	5	no.		
	Total for Second Floor to collection page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
7.4	MEDICAL CENTER				
a	<u>Cable carriers:</u>				
a1	<u>Vertical Cable Trays</u>				
i	300mm*50 mm Perforated Cable Tray With 1.2 mm Thickness and Coating, Hot Dip Galvanized Cable Tray as 'CABROFIL" or equal and approved complete with supports and all accessories.(Power Vertical Tray)	4	lm		
a2	<u>Horizontal Cable Trays</u>				
i	300mm*50 mm Perforated Cable wire Tray as 'CABROFIL" or equal and approved complete with supports and all accessories.	15	lm		
a3	<u>Trunking System</u>				
i	<u>Internal Horizontal and Vertical Trunking</u> 220 mm x 65mm extra large dado trunking, 3 deep Compartments with electromagnetic shielding (conductive spray shielding) to run in the offices to work stations as "Sterling-" or equal and approved.	60	lm		
ii	<u>Low Voltage Services Trunking</u> 25mm x 25mm PVC surface trunking for speaker points, Fire alarm points Sirens and Magneti call button, as per drawings. as "MK" or equal and approved. Inclusive of all fitting accessories.	7	no.		
iii	<u>Trunking accessories comprising of:</u>				
i.	Twin socket boxes complete with frame for power outlets	18	no.		
ii.	Single socket boxes complete with frame for data outlets	15	no.		
iii.	End caps	8	no		
iv.	Corner bends	15	no		
v.	Flat Tee	4	no		
Total carried forward to next page					

