



**Kenya Marine Fisheries Socioeconomic
Development Project (KEMFSED)
P.O. Box 58187-00200
NAIROBI**



**MINISTRY OF MINING, BLUE ECONOMY AND MARITIME
AFFAIRS**

Request for Bids

CONSTRUCTION OF KIDONGO FISH LANDING SITE

Employer: State Department for Blue Economy & Fisheries
Project: Kenya Marine Fisheries Socio-Economic
Development Project (KEMFSED)
Contract Title: **CONSTRUCTION OF KIDONGO FISH
LANDING SITE**
Country: Republic of Kenya
Loan No./Credit No./Grant No.: 6540-KE
RFBNo.: KE-MOMBE&MA-MSA-2024-008-CW
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VOLUME 2 OF 4

BILLS OF QUANTITIES

TABLE OF CONTENT

A. Preamble.....	1
B. Work Items.....	2
1. BILL NO. 1: PARTICULAR PRELIMINARIES	2
2. BILL NO. 2: GENERAL PRELIMINARIES	2
3. BILL No.3 2No. Hatchery building Works	2
4. BILL No.4 Algae Production building Works.....	2
5. BILL No.5 3No. Washroom Blocks Building Works.....	2
6. BILL No.6 Power House Building Works.....	2
7. BILL No.7 Reverse Osmosis Room Building Works	2
8. BILL No.8 Pump Room Building Works	2
9. BILL No.9 2No. Storage Tanks Building Works	2
10. BILL No.10 2 No. Trial Tanks Building Works.....	2
11. BILL No.11 WetLand Building Works	2
12. BILL No.12 Battery Room Building Works.....	2
13. BILL No.13 Mechanical Works.....	2
14. BILL No.14 Electrical Installations	2
15. BILL No.15 Landscaping Works	2
16. BILL No.16 Civil Works	2
17. BILL No.17 Ocean Water Intake Building Works	2
18. BILL No.18 Day Works.....	2
19. BILL No.19 ESMP	2
20. BILL No.2 CSR	2
DAYWORK SCHEDULE.....	3
21. GRAND SUMMARY	21-1

A. PREAMBLE

1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, General and Particular Conditions, Technical Specifications, and Drawings.
2. The quantities given in the Bill of Quantities are estimated and provisional and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineer and valued at the rates and prices bid in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix within the terms of the Contract.
3. The rates and prices bid in the priced Bill of Quantities shall, except insofar as it is otherwise provided under the Contract, include all Constructional Plant, labour, supervision, materials, erection, maintenance, insurance, profit, taxes, and duties, together with all general risks, liabilities, and obligations set out or implied in the Contract.
4. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of Items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
5. The whole cost of complying with the provisions of the Contract shall be included in the Items provided in the priced Bill of Quantities, and where no Items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work.
6. General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering prices against each item in the priced Bill of Quantities.
7. Provisional Sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Engineer in accordance with Sub-Clauses 13.4 and 13.5 of the General Conditions except with respect to DAAB Fees and Expenses for which no instruction will be required from the Engineer.
8. The method of measurement of completed work for payment shall be Admeasurement in accordance with ICE Conditions of Contract measurement clauses.¹

¹ The method of measurement should be spelled out precisely in the Preamble to the Bill of Quantities, describing for example the allowances (if any) for timbering in excavation, etc. Many national standard reference guides have been prepared on the subject, and one such guide is the Standard Method of Measurement of the U.K. Institution of Civil Engineers.

B. WORK ITEMS

1. The Bill of Quantities contains the following part Bills, which have been grouped according to the nature or timing of the work:

1. **BILL NO. 1: PARTICULAR PRELIMINARIES**
2. **BILL NO. 2: GENERAL PRELIMINARIES**
3. **BILL NO.3 2NO. HATCHERY BUILDING WORKS**
4. **BILL NO.4 ALGAE PRODUCTION BUILDING WORKS**
5. **BILL NO.5 3NO. WASHROOM BLOCKS BUILDING WORKS**
6. **BILL NO.6 POWER HOUSE BUILDING WORKS**
7. **BILL NO.7 REVERSE OSMOSIS ROOM BUILDING WORKS**
8. **BILL NO.8 PUMP ROOM BUILDING WORKS**
9. **BILL NO.9 2NO. STORAGE TANKS BUILDING WORKS**
10. **BILL NO.10 2 NO. TRIAL TANKS BUILDING WORKS**
11. **BILL NO.11 WETLAND BUILDING WORKS**
12. **BILL NO.12 BATTERY ROOM BUILDING WORKS**
13. **BILL NO.13 MECHANICAL WORKS**
14. **BILL NO.14 ELECTRICAL INSTALLATIONS**
15. **BILL NO.15 LANDSCAPING WORKS**
16. **BILL NO.16 CIVIL WORKS**
17. **BILL NO.17 OCEAN WATER INTAKE BUILDING WORKS**
18. **BILL NO.18 DAY WORKS**
19. **BILL NO.19 ESMP**
20. **BILL NO.2 CSR**

2. Bidders shall price the Bill of Quantities in local currency only and shall indicate in the Appendix to Bid the percentage expected for payment in foreign currency or currencies.

DAYWORK SCHEDULE

General

1. Reference should be made to Sub-Clause 13.5 of the General Conditions. Work shall not be executed on a daywork basis except by written order of the Engineer. Bidders shall enter basic rates for daywork items in the Schedules, which rates shall apply to any quantity of daywork ordered by the Engineer. Nominal quantities have been indicated against each item of daywork, and the extended total for Daywork shall be carried forward as a Provisional Sum to the Summary Total Bid Amount. Unless otherwise adjusted, payments for daywork shall be subject to price adjustment in accordance with the provisions in the Conditions of Contract.

Daywork Labour

2. In calculating payments due to the Contractor for the execution of daywork, the hours for labour will be reckoned from the time of arrival of the labour at the job site to execute the particular item of daywork to the time of return to the original place of departure, but excluding meal breaks and rest periods. Only the time of classes of labour directly doing work ordered by the Engineer and for which they are competent to perform will be measured. The time of gangers (charge hands) actually doing work with the gangs will also be measured but not the time of foremen or other supervisory personnel.
3. The Contractor shall be entitled to payment in respect of the total time that labour is employed on daywork, calculated at the basic rates entered by the Contractor in the Schedule of Daywork Rates:
 1. Labour, together with an additional percentage payment on basic rates representing the Contractor's profit, overheads, etc., as described below:
 - a) The basic rates for labour shall cover all direct costs to the Contractor, including (but not limited to) the amount of wages paid to such labour, transportation time, overtime, subsistence allowances, and any sums paid to or on behalf of such labour for social benefits in accordance with [country of Borrower]Kenya law. The basic rates will be payable in local currency only.
 - b) The additional percentage payment to be quoted by the bidder and applied to costs incurred under (a) above shall be deemed to cover the Contractor's profit, overheads, superintendence, liabilities, and insurances and allowances to labour, timekeeping, and clerical and office work, the use of consumable stores, water, lighting, and power; the use and repair of stagings, scaffolding, workshops, and stores, portable power tools, manual plant, and tools; supervision by the Contractor's staff, foremen, and other supervisory personnel; and charges incidental to the foregoing. Payments under this item shall be made in local currency.

Daywork Materials

4. The Contractor shall be entitled to payment in respect of materials used for daywork (except for materials for which the cost is included in the percentage addition to labour costs as detailed heretofore), at the basic rates entered by the Contractor in the Schedule of Daywork Rates: 2. Materials, together with an additional percentage payment on the basic rates to cover overhead charges and profit, as follows:
 - a) the basic rates for materials shall be calculated on the basis of the invoiced price, freight, insurance, handling expenses, damage, losses, etc., and shall provide for delivery to store for stockpiling at the Site. The basic rates shall be stated in local currency, but payment will be made in the currency or currencies expended upon presentation of supporting documentation.
 - b) the additional percentage payment shall be quoted by the bidder and applied to the equivalent local currency payments made under (a) above. Payments under this item will be made in local currency.
 - c) the cost of hauling materials for use on work ordered to be carried out as daywork from the store or stockpile on the Site to the place where it is to be used will be paid in accordance with the terms for Labour and Construction in this schedule.

Daywork Contractor's Equipment

5. The Contractor shall be entitled to payments in respect of Contractor's Equipment already on Site and employed on daywork at the basic rental rates entered by the Contractor in the Schedule of Daywork Rates: **3. Contractor's Equipment.** Said rates shall be deemed to include due and complete allowance for depreciation, interest, indemnity, and insurance, repairs, maintenance, supplies, fuel, lubricants, and other consumables, the cost of drivers, operators, and assistants and all overhead, profit, and administrative costs related to the use of such equipment.
6. In calculating the payment due to the Contractor for Contractor's Equipment employed on daywork, only the actual number of working hours will be eligible for payment, except that where applicable and agreed with the Engineer, the travelling time from the part of the Site where the Contractor's Equipment was located when ordered by the Engineer to be employed on daywork and the time for return journey thereto shall be included for payment.
7. The basic rental rates for Contractor's Equipment employed on daywork shall be stated in local currency, but payments to the Contractor will be made in local currency.

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	AMOUNT (KSHS)
	<u>BILL NO 1; GENERAL PRELIMINARIES</u>	
1.0.1	<p>PRICING OF ITEMS OF PRELIMINARIES AND PREAMBLES</p> <p>Prices will be inserted against items of Preliminaries in the Contractor's priced Bills of Quantities and Specification.</p> <p>The Contractor shall be deemed to have included in his prices or rates (VAT Inclusive) for the various items in the Bills of Quantities or Specification for all costs involved in complying with all the requirements for the proper execution of the whole of the works in the Contract.</p> <p>Failure to price an item shall not exempt the contractor from carrying out works described therein. Should the contractor fail to carry out works which he/she did not price and after having received a written instruction from the PM, then the value of such works shall be deducted from the very immediate certificate issued to the contractor.</p> <p>MoPW current rates, JBC, IQSK, manufacturers or fair rates shall be used by the PM in valuation of unpriced items which the contractor shall fail to execute.</p> <p>The contractor is advised to read and understand all preliminary items.</p> <p>The Contractor is advised to visit the site, to familiarize with the nature and position of the site. No claims arising from the Contractor's failure to do so will be entertained.</p>	
1.0.2	<p>FIRM PRICE CONTRACT</p> <p>Unless otherwise specifically stated in the Contract Data and/or Particular preliminaries this is a firm price contract and the contractor must allow in his tender rates for any increase in the cost of labour and/or materials during the currency of the contract.</p>	
1.0.3	<p>VISIT SITE AND EXAMINE DRAWINGS</p> <p>The Contractor is recommended to examine the drawings and visit the site the location of which is described in the Particular Preliminaries hereof. He shall be deemed to have acquainted himself therewith as to its nature, position, means of access or any other matter which, may affect his tender. No claim arising from his failure to comply with this recommendation will be considered.</p>	
1.0.4	<p>SUFFICIENCY OF TENDER</p> <p>The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of this tender for the works and of the rates and prices stated in the Priced Bills of Quantities, which rates and prices shall cover all his obligations under the Contract and all matters that are necessary for the proper completion and maintenance of the works.</p>	
1.0.5	<p>FORM OF CONTRACT</p> <p>The Form of Contract shall be as stipulated in the standard Procurement Document Request for bids small works included herein. The Conditions of Contract are also included herein</p>	
1.0.6	<p><i>Conditions of Contract</i></p> <p>These are numbered from AS ATTACHEMENT of these tender documents. Particulars of insertions to be made in the Appendix to the Contract Agreement will be found in the Preliminaries part of these Bills of Quantities</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	AMOUNT (KSHS)
1.0.7	EMPLOYER The Employer is Kenya Marine Fisheries Socio Economic Development Project (KEMFSED) The term "Employer" and "Government" wherever used in the contract document shall be synonymous	
1.0.8	PROJECT MANAGER The term "P.M." wherever used in these Bills of Quantities shall be deemed to imply the Engineer as defined in the Conditions of Contract or such person or persons as may be duly authorised to represent him/her.	
1.0.9	ARCHITECT The term "Architect" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is	
1.0.10	QUANTITY SURVEYOR The term "Quantity Surveyor" shall be deemed to mean "The P.M." as defined above address unless otherwise notified is.....	
1.0.11	ELECTRICAL ENGINEER The term "Electrical Engineer" shall be deemed to mean "The P.M." as defined above address unless otherwise notified is	
1.0.12	MECHANICAL ENGINEER The term "Mechanical Engineer" shall be deemed to mean "The P.M." as defined above address unless otherwise notified is	
1.0.13	STRUCTURAL ENGINEER The term "Structural Engineer" shall be deemed to mean "The P.M." as defined above address unless otherwise notified is	
1.0.14	PROJECT ENGINEER (PE) The term "Project Engineer" shall be deemed to mean "The Engineer" as defined above whose address unless otherwise notified is	
<i>Carried to collection</i>		