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
	Total brought forward from previous page				
c	<u>Cables:</u>				
i	6 sq. mm 2c pvc/swa/pvc CU W	68	lm.		
iii	6 sq. mm 4c pvc/swa/pvc EDB MC	65	lm.		
d	<u>Distribution boards:</u>				
	For supply and installation of sub distribution boards, inclusive of all circuit breakers. All distribution boards as Hager or equal and approved.				
i	6 way SP consumer unit (UPS) with 100 Amps isolator. CU. G1.1	1	no.		
ii	8 way TP Electrical Distribution Board with 100 Amps isolator. EDB 11	1	no.		
e	<u>Mcbs, make Hager, 6KA,Hager EN 60898-1 to IEC 898 & 947.2</u>				
i	10 Amps sp	8	no.		
ii	20 Amps sp	16	no.		
iii	30 Amps sp	4	no.		
	<u>Lighting & Power:</u>				
f	<u>Lighting:</u>				
	Supply, install, connect and set pvc insulated cables in existing conduits in the roof slab and other necessary installation in trunking with wiring in pvc insulated cables complete with all accessories as specified and indicated on the drawings:- All switches and accessories to be "MK " rated 10A; 6 kAmps or equal and approved and in accordance with B.S. 3676. Basically a lighting point shall be understood to comprise a 25mm White Marshall Tufflex Trunking below the basement roof soffit in areas with no lighting point in the basement roof slab, and 1.5 sq mm 3c pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. Runinng in existing conduits to switches and to lighting points via trunking inclusive of all accessories and wired for one way or two way switching				
f1	General purpose lighting point comprising conduit, cable and all accessories as described above for one or two way switching.	51	no.		
	Total carried forward to next page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
	Total brought forward from previous page				
f2	<u>Switches</u>				
i	Presence detector switches 10 meter range complete with 10 Amps 3 pole AC2 contactors as ABB	2	no.		
ii	1 gang 2 way switch	18	no.		
iii	2 gang 2 way switch	8	no.		
g	<u>Power:</u>				
	Basically a power point shall be understood to comprise of cables, socket outlet plate and inclusive of all accessories. All outlets to be as "MK" or equal and approved				
i	13 Amps twin Shuttered socket outlets comprising 3*2.5 sq. mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. drawn in trunking and all other accessories.	22	no.		
ii	20 Amps DP switched socket outlets comprising 3*2.5 sq. mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. drawn in 25mm pvc marshall tuflex white conduit in wall to hand driers and all other accessories.	3	no.		
iii	20 Amps DP switched socket outlets comprising 3*2.5 sq. mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. drawn in 25mm pvc marshall tuflex white conduit in wall to Air conditioning Units and all other accessories.	9	no.		
iv	20 Amps DP switched socket outlets comprising 3*2.5 sq. mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. drawn in 25mm pvc marshall tuflex white conduit in wall to General Units and all other accessories.	3	no.		
h	<u>Light fittings:</u>				
	Supply and install basic lamp holder & testing lamp as detailed in the light fitting schedule and below: <u>Light fitting type</u>				
i	Type C1	3	no.		
ii	Type B4	10	no.		
iii	Type D1.1	9	no.		
iv	Type D1.2	1	no.		
v	Type F1	8	no.		
vi	Type F3	1	no.		
vii	Type F4	2	no.		
ix	Type F5	7	no.		
x	EXIT	5	no.		
xi	Type W1.1	4	no.		
ii	<u>Fire Alarm Points</u>				
	Fire alarm points in 25mm Ø Marshall tuflex pvc trunking and accessories for fire alarm points and fitting of trunking, as per drawings.	10	no.		
	Total for Medical Center to collection page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
7.5	GAZEBO				
a	<u>Cable carriers:</u>				
a1	<u>Conduits</u>				
i	ø38mm pvc conduits	24	lm		
ii	ø32mm pvc conduits	25	lm		
b	<u>Cables:</u>				
i	16 sq. mm 2c pvc/swa/pvc CU GZ	75	lm.		
d	<u>Distribution boards:</u>				
	For supply and installation of sub distribution boards, inclusive of all circuit breakers. All distribution boards as Hager or equal and approved.				
i	9 way SP consumer unit (UPS) with 100 Amps isolator. CU. GZ	1	no.		
e	Mcbs, make Hager, 6KA,Hager EN 60898-1 to IEC 898 & 947.2				
i	10 Amps sp	3	no.		
ii	20 Amps sp	1	no.		
iii	30 Amps sp	4	no.		
	<u>Lighting & Power:</u>				
f	<u>Lighting:</u>				
	Supply, install, connect and set pvc insulated cables in existing conduits in the roof slab and other necessary installation in trunking with wiring in pvc insulated cables complete with all accessories as specified and indicated on the drawings:- All switches and accessories to be "MK " rated 10A; 6 kAmps or equal and approved and in accordance with B.S. 3676. Basically a lighting point shall be understood to comprise a 25mm White Marshall Tufflex Trunking below the basement roof soffit in areas with no lighting point in the basement roof slab, and 1.5 sq mm 3c pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. Runinng in existing conduits to switches and to lighting points via trunking inclusive of all accessories and wired for one way or two way switching				
f1	General purpose lighting point comprising conduit, cable and all accessories as described above for one or two way switching.	27	no.		
	Total carried forward to next page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
	Total brought forward from previous page				
f2	<u>Switches</u>				
i	Presence detector switches 10 meter range complete with 10 Amps 3 pole AC2 contactors as ABB	1	no.		
ii	1 gang 2 way switch	3	no.		
iii	2 gang 2 way switch	1	no.		
g	<u>Power:</u>				
	Basically a power point shall be understood to comprise of cables, socket outlet plate and inclusive of all accessories. All outlets to be as "MK" or equal and approved				
i	13 Amps twin Shuttered socket outlets comprising 3*2.5 sq. mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. drawn in trunking and all other accessories.	10	no.		
ii	20 Amps DP switched socket outlets comprising 3*2.5 sq. mm pvc Soft annealed 7 strand Copper cables PVC insulated rated 90 °C according to IEC 60227 & BS 6004. drawn in 25mm pvc marshall tuflex white conduit in wall to General Units and all other accessories.	1	no.		
h	<u>Light fittings:</u>				
	Supply and install basic lamp holder & testing lamp as detailed in the light fitting schedule and below: <u>Light fitting type</u>				
i	Type C1	1	no.		
ii	Type C2	3	no.		
iv	Type L1.1	12.8	Lm		
v	Type P1.1	8	no.		
vi	Type W2.1	12	no.		
	Total for Gazebo to collection page				

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
7.6	Lightning protection System:				
a	Lightning protection system comprising 25*3mm copper tape with joining clamps and all accessories. on the roof	32	lm		
b	Ditto as a) above but for down conductors	24	lm		
c	2.1 m high lightning arrestors complete with base clamps	1	no.		
d	Earthing via cooper300mm*300mm mesh, in 450*450*600mm. inspection pits with removable cover, to obtain earth resistance less than 1 ohm.	2	item.		
e	Lightning protection system test points to relevant specifications.	2	no.		
f	Testing for earth impedance in presence of Engineer, to ensure impedance values below 1 ohm is achieved.	1	item		
Total for Lightning Protection System to the collection page					