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	AMOUNT (KSHS)
1.0.15	<p>BONDS</p> <p>The Contractor shall find and submit with the Form of Tender a guarantor and who will be willing to be bound the Government in the amount of the bond.</p> <p>The amount of the bond is SPECIFIED IN THE PARTICULAR PRELIMINARIES</p> <p>The guarantor shall be an approved institution as specified in the particular preliminaries or invitation to tender and who will when and if called upon, sign a Bond to that effect on the relevant standard form included herein. (without the addition of any limitations) on the same day as the Contract Agreement is signed, by the Government, the Contractor shall furnish within seven days another Surety to the approval of the Government.</p>	
1.0.16	<p>PERFORMANCE BOND</p> <p>10% bond shall be required from the specified institution.</p> <p>The period for supplying the bond shall be 14 days.</p> <p>No contract shall be signed, NOR shall any payment be made before the bidder has complied with the bond requirements</p> <p>Failure to deliver the bond within the specified period shall automatically disqualify the bidder and the tender shall be awarded to next most responsive bidder without reference to the defaulting bidder.</p> <p>Should the bidder commence works and subsequently fail to provide the bond, he shall be evicted from site without any reimbursement notwithstanding the site having been handed over by the PM and client. The handing over only kick-starts the process and is not a waiver to bond conditions.</p> <p>The bond for the due performances of the Contract shall be valid up to the date of completion as certified by the ENGINEER.</p> <p>Any bond which provides otherwise or attempts to vary the duration of validity shall be invalid.</p> <p>The bond shall comply in all respects with the PPOA copy enclosed in the instructions to tender. A bond that does not match the PPOA copy shall be treated as NO BOND</p>	
1.0.17	<p>EXCEPTION TO THE STANDARD METHOD OF MEASUREMENT</p> <p>Attendance ; Clause B19(a) of the Standard Method of Measurement is deleted and the following clause is substituted:-</p> <p>Attendance on nominated Sub-Contractors shall be given as an item in each case shall be deemed to include: allowing use of standing scaffolding, mess rooms, sanitary accommodation and welfare facilities; provision of special scaffolding where necessary; providing space for office accommodation and for storage of plant and materials; providing light and water for their work; clearing away rubbish; unloading checking and hoisting; providing electric power and removing and replacing duct covers, pipe casings and the like necessary for the execution and testing of Sub-Contractors' work and being responsible for the accuracy of the same.</p> <p>Fix Only:-</p> <p>"Fix Only" shall mean take delivery at nearest railway station (Unless otherwise stated), pay all demurrage charges, load and transport to site where necessary, unload, store, unpack, assemble as necessary, distribute to position, hoist and fix only.</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	AMOUNT (KSHS)
1.0.18	<p>ABBREVIATIONS</p> <p>Throughout these Bills, units of measurement and terms are abbreviated and shall be interpreted as follows:-</p> <p>C.M. Shall mean cubic metre</p> <p>S.M. Shall mean square metre</p> <p>L.M. Shall mean linear metre</p> <p>MM Shall mean Millimetre</p> <p>Kg. Shall mean Kilogramme</p> <p>No. Shall mean Number</p> <p>Prs. Shall mean Pairs</p> <p>B.S. Shall mean the British Standard Specification Published by the British Standards Institution, 2 Park Street, London W.I., England.</p> <p>"K.S" Shall mean the current Kenya Standard specification published by the Kenya Bureau of Standards, P.O. Box 54974, NAIROBI, Kenya.</p> <p>Ditto Shall mean the whole of the preceding description except as qualified in the description in which it occurs.</p> <p>m.s. Shall mean measured separately.</p> <p>a.b.d Shall mean as before described.</p> <p>"Approved" <i>Shall mean approved by the Project Engineer and the Employer in writing.</i></p> <p>"As directed" <i>Shall mean as directed by the Project Engineer and the Employer in writing.</i></p> <p>"Demolish" Shall be deemed to mean cutting away, breaking up, demolishing, pulling down, taking down, removing, etc., as the context requires and shall include in all cases temporarily strutting and supporting and making good remaining work as necessary, and clearing away and removing from Site all debris, etc.</p> <p>"Remove" Shall mean taking down, hacking up, breaking down, removing etc., and clearing away from Site and all other expenses thereby entailed.</p> <p>"Make good" Shall be deemed to mean all making good, fitting, facing up, plastering, paving, repairing and painting to match and jointing to remaining existing work.</p> <p>To "match" Shall mean to be equal to relevant existing work in design, workmanship and all other respects.</p> <p>"Re-fix" Shall apply to existing materials arising from the Works and shall mean take from store and fix in new position, including making good, repairing and adjusting as necessary.</p>	
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**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	AMOUNT (KSHS)
1.0.19	PLANT, TOOLS AND VEHICLES Allow for providing all scaffolding, plant, tools and vehicles required for the works except in so far as may be stated otherwise herein and except for such items specifically and only required for the use of nominated Sub-Contractors as described herein. No timber used for scaffolding, formwork or temporary works of any kind shall be used afterwards in the permanent work.	
1.0.20	TRANSPORT. Allow for transport of workmen, materials, etc., to and from the site at such hours and by such routes as may be permitted by the competent authorities.	
1.0.21	MATERIALS AND WORKMANSHIP. All materials and workmanship used in the execution of the work shall be of the best quality and description unless otherwise stated. The Contractor shall order all materials to be obtained from overseas immediately after the Contract is signed and shall also order materials to be obtained from local sources as early as necessary to ensure that they are onsite when required for use in the works. The Bills of Quantities shall not be used for the purpose of ordering materials.	
1.0.21	SIGN FOR MATERIALS SUPPLIED. The Contractor will be required to sign a receipt for all articles and materials supplied by the Project Engineer at the time of taking deliver thereof, as having received them in good order and condition, and will thereafter be responsible for any loss or damage and for replacements of any such loss or damage with articles and/or materials which will be supplied by the Project Engineer at the current market prices including Customs Duty and V.A.T., all at the Contractor's own cost and expense, to the satisfaction of the Project Engineer	
1.0.22	STORAGE OF MATERIALS The Contractor shall provide at his own risk and cost where directed on the site weather proof lock-up sheds and make good damaged or disturbed surfaces upon completion to the satisfaction of the Project Engineer Nominated Sub-Contractors are to be made liable for the cost of any storage accommodation provided especially for their use.	
1.0.23	ORDERING OF MATERIALS The Contractor must assist in alleviating the effects of possible shortages of materials by advance ordering of materials in order to maintain a continuous supply. Early delivery of materials will be permitted and included in interim certificates and upon request by the Project Engineer, the Contractor will be required to produce copies of order forms and invoices to establish that materials have been ordered in sufficient time and to check on material deliveries.	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	AMOUNT (KSHS)
1.0.24	<p>SAMPLES</p> <p>The Contractor shall furnish at his own cost any samples of materials or workmanship required for the works that may be called for by the Project Engineer for his approval until such samples are approved by the Project Engineer and the Project Engineer, may reject any materials or workmanship not in his opinion to be up to approved samples. The Project Engineer shall arrange for the testing of such materials as he may at his discretion deem desirable, but the testing shall be made at the expense of the Contractor and not at the expense of the Project Engineer. The Contractor shall pay for the testing in accordance with the current scale of testing charges laid down by the Ministry of Public Works.</p> <p>The procedure for submitting samples of materials for testing and the method of marking for identification shall be as laid down by the Project Engineer The Contractor shall allow in his tender for such samples and tests except those in connection with nominated sub-contractors' work.</p> <p>Samples of paint, carpets, curtains & covers, tiles & timber shall be required for approval by the PM together with the employer.</p> <p>No alternate rate shall be offered on account that the employer has chosen a superior finish unless the bidder had attached the sample he priced.</p>	
1.0.25	<p>PUBLIC AND PRIVATE ROADS.</p> <p>Maintain as required throughout the execution of the works and make good any damage to public or private roads arising from or consequent upon the execution of the works to the satisfaction of the local and other competent authority and the Project Engineer.</p>	
1.0.26	<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 and shall make good all such damage arising from the execution of this contract at his own expense to the satisfaction of the Project Engineer.</p>	
1.0.27	<p>ACCESS TO SITE AND TEMPORARY ROADS.</p> <p>Means of access to the Site shall be agreed with the Project Engineer prior to commencement of the work and Contractor must allow for building any necessary temporary access roads for the transport of the materials, plant and workmen as may be required for the complete execution of the works including the provision of temporary culverts, crossings, bridges, or any other means of gaining access to the Site. Upon completion of the works, the Contractor shall remove such temporary access roads; temporary culverts, bridges, etc., and make good and reinstate all works and surfaces disturbed to the satisfaction of the Project Engineer.</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	AMOUNT (KSHS)
1.0.28	AREA TO BE OCCUPIED BY THE CONTRACTOR The area of the site which may be occupied by the Contractor for use of storage and for the purpose of erecting workshops, etc., shall be defined on site by the Project Engineer.	
1.0.29	SECURITY OF WORKS ETC. The Contractor shall be entirely responsible for the security of all the works stores, materials, plant, personnel, etc., both his own and sub-contractors' and must provide all necessary watching, lighting and other precautions as necessary to ensure security against theft, loss or damage and the protection of the public.	
1.0.30	PROGRESS CHART. The Contractor shall provide within two weeks of Possession of Site and in agreement with the Project Engineer a Progress Chart for the whole of the works including the works of Nominated Sub-Contractors ; one copy to be handed to the Project Engineer and a further copy to be retained on Site. Progress to be recorded and chart to be amended as necessary as the work proceeds.	
1.0.31	INSURANCE The Contractor shall insure as required in Conditions No 30 of the Conditions of Contract. No payment on account of the work executed will be made to the Contractor until he has satisfied the Project Engineer either by production of an Insurance Policy or and Insurance Certificate that the provision of the foregoing Insurance Clauses have been complied with in all respects. Thereafter the Project Engineer shall from time to time ascertain that premiums are duly paid up by the Contractor who shall if called upon to do so, produce the receipted premium renewals for the Project Engineer's inspection.	
1.0.32	CONTRACTOR'S SUPERINTENDENCE/SITE AGENT The Contractor shall constantly keep on the works a literate English speaking Agent or Representative, competent and experienced in the kind of work involved who shall give his whole experience in the kind of work involved and shall give his whole time to the superintendence of the works. Such Agent or Representative shall receive on behalf of the Contractor all directions and instructions from the Project Engineer and such directions shall be deemed to have been given to the Contractor in accordance with the Conditions of Contract.	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	AMOUNT (KSHS)
1.0.33	PROVISIONAL WORK All work described as "Provisional" in these Bills of Quantities is subject to remeasurement in order to ascertain the actual quantity executed for which payment will be made. All "Provisional" and other work liable to adjustment under this Contract shall left uncovered for a reasonable time to allow all measurements needed for such adjustment to be taken by the Project Engineer Immediately the work is ready for measuring, the Contractor shall give notice to the Project Engineer. If the Contractor makes default in these respects he shall if the Project Engineer so directs uncover the work to enable all measurements to be taken and afterwards reinstate at his own expense.	
1.0.34	PROVISIONAL SUMS. The term "Provisional Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A7(i) of the Standard Method of Measurement. Such sums are net and no addition shall be made to them for profit.	
1.0.35	ADJUSTMENT OF PROVISIONAL SUMS. In the final account all Provisional Sums shall be deducted and the value of the work properly executed in respect of them upon the Project Engineer's order added to the Contract Sum. Such work shall be valued , but should any part of the work be executed by a Nominated Sub-Contractor, the value of such work or articles for the work to be supplied by a Nominated Supplier, the value of such work or articles shall be treated as a P.C. Sum and profit and attendance comparable to that contained in the priced Bills of Quantities for similar items added.	
1.0.36	PRIME COST (OR P.C.) SUMS. The term "Prime Cost Sum" or "P.C. Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A7 (ii) of the Standard Method of Measurement . Persons or firms nominated by the Project Engineer to execute work or to provide and fix materials or goods are described herein as Nominated Sub Contractors. Persons or firms so nominated to supply goods or materials are described herein as Nominated Suppliers.	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	AMOUNT (KSHS)
1.0.37	ADJUSTMENT OF P.C. SUMS. In the final account all P.C. Sums shall be deducted and the amount properly expended upon the Project Engineer'S order in respect of each of them added to the Contract sum. The Contractor shall produce to the Project Engineer such quotations, invoices or bills, properly receipted, as may be necessary to show the actual details of the sums paid by the Contractor. Items of profit upon P.C. Sums shall be adjusted in the final account pro-rata to the amount paid. Items of "attendance" (as previously described) following P.C. Sums shall be adjusted pro-rata to the physical extent of the work executed (not pro-rata to the amount paid) and this shall apply even though the Contractor's priced Bill shows a percentage in the rate column in respect of them. Should the Contractor be permitted to tender and his tender be accepted of any work for which a P.C. Sum is included in these Bill of Quantities profit and attendance will be allowed at the same rate as it would be if the work were executed by a Nominated Sub-Contractor.	
1.0.38	NOMINATED SUB-CONTRACTORS When any work is ordered by the Project Engineer to be executed by nominated sub-contractors, the Contractor shall enter into sub-contracts and shall thereafter be responsible for such sub-contractors in every respect. Unless otherwise described the Contractor is to provide for such Sub-Contractors any or all of the facilities described in these Preliminaries. The Contractor should price for these with the nominated Sub contract Contractor's work concerned in the P.C. Sums under the description "add for Attendance".	
1.0.39	DIRECT CONTRACTS Notwithstanding the foregoing conditions, the Client reserves the right to place a "Direct Contract" for any goods or services required in the works which are covered by a P.C. Sum in the Bills of Quantities and to pay for the same direct. In any such instances, profit relative to the P.C. Sum the priced Bills of Quantities will be adjusted as described for P.C. Sums and allowed.	
1.0.40	ATTENDANCE UPON OTHER TRADESMEN, ETC. The Contractor shall allow for the attendance of trade upon trade and shall afford any tradesmen or other persons employed for the execution of any work not included in this Contract every facility for carrying out their work and also for use of his ordinary scaffolding. The Contractor, however, shall not be required to erect any special scaffolding for them. The Contractor shall perform such cutting away for and making good after the work of such tradesmen or persons as may be ordered by the Project Engineer and the work will be measured and paid for to the extent executed at rates provided in these Bills.	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	AMOUNT (KSHS)
1.0.41	OFFICE ETC. FOR THE Project Engineer The Contractor shall provide, erect and maintain where directed on site a properly ventilated lockable office for the consultants, having a minimum floor area of 40 Square Metres complete with furniture (Tables, chairs e.t.c). Provision shall be made for artificial lighting and cleaning facilities for the duration of the works. Upon completion the Contractor shall dismantle and clear away the office. He shall also provide a strong metal trunk complete with strong hasp and staple fastening and two keys. He shall provide, erect and maintain a lock-up type water or bucket closet for the sole use of the Project Engineer including making temporary connections to the drain where applicable to the satisfaction of Government and Medical Officer of Health and shall provide services of cleaner and pay all conservancy charges and keep both office and closet in a clean and sanitary condition from commencement to the completion of the works and dismantle and make good disturbed surfaces. The office and closet shall be completed before the Contractor is permitted to commence the works. The Contractor shall make available on the Site as and when required by the "Project Engineer" a modern and accurate level together with levelling staff, ranging rods and 50 metre metallic or linen tape.	
1.0.42	WATER AND ELECTRICITY SUPPLY FOR THE WORKS The Contractor shall provide at his own risk and cost all necessary water, electric lighting and power required for use in the works. The Contractor must make his own arrangements for connection to the nearest suitable water main and for metering the water used. He must also provide temporary tanks and meters as required at his own cost and clear away when no longer required and make good on completion to the entire satisfaction of the Project Engineer . The Contractor shall pay all charges in connection herewith. No guarantee is given or implied that sufficient water will be available from mains and the Contractor must make his own arrangements for augmenting this supply at his own cost. Nominated Sub--contractors are to be made liable for the cost of any water or electric current used and for any installation provided especially for their own use.	
1.0.43	SANITATION OF THE WORKS The Sanitation of the works shall be arranged and maintained by the Contractor to the satisfaction of the Government and/or Local Authorities, Labour Department and the Project Engineer.	
1.0.44	SUPERVISION AND WORKING HOURS The works shall be executed under the direction and to the entire satisfaction in all respects of the Project Engineer who shall at all times during normal working hours have access to the works and to the yards and workshops of the Contractor and sub-Contractors or other places where work is being prepared for the contract.	
1.0.45	HOARDING The Contractor shall enclose the site or part of the works under construction with a hoarding 2400 mm high consisting of iron sheets on 100 x 50 mm timber posts firmly secured at 1800 mm centres with two 75 x 50 mm timber rails. The Contractor is in addition required to take all precautions necessary for the safe custody of the works, materials, plant, public and Employer's property on the site.	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	AMOUNT (KSHS)
1.0.46	PROTECTION OF THE WORKS. Provide protection of the whole of the works contained in the Bills of Quantities, existing property, finishes, workmen employed on the site, employer's agents and the public; including casing , casing up, covering or such other means as may be necessary to avoid damage to the satisfaction of the Project Engineer and remove such protection when no longer required and make good any damage which may nevertheless have been done at completion free of cost to the Client. Any damage or loss incurred due to the insufficiency of such protection must be made good by the Contractor	
1.0.47	WORKS TO BE DELIVERED UP CLEAN Clean and flush all gutters, rainwater and waste pipes, manholes and drains, wash (except where such treatment might cause damage) and clean all floors, sanitary fittings, glass inside and outside and any other parts of the works and remove all marks, blemishes, stains and defects from joinery, fittings and decorated surfaces generally, polish door furniture and bright parts of metalwork and leave the whole of the buildings watertight, clean, perfect and fit for occupation to the approval of the Project Engineer.	
1.0.48	GENERAL SPECIFICATION. For the full description of materials and workmanship, method of execution of the work and notes for pricing, the Contractor is referred to the Ministry of Roads and Public Works and Housing General Specification dated 1976 or any subsequent revision thereof which is issued as a separate document, and which shall be allowed in all respects unless it conflicts with the General Preliminaries, Trade Preambles or other items in these Bills of Quantities.	
1.0.49	TRAINING LEVY The Contractor's attention is drawn to the legal notice which requires payment by the Contractor of a Training Levy at the rate of 1/4 % of the Contract sum on all contracts of more than KShs. 50,000.00 in value.	
1.0.50	MATERIALS ON SITE All materials for incorporation in the works must be stored on or adjacent to the site before payment is effected unless specifically exempted by the Project Engineer. This includes the materials of the Main Contractor, Nominated Sub-Contractors and Nominated Suppliers.	
1.0.51	ALTERATIONS TO BILLS, PRICING, ETC. Any unauthorised alteration or qualification made to the text of the Bills of Quantities may cause the Tender to be disqualified and will in any case be ignored. The Contractor shall be deemed to have made allowance in his prices generally to cover any items against which no price has been inserted in the priced Bills of Quantities. All items of measured work shall be priced in detail and the Tenders containing Lump Sums to cover trades or groups of work must be broken down to show the price of each item before they will be accepted.	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	AMOUNT (KSHS)
1.0.52	MATERIALS ARISING FROM EXCAVATIONS Materials of any kind obtained from the excavations shall be the property of the client. Unless the Project Engineer directs otherwise such materials shall be dealt with as provided in the Contract. Such materials shall only be used in the works, in substitution of materials which the Contractor would otherwise have had to supply with the written permission of the Project Engineer Should such permission be given, the Contractor shall make due allowance for the value of the materials so used at a price to be agreed.	
1.0.53	PREVENTION OF ACCIDENT, DAMAGE OR LOSS The Contractor is notified that these works are to be carried out on a restricted site where the client is going on with other normal activities. The Contractor is thus instructed to take reasonable care in the execution of the works as to prevent accidents, damage or loss and disruption of activities being carried out by the Client. The Contractor shall allow in his rates any expense he deemed necessary by taking such care within the site.	
1.0.54	GOVERNMENT ACTS REGARDING WORK, PEOPLE ETC. Allow for complying with all Government Acts, Orders and Regulations in connection with the employment of Labour and other matters related to the execution of the works. In particular the Contractor's attention is drawn to the provisions of the Factory Act 1950 and his tender must include for all costs arising or resulting from compliance with any Act, Order or Regulation relating to Insurances, pensions and holidays for workpeople or so the safety, health and welfare of the workpeople. The Contractor must make himself fully acquainted with current Acts and Regulations, including Police Regulations regarding the movement, housing, security and control of labour, labour camps, passes for transport, etc. It is most important that the Contractor, before tendering, shall obtain from the relevant Authority the fullest information regarding all such regulations and/or restrictions which may affect the organisation of the works, supply and control of labour, etc., and allow accordingly in his tender. No claim in respect of want of knowledge in this connection will be entertained.	
1.0.55	BLASTING OPERATIONS Blasting will only be allowed with the express permission of the Project Engineer in writing. All blasting operations shall be carried out at the Contractor's sole risk and cost in accordance with any Government regulations in force for the time being, and any special regulations laid down by the Project Engineer governing the use and storage of explosives.	
1.0.56	SIGNBOARD Allow for providing, erecting, maintaining throughout the course of the Contract and afterwards clearing away a signboard as designed, specified and approved by the Project Engineer.	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	AMOUNT (KSHS)
1.0.57	NUISANCE The Contractor must take such steps and exercise such care and diligence so as to minimize nuisance from dust, noise or any other cause, to the occupiers of adjacent properties	
1.0.58	PROTECTION OF TREES The Contractor shall in the course of construction take all necessary precautions to preserve any existing trees. The contractor will not cut down any tree(s) without express authority or written instruction by the Project Engineer and relevant authorities. He must at all times liaise with the Project Engineer in this regard. The cost of obtaining any necessary permits will be borne by the Contractor.	
1.0.59	EXTENDED PRELIMINARIES In case the Contractor suffers costs due to extended preliminaries as a result of excusable delays. Then the Employer shall compensate the Contractor the ACTUAL COST of such extended preliminaries plus 10% administrative costs. Such costs will be proven with payment receipts, payroll etc. No further claims shall be allowed with respect to the same.	
1.0.60	TIMELY PAYMENT FOR LABOURERS The Contractor shall ensure that his workers are paid their wages promptly and on time. If such payments are effected weekly the Contractor shall ensure that workers are paid on the appointed day to avoid any disruption of work occasioned by the failure of the Contractor to pay workers on time and shall be required to furnish proof to that effect,	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	AMOUNT (KSHS)
	<u>COLLECTION</u>	
	Brought Forward From Page GP/1	
	Brought Forward From Page GP/2	
	Brought Forward From Page GP/3	
	Brought Forward From Page GP/4	
	Brought Forward From Page GP/5	
	Brought Forward From Page GP/6	
	Brought Forward From Page GP/7	
	Brought Forward From Page GP/8	
	Brought Forward From Page GP/9	
	Brought Forward From Page GP/10	
	Brought Forward From Page GP/11	
	Brought Forward From Page GP/12	
	Brought Forward From Page GP/13	
	TOTAL FOR GENERAL PRELIMINARIES CARRIED TO GRAND SUMMARY	-

BILL NO 2; PARTICULAR PRELIMINARIES

Item	DESCRIPTION	Kshs.
2.0.1	<p>PRICING ITEMS OF PRELIMINARIES</p> <p>Prices SHALL BE INSERTED against items of “preliminaries” in the tenderer’s priced Bills of Quantities. The contractor is advised to read and understand all preliminary items.</p>	
2.0.2	<p>SCOPE OF THE CONTRACT</p> <p>The works to be carried out under this contract comprises of General builders works in accordance with the BQ supplied in amplification thereof including.</p> <p><u>Block</u> <u>Use</u></p> <p>i. Social Fish Banda : Fish Reception and Weighing Area; Fish Processing Area, BMU Office, Chest Freezers, Ice making machine and, Changing Room and Washrooms</p> <p>ii. Ablution Block: Public Washrooms and Store.</p> <p>iii. Social Hall: Multipurpose Hall and Washroom</p> <p>iv. Fishing Gear Mending Shed: Shed and storage</p> <p>v. External Works: Access Road, Boundary Wall & External Drainage</p> <p><u>Total Built-up Area (As Measured by QS)</u> <u>Sq. Meters 503m2</u></p>	
2.0.3	<p>DESCRIPTION OF THE WORKS</p> <p>The works to be carried out under this contract comprise of</p> <p>The Buildings are reinforced concrete frame with sustainable finishes to provide conducive working environment and facilities.</p> <p>The Substructure consists of Reinforced Concrete Column Base Foundations, Surface Bed Preparations, and Floors Slabs.</p> <p>The Superstructure Consists of Reinforced Concrete Columns, Beams, and Suspended Slabs.</p> <p>The walling is in dressed coral stones or solid concrete blocks.</p> <p>The flat roof sections to be in waterproofed screeds covered in bituminous member and concrete tiles.</p>	
	Carried to Collection	

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

Item	DESCRIPTION	Kshs.
	<p>The windows are in glazed Aluminium casements.</p> <p>The Doors are in Aluminium and Mvule.</p> <p>External Finishes include plaster, textured paint.</p> <p>Internal Finishes include plaster and paint, Terrazo Finish and Ceramic tiles.</p> <p><u>External Works</u> External Works Comprise but shall not be limited to the following:- i. Paved Driveway and Parking ii. Storm Water Drainage iii. Foul Water Drainage iv. Landscaping v. Water Reticulation</p> <p>Electrical installations including lighting and power point and fittings, distribution boards, lift installation, cable trunking and data point, earthing, and solar system.</p> <p>Mechanical installations including sanitary fittings, plumbing and drainage works, firefighting installations, and ice making machine</p>	
2.0.4	<p>MEASUREMENTS In the event of any discrepancies arising between the Bills of Quantities and the actual works, the site measurements shall generally take precedence. However, such discrepancies between any contract documents shall immediately be referred to the Employer Representative in accordance with Clauses of the Conditions of Contract. The discrepancies shall then be treated as a variation and be dealt with in accordance with Clause of the said Conditions.</p>	
2.0.5	<p>LOCATION OF SITE The sites of the proposed works are at Kidongo Landing Site, Latitude 3.57S and Longitude 39.42 E . The Contractor is advised to visit the site, to familiarize with the nature and position of the site. No claims arising from the Contractor's failure to do so will be entertained</p>	
	Carried to Collection	

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

Item	DESCRIPTION	Kshs.
	CLEARING AWAY	
2.0.6	<p>The Contractor shall remove all temporary works, rubbish, debris and surplus materials from the site as they accumulate and upon completion of the works, remove and clear away all plant, equipment, rubbish, unused materials and stains and leave in a clean and tidy state to the reasonable satisfaction of the ENGINEER.</p> <p>The whole of the works shall be delivered up clean, complete and in perfect condition in every respect to the satisfaction of the Project Manager.</p>	
2.0.7	<p>CLAIMS</p> <p>It shall be a condition of this contract that upon it becoming reasonably apparent to the Contractor that he has incurred losses and/or expenses due to any of the contract conditions, or by any other reason whatsoever, he shall present such claim or intent to claim notice to the Employer Representative within the contract period. No claims shall be entertained upon the expiry of the said contract period.</p>	
2.0.8	<p>PAYMENTS</p> <p>The tenderer's attention is drawn to the fact that the Department SHALL NOT MAKE ADVANCE PAYMENTS in accordance with SECTION IV – Appendix to the Conditions of Contract Agreement.</p>	
2.0.9	<p>PREVENTION OF ACCIDENT, DAMAGE OR LOSS</p> <p>The Contractor is notified that these works are to be carried out on a Restricted site where the client is going on with other normal activities. The Contractor is instructed to take reasonable care in the execution of the works as to prevent accidents, damage or loss and disruption of normal activities being carried out by the Client. The Contractor shall allow in his rates any expense he deems necessary by taking such care within the site.</p>	
	Carried to Collection	

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

Item	DESCRIPTION	Kshs.
2.0.10	WORKING CONDITIONS The Contractor shall allow in his rates for any interference that he may encounter in the course of execution of the works for the Client may in some cases ask the Contractor not to proceed with the works until some activities within the site are completed, as the facility will be operating as usual during the course of the contract.	
2.0.11	SIGNBOARD Allow for providing, erecting, maintaining throughout the course of the Contract and afterwards clearing away a signboard as designed, specified and approved by the Employer Representative.	
2.0.12	LABOUR CAMPS The Contractor shall not be allowed to house labour on site. Allow for transporting workers to and from the site during the tenure of the contract.	
2.0.13	MATERIALS FROM DEMOLITIONS Any materials arising from demolitions and not re-used shall be removed from site. The contractor shall allow in his rates the cost of removal from site and dumping at a site approved by the city authorities.	
2.0.14	PRICING RATES The tenderer shall include for all costs in executing the whole of the works, including transport, replacing damaged items, fixing, all to comply with the said Conditions of Contract.	
	Carried to Collection	

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

Item	DESCRIPTION	Kshs.
2.0.15	SECURITY The Contractor shall allow for providing adequate security for the works and the workers in the course of execution of this contract. No claim will be entertained from the Contractor for not maintaining adequate security for both the works and workers.	
2.0.16	URGENCY OF THE WORKS The Contractor is notified that these “ works are urgent ” and should be completed within the contract period. The Contractor shall allow in his rates for any costs he deems that he/she may incur by having to complete the works within the stipulated contract period.	
2.0.17	PAYMENT FOR MATERIALS ON SITE All materials for incorporation in the works must be stored on site before payment is effected, unless specifically exempted by the Employer Representative	
2.0.18	EXISTING SERVICES Prior to the commencement of any work, the Contractor is to ascertain from the relevant authority the exact position, depth and level of all existing services in the area and he/she shall make whatever provisions may be required by the authorities concerned for the support, maintenance and protection of such services.	
2.0.19	FIRM PRICE CONTRACT This is a firm price contract and the contractor must allow in his tender rates for any increase in the cost of labour and/or materials during the currency of the contract	
	Carried to Collection	

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

Item	DESCRIPTION	Kshs.
2.0.20	BID BOND A bid bond shall be required in the amount stated in the invitation to tender or advertisement. Bid bond shall be from EITHER an insurance or bank.	
2.0.21	PERFORMANCE BOND The Contractor shall find and submit the name of one surety who shall be an approved Kenyan Bank and who will be bound to the employer in an amount equal to Ten per cent (10%) of the Contract amount for the due performances of the Contract up to the date of completion as certified by the ENGINEER and who will when and if called upon sign a Bond to that effect without the addition of any limitations.	
2.0.22	TENDER DOCUMENTS Tender documents are as listed in the Instructions to Tenderer's.	
2.0.23	DELIVERY OF TENDER Tenders and all documents in connection therewith, as specified above must be delivered in the addressed envelope which should be properly sealed and deposited at the offices as specified in the letter accompanying these documents or as indicated in the advertisement. Tenders will be opened at the time specified in the letter accompanying these Tender Documents or as indicated in the advertisement. Tenders delivered/received later than the above time will not be opened.	
2.0.24	VALUE ADDED TAX The contractor shall include in his rates/prices allowances to meet VAT requirements and any other government taxes currently in force. No claim arising from the contractors failure to allow in his rates/prices allowance to meet all government taxes shall be entertained	
	Carried to Collection	

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

Item	DESCRIPTION	Kshs.
2.0.25	<p>CONTRACT COMPLETION PERIOD</p> <p>The contract completion period in accordance with conditions of the Conditions of contract must be adhered to.</p> <p>The 'ENGINEER' shall strictly monitor the Contractors progress in relation to the progress chart and should it be found necessary the 'ENGINEER' shall inform the Contractor in writing that his actual performance on site is not satisfactory. In all such cases the Contractor shall accelerate his rate of performance production and progress by all means such as additional labour,plant, e.t.c and working overtime all at his cost.</p>	
	Carried to Collection	

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

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**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

BILL NO 3; ABLUTION BLOCK BUILDERS WORKS

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<p>ELEMENT NO. 1</p> <p>SUBSTRUCTURES (All provisional)</p> <p>Please note that ALL substructure works are Measured Provisionally. The contractor must ensure that the actual measurements are taken by the Project Quantity Surveyor before any works are covered. Failure to do so will necessitate works to be open up for verification at your (contractors) cost.</p> <p>NOTE: Classes of Rock</p> <p>(1) Class 1 : Soft rock of the type known locally as "CORAL" which in the opinion of the Engineer cannot be considered as hard rock shall be known as Class 1 rock. Soft Rock shall be rock with compressive strength not exceeding 15N/mm². Murram and Kunker is specifically excluded and will be reckoned as normal/common excavation. Extremely weathered and weak Tuff shall also be considered as normal excavation.</p> <p>(2) Class 2 : Class 2 Rock shall be with compressive strength exceeding 15N/mm². This type of rock contains stones and boulders of unweathered or incompletely weathered Tuff, trachyte, black trap or lava with compressive strength exceeding 15N/mm² in a formation which is massive and geologically homogeneous. A boulder or outcrop with such compressive strength will be deemed to be Class 2 rock or Hard Rock</p> <p>The opinion of the Engineer in classifying rock shall be final and binding. Explosives must not be used without the prior approval of the Engineer. Blasting operations are carried out at the Contractor's sole risk, and all blasting must be carried out in accordance with government regulations and approval</p>				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

	ABLUTION BLOCK				
	ELEMENT 1: SUBSTRUCTURES (All Provisional)				
	SITE PREPARATION				
	Excavations				
3.1.1	Clear site of all bushes, tufts and any small or large trees, including grubbing out roots and burn on site where directed	SM	146	50	7,300
3.1.2	Excavate oversite to remove vegetable soil 200mm average depth, loads, wheel and deposit where directed on site and level	SM	146		
3.1.3	Excavate for foundation trenches not exceeding 1.5M deep from stripped level	CM	51		
3.1.4	Ditto; for columns base	CM	41		
3.1.5	Ditto; for retaining wall footing	CM	102		
	Disposal				
3.1.6	Return, fill and ram extra excavation materials around foundation	CM	154		
3.1.7	Cart away surplus excavated materials to designated dumpsite	CM	40		
	Filling				
3.1.8	Average 300mm thick hardcore bed well watered leveled and compacted	CM	158		
3.1.9	50mm thick murram blinding	SM	135		
3.1.10	Treat hardcore surface with approved antitermite applied in accordance with the manufacturer's instructions and subject to a TEN YEAR guarantee	SM	135		
	CONCRETE WORKS				
	Mass Concrete				
3.1.11	50mm thick concrete blinding under strip footing	SM	34		
3.1.12	Ditto to column bases	SM	27		
3.1.13	Ditto to retaining wall footing	SM	102		
3.1.14	Water bars; standard PVC bulb edged strip as approved 200 mm wide to retaining wall	LM	34		
	Total carried forward to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<i>Brought forward from page 3/1</i>				
	CONCRETE WORKS				
	Vibrated reinforced concrete class 25/20				
3.1.12	Retaining wall footing	CM	36		
3.1.13	Retaining wall	CM	24		
3.1.12	Strip foundation	CM	7		
3.1.13	Column bases	CM	11		
3.1.14	Column starters	CM	2		
3.1.15	150mm thick floor slab	SM	135		
	Reinforcement				
	Ribbed Reinforcement Steel Bars Grade 100 to BS 4449 including cutting to length, bending, hoisting and fixing including all necessary tying wires and spacing blocks				
3.1.16	T16	KG	245		
3.1.17	T12	KG	4492		
3.1.18	T10	KG	1931		
3.1.19	T8	KG	132		
3.1.20	B.R.C Mesh reinforcement A142	SM	135		
	Formwork as Described. Allow for setting to special steel proping, strutting, fillets, nails, etc to				
3.1.21	Sides of strip footing	SM	23		
3.1.22	Sides of column base	SM	29		
3.1.23	Sides of column starters	SM	18		
3.1.24	Sides of retaining walls	SM	136		
3.1.24	Edges of the surface bed 225- 300mm high	LM	41		
3.1.25	Edges of the surface footing	SM	24		
	Total carried forward to collection				

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

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**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	GROUND FLOOR				
	ELEMENT 2: REINFORCED CONCRETE SUPERSTRUCTURE				
3.2.1	Vibrated reinforced concrete class 25/20 in:- Beams	CM	3		
3.2.2	Columns	CM	4		
3.2.3	Gutter	CM	6		
3.2.4	250mm thick suspended floor slab	SM	135		
	Reinforcement				
	Ribbed Reinforcement Steel Bars Grade 100 to BS 4449 including cutting to length, bending, hoisting and fixing including all necessary tying wires and spacing blocks				
3.2.5	T20	KG	882		
3.2.6	T16	KG	1196		
3.2.7	T12	KG	2041		
3.2.8	T10	KG	1386		
3.2.9	T8	KG	154		
	Formwork as Described. Allow for setting to special steel proping, strutting, fillets, nails, etc to				
3.2.10	Soffits of floor slab not exceeding 3.00m high	SM	135		
3.2.11	Vertical sides of columns	SM	48		
3.2.12	Sides and soffits of beams	SM	57		
3.2.13	Ditto gutters	SM	70		
	Ditto to edges of:-				
3.2.14	Suspended floor slab 225mm but not exceeding 300mm high	LM	41		
	Total for supestructures carried to summary				

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	ELEMENT 3: WALLING Machine cut coral block walling bedded and jointed in cement and sand mortar 1:4; including 20swg x 25mm wide hoop iron in every alternate course				
3.3.1	200mm thick external walling	SM	115		
3.3.2	200mm thick internal walling	SM	66		
3.3.3	100 mm ditto	SM	21		
3.3.4	200 mm parapet walling	SM	31		
	Precast concrete vent blocks				
3.3.5	200mm thick vent block walling	SM	25		
	Precast concrete coping				
3.3.6	75mm thick weathered and throated saddled-back coping for 200mm thick walling	LM	41		
3.3.7	Ditto 450 x 450mm pier cap ditto to columns	NO	12		
	Total for walling carried to summary				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
ELEMENT 4: ROOF STRUCTURE (All Provisional)					
FLAT ROOF FINISHES					
3.4.1	50 mm cement sand 1:3 water proof screed to flat roof slab laid to fall and crossfalls	SM	135		
3.4.2	Apply one coat bituminous primer to surface of screed including gutters	SM	135		
3.4.3	Supply, torch and apply bituminous membrane in 200mm overlaps ditto	SM	135		
3.4.4	Ditto sides of wall 200mm high	LM	41		
3.4.5	50 x 50mm internal angle fillet	LM	41		
3.4.6	300 x 300 x 50mm thick; heavy duty interlocking concrete tiles; butt joints straight both ways to cement and sand base (m.s) generally to;	SM	135		
3.4.7	Ditto sides of wall 200mm high	LM	41		
Rainwater goods					
3.4.8	Extra over for running outlet	NO	9		
3.4.9	100mm x 75 x 0.6mm PVC down pipes fixed to wall with holding clips at 1200mm centres	LM	30		
3.4.10	Extra over for swan neck 1000mm long	NO	9		
3.4.11	Extra over for shoe 1000mm long	NO	9		
Total for Roof Structure carried to summary page					

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	ELEMENT 5: DOORS				
	<i>Wrot mvule hardwood timber profiled to Architects specifications as described in:-</i>				
	Door frame				
3.5.1	250 mm x 50 mm thick, rebated with labours	LM	58		
	Architraves				
3.5.2	75 mm x 25 mm moulded	LM	116		
	Quadrants				
3.5.3	50 mm x 25 mm	LM	116		
	Beading to fanlight				
3.5.4	25 mm x 25 mm;	LM	10		
	Door				
3.5.5	Louvred door panel overall size; 1100 x 2400mm high	NO.	2		
3.5.6	Ditto double action overall size 1000 x 2100mm high	NO.	4		
3.5.7	Ditto overall size 800 x 2100mm high	NO.	4		
3.5.8	Solid panel door overall size 900 x 2400mm high	NO.	1		
	Iron Mongery				
3.5.9	3 - Lever mortice lock with aluminium furniture	NO.	5		
3.5.10	150 x 150mm sex indicator plate	NO.	4		
3.5.11	Indicator bolt "Vacant/Engaged"	NO.	6		
3.5.12	150mm x 3.25mm heavy duty powerload stainless steel bushed bearing butterfly hinges	PRS	9.0		
3.5.13	Ditto double action hinges	PRS	6.0		
3.5.14	38mm diameter cylindrical satin steel door stop fixed to floor or wall with screw to approval	NO.	11		
3.5.15	Coat and hat hook with rubber tip in stainless steel finish	NO.	4		
	Painting and decoration				
	<i>Prepare and apply three coats marine quality vanish paint to:</i>				
3.5.16	Doors both internally and externally (Measured nett)	SM	46		
	Total for doors carried to summary				

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	ELEMENT 6: WINDOWS Supply, assemble and fix the following purpose made powder coated aluminium framed top hung windows from approved manufacturer(s) complete with mullions, transomes, railing and necessary intermediate reinforcement elements including all weather strips, rubber glazing strips,couplings, and accessories; panes fixed with 5mm thick one way glass fixed with beadings.				
3.6.1	Size 1500 x 600 mm	NO.	4		
3.6.2	Size 3000 x 600 mm	NO.	2		
3.6.3	Size 4600 x 600 mm	NO.	1		
	Glazing laminated oneway glass fixed with and including beadings.				
3.6.4	6mm thick glass in panes (0.50-1.00m ²)	SM	10		
	Total for widows carried to summary				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
ELEMENT 7: FINISHES					
Wall Finish					
3.7.1	15mm cement and sand (1:4) render wood float on external walling, columns and beams.	SM	115		
3.7.2	Prepare and apply one undercoat and two coats of first quality long lasting, textured, marine grade paint to rendered surfaces externally	SM	115		
3.7.3	15mm cement and sand (1:4) plaster trowelled smooth and comprising 12mm thick backing and 3mm finishing coat to internal walls.	SM	118		
3.7.4	Prepare surface, skim to approval and apply one undercoat and two finishing coats of first quality silk vinyl emulsion (marine quality) paint to plastered surfaces	SM	118		
3.7.5	12 mm thick cement and sand (1:3) paving prepared to receive ceramic tiles	SM	129		
3.7.6	Supply and fix 6mm thick ceramic wall tiles or any other equal and approved on prepared backing (m.s) including grouting and edge protectors where required; overall size 200mm x 300mm.	SM	129		
Floor Finish					
3.7.7	30 mm thick cement and sand screed (1:3) backing prepared to receive ceramic tiles	SM	65		
3.7.8	Supply and fix 10mm thick polished ceramic floor tiles to approval on prepared backing (m.s) including grouting; overall size 300mm x 300mm.	SM	25		
3.7.9	Supply and fix 10mm thick non-slip ceramic floor tiles to approval on prepared backing (m.s) including grouting; overall size 300mm x 300mm.	SM	40		
3.7.10	Ditto 100mm high skirting	LM	20		
Ceiling Finish					
3.7.11	15mm cement and sand (1:4) plaster trowelled smooth and comprising 12mm thick backing and 3mm finishing coat to suspended concrete slab	SM	75		
3.7.12	Prepare surface, skim to approval and apply one undercoat and two finishing coats of first quality silk vinyl emulsion (marine quality) paint to plastered surfaces	SM	75		
Total for finishes carried to summary					

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	ELEMENT 8: EXTERNAL PAVING				
	Floor Finishes				
	Screed; cement and sand 1:3 with approved integral dust proofing additive wood floated.				
3.8.1	32 mm thick to receive terrazzo (m.s)	SM	73		
	Polished Terrazzo paving				
3.8.2	25mm thick insitu polished terrazzo laid on concrete in approved coloured aggregate finished smooth including sanding and polishing	SM	73		
3.8.3	20 x 100mm ditto skirting	LM	37		
3.8.4	25 mm wide Slip-resistant Carborandum inserts on Terrazzo ramp bonded with an approved adhesive	LM	24		
	Plastic dividing strips				
3.8.5	32 x 3mm thick plastic dividing strips	LM	75		
	TOTAL FOR EXTERNAL PAVING CARRIED TO SUMMARY				
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

	ELEMENT 9: FIXTURES AND FITTINGS				
	Washroom Worktop				
	2 No. 75 mm thick in-situ concrete worktop size 1600 mm (average) x 600 mm deep on plan, reinforced with BRC Ref. A142, necessary formwork, 100 mm thick concrete plinth, chasing into wall for anchoring, dwarf wall, boxing to form opening for sink the top finished tiles				
3.9.1	75mm thick Worktop	SM	2		
3.9.2	100mm plain concrete class 15/20 in benching slab	SM	2		
	Reinforcement				
	Ribbed Reinforcement Steel Bars Grade 100 to BS 4449 including cutting to length, bending, hoisting and fixing including all necessary tying wires and spacing blocks				
3.9.3	Assorted reinforcement bars	KG	15		
	Formwork as Described. Allow for setting to special steel proping, strutting, fillets, nails, etc to				
3.9.4	Soffits of floor slab not exceeding 3.00m high	SM	2		
	Ditto to edges of;-				
3.9.5	Suspended slab 75mm but not exceeding 150mm high	LM	5		
	Precast concrete solid blocks bedded and jointed in cement and sand mortar (1:3)				
3.9.6	100mm internal walling	SM	4		
3.9.7	Worktop Finish				
	20 mm thick cement and sand screed (1:3) paving prepared to receive terrazo	SM	10		
3.9.8	20mm thick terrazzo layer including waterproofing admixture, rough and smooth sanding and polishing with acid to floor including 32 x 3mm thick plastic dividing strip where required	SM	10		
	Total for fixtures and fittings carried to summary			Ksh.	

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	ABLUTION BLOCK BUILDERS WORK SUMMARY				
1	SUBSTRUCTURE				
2	SUPERSTRUCTURE				
3	WALLING				
4	ROOF STRUCTURE				
5	DOORS				
6	WINDOWS				
7	FINISHES				
8	EXTERNAL PAVING				
9	JOINERY FITTINGS				
TOTAL FOR ABLUTION BLOCK CARRIED TO MAIN SUMMARY					