Item ref	Description	Qty	Unit	Rate Kes.	Total Kes.
8.0	BILL NO 08: AUTOMATIC FIRE ALARM & DETECTION				
i	For the supply and installation of a 4-loop, 50 devices capacity intelligent fire alarm panel as described in the Engineering specification make MENVIER Model DF 60004 or equal and approved. C/W 4*12V*12AH extended battery. Main Office Block	1	no		
ii	For the supply and installation of a 1-loop, 50 devices capacity intelligent fire alarm panel as described in the Engineering specification make MENVIER Model or equal and approved. C/W 4*12V*12AH. extended battery. Apartment Office and Power Rooms	1	no		
iii	Analogue addressable photoelectric smoke detector with base as MENVIER model MAP820 complete with mounting base.	32	no.		
iv	Analogue addressable photoelectric heat detector with base as MENVIER model MAP820 complete with mounting base.	4	no.		
v	Low current high out put multi-tone fire sounder, sound level: 75 dBA in red housing make MENVIER model MAS 767S	6	no.		
vi	Supply and install manual call point make MENVIER Model MBG 613	6	no.		
vii	For wiring to smoke & heat detector points in 1.5 sq. mm 2C fire resistant screened cable as detailed in specifications.	768	lm		
viii	For wiring to sounder points in 1.5 sq. mm sc FP 100 fire resistant cable.	204	lm		
x	For interlinking to city fire brigade	1	lot		
xi	Testing and commisioning	1	item		
Total for automatic fire alarm & detection to collection page					

PROPOSED REFURBISHMENT OF PEACE CORPS PREMISE IN KISUMU

**ELECTRICAL INSTALLATION
COLLECTION PAGE**

ITEM REF	DESCRIPTION	TOTAL	TOTAL
1.0	BILL 01: INCOMING POWER SERVICES		
2.0	BILL 02: GENERATOR INSTALLATION		
3.0	BILL 03: POWER STABILIZER AND UPS		
4.0	BILL 04: LV SWITCHBOARD		
4.1	Switchboard 1 (Power Room)		
5.0	BILL 05: ELECTRICAL SITE SERVICES		
6.0	BILL 06: SERVICES BUILDINGS		
6.1	Power rooms (transformer, generator & Switchroom) & Gate 2		
6.2	Changing Rooms for cleaners and guards		
6.3	Gate House 1&3		
6.4	Water Pump Room		
	<i>Total For Bill No. 6</i>		
7.0	BILL 07 : INTERNAL SERVICES (MAIN OFFICE BLOCK)		
7.1	Ground Floor Main Office Block		
7.2	First Floor Main Office Block		
7.3	Second Floor Main Office Block		
7.4	Medical Center		
7.5	Gazebo		
7.6	Ligtning Protection System		
	<i>Total For Bill No. 7</i>		
8.0	BILL 08: AUTOMATIC FIRE ALARM & DETECTION		
	TOTAL		
	Total Carried forward to the next page		

Item	Description	Qty	Unit	Rate	Amount
				Kshs	Kshs
8.0	BILL NO. 1: PRELIMINARIES AND GENERAL ITEMS				
A	Allow for the preparation of all Working Drawings .	1	Sum		
B	Allow for the preparation of all As Built Drawings .	1	Sum		
C	Allow for Sterilization of plumbing and reticulation systems to the Engineer's satisfaction.	1	Sum		
D	Allow for Setting to proper functioning, testing and commissioning of the whole system of plumbing, drainage and fire fighting installations to the Engineer's satisfaction.	1	Sum		
E	Allow for Water Connection Fees by Local Authority Water Department to the laid down external water pipeline.	1	Sum		
E	The tenderer is to describe hereunder inserting any relevant clause number, any other works, obligations or items that may be referred to in the Conditions Of Contract, Specification or Drawings in respect of the works for which he desires to enter a separate charge (this charge is to be entered in the Amount column) If no charge is entered hereunder, rates and amounts elsewhere in the shedule of prices shall be deemed to cover all expenss for such works, obligations or items.	1	Sum		-
1.1	Total Bill No. 1: for Preliminaries and General Items C/f to Summary Page				

Item	Description	Qty	Unit	Rate	Amount
				KSHS	KSHS
8.2	BILL NO. 2.: SANITARY WARE AND FITTINGS				
	<i>Supply, deliver, install, test and commossion the following sanitary ware and fittings, complete with all necessary accessories for proper function as described and shown on the drawings.Trade names and Reference numbers are intended only as a guide to the type and quality of the fitting.</i>				
A	Water Closet and Accessories				
i)	Vitreous china to BS 3402, BS EN 997 and BS EN 33 wall mounted pack, including: wall-hang bowl, soft close seat & cover, fixing kit #T3332 and straight finned pattern panekta WC outlet connector #S4325 as ARMITAGE SHANKS model Chelsea or equal and approved.	14	Set		
ii)	20mm dia inline WC flush valve for concealed Body with possible repeated flushing, low flushing noise, Inlet pipe connection of ¾" BSP & min 1.5 bar pressure as JAQUAR iFlush #FLV-CHR-1075C or equal and approved.	14	Set		
B	Wash Hand Basin and Fittings				
i)	705x450x200mm countertop washbasin with overflow and one tap hole #ALS-WHT-85601 complete with 1¼" plastic bottle trap with 75mm seal as JAQUAR model Alive or equal and approved.	21	Set		
ii)	Chrome finish single lever basin mixer complete with pop-up waste set, 450mm long braided hoses and angle valves #ALI-85051B as JAQUAR model Alive or equal and approved.	21	Set		
iii)	Back-Lit Mirror Size: Width 600mm x Height 800mm x Depth 45mm with two illuminated frosted strips, IP44 rated T9 40 Watt bulb and infra-red sensor switch and heated demister pad as HIB Casey Fluorescent Back-Lit Mirror #77309000 or equal and approved.	21	Set		
C	Shower Fittings				
i)	Hansgrohe overhead rain shower S 240 2jets 243mm dia round shape with spray type of rainair. Maximum flowrate of 3bars, 17l/min. Consist ogf overhead shower, shower arm.	11	Set		
D	Bath Tubs and Fittings				
i)	1800x800x470mm built-in reinforced cast acrylic sheet rectangle Bath tub with overflow and outlet #BT-WHT-ALIVE180X complete with chorme plated waste set #JWA-CHR-132201 ; front panel #JWA-WHT-KUBIXFPX and side panel #JWA-WHT-KUBIXSPX as JAQUAR model Alive or equal and approved.	1	Set		
	Total Carried Forward to Next Page				