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<p>ELEMENT NO. 1</p> <p>SUBSTRUCTURES (All provisional)</p> <p>Please note that ALL substructure works are Measured Provisionally. The contractor must ensure that the actual measurements are taken by the Project Quantity Surveyor before any works are covered. Failure to do so will necessitate works to be open up for verification at your (contractors) cost.</p> <p>NOTE: Classes of Rock</p> <p>(1) Class 1 : Soft rock of the type known locally as "CORAL" which in the opinion of the Engineer cannot be considered as hard rock shall be known as Class 1 rock. Soft Rock shall be rock with compressive strength not exceeding 15N/mm². Murram and Kunker is specifically excluded and will be reckoned as normal/common excavation. Extremely weathered and weak Tuff shall also be considered as normal excavation.</p> <p>(2) Class 2 : Class 2 Rock shall be with compressive strength exceeding 15N/mm². This type of rock contains stones and boulders of unweathered or incompletely weathered Tuff, trachyte, black trap or lava with compressive strength exceeding 15N/mm² in a formation which is massive and geologically homogeneous. A boulder or outcrop with such compressive strength will be deemed to be Class 2 rock or Hard Rock</p> <p>The opinion of the Engineer in classifying rock shall be final and binding.</p> <p>Explosives must not be used without the prior approval of the Engineer. Blasting operations are carried out at the Contractor's sole risk, and all blasting must be carried out in accordance with government regulations and approval</p>				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	SUBSTRUCTURES (All provisional)				
	Site Preparation				
4.1.1	Clear site of all bushes, tufts and any small or large trees, including grubbing out roots and burn on site where directed by the Project Manager	380	SM		
	Excavation Note that all excavations are measured nett and no allowance for working space provided				
4.1.2	Excavate oversite average 250mm deep and cart away	380	SM		
4.1.3	Excavation for foundation trenches from reduced level: not exceeding 1.50 metres deep	234	CM		
4.1.4	Ditto but exceeding 1.50 m deep but not exceeding 3.0 m deep	172	CM		
4.1.5	Ditto for column bases from reduced level not exceeding 1.50 metres deep	110	CM		
4.1.6	Ditto but exceeding 1.50 m deep but not exceeding 3.0 m deep	97	CM		
4.1.7	Ditto for retaining wall footing from reduced level: not exceeding 1.50 metres deep	150	CM		
4.1.8	Extra over all descriptions of excavations and removal from site for breaking up rocks: irrespective of class	153	CM		
	Disposal of excavated material				
4.1.9	Fillings around sub- walls: backfill and compact in 150 mm layers: selected excavated materials	952	CM		
4.1.10	Remove surplus spoil from site and deposit in spoil heaps and later spread on site as directed	191	CM		
	Planking and strutting				
4.1.11	Planking and strutting to sides of all excavations: keep excavations free from all fallen materials		ITEM		
	Disposal of Water				
4.1.12	Keep excavations free from all water including spring or running water.		ITEM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Hardcore Filling				
4.1.11	300mm thick (minimum) approved hardcore handpacked in layers not exceeding 150mm	300	SM		
4.1.12	Imported filling to make-up levels; compacted in layers not exceeding 150 mm thick	150	CM		
	Murram				
4.1.13	50mm Thick Quarry dust blinding to the surface of hardcore rolled smooth to receive polythene sheeting	300	SM		
	Insecticide treatment Treat hardcore surface with approved antitermite applied in accordance with the manufacturer's instructions and subject to a TEN YEAR guarantee				
4.1.14	To Quarry dust surface	300	SM		
	CONCRETE WORK				
	Insitu concrete class 15/20: in				
4.1.15	50 mm thick blinding to strips and column bases	230	SM		
4.1.16	50 mm thick blinding to retaining wall footing	150	SM		
	Water bars; standard PVC bulb edged strip as approved				
4.1.17	200 mm wide to retaining wall	LM	50		
	Insitu concrete Class 25 (20mm aggregate) : vibrated: reinforced				
4.1.18	Retaining wall footing	53	CM		
4.1.19	Retaining wall	35	CM		
4.1.20	Strip foundation	32	CM		
4.1.21	Column bases	31	CM		
4.1.22	Columns	5	CM		
4.1.23	Thicknessing at staircase base	1	CM		
4.1.24	Steps	1	CM		
4.1.25	150mm Thick ground floor slab	340	SM		
4.1.26	Ditto ramps	12	SM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4.1.27	Extra over in slab to forming or leaving 300mm wide shallow drainage channels;average 300mm deep 'U' channel in hardcore and floor slab; including hand packing to sides of channel;150mm thick concrete class 25/20 to sides and bed of channel including 50mm blinding class 15/20 and all necessary formwork and reinforcement, all to detail and approval High Tensile Reinforcement Bars to B. S. 4449 including cutting, bending and all necessary spacer blocks : (Provisional) :- Ribbed bars to KS ISO 6935-2:2007	70	LM		
4.1.28	8mm diameter	200	KG		
4.1.29	10mm diameter	3060	KG		
4.1.30	12mm diameter	7080	KG		
4.1.31	16mm diameter	500	KG		
	Mesh Fabric Reinforcement				
4.1.32	BRC Fabric mesh reinforcement Ref. A142; weighing 2.22kg per square metre(measured net no allowances made for laps) including bends tying wire and spacer blocks. Formwork as Described. Allow for setting to special steel propping, strutting, fillets, nails, etc to	352	SM		
4.1.33	Vertical: sides of foundations in trenches	104	SM		
4.1.34	Vertical: sides of column bases	74	SM		
4.1.35	Vertical: sides of columns	70	SM		
4.1.36	Vertical: sides of retaining wall	200	SM		
4.1.37	Edges: slab over 75 but not exceeding 150 mm wide	83	LM		
4.1.38	Edges of steps 75mm - 150 mm high	26	LM		
4.1.39	Edges of ramp slab over 75 but not exceeding 150 mm wide	12	LM		
4.1.40	Edges of retaining wall footing	37	SM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	WALLING Approved natural stone or coral stone ; load bearing 7.0 N/mm2: reinforced with 20 gauge 25mm hoop iron strips laid horizontally every alternate course: bedded and jointed in cement and sand (1:3) mortar				
4.1.41	200 mm thick walls reinforced with hoop iron at every alternate course	521	SM		
	DAMP PROOFING 1000 Gauge polythene; 150mm laps; no allowances made for laps				
4.1.42	Horizontal; over 300mm wide	352	SM		
	Plinth Finishes				
4.1.43	15mm Thick cement sand (1:3) rendering to plinth; wood float finish (PLEASE NOTE: The render shall be at least 450 mm below natural ground level)	43	SM		
4.1.44	Prepare and apply three coats of premium quality marine grade bituminous paint to rendered walls; externally	43	SM		
	Carried to collection				
	COLLECTION SUBSTRUCTURE Brought forward from page 4/2 Brought forward from page 4/3 Brought forward from page 4/4 Brought forward from page 4/5				
	TOTAL FOR SUBSTRUCTURE CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 2				
	RC SUPERSTRUCTURE				
	Insitu concrete Class 25 (20mm aggregate) : vibrated: reinforced				
4.2.1	Beams	13	CM		
4.2.2	Gutter beams	14	CM		
4.2.3	Columns	7	CM		
4.2.4	Staircase	4	CM		
4.2.5	175 mm thick suspended floor slab	247	SM		
4.2.6	175 mm thick suspended roof slab	22	SM		
4.2.7	175mm thick suspended staircase landings	2	SM		
	High Tensile Reinforcement Bars to B. S. 4449 including cutting, bending and all necessary spacer blocks : (Provisional) :-				
	Ribbed bars to KS ISO 6935-2:2007				
4.2.8	Assorted sizes	11498	KG		
	Marineply formwork to:				
4.2.9	Sides of Columns	109	SM		
4.2.10	Sides and soffits of beams	166	SM		
4.2.11	Sides and soffits of gutter beams	113	SM		
4.2.12	Soffites of suspended floor slab	269	SM		
4.2.13	Edges of suspended floor slab 150-225mm high	89	LM		
4.2.14	Ditto edges of suspended staircase landings	6	LM		
4.2.15	Soffites of staircase landings	2	SM		
4.2.16	Sloping soffites of staircase	11	SM		
4.2.17	Extreme edges of staircase average 300mm wide with profile to treads and risers	7	LM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4.2.18	Risers 150mm high	24	LM		
4.2.19	Box out formwork to opening size 1100x1300mm	1	NO		
4.2.19	Creation of Arches Construction and formation of decorative arches around windows and the main door externally and main arches at terrace finished same as external walls;1000 - 3000 mm diameter;including all necessary formworks and reinforcements; all to Architect's details	2	No		
	Carried to collection				
	COLLECTION RC SUPERSTRUCTURE Brought forward from page 4/6 Brought Down from page 4/7 above				
	TOTAL FOR RC SUPERSTRUCTURE CARRIED TO SUMMARY				

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 3 EXTERNAL WALLS NATURAL STONE WALLING Machine cut natural stone or machine cut coral stone or hollow concrete block walling ; load bearing 7.0 N/mm2: reinforced with 20 gauge 25mm hoop iron strips laid horizontally every alternate course: bedded and jointed in cement and sand (1:3) mortar				
4.3.1	200mm. Thick walling externally	255	SM		
4.3.2	200mm thick at parapet wall; including allowing for crenellation to architect's detail Pre-cast concrete class 20/20 precast ventilation blocks	80	SM		
4.3.3	600x600x200mm thick vents block with floral motifs; bedded and jointed in cement and sand (1:3) mortar and reinforced every alternate course with hoop iron.;To architect's details Pre-cast concrete class 20/20 concrete coping	15	SM		
4.3.4	250 x 50 mm high precast concrete coping weathered and throated on both sides and jointed to wall in cement sand mortar 1:3 all to approval Bituminous or other equal approved damp-proof course; 3 ply membrane	121	LM		
4.3.5	Horizontal; 200mm wide under walls	64	LM		
	TOTAL EXTERNAL WALLING CARRIED TO SUMMARY				

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 4 INTERNAL WALLS NATURAL STONE WALLING Machine cut natural stone or machine cut coral stone or hollow concrete block walling ; load bearing 7.0 N/mm ² : reinforced with 20 gauge 25mm hoop iron strips laid horizontally every alternate course: bedded and jointed in cement and sand (1:3) mortar				
4.4.1	200mm. Thick walling internally	158	SM		
	Bituminous or other equal approved damp-proof course; 3 ply membrane				
4.4.2	Horizontal; 200mm wide under walls	55	LM		
	TOTAL FOR INTERNAL WALLING CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 5				
	FLAT ROOF FINISHES AND RAIN WATER HARVESTING				
	Flat roof finishes				
4.5.1	50mm thick (average) water proof screed consisting of cement and sand (1:3)	368	SM		
4.5.2	Ditto to sides of wall;300mm high	20	SM		
4.5.3	50 x 50mm internal angle fillet	66	LM		
	Supply and apply 4mm thick bituminous felt membrane heat welded in 200mm overlaps and all necessary surface preparations; applied strictly in accordance with printed manufacturer's instructions; provide a 10 year guarantee				
4.5.4	To roof slabs and gutters	368	SM		
4.5.5	To sides of walls	20	SM		
	Screed; cement and sand 1:3 with approved integral dust proofing additive wood floated.				
4.5.6	32mm thick to receive concrete interlocking tiles m.s)	269	SM		
	Concrete interlocking tiles				
4.5.7	200 x 200 x 25mm thick concrete interlocking tiles at roof slab; bedding and jointing in cement mortar mix 1:4(m/s)	269	SM		
4.5.8	100mm high matching skirting	66	LM		
	Unplasticized PVC downpipes and fittings: solvent welded joints				
4.5.9	160mm downpipes in concrete columns to approval	16	LM		
4.5.10	Extra over suspended concrete slab for forming 160mm diameter hole for down pipe	3	NO		
4.5.11	Extra over downpipe for bends	4	NO		
4.5.12	Extra over downpipe for 160mm diameter anti splash shoe	3	NO		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<i>Rainwater Harvesting Cont'd</i>				
4.5.13	Extra over 150mm fulbora outlets including galvanised expanded metal mesh	3	NO		
4.5.14	450 mm girth flashing one end built in mortar in groove in wall/concrete gutter	66	LM		
	Carried to collection				
	COLLECTION FLAT ROOF FINISHES AND RAIN WATER HARVESTING Brought forward from page 4/10 Brought Down from page 4/11 above				
	TOTAL FOR FLAT ROOF FINISHES AND RAIN WATER HARVESTING CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 6				
	DOORS				
	Louvred Doors				
	50mm thick mvule louvred door comprising of 50x3mm louvres set at 45 degrees at 50mm centres;solid blocking for iron mongery (m/s) to door : all in accordance with Architect's details				
4.6.1	Double leaf door overall size 900 x 2400; complete with louvred fanlight size 900x475mm high as D003	7	NO		
	Panel Doors				
	50mm thick mvule panelled door: comprised of 200 x 50mm thick stiles, top and middle rail: 200 x 50mm thick bottom rail ;solid blocking to iron mongery (m/s) to door				
4.6.2	Single leaf door hardwood panel door overall size 1100 x 2400mm high; with timber louvred fanlight size 1100x475mm high as D002	4	No		
4.6.3	Double leaf door hardwood panel door overall size 1500 x 2400mm high; with louvred fanlight size 1500x475mm high as D001	3	No		
	Fire rated door				
	Supply and fix 50mm thick one hour fire rated(1 HR) ; complete with fireproof frames and leaf made of 2mm thick G.I Steel in filled with rockwool and gypsum powder and finished in polyester powder coating and 475mm high fanlight glazed with 10mm thick georgian wire glass; complete with fire rated iron mongery (mortise lock,levers,hinges,door closer,panic bars and contact alarm ; solid blocking for iron mongery				
4.6.4	Double leaf door overall size 1100 x 2400mm high	1	No		
	The following in wrot mvule				
4.6.5	150 x 50mm frame with two labours	84	LM		
4.6.6	150 x 50 mm Transome	17	LM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4.6.7	150 x 50 mm Mullion	5	LM		
4.6.8	50 x 25mm. Splayed architrave.	84	LM		
4.6.9	25 x 25mm. Quadrant.	84	LM		
	Ironmongery Supply and fix the following ironmongery from an approved manufacturer including all necessary matching screws;all ironmongery to be stainless steel grade 3.1.6 marine grade				
4.6.10	3 - Lever mortice lock; complete with lockcase and handle	11	NO		
4.6.11	2 - Lever mortice lock; ditto complete with indicator	4	NO		
4.6.12	100mm. Pressed butt hinges	19.5	PRS		
4.6.13	150mm heavy duty double action spring hinges	6.0	PRS		
4.6.14	38mm. Diameter door stop on floor / wall to approval	21	NO		
4.6.15	Stainless steel overhead door closer	13	NO		
4.6.16	Ditto double action door closer	4	NO		
4.6.17	800 x 200mm high stainless steel kick plate onto both sides to approval	8	NO		
4.6.18	150 x 150mm sex indicator plate	4	NO		
4.6.19	Coat and hat hook	4	NO		
	Metal fixing cramps				
4.6.20	30 x 3mm. Approved door cramps 250mm. Long once bent one end drilled and screwed to wood	60	NO		
	Painting and Decoration Prepare and apply three coats of premium quality marine grade clear varnish; Matt quality to:-				
4.6.21	General surfaces of wood exceeding 200mm but not exceeding 300mm girth	106	LM		
4.6.22	Ditto; girth not exceeding 100mm	168	LM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4.6.23	Doors both internally and externally Prepare and apply one coat aluminium primer before fixing: to backing of wood	74	SM		
4.6.2	Surfaces over 200 but not exceeding 300mm	106	LM		
4.6.25	Surfaces not exceeding 100mm	168	LM		
	Carried to collection				
	COLLECTION DOORS Brought forward from page 4/12 Brought Down from page 4/13 Brought Down from page 4/14 above				
	TOTAL FOR DOORS CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 7				
	WINDOWS				
	Heavy Duty powder coated Aluminium windows to B.S. 4813 to be executed by an approved sub contractor The following in Heavy Duty Powder Coated Aluminium windows from approved manufacturer(s) complete with 80x55x3 mm frames mullions trasomes railing and necessary intermediate reinforcement elements including all weather strips, rubber glazing strips, couplings, ironmongery including hinges, fasteners and stays, sliding rails(where necessary) bars; all ironmongery to be of stainless steel grade 316 marine grade; panes left open for glazing to Architects detail Please note that the sliding panels and fixed lights should not be spaced more than 700 mm wide				
4.7.1	Window size 2400x675mm high as W-01	9	NO		
4.7.2	Window size 2400x1075mm high as W-02	1	NO		
4.7.3	Window size 1200x675mm high as W-03	1	NO		
	Burglar proofing grilles				
4.7.4	Mild steel grille framed with 50 x 25 x 3mm thick RHS sections, 16 mm diameter round bars welded together at 150 mm centres bothways; including assembly and fixing to opening cutting and pinning lugs to concrete and bedding frame in cement and sand mortar (1:3)	17	SM		
	Glazing				
	laminated oneway glass fixed with and including beadings.				
4.7.5	6mm thick glass in panes (0.50-1.00m ²)	17	SM		
	Window cills				
4.7.6	200x50mm pre-cast concrete window sill bedded and pointed in cement sand(1:3) mortar, weathred and throated all to Architects detail and approval	28	LM		
	Carried to collection				
	Prepare surface by sand blasting, apply one coat of 2 pack epoxy zinc phosphate primer; apply three coats of Marine grade gloss paint				
4.7.7	To burglar-proofing grilles; internally/externally	34	SM		
	Carried to collection				

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<div><div>COLLECTION</div><div>WINDOWS</div><div>Brought forward from page 4/15</div><div>Brought Down from page 4/16 above</div></div>				
	TOTAL FOR WINDOWS CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 8				
	FIXTURES AND FITTINGS: "All Provisional"				
	FIXTURES AND FITTINGS:-(PROVISIONAL)				
	Worktop				
4.8.1	100mm thick plain concrete class 15/20 in plinth	13	SM		
4.8.2	Reinforced concrete class 25/20 in 150mm worktops	13	SM		
	Formwork to:-				
4.8.3	Soffites of worktops	13	SM		
4.8.4	Edges of worktops and plinths 75-150mm high	48	LM		
4.8.5	10mm diameter high yield reinforcement bars	200	KG		
4.8.6	100mm thick coral block walling in cement/sand 1:3 mortar	34	SM		
4.8.7	15mm thick cement sand (1:3) plaster of worktop	13	SM		
4.8.8	Ditto walls	68	SM		
	Polished Terrazzo paving				
4.8.9	25mm thick insitu polished terrazzo laid on concrete in approved coloured aggregate finished smooth including sanding and polishing	81	SM		
	Plastic dividing strips				
4.8.10	32 x 3mm thick plastic dividing strips	122	LM		
	Supply and fix the following in high grade brass plate treated with sealer and chemical etching ; graphics and lettering finished in 3M vinyl cut outs as per architect's details				
4.8.11	500 x 100 mm door signage	11	No		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Stainless steel grating				
4.8.12	300mm wide stainless steel channel grating grade 3.1:6 marine grade: comprising 40 x 40 x 6mm edge frame : infilled with 40 x 6mm flats at 50mm centres : 40 x 40 x 6mm frame set in concrete with 150mm long stainless steel end split lugs : smooth weld joints	70	LM		
	Footbath				
4.8.13	2100 x 1000 x 550mm deep foot bath comprising of 30x30x3mm thick aluminium frame anchored in reinforced concrete slab; 22mm thick entrance matting with 5mm spacing between profiles. Colour: black; All to Architect's detail and approval	2	NO		
4.8.14	Ditto 1800 x 900 x 550mm deep	1	NO		
4.8.15	Ditto 1000 x 1000 x 550mm deep	1	NO		
	Handrail -Stainless Steel				
4.8.16	Supply, assemble and fix 1000mm high purpose made stainless steel (grade 3.1.6) comprising of 50mm diameter x 3mm thick stainless steel tube handrail welded to 50mm diameter x 3mm thick stainless steel balusters at fixed to concrete floor at 1000mm centres; balusters fixed to and including 200mm x 150mm x 15mm thick stainless steel base plate fixed to concrete; complete with 4no. 25mm diameter x 3mm thick horizontal middle rails ; including all necessary cleats, brackets,lugs stiffeners and the like; all to Architect's instructions and approval	8	LM		
4.8.17	Ditto at steps and ramps	12	LM		
	Carried to collection				
	COLLECTION				
	FIXTURES AND FITTINGS				
	Brought forward from page 4/17				
	Brought Down from page 4/18				
	TOTAL OF FIXTURES AND FITTINGS, CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO.9				
	INTERNAL FINISHES				
	Floor Finishes				
	Screed; cement and sand 1:3 with approved integral dust proofing additive wood floated				
4.9.1	32 mm thick to receive terrazzo (m.s)	136	SM		
4.9.2	Ditto to staircase landing	2	SM		
4.9.3	Ditto at treads; 300mm wide	24	LM		
4.9.4	Ditto to risers; 150mm high	24	LM		
4.9.5	32 mm Thick to receive ceramic floor tiles(m.s)	36	SM		
	Polished Terrazzo paving				
4.9.6	25mm thick insitu polished terrazzo laid on concrete in approved coloured aggregate finished smooth including sanding and polishing	136	SM		
4.9.7	Ditto to staircase landing	2	SM		
4.9.8	Ditto to treads; 300mm wide	24	LM		
4.9.9	Ditto to 150mm high risers	24	LM		
4.9.10	20 x 100mm ditto skirting	132	LM		
4.9.11	25 mm wide Slip-resistant Carborandum inserts on Terrazzo treads bonded with an approved adhesive	124	LM		
	Plastic dividing strips				
4.9.12	32 x 3mm thick plastic dividing strips	207	LM		
	Ceramic tiles				
4.9.13	330x330x10mm Thick non-slip Ceramic tiles to architects approval fixed with waterproof tile adhesive to approval; including spacers and edge protectors where required	36	SM		
	Skirting				
4.9.14	100x10mm thick ceramic tile skirting with colour to match floor finish	56	LM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Wall Finishes				
	15mm thick two coat gauged cement lime and sand (1:2:9) plaster steel trowelled smooth to:-				
4.9.15	To surface of wall,columns and beams	483	SM		
4.9.16	Door and Window reveals 100-200mm	216	LM		
	Backing; cement and sand 1:3 with approved integral dust proofing additive wood floated.				
4.9.17	15 mm thick to receive ceramic tiles	165	SM		
	Glazed wall tiles, local approved colour; glazed; to regular pattern bedding and jointing in cement mortar (1:3). Including matching grouting,spacers,waterproof adhesive and edge protectors where required				
4.9.18	330 x 330 x 10mm thick glazed ceramic tiles to wall surfaces	165	SM		
4.9.19	12mm girth PVC Edgings	73	LM		
	Ceiling Finishes				
	15 mm Thick Internal cement sand (1:3) gauged plaster as described to:				
4.9.20	Soffits of concrete slab	172	SM		
	Painting and Decorating				
	Prepare and apply undercoat and three coats PVA based premium quality marine grade silk vinyl sheen emulsion paint as approved to:				
4.9.21	To plastered surface of wall,columns and beams	483	SM		
4.9.22	Precast concrete Louvre Blocks	15	SM		
4.9.23	Door and Window reveals 100-200mm	216	LM		
4.9.24	Plastered concrete slab soffits	172	SM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	COLLECTION INTERNAL FINISHES Brought forward from page 4/20 Brought Down from page 4/21				
	TOTAL FOR INTERNAL FINISHES CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO.10				
	EXTERNAL FINISHES				
	Floor Finishes				
	Screed; cement and sand 1:3 with approved integral dust proofing additive wood floated.				
4.10.1	32 mm thick to receive terrazzo (m.s)	157	SM		
4.10.2	Ditto to 450mm wide treads	26	LM		
4.10.3	Ditto to 150mm high risers	26	LM		
	Polished Terrazzo paving				
4.10.4	25mm thick insitu polished terrazzo laid on concrete in approved coloured aggregate finished smooth including sanding and polishing	157	SM		
4.10.5	Ditto to 450mm wide treads	26	LM		
4.10.6	Ditto to 150mm high risers	26	LM		
4.10.7	20 x 100mm ditto skirting	58	LM		
4.10.8	25 mm wide Slip-resistant Carborandum inserts on Terrazzo treads bonded with an approved adhesive	146	LM		
	Plastic dividing strips				
4.10.9	32 x 3mm thick plastic dividing strips	236	LM		
	Wall Finishes				
4.10.10	15mm Thick cement sand (1:3) rendering to wall,columns and beams	431	SM		
4.10.11	Ditto gutter beams	83	SM		
4.10.12	Ditto: Door and Windows reveals 100-200mm	153	LM		
	Prepare and apply one undercoat and two finishing coats marine grade weatherguard(silicone based) exterior paint as approved to:				
4.10.13	Rendered surfaces of walls,columns and beams	423	SM		
4.10.14	Precast concrete Louvre Blocks	15	SM		
4.10.15	To gutter beams	83	SM		
4.10.16	Door and Window reveals 100-200mm	153	LM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4.10.17	Ceiling Finishes 15 mm Thick Internal cement sand (1:3) gauged plaster as described to: Soffits of concrete slab	51	SM		
4.10.18	Painting and Decoration Prepare surface, apply undercoat and apply three coats of premium quality marine grade emulsion paint to:- Plastered ceiling surfaces	51	SM		
	Carried to collection				
	COLLECTION EXTERNAL FINISHES Brought forward from page 4/23 Brought Down from page 4/24				
	TOTAL FOR EXTERNAL FINISHES CARRIED TO SUMMARY				