Item	Description	Qty	Unit	Rate	Amount
				KSHS	KSHS
Total Brought Down from Previous Page					
ii)	Chrome finish wall mounted single lever Bath/shower mixer #ALI-85119 complete with hand shower Ø75mm cylindrical shape (rain, massage & mist), rubit cleaning system #HSH-1797 , round wall mounted outlet with shower hook #SHA-566R and 8mm dia, 1.5m long flexible tube with nuts #SHA-549D8 as JAQUAR model Alive or equal and approved.	1	Set		
E	Bathroom Accessories				
i)	Stainless steel 600mm long towel rack with lower hanger and hook as JAQUAR #AHS-1581H or equal and approved.	11	No		
ii)	Chrome finish Swiveling 2 Parts towel bar as JAQUAR #ACN-CHR-1115N or equal and approved.	11	No		
iii)	Glass soap dish with soap dish holder as JAQUAR #ACN-CHR-1131N or equal and approved.	11	Set		
iv)	Glass toothbrush tumbler in chrome finish wall mounted containment as JAQUAR #ACN-CHR-1141N or equal and approved.	11	Set		
v)	Toilet brush with glass brush holder in chrome finish wall mounted containment as JAQUAR #4ACN-CHR-1143N or equal and approved.	11	Set		
vi)	Chrome finish toilet paper holder with lid as JAQUAR #ACN-CHR-1153N or equal and approved.	11	No		
F	Urinal and Fittings				
i)	Vitreous china to BS 3402 Waterless bowl urinal #S6321 complete with shrouded outlet, renewable cartridge with outlet adapter - box of 32 #S6283 fixing hangers, toggle bolts and Urinal division with hanger and screws #S6120 as ARMITAGE SHANKS model Aridian or equal and approved.	2	No		
2	Total for Bill No.2.: Sanitary Ware and Fittings C/f to Summary Page				

Item	Description	Qty	Unit	Rate KSHS	Amount KSHS
Item	Description	Qty	Unit		
BILL NO.3. INTERNAL PLUMBING					
Internal Plumbing Works					
	Supply, deliver and install chlorinated polyvinyl chloride (PPR) pipes, tubing and fittings as described and shown on the drawings. The pipes and fittings shall be produced as per SDR 11 and shall meet or exceed the requirements of ASTM D 2846, current European standards for PPR installations and to the Engineers approval. All joints shall be assembled employing solvent cements that meet or exceed the requirements of ASTM F493. 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, supporting brackets, 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.				
A	20mm diameter pipework	36	Lm		
B	25mm diameter pipework	32	Lm		
C	32mm diameter pipework	24	Lm		
D	40mm diameter pipework c/w risers	18	Lm		
Bends					
E	20mm diameter bend	40	No.		
F	25mm diameter bend	60	No.		
G	32mm diameter bend	40	No.		
H	40mm diameter bend	25	No.		
Tees					
I	20mm Equal Tee	30	No		
I	25mm equal tee	40	No.		
J	32mm equal tee	20	No.		
K	40mm equal tee	10	No.		
Flexible Tubing					
L	15mm diameter x 300mm long flexible connectors complete with integral chrome plated angle valve for connecting the sanitary fitting to water supply. To be as Cobra or equal and approved.	58	No		