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

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PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	FISH BANDA				
	SUMMARY				
1	SUBSTRUCTURES				
2	R.C SUPERSTRUCTURE				
3	EXTERNAL WALLS				
4	INTERNAL WALLS				
5	ROOF FINISHES				
6	DOORS				
7	WINDOWS				
8	FIXTURES AND FITTINGS				
9	INTERNAL FINISHES				
10	EXTERNAL FINISHES				
11	BWICS				
	TOTAL FOR FISH BANDA CARRIED TO SUMMARY OF BUILDERS' WORKS				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT
KIDONGO, MOMBASA**

BILL NO 5; SOCIAL HALL BUILDERS WORKS					
ITEM	DESCRIPTION	UNIT	BQ QTY	RATE	BQ AMOUNT
	SOCIAL HALL				
	ELEMENT 1: SUBSTRUCTURES(All Provisional)				
	SITE PREPARATION				
	Excavations				
5.1.1	Clear site of all bushes, tufts and any small or large trees, including grubbing out roots and burn on site where directed	SM	234		
5.1.2	Excavate oversite to remove vegetable soil 200mm average depth, loads, wheel and deposit where directed on site and level	SM	234		
5.1.3	Excavate for foundation trenches not exceeding 1.5M deep from stripped level in coral	CM	62		
5.1.4	Ditto; for columns base	CM	54		
5.1.5	Ditto; for retaining wall footing	CM	147		
	Disposal				
5.1.6	Return, fill and ram extra excavation materials around foundation	CM	208		
5.1.7	Cart away surplus excavated materials to designated dumpsite	CM	55		
	Filling				
5.1.7	Average 300mm thick hardcore bed well watered leveled and compacted	CM	157		
5.1.8	50mm thick murram blinding	SM	234		
5.1.9	Treat hardcore surface with approved antitermite applied in accordance with the manufacturer's instructions and subject to a TEN YEAR guarantee	SM	234		
	CONCRETE WORKS				
	Mass Concrete				
5.1.10	50mm thick concrete blinding under strip footing, and column bases(class 15)	SM	77		
5.1.11	Ditto to retaining wall footing	SM	98		
	Total carried forward to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT
KIDONGO, MOMBASA**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<i>Brought forward from page SH/1</i>				
	Water bars; standard PVC bulb edged strip as approved				
5.1.12	200 mm wide to retaining wall	LM	49		
	Vibrated reinforced concrete class 25/20				
5.1.13	Retaining wall footing	CM	51		
5.1.14	Retaining wall	CM	34		
5.1.15	Strip foundation	CM	8		
5.1.16	Column bases	CM	14		
5.1.17	Column starters	CM	2		
5.1.18	150mm thick floor slab	SM	153		
	Reinforcement				
	High Tensile Reinforcement Bars to B. S. 4449 including cutting, bending and all necessary spacer blocks : (Provisional) :-				
5.1.19	T16	KG	152		
5.1.20	T12	KG	5571		
5.1.21	T10	KG	2056		
5.1.22	T8	KG	49		
5.1.23	B.R.C Mesh reinforcement A142	SM	153		
	Formwork as Described. Allow for setting to special steel propping, strutting, fillets, nails, etc to				
5.1.24	Sides of strip footing	SM	28		
5.1.25	Sides of column base	SM	38		
5.1.26	Sides of column starters	SM	19		
5.1.27	Sides of retaining walls	SM	196		
5.1.28	Edges of the surface bed 150 - 225mm high	LM	49		
5.1.29	Edges of retaining wall footing	SM	34		
	Total carried forward to collection				

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

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**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT
KIDONGO, MOMBASA**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	GROUND FLOOR				
	ELEMENT 2: REINFORCED CONCRETE SUPERSTRUCTURE				
5.2.1	Vibrated reinforced concrete class 25/20 in:- Beams	CM	8		
5.2.2	Columns	CM	6		
5.2.3	Gutters	CM	14		
5.2.4	Ditto in:- 150mm thick suspended floor slab	SM	234		
	Reinforcement				
	Ribbed Reinforcement Steel Bars Grade 100 to KS ISO 6935 - 2:2007 including cutting to length, bending, hoisting and fixing including all necessary tying wires and spacing blocks				
5.2.5	T20	KG	1295		
5.2.6	T16	KG	903		
5.2.7	T12	KG	3643		
5.2.8	T10	KG	1023		
5.2.9	T8	KG	483		
	Formwork as Described. Allow for setting to special steel propping, strutting, fillets, nails, etc to				
5.2.10	Soffits of floor slab not exceeding 3.00m high	SM	234		
5.2.11	Vertical sides of columns	SM	59		
5.2.12	Sides and soffits of beams	SM	53		
	Ditto gutters	SM	168		
	Ditto to edges of:-				
5.2.13	Suspended floor slab 225mm but not exceeding 300mm high	LM	59		
	Total for superstructures carried to summary				

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	ELEMENT 3: WALLING Machine cut coral block walling bedded and jointed in cement and sand mortar 1:4; including 20swg x 25mm wide hoop iron in every alternate course				
5.3.1	200mm thick external walling	SM	136		
5.3.2	200 mm internal walling	SM	48		
5.3.3	150 mm ditto	SM	20		
5.3.4	200 mm parapet walling	SM	57		
	Precast concrete vent blocks				
5.3.5	200mm thick vent block walling	SM	39		
	Precast concrete coping				
5.3.6	75mm thick weathered and throated saddled-back coping for 200mm thick walling	LM	65		
5.3.7	Ditto 450 x 450mm pier cap ditto to columns	NO	16		
	Total for wallings carried to summary				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT
KIDONGO, MOMBASA**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
ELEMENT 4: ROOF STRUCTURE (All Provisional)					
FLAT ROOF FINISHES					
5.4.1	50 mm cement sand 1:3 water proof screed to flat roof slab laid to fall and crossfalls	SM	234		
5.4.2	Apply one coat bituminous primer to surface of screed including gutters	SM	302		
5.4.3	Supply, torch and apply bituminous membrane in 200mm overlaps ditto	SM	302		
5.4.4	Ditto sides of wall 200mm high	LM	52		
5.4.5	50 x 50mm internal angle fillet	LM	52		
5.4.6	300 x 300 x 50mm thick; heavy duty interlocking concrete tiles; butt joints straight both ways to cement and sand base (m.s) generally to;	SM	234		
5.4.7	Ditto sides of wall 200mm high	LM	52		
Rainwater goods					
5.4.8	Extra over for running outlet	NO	4		
5.4.9	100mm x 75 x 0.6mm PVC down pipes fixed to wall with holding clips at 1200mm centres	LM	16		
5.4.10	Extra over for swan neck 1000mm long	NO	4		
5.4.11	Extra over for shoe 1000mm long	NO	4		
5.4.12	Construct water tank platform 150mm thick mass concrete ground water tank base slab of 3200mm diameter on 200mm thick coral block walling and 250mm thick hardcore filling and 50mm thick blinding supported by 200mm thick coral block walling, 200mm x600mm wide mass concrete strip foundation 1200mm deep including all excavations, disposal and necessary formwork and 12mm thick plaster (1:3) and 25mm thick screeding on slab	NO	1		
Total for Roof Structure carried to summary page					-

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT
KIDONGO, MOMBASA**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	ELEMENT 5: DOORS <i>Wrot mvule hardwood timber profiled to Architects specifications as described in:-</i>				
	Door frame				
5.5.1	250 mm x 50 mm thick, rebated with labours	LM	97		
	Architraves				
5.5.2	75 mm x 25 mm moulded	LM	194		
	Quadrants				
5.5.3	50 mm x 25 mm	LM	194		
	Beading to fanlight				
5.5.4	25 mm x 25 mm;	LM	38		
	Door				
5.5.5	Solid panel double door overall size 1500 x 2400mm high (D001)	NO.	3		
5.5.6	Louvred single leaf double action door overall size; 2400 x 900mm high (D002)	NO.	4		
5.5.7	Louvred single leaf door overall size; 2400 x 900mm high (D004)	NO.	4		
5.5.8	Ditto overall size 2100 x 900mm high (D003)	NO.	5		
	Iron Mongery				
5.5.9	3 - Lever mortice lock with aluminium furniture	NO.	9		
5.5.10	150 x 150mm sex indicator plate	NO.	2		
5.5.11	Indicator bolt "Vacant/Engaged"	NO.	7		
5.5.12	150mm x 3.25mm heavy duty powerload stainless steel bushed bearing butterfly hinges	PRS	19.5		
5.5.13	Ditto double action hinges	PRS	6.0		
5.5.14	38mm diameter cylindrical satin steel door stop fixed to floor or wall with screw to approval	NO.	21		
5.5.15	Coat and hat hook with rubber tip in stainless steel finish	NO.	5		
	Painting and decoration <i>Prepare and apply three coats marine quality vanish paint to:</i>				
5.5.16	Doors both internally and externally (Measured nett)	SM	76		
	Total for doors carried to summary				-

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	ELEMENT 6: WINDOWS Supply, assemble and fix the following purpose made powder coated aluminium framed top hung windows from approved manufacturer(s) complete with mullions, transomes, railing and necessary intermediate reinforcement elements including all weather strips, rubber glazing strips,couplings, and accessories; panes fixed with 5mm thick one way glass fixed with beadings.				
5.6.1	Size 2750 x 600 mm	NO.	6		
5.6.2	Size 1200 x 600 mm	NO.	2		
5.6.3	Size 1000 x 600 mm	NO.	2		
	Glazing laminated oneway glass fixed with and including beadings.				
5.6.4	6mm thick glass in panes (0.50-1.00m ²)	SM	13		
	Total for widows carried to summary				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT
KIDONGO, MOMBASA**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
ELEMENT 7: INTERNAL FINISHES					
Wall Finish					
5.7.1	15mm cement and sand (1:4) render wood float on external walling, columns and beams.	SM	136		
5.7.2	Prepare and apply one undercoat and two coats of first quality long lasting, textured, marine grade paint to rendered surfaces externally	SM	136		
5.7.3	15mm cement and sand (1:4) plaster trowelled smooth	SM	124		
5.7.4	Prepare surface, skim and apply one undercoat and two finishing coats of first quality silk vinyl emulsion (marine quality) paint to plastered surfaces	SM	124		
5.7.5	12 mm thick cement and sand (1:3) backing to receive ceramic tiles	SM	148		
5.7.6	Supply and fix 6mm thick ceramic wall tiles on prepared backing (m.s) including grouting and edge protectors where required; overall size 300mm x 300mm	SM	148		
Floor Finish					
5.7.7	20 mm thick cement and sand screed (1:3) backing prepared to receive terrazzo finish	SM	88		
5.7.8	30 mm thick cement and sand screed (1:3) backing prepared to receive ceramic tiles	SM	54		
5.7.9	Supply and fix 10mm thick non-slip ceramic floor tiles to approval on prepared backing (m.s) including grouting; overall size 300mm x 300mm.	SM	54		
5.7.10	20mm thick terrazzo layer including waterproofing admixture, rough and smooth sanding and polishing with acid to floor including 32 x 3mm thick plastic dividing strip where required	SM	88		
5.7.11	Ditto 100mm high skirting	LM	38		
Ceiling Finish					
5.7.12	15mm cement and sand (1:4) plaster trowelled smooth and comprising 12mm thick backing and 3mm finishing coat to suspended concrete slab	SM	234		
5.7.13	Prepare surface, skim and apply one undercoat and two finishing coats of first quality silk vinyl emulsion (marine quality) paint to plastered surfaces	SM	234		
Total for finishes carried to summary					-

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

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**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT
KIDONGO, MOMBASA**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	ELEMENT 9: FIXTURES AND FITTINGS				
	Washroom Worktop				
	2 No. 75 mm thick in-situ concrete worktop size 1600 mm (average) x 600 mm deep on plan, reinforced with BRC Ref. A142, necessary formwork, 100 mm thick concrete plinth, chasing into wall for anchoring, dwarf wall, boxing to form opening for sink the top finished tiles				
5.9.1	75mm thick Worktop	SM	2		
5.9.2	100mm plain concrete class 15/20 in benching slab	SM	2		
	Reinforcement				
	Ribbed Reinforcement Steel Bars to KS ISO 6935 - 2:2007 including cutting to length, bending, hoisting and fixing including all necessary tying wires and spacing blocks				
5.9.3	Assorted reinforcement bars	KG	15		
	Formwork as Described. Allow for setting to special steel propping, strutting, fillets, nails, etc to				
5.9.4	Soffits of floor slab not exceeding 3.00m high	SM	2		
	Ditto to edges of;-				
5.9.5	Suspended floor slab 75mm but not exceeding 150mm high	LM	5		
	Precast concrete solid blocks bedded and jointed in cement and sand mortar (1:3)				
5.9.6	100mm internal walling	SM	4		
5.9.7	Worktop Finish				
	20 mm thick cement and sand screed (1:3) paving prepared to receive terrazzo	SM	10		
5.9.8	15mm thick terrazzo layer) including rough and smooth sanding and polishing with acid to worktop and including 32 x 3mm thick plastic dividing strip where required	SM	10		
	Total for fixtures and fittings carried to summary			Ksh.	

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	SOCIAL HALL BUILDERS WORK SUMMARY				
1	SUBSTRUCTURE				
2	SUPERSTRUCTURE				
3	WALLING				
4	ROOF STRUCTURE				
5	DOORS				
6	WINDOWS				
7	FINISHES				
8	EXTERNAL PAVING				
9	JOINERY FITTINGS				
	TOTAL FOR SOCIAL HALL CARRIED TO MAIN SUMMARY				

ITEM	DESCRIPTION	UNIT	QTY	RATE	BQ AMOUNT
	BILL NO 6; FISH GEAR MENDING SHED				
	ELEMENT 1: SUBSTRUCTURES(All Provisional)				
	SITE PREPARATION				
	Excavations				
6.1.1	Clear site of all bushes, tufts and any small or large trees, including grubbing out roots and burn on site where directed	SM	101		
6.1.2	Excavate oversite to remove vegetable soil 200mm average depth, loads, wheel and deposit where directed on site and level	SM	101		
6.1.3	Excavate for foundation trenches not exceeding 1.5M deep from stripped level in coral	CM	62		
6.1.4	Ditto; for columns base	CM	41		
6.1.5	Ditto; for retaining wall footing	CM	134		
	Disposal				
6.1.6	Return, fill and ram extra excavation materials around foundation	CM	144		
6.1.7	Cart away surplus excavated materials to designated dumpsite	CM	93		
	Filling				
6.1.8	Average 300mm thick hardcore bed well watered leveled and compacted	CM	47		
6.1.9	50mm thick murram blinding	SM	158		
6.1.10	Treat surface of hardcore filing with approved insecticide according to the manufacture instructions.	SM	158		
	Total carried forward to collection				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<i>Brought forward from page 4/1</i>				
	CONCRETE WORKS				
	Mass Concrete				
6.1.11	50mm thick concrete blinding under strip footing, and column bases(class 15)	SM	68		
6.1.12	Ditto to retaining wall footing	SM	57		
	Vibrated reinforced concrete class 25/20				
6.1.13	Retaining wall footing	CM	20		
6.1.14	Retaining wall	CM	13		
6.1.15	Strip foundation	CM	8		
6.1.16	Column bases	CM	11		
6.1.17	Column starters	CM	1		
6.1.18	200mm thick floor slab	SM	158		
	Reinforcement				
	Ribbed Reinforcement Steel Bars Grade 100 to KS ISO 6935 - 2:2007 including cutting to length, bending, hoisting and fixing including all necessary tying wires and spacing blocks				
6.1.19	T16	KG	410		
6.1.20	T12	KG	1495		
6.1.21	T10	KG	1247		
6.1.22	T8	KG	144		
6.1.23	B.R.C Mesh reinforcement A142	SM	158		
	Formwork as Described. Allow for setting to special steel proping, strutting, fillets, nails, etc to				
6.1.24	Sides of strip footing	SM	28		
6.1.25	Sides of column base	SM	29		
6.1.26	Sides of column starters	SM	16		
6.1.27	Sides of retaining walls	SM	76		
6.1.28	Edges of the surface bed 150- 225mm high	LM	41		
6.1.29	Edges of retaining wall footing	SM	15		
	Total carried forward to collection				

[illegible]