Item	Description	Qty	Unit	Rate	Amount
				KSHS	KSHS
Total Carried to Next Page					-
Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	Reducers				-
A	25 x 20mm diameter reducer	16	No.		
B	32 x 20mm diameter reducer	12	No.		
C	32 x 25mm diameter reducer	12	No.		
D	40 x 20mm diameter reducer	10	No.		
E	40 x 25mm diameter reducer	8	No.		
F	40 x 32mm diameter reducer	8	No.		
	Threaded Brass Tee				
F	20mm male/female threaded brass tee	20	No.		
G	25mm male/female threaded brass tee	20	No.		
H	32mm male/female threaded brass tee	15	No.		
I	40mm male/female threaded brass tee	6	No.		
	Threaded Brass Elbow/Bend				
J	20mm male/female threaded brass elbow/bend	16	No.		
K	25mm male/female threaded brass elbow/bend	18	No.		
L	32mm male/female threaded brass elbow/bend	12	No.		
	Threaded Brass Coupling				
M	25mm male/female threaded brass coupling	5	No.		
N	32mm male/female threaded brass coupling	5	No.		
O	40mm male/female threaded brass coupling	5	No.		
	Threaded Brass Adapter				
P	20mm male/female threaded brass adapter	12	No.		
Q	25mm male/female threaded brass adapter	18	No.		
R	32mm male/female threaded brass adapter	8	No.		
S	40mm male/female threaded brass adapter	5	No.		
Total Carried to Next Page					

Item	Description	Qty	Unit	Rate KSHS	Amount KSHS
Item	Description	Qty	Unit	Rate (Kshs)	
	Valves				
A	25mm diameter approved medium pressure screw down full way non-rising stem wedge gate valve to BS 5154 PN 20 for series B rating, with wheel and head joints to steel tubing and complete with round male threaded transition fittings. The gate valve to be as PEGLER or approved equivalent.	8	No.		
i	32mm ditto	4	No.		
ii	40mm ditto	2	No.		
	Unions				
G	20mm diameter pipe union	4	No.		
H	25mm diameter pipe union	2	No.		
I	32mm diameter pipe union	4	No.		
J	40mm diameter pipe union	4	No.		
K	In line Kitchen Water purification plant				
	Supply, install and commision a 5 stage ultra violet purifier capable of purifying 350 litres/day for kitchen use. The unit is to come complete with tap to the approval of the engineer	1	No.		
Total for Bill No. 3: Internal Plumbing Installations C/f to Summary Page					

Item	Description	Qty	Unit	Rate KSHS	Amount KSHS
Item	Description	Qty	Unit	Rate (Kshs)	
	BILL NO. 4. INTERNAL DRAINAGE				
	INTERNAL FOUL WATER DRAINAGE				
	Supply, deliver and install the following UPVC, MUPVC, soil and waste systems respectively to B.S 5255 with fittings fixed to Manufactures Printed instructions and manufactured by reputable manufacturers. Tenderers must allow in their pipework prices for all the 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.				
	MuPVC and uPVC Waste and Soil pipework				
A	100mm diameter heavy gauge golden brown UPVC pipe	45	Lm		
B	100mm diameter heavy gauge grey UPVC pipe	25	Lm		
C	75mm diameter waste pipe	50	Lm		
D	50mm diameter waste pipe	35	Lm		
E	40mm diameter waste pipe	25	Lm		
	Bends				
H	100mm diameter short radius bend	8	No.		
I	100mm diameter sweep bend	8	No.		
J	75mm diameter sweep bend	12	No.		
K	50mm diameter sweep bend	12	No.		
L	40mm diameter sweep bend	6	No.		
	Tees				
N	100mm diameter sweep tee	6	No.		
O	75mm diameter sweep tee	10	No.		
P	50mm diameter sweep tee	10	No.		
Q	40mm diameter sweep tee	12	No.		
Total Carried to Next Page					