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	GROUND FLOOR				
	ELEMENT 2: REINFORCED CONCRETE SUPERSTRUCTURE				
	Vibrated reinforced concrete class 25/20 in:-				
6.2.1	Beams	CM	7		
6.2.2	Columns	CM	3		
6.2.3	Gutters	CM	11		
6.2.4	250mm thick suspended floor slab	SM	140		
	Reinforcement				
	Ribbed Reinforcement Steel Bars Grade 100 to KS ISO 6935 - 2:2007 including cutting to length, bending, hoisting and fixing including all necessary tying wires and spacing blocks				
6.2.5	T18	KG	492		
6.2.6	T16	KG	1106		
6.2.7	T12	KG	2531		
6.2.8	T10	KG	822		
6.2.9	T8	KG	209		
	Formwork as Described. Allow for setting to special steel proping, strutting, fillets, nails, etc to				
6.2.10	Soffits of floor slab not exceeding 3.00m high	SM	140		
6.2.11	Vertical sides of columns	SM	41		
6.2.12	Sides and soffits of beams	SM	49		
	Ditto gutters	SM	138		
	Ditto to edges of:-				
6.2.13	Suspended floor slab 75mm but not exceeding 150mm high	LM	53		
	Total for superstructures carried to summary				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	ELEMENT 3: WALLING				
	Machine cut coral block walling bedded and jointed in cement and sand mortar 1:4; including 20swg x 25mm wide hoop iron in every alternate course				
6.3.1	200mm thick external walling	SM	115		
6.3.2	200 mm internal walling	SM	32		
6.3.3	200 mm parapet walling	SM	49		
	Precast concrete solid blocks bedded and jointed in cement and sand mortar (1:3)				
6.3.4	100mm internal walling	SM	0		
	Precast concrete vent blocks				
6.3.5	200mm thick vent block walling	SM	14		
	Precast concrete coping				
6.3.6	75mm thick weathered and throated saddled-back coping for 200mm thick walling	LM	41		
6.3.7	Ditto 450 x 450mm pier cap ditto to columns	NO	10		
	Creation of Arches				
6.3.8	Construction and formation of decorative arches around windows and the main door externally and main arches at terrace finished same as external walls;1000 - 3000 mm diameter;including all necessary formworks and reinforcements; all to Architect's details	NO	12		
	Total for walling carried to summary				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	ELEMENT 4: ROOF STRUCTURE (All Provisional)				
	FLAT ROOF FINISHES				
6.4.1	50 mm cement sand 1:3 water proof screed to flat roof slab laid to fall and crossfalls	SM	140		
6.4.2	Apply one coat bituminous primer to surface of screed including gutters	SM	196		
6.4.3	Supply, torch and apply bituminous membrane in 200mm overlaps ditto	SM	196		
6.4.4	Ditto sides of wall 200mm high	LM	41		
6.4.5	50 x 50mm internal angle fillet	LM	41		
6.4.6	300 x 300 x 50mm thick; heavy duty interlocking concrete tiles; butt joints straight both ways to cement and sand base (m.s) generally to;	SM	140		
6.4.7	Ditto sides of wall 200mm high	LM	41		
	Rainwater goods				
6.4.8	Extra over for fulbora outlet	NO	4		
6.4.9	100mm x 75 x 0.6mm PVC down pipes fixed to wall with holding clips at 1200mm centres	LM	16		
6.4.10	Extra over for swan neck 1000mm long	NO	4		
6.4.11	Extra over for shoe 1000mm long	NO	4		
	Total for Roof Structure carried to summary page				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	ELEMENT 5: DOORS				
	<i>Wrot mvule hardwood timber profiled to Architects specifications as described in:-</i>				
	Door frame				
6.5.1	250 mm x 50 mm thick, rebated with labours	LM	6		
	Architraves				
6.5.2	75 mm x 25 mm moulded	LM	12		
	Quadrants				
6.5.3	50 mm x 25 mm	LM	12		
	Beading to fanlight				
6.5.4	25 mm x 25 mm;	LM	5		
	Door				
6.5.5	Louvred door panel overall size; 900 x 2400mm high (D001)	NO.	1		
	Iron Mongery				
6.5.6	3 - Lever mortice lock with aluminium furniture	NO.	1		
6.5.7	150mm x 3.25mm heavy duty powerload stainless steel bushed bearing butterfly hinges	PRS	1.5		
6.5.8	38mm diameter cylindrical satin steel door stop fixed to floor or wall with screw to approval	NO.	1		
	Painting and decoration				
	<i>Prepare and apply three coats marine quality vanish paint to:</i>				
6.5.9	Doors both internally and externally (Measured nett)	SM	4		
	Total for doors carried to summary				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
ELEMENT 6: FINISHES					
Wall Finish					
6.6.1	15mm cement and sand (1:4) render wood float on external walling, columns and beams.	SM	115		
6.6.2	Prepare and apply one undercoat and two coats of first quality long lasting, textured, marine grade paint to rendered surfaces externally	SM	115		
6.6.3	15mm cement and sand (1:4) plaster trowelled smooth and comprising 12mm thick backing and 3mm finishing coat to internal walls.	SM	179		
6.6.4	Prepare surface, skim to approval and approved and apply one undercoat and two finishing coats of first quality silk vinyl emulsion marine quality paint to plastered surfaces	SM	179		
Floor Finish					
6.6.5	20 mm thick cement and sand screed (1:3) paving prepared to receive terrazzo finish	SM	158		
6.6.6	20mm thick terrazzo layer including waterproofing admixture, rough and smooth sanding and polishing with acid to floor including 32 x 3mm thick plastic dividing strip where required	SM	158		
6.6.7	Ditto 100mm high skirting	LM	63		
Ceiling Finish					
6.6.8	15mm cement and sand (1:4) plaster trowelled smooth and comprising 12mm thick backing and 3mm finishing coat to suspended concrete slab	SM	140		
6.6.9	Prepare surface, skim to approval and approved and apply one undercoat and two finishing coats of first quality silk vinyl emulsion marine quality paint to plastered surfaces	SM	140		
Total for finishes carried to summary					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	ELEMENT 7: FIXTURES AND FITTINGS:-(PROVISIONAL)				
	Stainless steel grating				
6.7.1	300mm wide stainless steel channel grating grade 3.1:6 marine grade: comprising 40 x 40 x 6mm edge frame : infilled with 40 x 6mm flats at 50mm centres : 40 x 40 x 6mm frame set in concrete with 150mm long stainless stel end split lugs : smooth weld joints	LM	16		
	Total for finishes carried to summary				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	FISH GEAR MENDING SHED				
6.1	SUBSTRUCTURE				
6.2	SUPERSTRUCTURE				
6.3	WALLING				
6.4	ROOF STRUCTURE				
6.5	DOORS				
6.6	FINISHES				
6.7	FIXTURES AND FITTINGS--(PROVISIONAL)				
	TOTAL FOR SOCIAL HALL CARRIED TO MAIN SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<p>ELEMENT NO. 1</p> <p>SUBSTRUCTURES (All provisional)</p> <p>Please note that ALL substructure works are Measured Provisionally. The contractor must ensure that the actual measurements are taken by the Project Quantity Surveyor before any works are covered. Failure to do so will necessitate works to be open up for verification at your (contractors) cost.</p> <p>NOTE: Classes of Rock</p> <p>(1) Class 1 : Soft rock of the type known locally as "CORAL" which in the opinion of the Engineer cannot be considered as hard rock shall be known as Class 1 rock. Soft Rock shall be rock with compressive strength not exceeding 15N/mm². Murram and Kunker is specifically excluded and will be reckoned as normal/common excavation. Extremely weathered and weak Tuff shall also be considered as normal excavation.</p> <p>(2) Class 2 : Class 2 Rock shall be with compressive strength exceeding 15N/mm². This type of rock contains stones and boulders of unweathered or incompletely weathered Tuff, trachyte, black trap or lava with compressive strength exceeding 15N/mm² in a formation which is massive and geologically homogeneous. A boulder or outcrop with such compressive strength will be deemed to be Class 2 rock or Hard Rock The opinion of the Engineer in classifying rock shall be final and binding. Explosives must not be used without the prior approval of the Engineer. Blasting operations are carried out at the Contractor's sole risk, and all blasting must be carried out in accordance with government regulations and approval</p>				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	SUBSTRUCTURES (All provisional)				
	Site Preparation				
7.1.1	Clear site of all bushes, tufts and any small or large trees, including grubbing out roots and burn on site where directed by the Project Manager	25	SM		
	Excavation Note that all excavations are measured nett and no allowance for working space provided				
7.1.2	Excavate oversite average 250mm deep and cart away	25	SM		
7.1.3	Excavation for foundation trenches from reduced level: not exceeding 1.50 metres deep	27	CM		
7.1.4	Ditto but exceeding 1.50 m deep but not exceeding 3.0 m deep	20	CM		
7.1.5	Ditto for column bases from reduced level not exceeding 1.50 metres deep	9	CM		
7.1.6	Ditto but exceeding 1.50 m deep but not exceeding 3.0 m deep	8	CM		
7.1.7	Extra over all descriptions of excavations and removal from site for breaking up rocks: irrespective of class	30	CM		
	Disposal of excavated material				
7.1.8	Fillings around sub- walls: backfill and compact in 150 mm layers: selected excavated materials	68	CM		
7.1.9	Remove surplus spoil from site and deposit in spoil heaps and later spread on site as directed	21	CM		
	Planking and strutting				
7.1.10	Planking and strutting to sides of all excavations: keep excavations free from all fallen materials		ITEM		
	Disposal of Water				
7.1.11	Keep excavations free from all water including spring or running water.		ITEM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Hardcore Filling				
7.1.12	300mm thick (minimum) approved hardcore handpacked in layers not exceeding 150mm	14	SM		
7.1.13	Imported filling to make-up levels; compacted in layers not exceeding 150 mm thick; To atleast 95% MDD (AASHTO T99) compaction	7	CM		
	Murram				
7.1.14	50mm Thick Quarry dust blinding to the surface of hardcore rolled smooth to receive polythene sheeting	14	SM		
	Insecticide treatment				
	Treat hardcore surface with approved antitermite applied in accordance with the manufacturer's instructions and subject to a TEN YEAR guarantee				
7.1.15	To Quarry dust surface	14	SM		
	CONCRETE WORK				
	Insitu concrete class 15/20: in				
7.1.16	50 mm thick blinding to strips	18	SM		
7.1.17	50 mm thick blinding to column bases	6	SM		
	Insitu concrete Class 25 (20mm aggregate) : vibrated: reinforced				
7.1.18	Strip foundation	4	CM		
7.1.19	Column bases	3	CM		
7.1.20	Columns	1	CM		
7.1.21	150mm Thick ground floor slab	19	SM		
	High Tensile Reinforcement Bars to B. S. 4449 including cutting, bending and all necessary spacer blocks : (Provisional) :-				
	Ribbed bars to KS ISO 6935-2:2007				
7.1.22	8mm diameter	50	KG		
7.1.23	10mm diameter	200	KG		
	Carried to collection				

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
7.1.24	12mm diameter	220	KG		
7.1.25	16mm diameter	100	KG		
7.1.26	Mesh Fabric Reinforcement BRC Fabric mesh reinforcement Ref. A142; weighing 2.22kg per square metre(measured net no allowances made for laps) including bends tying wire and spacer blocks.	19	SM		
7.1.27	Marineply formwork to: Vertical: sides of foundations in trenches	12	SM		
7.1.28	Vertical: sides of column bases	8	SM		
7.1.29	Vertical: sides of columns	8	SM		
7.1.30	Edges: slab over 75 but not exceeding 150 mm wide WALLING Approved natural stone or coral stone ; load bearing 7.0 N/mm2: reinforced with 20 gauge 25mm hoop iron strips laid horizontally every alternate course: bedded and jointed in cement and sand (1:3) mortar	18	LM		
7.1.3	200 mm thick walls reinforced with hoop iron at every alternate course DAMP PROOFING 1000 Gauge polythene; 150mm laps; no allowances made for laps	60	SM		
7.1.32	Horizontal; over 300mm wide	19	SM		
7.1.33	Plinth Finishes 15mm Thick cement sand (1:3) rendering to plinth; wood float finish (PLEASE NOTE: The render shall be at least 450 mm below natural ground level)	8	SM		
7.1.34	Prepare and apply three coats of premium quality marine grade bituminous paint to rendered walls; externally	8	SM		
	Carried to collection				
	COLLECTION SUBSTRUCTURE Brought forward from page PR/2 Brought forward from page PR/3 Brought forward from page PR/4 above				
	TOTAL FOR SUBSTRUCTURE CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 2				
	RC SUPERSTRUCTURE				
	Insitu concrete Class 25 (20mm aggregate) : vibrated: reinforced				
7.2.1	Beams	1	CM		
7.2.2	Gutter beams	4	CM		
7.2.3	Columns	1	CM		
7.2.4	150 mm thick suspended roof slab	14	SM		
	High Tensile Reinforcement Bars to B. S. 4449 including cutting, bending and all necessary spacer blocks : (Provisional) :- Ribbed bars to KS ISO 6935-2:2007				
7.2.5	Assorted sizes	1275	KG		
	Marineply formwork to:				
7.2.6	Sides of Columns	11	SM		
7.2.7	Sides and soffits of beams	10	SM		
7.2.8	Sides and soffits of gutter beams	33	SM		
7.2.9	Soffites of suspended floor slab	14	SM		
7.2.10	Edges of suspended floor slab 75-150mm high	15	LM		
	Creation of Arches				
7.2.11	Construction and formation of decorative arches around windows and the main door externally and main arches at terrace finished same as external walls;1000 - 3000 mm diameter;including all necessary formworks and reinforcements; all to Architect's details	3	No		
	TOTAL FOR RC SUPERSTRUCTURE CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 3				
	EXTERNAL WALLS				
	NATURAL STONE WALLING				
	Machine cut natural stone or machine cut coral stone or hollow concrete block walling ; load bearing 7.0 N/mm2: reinforced with 20 gauge 25mm hoop iron strips laid horizontally every alternate course: bedded and jointed in cement and sand (1:3) mortar				
7.3.1	200mm. Thick walling externally	29	SM		
7.3.2	200mm thick at parapet wall; including allowing for crenellation to architect's detail	27	SM		
	Pre-cast concrete class 20/20 precast ventilation blocks				
7.3.3	600x600x200mm thick vents block with floral motifs; bedded and jointed in cement and sand (1:3) mortar and reinforced every alternate course with hoop iron.;To architect's details	11	SM		
	Pre-cast concrete class 20/20 concrete coping				
7.3.4	300 x 75 mm high precast concrete coping weathered and throated on both sides and jointed to wall in cement sand mortar 1:3 all to approval	22	LM		
	Bituminous or other equal approved damp-proof course; 3 ply membrane				
7.3.5	Horizontal; 200mm wide under walls	16	LM		
	TOTAL EXTERNAL WALLING CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 4				
	FLAT ROOF FINISHES AND RAIN WATER HARVESTING				
	Flat roof finishes				
7.4.1	50mm thick (average) water proof screed consisting of cement and sand (1:3)	43	SM		
7.4.2	Ditto to sides of wall;300mm high	7	SM		
7.4.3	50 x 50mm internal angle fillet	22	LM		
	Supply and apply 4mm thick bituminous felt membrane heat welded in 200mm overlaps and all necessary surface preparations; applied strictly in accordance with printed manufacturer's instructions; provide a 10 year guarantee				
7.4.4	To roof slab and gutters	43	SM		
7.4.5	To sides of walls	7	SM		
	Screed; cement and sand 1:3 with approved integral dust proofing additive wood floated.				
7.4.6	32 mm thick to receive concrete interlocking tiles (m.s)	14	SM		
	Concrete interlocking tiles				
7.4.7	200 x 200 x 25mm thick concrete interlocking tiles at roof slab; bedding and jointing in cement mortar mix 1:4(m/s)	14	SM		
7.4.8	100mm high matching skirting	22	LM		
	Unplasticized PVC downpipes and fittings: solvent welded joints				
7.4.9	160mm downpipes in concrete columns to approval	6	LM		
7.4.10	Extra over suspended concrete slab for forming 160mm diameter hole for down pipe	2	NO		
7.4.11	Extra over downpipe for bends	2	NO		
7.4.12	Extra over downpipe for 160mm diameter anti splash shoe	2	NO		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<i>Rainwater Harvesting Cont'd</i>				
7.4.13	Extra over 150mm fulbora outlets including galvanised expanded metal mesh	2	NO		
7.4.14	450 mm girth flashing one end built in mortar in groove in wall/concrete gutter	22	LM		
	Carried to collection				
	COLLECTION FLAT ROOF FINISHES AND RAIN WATER HARVESTING Brought forward from page PR/7 Brought Down from page PR/8 above				
	TOTAL FOR FLAT ROOF FINISHES AND RAIN WATER HARVESTING CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 5				
	DOORS				
	Supply, assemble and fix the following Galvanized Steel double door comprising of 75x50x3mm frame with louvre vents and all necessary furniture; The door should be assembled and fixed to opening including cutting and pinning lugs to concrete or blockwork surround and bedding frame in cement and sand mortar (1:4); prepare surface by Sand blasting; apply one coat of 2 pack epoxy zinc PRosPRate primer; apply three coats of marine grade gloss paint (Ref Architects Detailing)				
7.5.1	Double leaf door Overal size 1800mm x 2400mm high as D-001	1	NO		
	TOTAL FOR DOORS CARRIED TO SUMMARY				
	ELEMENT NO. 6				
	FIXTURES AND FITTINGS: "All Provisional"				
	FIXTURES AND FITTINGS:-(PROVISIONAL)				
	Plinth				
7.6.1	200mm thick Plain concrete class 15/20 in plinth	2	SM		
	Formwork to:-				
7.6.2	Edges of plinths 150-225mm high	5	LM		
7.6.3	15mm thick cement sand (1:3) plaster of plinths	5	SM		
	TOTAL OF FIXTURES AND FITTINGS, CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO.7				
	INTERNAL FINISHES				
	Floor Finishes				
	Screed; cement and sand 1:3 with approved integral dust proofing additive wood floated.				
7.7.1	32 mm thick to receive terrazzo (m.s)	12	SM		
	Polished Terrazzo paving				
7.7.2	25mm thick insitu polished terrazzo laid on concrete in approved coloured aggregate finished smooth including sanding and polishing	12	SM		
7.7.3	20 x 100mm ditto skirting	13	LM		
7.7.4	25 mm wide Slip-resistant Carborandum inserts on Terrazzo treads bonded with an approved adhesive	8	LM		
	Plastic dividing strips				
7.7.5	32 x 3mm thick plastic dividing strips	18	LM		
	Wall Finishes				
	15mm thick two coat gauged cement lime and sand (1:2:9) plaster steel trowelled smooth to:-				
7.7.6	To surfaces of walls,columns and beams	38	SM		
7.7.7	Door and Window reveals 100-200mm	17	LM		
	Ceiling Finishes				
	15 mm Thick Internal cement sand (1:3) gauged plaster as described to:				
7.7.8	Soffits of concrete slab	12	SM		
	Painting and Decorating				
	Prepare and apply undercoat and three coats PVA based premium quality marine grade silk vinyl sheen emulsion paint as approved to:				
7.7.9	To plastered surface of walls,columns and beams	38	SM		
7.7.10	Precast concrete Louvre Blocks	11	SM		
7.7.11	Door and Window reveals 100-200mm	17	LM		
7.7.12	Plastered concrete slab soffits	12	SM		
	TOTAL FOR INTERNAL FINISHES CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO.8				
	EXTERNAL FINISHES				
	Floor Finishes				
	Screed; cement and sand 1:3 with approved integral dust proofing additive wood floated.				
7.8.1	32 mm thick to receive terrazzo (m.s)	7	SM		
	Polished Terrazzo paving				
7.8.2	25mm thick insitu polished terrazzo laid on concrete in approved coloured aggregate finished smooth including sanding and polishing	7	SM		
7.8.3	20 x 100mm ditto skirting	13	LM		
7.8.4	25 mm wide Slip-resistant Carborandum inserts on Terrazzo treads bonded with an approved adhesive	7	LM		
	Plastic dividing strips				
7.8.5	32 x 3mm thick plastic dividing strips	11	LM		
	Wall Finishes				
7.8.6	15mm Thick cement sand (1:3) rendering to wall,columns and beams	87	SM		
7.8.7	To gutter beams	24	SM		
7.8.8	Ditto: Door and Windows reveals 100-200mm	17	LM		
	Prepare and apply one undercoat and two finishing coats marine grade weatherguard(silicone based) exterior paint as approved to:				
7.8.9	Rendered surfaces of walls,columns and beams	87	SM		
7.8.10	Precast concrete Louvre Blocks	11	SM		
7.8.11	To gutter beams	24	SM		
7.8.12	Ditto: Door and Windows reveals 100-200mm	17	LM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
7.8.13	Ceiling Finishes 15 mm Thick Internal cement sand (1:3) gauged plaster as described to:				
	Soffits of concrete slab	9	SM		
7.8.14	Painting and Decoration Prepare surface, apply undercoat and apply three coats of premium quality marine grade emulsion paint to:-				
	Plastered ceiling surfaces	9	SM		
	Carried to collection				
	COLLECTION EXTERNAL FINISHES Brought forward from page PR/11 Brought Down from page PR/12 above				
	TOTAL FOR EXTERNAL FINISHES CARRIED TO SUMMARY				

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<p>ELEMENT NO.9</p> <p>BUILDERS WORK IN CONNECTION WITH SERVICES(BWICS)</p> <p>Builder's Work incidental to ventilation,electrical installations, concealed fixings</p>				
7.9.1	Allow for making holes, chasing walls, floors, inclusion of sleeves and other items necessary for the proper carrying out of the installation;including making good all surfaces	1	ITEM		
TOTAL FOR BWICS CARRIED TO SUMMARY					