Item	Description	Qty	Unit	Rate KSHS	Amount KSHS
Item	Description	Qty	Unit	Rate (Kshs)	
	Access Caps				
A	100mm diameter access cap	8	No.		
B	75mm diameter access cap	10	No.		
C	50mm diameter access cap	8	No.		
D	40mm diameter access cap	8	No.		
	Reducing Sockets				
E	40 x 32mm diameter reducing socket	10	No.		
F	50 x 32mm diameter reducing socket	10	No.		
G	75 x 50mm diameter reducing socket	8	No.		
H	100 x 50mm diameter reducing socket	8	No.		
	Single Branch				
H	100 x 100mm diameter single branch with 50mm boss adaptor	8	No.		
I	100 x 100mm diameter single branch with 40mm boss adaptor	4	No.		
J	75 x 50mm diameter single branch	10	No.		
	WC Connectors				
K	100mm diameter WC connector	16	No.		
	Traps				
L	100 x 50mm diameter floor trap and grating	33	No.		
M	Gully trap Allow for a standard 300 x 300 x 450mm masonry gully trap complete with concrete cover.	15	No		
N	Inspection Chambers Allow excavation, concreting to Class 1:3:6, walling 150mm thick solid concrete block walls with 1:3 mortar and plastering to 1:2, Medium duty Rectangular Cover and Frame to specification for manhole not exceeding 1500mm depth.	8	No.		
Total for Bill No. 4: Internal Drainage Installations C/f to Summary Page					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
8.5	BILL NO. 5: SOLAR WATER HEATING				
	SOLAR WATER HEATING INSTALLATION				
	Supply, delivery, installation, test and commission of the following solar hot water system appliances complete with all the accessories including all connections to the services, jointing to water supply, overflows, supports and all plugging and screwing to walls and frames. The hot water cylinder shall be installed inside the roof space or on the roof as shall be directed by the project manager.				
	Solar Panels and Hot Water Storage Cylinder				
A	Solar water heating system comprising of 1No. 300 litres capacity hot water cylinder with 3KW electric booster element, 2No. solar panels with selective (black chrome) 2m ² dielectric nett absorbing area and all other necessary interconnectors. The insulated cylinder shall be treated against corrosion by ceramic lining and shall be fitted with an anode. The system shall be a closed circuit type of the solar heating system as Solahart or equal and approved.	2	Item		
	Solar Heater Controller				
B	The solar system shall be equipped with a heater controller wired such that when the temperature of circulating fluid goes down below a certain level, then the controller shall switch on the electric heating element.	2	No.		
	Wiring				
C	Allow for all wiring to booster heater from local isolator supplied by others within two meter to the solar heating systems.	2	Item		
	Safety Valve				
D	Temperature/pressure safety valve set to release when the water in the tanks exceed 85°C as manufactured by Spirax Sarco Model No. SV11 Pop Type or equal and approved.	2	No.		
	Supporting Frames				
E	Allow for support 3mm hollow tubes mild steel angle iron fixed on roof for the above solar panels above solar hot water cylinders to engineers approval.	2	No.		
	Automatic Air Eliminator				
F	Air relief valve as manufactured by "Spirax Sarco" model No. AES 50 Air Eliminators for use on hot water services.	2	No.		
	Pressure gauge				
G	Pressure gauge as manufactured by Honeywell to be fitted as shall be instructed by the Engineer	2	No.		
Total Carried to Collection Page for Solar Installation					

Item	Description	Qty	Unit	Rate (Kshs)	
A	Thermometer Dial thermometer with 100mm diameter dial chart and graduated from 0°c to 100°c to be fitted to Engineer's approval.	2	No.		
B	Gate Valves 25mm diameter screwed- in bonnet, full way non-rising stem, solid wedge disk, bronze gate valve to BS 5154 PN 20 for series 'B' ratings with wheel head and transition fitting for jointing to CPVC pipework.	2	No.		
C	Non- Return Valves 25mm diameter screwed -in cap, lift type disc bronze non-return valve to BS 5154 PN 32 for series 'B' ratings.	2	No.		
	PPR Pipework and Fittings				
D	32mm diameter pipework	25	Lm		
E	32mm diameter bend	10	No.		
F	32mm equal tee	6	No.		
G	32mm diameter pipe unions	5	No.		
H	32mm male/female threaded tee	5	No.		
J	Sterilization Allow for flushing out and sterilizing the whole system with chlorine to the satisfaction of the Project Engineer.	1	Item		
K	Water Connection Allow for connections to rising mains for all solar heating systems and to the hot water delivery line.	1	Item		

Total Carried to Collection Page for Solar Installation

Item	Description		Amount (Kshs)
1	Total carried forward from page 1	
2	Total carried forward from page 2	

Total for Solar Installation Carried to Summary Page

FIREFIGHTING INSTALLATION WORKS

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL (KSHS)
8.6.	BILL NO.6				
8.51	Portable Fire Extinguishers <i>The portable fire extinguishers must be UL listed and FM approved complete with initial charge and mounting brackets conforming to European Standards (BS 5306-2 etc) with fittings fixed to manufacturer's printed instructions and Engineer's approval.</i>				
A	Water/CO₂ Fire Extinguisher				
i)	9-Litres H₂O/CO₂ gas portable fire extinguisher complete with cap, syphon-tube, CO ₂ cartridge, flexible rubber hose and nozzle as SAFECO #WHC1010 or equal and approved.	12	No		
B	CO₂ Gas Fire Extinguisher				
i)	5kg CO₂ gas portable fire extinguisher complete with squeeze grip operating head and discharge nozzle as SAFECO #CD 5-G or equal and approved.	12	No		
C	Automatic Dry Powder Fire Extinguisher				
i)	45kg Automatic dry powder fire extinguisher gas cartridge type fixed to ceiling complete with automatic pressure controlled actuator with manual override and red bulb for 68°C sprinkler heads as SAFECO #PD10-Matic or equal and approved(Kitchen).	1	No		
D	Fire Blanket				
i)	1.8x1.8m fire blanket with 3-layer cloth, protective vapour barrier and easy for deployment to BS EN 1869 as SAFECO #SFB200 or equal and approved.	1	No		
E	Fire Alarm Bell. 200mm external diameter , aluminium construction with an excellent sonorous tone upto 100dB and certified by LPCD to EN54-3:2001	4	No		
F	Fire ball to be installed in Generator room	2	No		
G	Fire Exit signs complying with UK standards, tough and durable construction	5	No		
	Total carried to Summary Page				