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	SUMMARY				
1	SUBSTRUCTURES				
2	R.C SUPERSTRUCTURE				
3	EXTERNAL WALLS				
4	FLAT ROOF FINISHES AND RAIN WATER HARVESTING				
5	DOORS				
6	FIXTURES AND FITTINGS				
7	INTERNAL FINISHES				
8	EXTERNAL FINISHES				
9	BWICS				
	TOTAL FOR PUMP ROOM CARRIED TO SUMMARY OF BUILDERS' WORKS				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<p>ELEMENT NO. 1</p> <p>SUBSTRUCTURES (All provisional)</p> <p>Please note that ALL substructure works are Measured Provisionally. The contractor must ensure that the actual measurements are taken by the Project Quantity Surveyor before any works are covered. Failure to do so will necessitate works to be open up for verification at your (contractors) cost.</p> <p>NOTE: Classes of Rock</p> <p>(1) Class 1 : Soft rock of the type known locally as "CORAL" which in the opinion of the Engineer cannot be considered as hard rock shall be known as Class 1 rock. Soft Rock shall be rock with compressive strength not exceeding 15N/mm². Murram and Kunker is specifically excluded and will be reckoned as normal/common excavation. Extremely weathered and weak Tuff shall also be considered as normal excavation.</p> <p>(2) Class 2 : Class 2 Rock shall be with compressive strength exceeding 15N/mm². This type of rock contains stones and boulders of unweathered or incompletely weathered Tuff, trachyte, black trap or lava with compressive strength exceeding 15N/mm² in a formation which is massive and geologically homogeneous. A boulder or outcrop with such compressive strength will be deemed to be Class 2 rock or Hard Rock</p> <p>The opinion of the Engineer in classifying rock shall be final and binding.</p> <p>Explosives must not be used without the prior approval of the Engineer. Blasting operations are carried out at the Contractor's sole risk, and all blasting must be carried out in accordance with government regulations and approval</p>				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	SUBSTRUCTURES (All provisional)				
	Site Preparation				
8.1.1	Clear site of all bushes, tufts and any small or large trees, including grubbing out roots and burn on site where directed by the Project Manager	125	SM		
	Excavation Note that all excavations are measured nett and no allowance for working space provided				
8.1.2	Excavate oversite average 250mm deep and cart away	125	SM		
8.1.3	Excavation for foundation trenches from reduced level: not exceeding 1.50 metres deep	81	CM		
8.1.4	Ditto but exceeding 1.50 m deep but not exceeding 3.0 m deep	59	CM		
8.1.5	Ditto for column bases from reduced level not exceeding 1.50 metres deep	73	CM		
8.1.6	Ditto but exceeding 1.50 m deep but not exceeding 3.0 m deep	63	CM		
8.1.7	Extra over all descriptions of excavations and removal from site for breaking up rocks: irrespective of class	50	CM		
	Disposal of excavated material				
8.1.8	Fillings around sub- walls: backfill and compact in 150 mm layers: selected excavated materials	327	CM		
8.1.9	Remove surplus spoil from site and deposit in spoil heaps and later spread on site as directed	74	CM		
	Planking and strutting				
8.1.10	Planking and strutting to sides of all excavations: keep excavations free from all fallen materials		ITEM		
	Disposal of Water				
8.1.11	Keep excavations free from all water including spring or running water.		ITEM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
8.1.12	Hardcore Filling 300mm thick (minimum) approved hardcore handpacked in layers not exceeding 150mm	125	SM		
8.1.13	Imported filling to make-up levels; compacted in layers not exceeding 150 mm thick; To atleast 95% MDD (AASHTO T99) compaction	54	CM		
8.1.14	Murram 50mm Thick Quarry dust blinding to the surface of hardcore rolled smooth to receive polythene Insecticide treatment Treat hardcore surface with approved antitermite applied in accordance with the manufacturer's instructions and subject to a TEN YEAR guarantee	125	SM		
8.1.15	To Quarry dust surface CONCRETE WORK Insitu concrete class 15/20: in	125	SM		
8.1.16	50 mm thick blinding to strips	54	SM		
8.1.17	50 mm thick blinding to column bases Insitu concrete Class 25 (20mm aggregate) : vibrated: reinforced	49	SM		
8.1.18	Strip foundation	11	CM		
8.1.19	Column bases	20	CM		
8.1.20	Columns	2	CM		
8.1.21	150mm Thick ground floor slab	126	SM		
8.1.22	Extra over in slab to forming or leaving 300mm wide shallow drainage channels;average 300mm deep 'U' channel in hardcore and floor slab; including hand packing to sides of channel;150mm thick concrete class 25/20 to sides and bed of channel including 50mm blinding class 15/20 and all necessary formwork and reinforcement, all to detail and approval	29	LM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	High Tensile Reinforcement Bars to B. S. 4449 including cutting, bending and all necessary spacer blocks : (Provisional) :- Ribbed bars to KS ISO 6935-2:2007				
8.1.23	8mm diameter	519	KG		
8.1.24	10mm diameter	1451	KG		
8.1.25	12mm diameter	1161	KG		
8.1.26	16mm diameter	167	KG		
	Mesh Fabric Reinforcement				
8.1.27	BRC Fabric mesh reinforcement Ref. A142; weighing 2.22kg per square metre(measured net no allowances made for laps) including bends tying wire and spacer blocks.	126	SM		
	Marineply formwork to:				
8.1.28	Vertical: sides of foundations in trenches	36	SM		
8.1.29	Vertical: sides of column bases	35	SM		
8.1.30	Vertical: sides of columns	30	SM		
8.1.31	Edges: slab over 75 but not exceeding 150 mm wide	47	LM		
	WALLING				
	Approved natural stone or coral stone ; load bearing 8.0 N/mm²: reinforced with 20 gauge 25mm hoop iron strips laid horizontally every alternate course: bedded and jointed in cement and sand (1:3) mortar				
8.1.32	200 mm thick walls reinforced with hoop iron at every alternate course	179	SM		
	DAMP PROOFING				
	1000 Gauge polythene; 150mm laps; no allowances made for laps				
8.1.33	Horizontal; over 300mm wide	126	SM		
	Plinth Finishes				
8.1.34	15mm Thick cement sand (1:3) rendering to plinth; wood float finish	25	SM		
8.1.35	Prepare and apply three coats of premium quality marine grade bituminous paint to rendered walls; externally	25	SM		
	Carried to collection				

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<div><div>COLLECTION</div><div>SUBSTRUCTURE</div><div>Brought forward from page PH/2</div><div>Brought forward from page PH/3</div><div>Brought forward from page PH/4</div></div>				
	TOTAL FOR SUBSTRUCTURE CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 2				
	RC SUPERSTRUCTURE				
	In situ concrete Class 25 (20mm aggregate) : vibrated: reinforced				
8.2.1	Beams	1	CM		
8.2.2	Gutter beams	10	CM		
8.2.3	Columns	3	CM		
8.2.4	150 mm thick suspended roof slab	76	SM		
	High Tensile Reinforcement Bars to B. S. 4449 including cutting, bending and all necessary spacer blocks : (Provisional) :- Ribbed bars to KS ISO 6935-2:2007				
8.2.5	8mm diameter	398	KG		
8.2.6	10mm diameter	1117	KG		
8.2.7	12mm diameter	894	KG		
8.2.8	16mm diameter	128	KG		
	Marineply formwork to:				
8.2.9	Sides of Columns	36	SM		
8.2.10	Sides and soffits of beams	10	SM		
8.2.11	Sides and soffits of gutter beams	82	SM		
8.2.12	Soffits of suspended floor slab	76	SM		
8.2.13	Edges of suspended floor slab 75-150mm high	37	LM		
	Creation of Arches				
8.2.14	Construction and formation of decorative arches around windows and the main door externally and main arches at terrace finished same as external walls;1000 - 3000 mm diameter;including all necessary formworks and reinforcements; all to	4	No		
	TOTAL FOR RC SUPERSTRUCTURE CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 3				
	EXTERNAL WALLS				
	NATURAL STONE WALLING				
	Machine cut natural stone or machine cut coral stone or hollow concrete block walling ; load bearing 8.0 N/mm2: reinforced with 20 gauge 25mm hoop iron strips laid horizontally every alternate course: bedded and jointed in cement and sand (1:3) mortar				
8.3.1	200mm. Thick walling externally	81	SM		
8.3.2	200mm thick at parapet wall; including allowing for crenellation to architect's detail	45	SM		
	Pre-cast concrete class 20/20 precast ventilation blocks				
8.3.3	600x600x200mm thick vents block with floral motifs; bedded and jointed in cement and sand (1:3) mortar and reinforced every alternate course with hoop iron.;To architect's details	14	SM		
	Pre-cast concrete class 20/20 concrete coping				
8.3.4	250 x 50 mm high precast concrete coping weathered and throated on both sides and jointed to wall in cement sand mortar 1:3 all to approval	77	LM		
	Bituminous or other equal approved damp-proof course; 3 ply membrane				
8.3.5	Horizontal; 200mm wide under walls	37	LM		
	TOTAL EXTERNAL WALLING CARRIED TO SUMMARY				

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 4 INTERNAL WALLS NATURAL STONE WALLING Machine cut natural stone or machine cut coral stone or hollow concrete block walling ; load bearing 8.0 N/mm ² : reinforced with 20 gauge 25mm hoop iron strips laid horizontally every alternate course: bedded and jointed in cement and sand (1:3) mortar				
8.4.1	200mm. Thick walling internally	54	SM		
	Bituminous or other equal approved damp-proof course; 3 ply membrane				
8.4.2	Horizontal; 200mm wide under walls	18	LM		
	TOTAL FOR INTERNAL WALLING CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 5				
	FLAT ROOF FINISHES AND RAIN WATER HARVESTING				
	Flat roof finishes				
8.5.1	50mm thick (average) water proof screed consisting of cement and sand (1:3)	148	SM		
8.5.2	Ditto to sides of wall;300mm high	12	SM		
8.5.3	50 x 50mm internal angle fillet	37	LM		
	Supply and apply 4mm thick bituminous felt membrane heat welded in 200mm overlaps and all necessary surface preparations; applied strictly in accordance with printed manufacturer's instructions; provide a 10 year guarantee				
8.5.4	To roof slabs and gutters	148	SM		
8.5.5	To sides of walls	12	SM		
	Screed; cement and sand 1:3 with approved integral dust proofing additive wood floated.				
8.5.6	32 mm thick to receive concrete interlocking tiles (m.s)	76	SM		
	Concrete interlocking tiles				
8.5.7	200 x 200 x 25mm thick concrete interlocking tiles at roof slab; bedding and jointing in cement mortar mix 1:4(m/s)	76	SM		
8.5.8	100mm high matching skirting	37	LM		
	Unplasticized PVC downpipes and fittings: solvent welded joints				
8.5.9	160mm downpipes in concrete columns to	6	LM		
8.5.10	Extra over suspended concrete slab for forming 160mm diameter hole for down pipe	2	NO		
8.5.11	Extra over downpipe for bends	2	NO		
8.5.12	Extra over downpipe for 160mm diameter anti splash shoe	2	NO		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<i>Rainwater Harvesting Cont'd</i>				
8.5.13	Extra over 150mm fulbora outlets including galvanised expanded metal mesh	2	NO		
8.5.14	450 mm girth flashing one end built in mortar in groove in wall/concrete gutter	37	LM		
	Carried to collection				
	COLLECTION FLAT ROOF FINISHES AND RAIN WATER HARVESTING Brought forward from page PH/9 Brought Down from page PH/10 above				
	TOTAL FOR FLAT ROOF FINISHES AND RAIN WATER HARVESTING CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 6 DOORS Supply, assemble and fix the following Mild/Galvanized Steel double door comprising of 75x50x3mm frame with louvre vents and all necessary furniture; The door should be assembled and fixed to opening including cutting and pinning lugs to concrete or blockwork surround and bedding frame in cement and sand mortar (1:4); prepare surface by Sand blasting; apply one coat of 2 pack epoxy zinc phosphate primer; apply three coats of marine grade gloss paint (Ref Architects Detailing)				
8.6.1	Double leaf door Overall size 1800mm x 2400mm high as D-001	5	NO		
	TOTAL FOR DOORS CARRIED TO SUMMARY				
	ELEMENT NO. 7 FIXTURES AND FITTINGS: "All Provisional" FIXTURES AND FITTINGS:-(PROVISIONAL) Stainless steel grating				
8.7.1	300mm wide stainless steel channel grating grade 3.1:6 marine grade: comprising 40 x 40 x 6mm edge frame : infilled with 40 x 6mm flats at 50mm centres : 40 x 40 x 6mm frame set in concrete with 150mm long stainless stel end split lugs : smooth weld joints	29	LM		
	TOTAL OF FIXTURES AND FITTINGS, CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO.8				
	INTERNAL FINISHES				
	Floor Finishes Screed; cement and sand 1:3 with approved integral dust proofing additive wood floated.				
8.8.1	32 mm thick to receive terrazzo (m.s)	69	SM		
	Polished Terrazzo paving				
8.8.2	25mm thick insitu polished terrazzo laid on concrete in approved coloured aggregate finished smooth including sanding and polishing	69	SM		
8.8.3	20 x 100mm ditto skirting	56	LM		
8.8.4	25 mm wide Slip-resistant Carborandum inserts on Terrazzo treads bonded with an approved adhesive	40	LM		
	Plastic dividing strips				
8.8.5	32 x 3mm thick plastic dividing strips	104	LM		
	Wall Finishes 15mm thick two coat gauged cement lime and sand (1:2:9) plaster steel trowelled smooth to:-				
8.8.6	To surfaces of walls,columns and beams	224	SM		
8.8.7	Door and Window reveals 100-200mm	40	LM		
	Ceiling Finishes 15 mm Thick Internal cement sand (1:3) gauged plaster as described to:				
8.8.8	Soffits of concrete slab	79	SM		
	Painting and Decorating Prepare and apply undercoat and three coats PVA based premium quality marine grade silk vinyl sheen emulsion paint as approved to:				
8.8.9	To plastered surface of walls,columns and beams	224	SM		
8.8.10	Precast concrete Louvre Blocks	14	SM		
8.8.11	Door and Window reveals 100-200mm	40	LM		
8.8.12	Plastered concrete slab soffits	79	SM		
	TOTAL FOR INTERNAL FINISHES CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO.9				
	EXTERNAL FINISHES				
	Floor Finishes				
	Screed; cement and sand 1:3 with approved integral dust proofing additive wood floated.				
8.9.1	32 mm thick to receive terrazzo (m.s)	50	SM		
	Polished Terrazzo paving				
8.9.2	25mm thick insitu polished terrazzo laid on concrete in approved coloured aggregate finished smooth including sanding and polishing	50	SM		
8.9.3	20 x 100mm ditto skirting	30	LM		
8.9.4	25 mm wide Slip-resistant Carborandum inserts on Terrazzo treads bonded with an approved adhesive	26	LM		
	Plastic dividing strips				
8.9.5	32 x 3mm thick plastic dividing strips	75	LM		
	Wall Finishes				
8.9.6	15mm Thick cement sand (1:3) rendering to wall,columns and beams	186	SM		
8.9.7	To gutter beams	60	SM		
8.9.8	Ditto: Door and Windows reveals 100-200mm	40	LM		
	Prepare and apply one undercoat and two finishing coats marine grade weatherguard exterior paint as approved to:				
8.9.9	Rendered surfaces of walls,columns and beams	186	SM		
8.9.10	Precast concrete Louvre Blocks	14	SM		
8.9.11	To gutter beams	60	SM		
8.9.12	Ditto: Door and Windows reveals 100-200mm	40	LM		
	Ceiling Finishes				
	15 mm Thick Internal cement sand (1:3) gauged plaster as described to:				
8.9.13	Soffits of concrete slab	17	SM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Painting and Decoration Prepare surface,apply undercoat and apply three coats of premium quality marine grade emulsion paint to:-				
8.9.14	Plastered ceiling surfaces	17	SM		
	Carried to collection				
	COLLECTION EXTERNAL FINISHES Brought forward from page PH/13 Brought Down from page PH/14 above				
	TOTAL FOR EXTERNAL FINISHES CARRIED TO SUMMARY				

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
8.10.1	<p>ELEMENT NO.10</p> <p>BUILDERS WORK IN CONNECTION WITH SERVICES(BWICS)</p> <p>Builder's Work incidental to ventilation,electrical installations, concealed fixings</p> <p>Allow for making holes, chasing walls, floors, inclusion of sleeves and other items necessary for the proper carrying out of the installation;including making good all surfaces</p>	1	ITEM		
TOTAL FOR BWICS CARRIED TO SUMMARY					

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	SUMMARY				
1	SUBSTRUCTURES				
2	R.C SUPERSTRUCTURE				
3	EXTERNAL WALLS				
4	INTERNAL WALLS				
5	ROOF FINISHES				
6	DOORS				
7	FIXTURES AND FITTINGS				
8	INTERNAL FINISHES				
9	EXTERNAL FINISHES				
10	BWICS				
TOTAL FOR POWER HOUSE CARRIED TO SUMMARY OF BUILDERS' WORKS					

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BILL NO.9: BOUNDARY WALL				
	ELEMENT NO. 1				
	SUBSTRUCTURES (ALL PROVISIONAL)				
	Site clearance				
9.1.1	Clear the site off grass, shrubs and all vegetation; cart away as directed by PE.	172	sm		
9.1.2	Excavate vegetable soil average 200mm deep and cart away as directed	172	sm		
	Excavation				
9.1.3	Excavate for strip foundation starting from reduced level not exceeding 1.50 meters deep and cart away as directed	257	cm		
9.1.4	Ditto in column bases	179	cm		
9.1.5	Extra over excavation for excavating in rock.	131	cm		
9.1.6	Return, fill-in and rum selected excavated material	342	cm		
9.1.7	Remove and cart away from site surplus excavated material as directed	95	cm		
	Diposal of water				
9.1.8	Keeping all excavations free from all water including spring or running water		Item		
	Planking and strutting				
9.1.9	Uphold the sides of all excavations		Item		
	Filling				
9.1.10	Hardcore filling in making up levels exceeding 300mm thick, depositing and compacting in layers of 150 mm maximum thickness .	51	cm		
9.1.11	50mm thick murrum blinding to surfaces of fill	172	sm		
	Anti-termite treatment				
9.1.12	Treat hardcore surface with approved antitermite applied in accordance with the manufacturer's instructions and subject to a TEN YEAR guarantee	172	sm		
CARRIED TO COLLECTION					

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Concrete				
9.1.13	50mm thick mass concrete mix class 15/20 to bottoms of foundations	172	sm		
9.1.14	Ditto to column bases	120	sm		
	Insitu concrete; reinforced; class 25 / (20mm); vibrated				
9.1.15	Foundations in trenches irrespective of thickness	34	cm		
9.1.16	Ditto in column bases	36	cm		
9.1.17	Ditto in columns	25	cm		
	Reinforcement				
	Bars; high yield steel; cold worked to B.S. 4461 including bends, hooks, tying wire and distance blocks				
9.1.18	12mm bars	2,800	KG		
9.1.19	10mm bars	2,450	KG		
9.1.20	8mm bars	1,325	KG		
	Walling				
9.1.21	200mm thick approved local natural stone; roughly squared to foundation walling; bedding and jointing in cement sand (1:3) mortar	343	sm		
	Damp proofing				
9.1.22	200mm wide; B.S. 743 Type A bitumen hessian base 150 mm laps (no allowance made for laps); horizontal, 1 no. layer, bedded in cement sand (1:3) mortar	286	lm		
TOTAL FOR SUBSTRUCTURES CARRIED TO SUMMARY					

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 2				
	CONCRETE SUPERSTRUCTURE				
	Insitu concrete; reinforced; class 25/ (20mm); vibrated				
9.2.1	Columns	46	SM		
	Reinforcement				
	Bars; high yield steel; cold worked to B.S. 4461 including bends, hooks, tying wire and distance blocks. Ribbed bars to KS ISO 6935-2:2007				
9.2.2	12mm diameter	476	KG		
9.2.3	8mm diameter	272	KG		
	Sawn formwork to insitu concrete as described:-				
9.2.4	Vertical sides of columns	369	sm		
TOTAL FOR SUPERSTRUCTURES CARRIED TO SUMMARY					

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 3 WALLING. EXTERNAL WALLING. Machine cut natural stone walling jointed in cement:sand mortar mix 1:3 including 25x4mm thick hoop iron at every alternate courses.				
9.3.1	200mm thick walling.	629	SM		
	Precast concrete coping				
9.3.2	75mm thick weathered and throated saddled-back coping for 200mm thick walling	286	LM		
9.3.3	Ditto 450 x 450mm pier cap ditto to columns	83	NO		
TOTAL FOR WALLING CARRIED TO SUMMARY					

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
9.4.1	<p>ELEMENT NO. 4</p> <p>FINISHES</p> <p>WALL FINISHES.</p> <p>External Wall Finishes</p> <p>12mm Gauged lime plaster (1:2:9) : steel trowelled finish : on concrete or blockwork : to</p> <p>Extra over dressed stone walling for neat recessed horizontal key pointing in 10mm thick rod in cement mortar (1:3) both internal and external sides of walling: one coat of bituminous paint.</p>	1,258	SM		
TOTAL FOR WALLING CARRIED TO SUMMARY					