COUNCIL CONNECTION & WATER RETICULATION

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
8.7	<p><u>BILL No.7</u> ASSOCIATED PIPEWORK Supply, deliver and install chlorinated polyvinyl chloride (PPR) pipes, tubing and fittings as described and shown on the drawings. The pipes and fittings shall be produced as per SDR 11 and shall meet or exceed the requirements of ASTM D 2846, current European standards for PPR installations and to the Engineers approval. All joints shall be assembled employing solvent cements that meet or exceed the requirements of ASTM F493. 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, supporting brackets, 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.</p> <p>Pipework</p>				
A	25mm diameter	100	Lm		
B	32mm diameter	250	Lm		
C	40mm diameter	180	Lm		
Total Carried Forward to the Collection Page for Water Storage Tanks					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
C	Gate Valve 32mm gate valve	3	No		
D	Ball Valves 32 mm diameter high pressure ball valve	3	No		
E	Bends 32mm diameter bend	8	No.		
F	40mm diameter bend	6	No.		
G	Tees 32mm equal tee	8	No.		
H	40mm ditto	12	No.		
I	Excavation Excavate trench in hard soil/murram 600mm wide and depth not exceeding 1000mm deep and average 850mm deep, prepare bed with red soil/murram of particle size not more than 20 mm to a depth of 750mm. Bed shall be approved by Engineer before laying of pipes. Fill with same material as above and compact in layers of 75 mm. Cart away surplus soil.	410	LM		
J	Pipe Sleeves 100mm diameter heavy duty PVC class 41 pipe sleeves for crossing over pathways and driveways. The sleeves will be encased in 150mm concrete surround.	25	Lm		
K	Stand Pipe 15mm diameter hose bib tap suitable for connecting hose pipe complete with threaded adaptors. The tap to be complete with 5meter long 15mm diameter GMS pipe class B, bends support, etc. The chrome plated bib tap to be as Cobra ref.108 hose bib taps or equal and approved.	8	No		
Total Carried Forward to the Collection Page for Water Storage Tanks					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	WATER PUMPS				
	Booster Pumps (Domestic water)				
C	Set of automatic electrically driven vertical multistage twin booster pumpset. One duty and the other one standby with automatic changeover, capable of delivering 2.5m ³ per hour against a head of 35 meters. The pumpset shall be complete with 100 litres pressure vessels and all accessories required for proper and satisfactory operation. It includes pressure switches, time delay switch, a switch to protect against dry run, timer, gate valves, non-return valves, flow switch (50mm), 40mm diameter strainer. The pump to be as Pedrollo or approved equivalent. Pump to be installed on galvanised mild steel frame with approved paint.	3	No.		
	Control and Control Panel				
D	Control panel for booster pumps with contactors, over voltage and under voltage protection relays, MCBs, phase failure protection, timer, 50 meters long float switch cable, start/stop push buttons and indicator lights. All these shall be housed in a lockable cabinet (with integral isolator) made from SWG 18 mild steel sheet that is oven powder coated. It should include a change-over switch to enable the pumps to work alternately.	1	No.		
	Electrical Works				
E	Allow for electrical works wiring and fitting to all pumps, control panel and float switches, from isolator provided by others with 3 metres distance.	1	Item		
	Water Connection				
A	Apply for and connect 50mm flanged bulk water meter approved by the Local Water Authorities. Include all the water connection charges.	1	Item		
	Bulk Water Meter				
B	50 mm bulk water meter as 'Kent' or equal and approved equivalent for the connection to the water main supply to site.	1	No.		
	Sterilization				
C	Allow for sterilization including flushing out water and chlorine of the water supply line and water storage tank to the satisfaction of the Engineer	1	Item		
Total Carried Forward to the Collection Page for Water Storage Tanks					

COLLECTION PAGE FOR WATER STORAGE TANK

Item	Description		Amount (Kshs)
1	Total carried forward from page 1	
2	Total carried forward from page 2	
3	Total carried forward from page 3	
Total Water Storage Tank Works and Supply Mains Carried to Summary Page			

AIR CONDITIONING WORKS					
Item	Description	Unit	Qty	Rate	Cost
				KShs	KShs
8.8	Bill No. 8				
A	SPLIT A/C UNIT (Indoor and Outdoor Unit) Supply deliver and install Wall Mounted Indoor Unit - 5.3kW Cooling Capacity with a maximum Power Input of 2.1kW . with Controllers and all accessories as Daikin / McQuay / Toshiba	No	16		
B	SPLIT A/C UNIT (Indoor and Outdoor Unit) Supply deliver and install Wall Mounted Split Type A/C Unit 3.5kW Cooling Capacity with a maximum Power Input of 1.4kW . with Controllers and all accessories as Daikin / McQuay / Toshiba Above Unit to be stand alone and to be operating on demand only	No	16		
C	Supply and install Refrigeration Copper Pipe Work complete with Necessary Supports/Brackets, 20mm thick Armoflex Insulation for Suction / Liquid Lines - Sizes from 3/8" and 5/8" Dia.	LM	200		
D	Supply and install uPVC drain pipe work to connect indoor units to drainage outlets complete with all fittings support brackets etc.	LM	80		
E	Allow for Electrical Connection for Outdoor / Indoor Units from Local Isolators / D P Switches provided by others	Item	1		
F	Inter connecting Control / Network Cables (Sheilded) to connect Indoor Units and / to Outdoor Units	LM	200		
J	Allow for Mounting Bracket for Indoor Unit	No.	26		
K	Allow for Mounting Bracket for Condensing Unit	No.	26		
L	Allow for Pressure Testing, Vacuuming and Refrigerant Charging	Item	1		
M	Allow for Tesing and Commissioning	Item	1		
Total carried to the next page					

	AIR EXTRACT SYSTEM				
A	Supply deliver & install inline extract Fans for toilets and kitchen Air Flow Rate: 360m ³ /hr . as Vent-Axia / System Air / Dynair or Equal and Approved	No	10		
B	Allow for Electrical Connection for Supply Air Fans from Local Isolators / D P Switches provided by others	Item	1		
C	Supply and install 22 SWG Galvanized Ducting complete with necessary bends, reducers, transformations, support brackets, hangers/fixtures etc.	SM	40		
D	Supply and Install Circular Diffusers with Opposed Blade Volume Control Dampers, Size:200mm Dia. for Supply Air White Powder Coated Finish as Airmaster of equal and approved	No	15		
E	Supply and install Un Insulated Flexible Duct - 150mm Dia.	LM	48		
F	Allow for Flexible Connector on supply side of the Fans to avoid vibration transmitted to the ducting	Item	1		
G	Supply and Install Fresh Air Intake Louvres 300 x 300mm complete with Insect Screen / Washable Air Filters etc.	No	12		
H	Allow for Balancing, Testing / Commissioning of the Fresh Air	Item	1		
TOTAL CARRIED TO COLLECTION PAGE					

ITEM NO	DESCRIPTION	Page	AMOUNT
			(Kshs)
1	Total for Bill No. 1: Preliminaries and General Items	BQ/1	
2	Total for Bill No. 2.: Sanitary Ware and Fittings B/F	BQ/2	
3	Total for Bill No. 3 Internal Plumbing B/F	BQ/3	
4	Total for Bill No. 4 Internal Drainage	BQ/4	
7	Total for Bill No. 5 Solar Water Heating B/F	BQ/5	
8	Total for Bill No. 6 Fire Fighting B/F	BQ/6	
9	Total for Bill No.7 External water Reticulation & Council connection B/F	BQ/7	
10	Total for Bill No. 8 Air Conditioning Equipment	BQ/8	
I	TOTAL FOR SANITARY, PLUMBING, DRAINAGE & OTHER INSTALLATIONS		

ITEM	DESCRIPTION	AMOUNT (KSHS)
1	PRELIMINARIES	
2	BILL NO. 1 MAIN BUILDING	
3	BILL NO. 2 MEDICAL FACILITY AND SICK BAY	
4	BILL NO. 3 GAZEBO	
5	BILL NO. 4 UTILITY ROOM	
6	BILL NO. 5 GUARD HOUSE	
7	BILL NO. 6 PUMP ROOM	
8	BILL NO. 7 EXTERNAL WORKS	
9	BILL NO. 8 ELECTRICAL INSTALLATIONS WORKS	
10	BILL NO. 9 MECHANICAL INSTALLATIONS WORKS	
	SUB-TOTAL CARRIED FORWARD	
11	<p><u>VALUE ADDED TAX</u></p> <p>THE BIDDER IS ADVISED TO KNOW THAT THE CLIENT IS EXCEMPTED FROM VAT PAYMENT BY GOVERNMENT AND THEREFORE THE RATES SHOULD BE VAT</p>	
TOTAL CARRIED TO FORM OF TENDER		

FURTHER WE AGREE TO COMPLETE THESE WORKS WITHIN A PERIOD OF _____ WEEKS FROM THE DATE OF SITE POSSESION (IF DIFFERENT FROM CLIENT DESIRED PERIOD)

Signed:

TENDERERS STAMP	
Date	