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 5				
	GATES				
9.5.1	6250mm wide x 2400mm high mild steel gate fabricated from 75 x 75 mm x3mm thick square tubes welded at 150mm centres both ways including 900mm x1800mm plate welded to lower part of the gate, appropriate framing and 300x300mm reinforced concrete columns, fixing gate in position and all the necessary paintwork.	1	NO		
9.5.2	Ditto but size 1425 x 2200mm high	1	NO		
	Prepare surface by sand blasting, apply one coat of 2 pack epoxy zinc phosphate primer; apply three coats of marine grade gloss paint				
9.5.3	To steel gates	36.27	SM		
TOTAL FOR GATES AND GATEHOUSE CARRIED TO SUMMARY					

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BOUNDARY WALL SUMMARY				
1	SUBSTRUCRTURE				
2	SUPERSTRUCTURE				
3	WALLING				
4	FINISHES				
5	GATES				
TOTAL BUILDER'S WORK CARRIED TO GRAND SUMMARY					

PROPOSED CONSTRUCTION OF KIDONGO FISH LANDING SITE

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BILL NO. 10: GATE HOUSE				
	ELEMENT NO 1.				
	SUBSTRUCTURE WORKS (All Provisional)				
	EXCAVATION AND EARTHWORKS				
10.1.1	Clear site of all bushes, tufts and any small or large trees, including grubbing out roots and burn on site where directed	14	SM		
10.1.2	Excavate oversite average 250mm deep and cart away	14	SM		
10.1.3	Excavate trench for strip foundation: not exceeding 1.5m deep	14	CM		
10.1.4	Ditto but exceeding 1.50 m deep but not exceeding 3.0 m deep	7	CM		
10.1.5	Excavate for column pits: not exceeding 1.5m deep	9	CM		
10.1.6	Ditto but exceeding 1.50 m deep but not exceeding 3.0 m deep	8	CM		
10.1.7	Extra over excavation from rock of any class in any position	11	CM		
	Disposal of excavated material				
10.1.8	Return fill in and ram in excavations	30	CM		
10.1.9	Load and cart away surplus material	8	CM		
	Disposal of Water				
10.1.10	Allow for keeping the whole of the excavation free from mud, water and fallen materials	1	Item		
	Planking and strutting				
10.1.11	Allow for planking and strutting sides of excavation	1	Item		
	Filling				
10.1.12	300mm thick (minimum) approved hardcore handpacked in layers not exceeding 150mm	14	SM		
Carried to collection					

PROPOSED CONSTRUCTION OF KIDONGO FISH LANDING SITE

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
10.1.13	50mm Thick Quarry dust blinding to the surface of hardcore rolled smooth to receive polythene sheeting	14	SM		
	Insecticide Treatment				
10.1.14	Treat hardcore surface with approved antitermite applied in accordance with the manufacturer's instructions and subject to a TEN YEAR guarantee	14	SM		
	WATERPROOFING				
10.1.15	1000 gauge polythene sheet damp proof membrane including 300mm laps	14	SM		
	CONCRETE WORKS				
	Insitu concrete class 15/20: in				
10.1.16	50mm thick concrete blinding to surfaces of strip footing	9	SM		
10.1.17	Ditto column bases	9	SM		
	Vibrated reinforced concrete class 25/20				
10.1.18	Strip footing	2	CM		
10.1.19	Columns Bases	3	CM		
10.1.20	Columns	1	CM		
10.1.21	150mm thick floor slab	14	SM		
	High Tensile Reinforcement Bars to B. S. 4449 including cutting, bending and all necessary spacer blocks : (Provisional) :- Ribbed bars to KS ISO 6935-2:2007				
10.1.22	8mm dia reinforcement bars	22	KG		
10.1.23	10mm dia reinforcement bars	75	KG		
10.1.24	12mm dia reinforcement bars	90	KG		
10.1.25	16mm dia reinforcement bars	75	KG		
10.1.26	BRC Fabric mesh reinforcement Ref. A142; weighing 2.22kg per square metre(measured net no allowances made for laps) including bends tying wire and spacer blocks.	14	SM		
Carried to collection					

PROPOSED CONSTRUCTION OF KIDONGO FISH LANDING SITE

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Marineply formwork as Described. Allow for setting to special steel proping, strutting, fillets, nails, etc to:				
10.1.27	Edges of strip footing	6	SM		
10.1.28	Ditto but to column bases	8	SM		
10.1.29	Ditto but to sides of columns	8	SM		
10.1.30	Ditto but to edges of floor slabs 75-150mm girth	15	LM		
	FOUNDATION WALLING				
10.1.31	200mm solid coral block foundation wall in cement:sand (1:3) reinforced with hoop iron at every to alternative course	30	SM		
	PLINTH FINISHES				
10.1.32	15mm cement and sand (1:4) render trowelled smooth and comprising 12mm thick backing and 3mm finishing coat.	15	SM		
	Painting and Decoration				
10.1.33	Prepare and apply 3 coats of first quality bituminous paint or equal and approved to rendered surfaces	15	SM		
Carried to collection					
	COLLECTION				
	Brought forward from page 10/1				
	Brought forward from page 10/2				
	Brought down from page 10/3				
TOTAL FOR SUBSTRUCTURE WORKS CARRIED TO SUMMARY					

PROPOSED CONSTRUCTION OF KIDONGO FISH LANDING SITE

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO 2.				
	SUPERSTRUCTURE REINFORCED CONCRETE WORKS				
	Vibrated reinforced concrete class 25/20				
10.2.1	Beams	1	CM		
10.2.2	Gutters	1	CM		
10.2.3	Columns	1	CM		
10.2.4	150mm thick roof slab	26	SM		
	High Tensile Reinforcement Bars to B. S. 4449 including cutting, bending and all necessary spacer blocks : (Provisional) :- Ribbed bars to KS ISO 6935-2:2007				
10.2.5	Assorted Bars	790	KG		
	Sawn Treated cypress formwork to: -				
10.2.6	Sides of Ring Beams	12	SM		
10.2.7	Sides and soffits of gutter beams	11	SM		
10.2.8	Soffits of columns	8	SM		
10.2.9	To soffits of roof slab and canopy	26	SM		
10.2.10	To Edges of roof slab and canopy 75-150mm	20	LM		
TOTAL SUPERSTRUCTURE CARRIED FORWARD TO SUMMARY					

PROPOSED CONSTRUCTION OF KIDONGO FISH LANDING SITE

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 3				
	WALLING				
	External walling				
	Machine cut natural stone or machine cut coral stone or hollow concrete block walling ; load bearing 7.0 N/mm2: reinforced with 20 gauge 25mm hoop iron strips laid horizontally every alternate course: bedded and jointed in cement and sand (1:3) mortar				
10.3.1	200mm mm thick	30	SM		
10.3.2	200mm thick at parapet walling; including allowing for crenellation to architect's detail	9	SM		
	Internal walling				
	Machine cut natural stone or machine cut coral stone or hollow concrete block walling ; load bearing 7.0 N/mm2: reinforced with 20 gauge 25mm hoop iron strips laid horizontally every alternate course: bedded and jointed in cement and sand (1:3) mortar				
10.3.3	150mm mm thick	12	SM		
	WATERPROOFING				
10.3.4	Hessian based bituminous felt damp proof course 200mm wide	15	LM		
10.3.5	Ditto 150mm	5	LM		
10.3.6	Pre-cast concrete class 20/20 concrete coping 250 x 50 mm high precast concrete coping weathered and throated on both sides and jointed to wall in cement sand mortar 1:3 all to approval	15	LM		
TOTAL FOR WALLING CARRIED FORWARD TO SUMMARY					

PROPOSED CONSTRUCTION OF KIDONGO FISH LANDING SITE

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 4				
	ROOFING				
	FLAT ROOF FINISHES				
10.4.1	50 mm cement sand 1:3 water proof screed to flat roof slab, gutters and sides of parapet walls; laid to fall and crossfalls	36	SM		
10.4.2	Apply one coat bituminous primer to surface of screed.	36	SM		
	Supply and apply 4mm thick bituminous felt membrane heat welded in 200mm overlaps and all necessary surface preparations; applied strictly in accordance with printed manufacturer's instructions; provide a 10 year guarantee				
10.4.3	To roof slabs	26	SM		
10.4.4	To gutters	7	SM		
10.4.5	Ditto sides of wall 200mm high	15	LM		
10.4.6	50 x 50mm internal angle fillet	15	LM		
	Floor Finishes				
10.4.7	Cement and sand (1:4) screeding smooth trowelled 32mm Thick floor screed to receive concrete tiles	26	SM		
10.4.8	200 x 200 x 25mm thick concrete interlocking tiles at roof slab; bedding and jointing in cement mortar mix 1:4(m/s)	26	SM		
10.4.9	100mm high matching skirting	15	LM		
10.4.10	Rainwater goods Extra over for running outlet	2	NO		
10.4.11	100mm x 75 x 0.6mm PVC down pipes fixed to wall with holding clips at 1200mm centres	6	LM		
10.4.12	Extra over for swan neck 1000mm long	2	NO		
10.4.13	Extra over for shoe 1000mm long	2	NO		
TOTAL FOR ROOFING CARRIED TO SUMMARY					

PROPOSED CONSTRUCTION OF KIDONGO FISH LANDING SITE

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 5				
	WINDOWS				
	The following in Heavy Duty Powder Coated Aluminium windows from approved manufacturer(s) complete with 75x50x3 mm frames mullions trasomes railing and necessary intermediate reinforcement elements including all weather strips, rubber glazing strips, couplings, ironmongery including hinges, fasteners and stays, sliding rails(where necessary) bars; all ironmongery to be of stainless steel grade 316 marine grade; panes left open for glazing to Architects detail				
10.5.1	Overall size 1500 x 750mm high as W03	3	NO.		
10.5.2	Overall size 600 x 900mm high as W04	2	NO.		
	Window cills				
10.5.3	200x50mm pre-cast concrete window sill bedded and pointed in cement sand(1:3) mortar, weathred and throated all to Architects detail and approval	5	LM		
	Glazing				
	laminated oneway glass fixed with and including beadings.				
10.5.4	6mm thick glass in panes (0.50-1.00m ²)	5	SM		
Carried to collection					

PROPOSED CONSTRUCTION OF KIDONGO FISH LANDING SITE

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Burglar proofing grilles-provisional Mild steel grille framed with 50 x 25 x 3mm thick RHS sections, 16 mm diameter round bars welded together at 150 mm centres bothways; including assembly and fixing to opening cutting and pinning lugs to concrete and bedding frame in cement and sand mortar (1:3);prepare surface by Sand blasting; apply one coat of 2 pack epoxy zinc phosphate primer; apply three coats of marine grade gloss paint to the whole grille complete with fixing lugs and including fixing to masonry walling.				
10.5.5	Overall size 1500 x 750mm high	3	NO.		
10.5.6	Overall size 600 x 90mm high	2	NO.		
	Carried to collection				
	COLLECTION Brought forward from page 10/7 Brought down from page 10/8				
TOTAL FOR WINDOWS CARRIED FORWARD TO SUMMARY					

PROPOSED CONSTRUCTION OF KIDONGO FISH LANDING SITE

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 6				
	DOORS				
	Louvred Doors				
	50mm thick mvule louvred door comprising of 50x3mm louvres set at 45 degrees at 50mm centres;solid blocking for iron mongery (m/s) to door : all in accordance with Architect's details				
10.6.1	Single leaf door overall size 1100 x 2400mm high;complete with timber louvred fanlight size 1100x300mm high as D06	2	NO		
	Panel Doors				
	50mm thick mvule panelled door: comprised of 200 x 50mm thick stiles, top and middle rail: 200 x 50mm thick bottom rail ;solid blocking to iron mongery (m/s) to door				
10.6.2	Single leaf door overall size 900 x 2400mm high; complete with timber louvred fanlight size 900x300mm high	1	NO		
10.6.3	FRAMES (Wrot Mvule) 150x50mm.rebated frame plugged	17	LM		
10.6.4	Ditto transome	3	LM		
10.6.5	50 x 25mm. Splayed architrave.	17	LM		
10.6.6	25mm quadrant moulds	17	LM		
Carried to collection					

PROPOSED CONSTRUCTION OF KIDONGO FISH LANDING SITE

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Ironmongery				
	Supply and fix the following ironmongery from an approved manufacturer including all necessary matching screws;all ironmongery to be stainless steel grade 3.1.6 marine grade				
10.6.7	3 - Lever mortice lock; complete with lockcase and handle	1	NO		
10.6.8	2 - Lever mortice lock; ditto with indicator	2	NO		
10.6.9	100mm. Pressed butt hinges	5	PRS		
10.6.10	38mm. Diameter door stop on floor / wall to approval	3	NO		
10.6.11	Heavy duty Door closer to an approved sample	3	NO		
10.6.12	800 x 200mm high stainless steel kick plate onto both sides to approval	2	NO		
10.6.13	150 x 150mm sex indicator plate	2	NO		
10.6.14	Coat and hat hook	2	NO		
	Painting and Decoration				
	Prepare and apply three coats of premium quality marine grade clear varnish; Matt quality to:-				
10.6.15	General surfaces of wood exceeding 200mm but not exceeding 300mm girth	37	LM		
10.6.16	Ditto; girth not exceeding 100mm	17	LM		
10.6.17	Doors both internally and externally	13	SM		
	Prepare and apply one coat aluminium primer before fixing: to backing of wood				
10.6.18	Surfaces over 200 but not exceeding 300mm	34	LM		
10.6.19	Surfaces not exceeding 100mm	17	LM		
	Carried to collection				

PROPOSED CONSTRUCTION OF KIDONGO FISH LANDING SITE

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	COLLECTION				
	Brought forward from page 10/9				
	Brought down from page 10/10				
TOTAL FOR DOORS CARRIED FORWARD TO SUMMARY					

PROPOSED CONSTRUCTION OF KIDONGO FISH LANDING SITE

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 7				
	FINISHES				
	EXTERNAL FINISHES				
	Walls				
10.7.1	25mm thick cement and sand (1:3) render to:- 25mm thick cement and sand rendering to walls, finished with a wood float.	11	SM		
10.7.2	Ditto to receive natural stone cladding	44	SM		
10.7.3	Prepare and apply one undercoat and two finishing coats marine grade weatheguard (silicone based) exterior paint as approved to: Plastered surfaces of walls	11	SM		
10.7.4	Stone Cladding 25mm thick polished mazeras stone cladding to columns in cement and sand (1:3) mortar (m/s) with and including galvanised wire reinforcement; pattern to architect's approval	44	SM		
	Ceiling Finishes				
10.7.5	Concrete Finishes 15mm thick two coat gauged cement lime and sand (1:2:9) plaster steel trowelled smooth to concrete surfaces	12	SM		
10.7.6	Prepare surface, apply undercoat and apply three coats PVA based premium quality marine grade emulsion paint or other equal and approved to plastered surfaces	12	SM		
10.7.7	INTERNAL FINISHES Wall and Concrete Finishes 15mm thick two coat gauged cement lime and sand (1:2:9) plaster steel trowelled smooth to walls and concrete surfaces	40	SM		
10.7.8	Prepare surface, apply undercoat and apply three coats PVA based premium quality marine grade silk vinyl emulsion paint or other equal and approved to plastered surfaces	40	SM		
Carried to collection					

PROPOSED CONSTRUCTION OF KIDONGO FISH LANDING SITE

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
10.7.9	12mm cement and sand (1:3) plaster to walls and concrete surfaces trowelled smooth; to receive wall tiles (m/s)	24	SM		
10.7.10	Wall Tiles 300 x 300 x 6mm Thick glazed ceramic wall tiles bedding and jointing in cement and sand (1:3) mortar and flush pointed with white cement;including matching grouting, waterproof adhesive,spacers and edge protectors where required	24	SM		
10.7.11	12mm PVC Edgings	21	LM		
10.7.12	Floor Finishes Cement and sand (1:4) screeding smooth trowelled 32mm Thick floor screed to receive non slip ceramic tiles	10	SM		
10.7.13	Ceramic floor tiles Supply and fix 10 mm thick non-slip ceramic floor tiles on prepared backing including matching grouting, waterproof adhesive and edge protectors where required; overall size 300mm x 300mm.	10	SM		
10.7.14	Ditto 100mm high skirting	21	LM		
10.7.15	Ceiling finishes Concrete Finishes 15mm thick two coat gauged cement lime and sand (1:2:9) plaster steel trowelled smooth to concrete surfaces	10	SM		
10.7.16	Prepare surface, apply undercoat and apply three coats PVA based premium quality marine grade silk vinyl emulsion paint or other equal and approved to plastered surfaces	10	SM		
	Carried to collection				
	COLLECTION Brought forward from page 10/12 Brought forward from page 10/13				
TOTAL FOR FINISHES CARRIED TO SUMMARY					

PROPOSED CONSTRUCTION OF KIDONGO FISH LANDING SITE

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 8				
	FIXTURES AND FITTINGS				
	BENCH				
10.8.1	100mm thick plain concrete class 15/20 in plinth	2	SM		
10.8.2	Reinforced concrete class 25/20 in 100mm worktops	2	SM		
	Formwork to:-				
10.8.3	Soffites of worktops	2	SM		
10.8.4	Edges of worktops and plinths 75-150mm high	6	LM		
10.8.5	10mm diameter high yield reinforcement bars as described before	20	KG		
10.8.6	100mm thick coral block walling in cement/sand 1:3 mortar; abd	2	SM		
10.8.7	15mm thick cement sand (1:3) plaster of worktop	2	SM		
10.8.8	Ditto walls	4	SM		
	Polished Terrazzo paving				
10.8.9	25mm thick insitu polished terrazzo laid on concrete in approved coloured aggregate finished smooth including sanding and polishing	6	SM		
	Plastic dividing strips				
10.8.10	32 x 3mm thick plastic dividing strips	9	LM		
TOTAL FOR FIXTURES AND FITTINGS CARRIED TO SUMMARY					

PROPOSED CONSTRUCTION OF KIDONGO FISH LANDING SITE

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
10.9.1	ELEMENT NO.9	1	SUM		
	BUILDERS WORK IN CONNECTION WITH SERVICES(BWICS)				
	Builder's Work incidental to sanitary fittings, plumbing, drainage, electrical installations, concealed fixings				
	Allow for making holes, chasing walls, floors, inclusion of sleeves and other items necessary for the proper carrying out of the installations including all builder's work of making good all surfaces				
TOTAL FOR BWICS CARRIED TO SUMMARY					

PROPOSED CONSTRUCTION OF KIDONGO FISH LANDING SITE

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	SUMMARY				
1	SUBSTRUCTURE				
2	SUPERSTRUCTURE				
3	WALLING				
4	ROOF AND RAINWATER DISPOSAL				
5	WINDOWS				
6	DOORS				
7	FINISHES				
8	FIXTURES AND FITTINGS				
9	BWICS				
TOTAL FOR GATE HOUSE CARRIED TO GRAND SUMMARY					

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT
KIDONGO, MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BILL NO.11:FOUL WATER DRAINAGE				
	ELEMENT NO. 1				
	EXTERNAL SOIL WATER DRAINAGE				
11.1.1	Excavate trench for drain pipe average 1500 mm deep, part return fill and ram and remainder cart away	165	LM		
11.1.2	150 mm diameter "Golden Brown" UPVC pipe laid in trench and jointed	165	LM		
	Plain in situ concrete : class 15/20 : as per Engineer's detail				
11.1.3	150mm bed and surround to 150mm diameter pipe : including all necessary formwork	165	LM		
	Inspection Chambers				
	The following manholes of various sizes to be executed in accordance with the Engineer's drawings, average depths as stated complete and including filling, 150mm thick masonry walling abd, 150mm thick concrete floor slab Class 20/20, concrete blinding and benching Class 15/20, 20mm diameter cast iron stepping irons where necessary; waterproof plaster to internal and external surfaces; complete with and including heavy duty double air seal cast iron cover and frame, all to Engineer's details. (Rate to include cost of all excavations, concrete, formwork, reinforcement, lifting key hole and associated works); prepare surface of steel by Sand blasting; prime with 2 pack epoxy zinc phosphate primer ; apply three coats of marine grade gloss oil paint				
11.1.4	Internal dimensions: 600x 450x 1000mm deep	21	NO		
11.1.5	Ditto 850x1200x1500mm deep	10	NO		
TOTAL OF EXTERNAL SOIL WATER DRAINAGE CARRIED TO ELEMENT					-

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT
KIDONGO, MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 2				
	BIODIGESTER & BIOREACTOR				
11.2.1	Clear site of shrubs,grass and carting away the arisings	204	SM		
11.2.2	Excavate pit for biodigester not exceeding 1.5m deep	306	CM		
11.2.3	Ditto 1.5 - 3.0M deep	306	CM		
11.2.4	Ditto 3 - 4.5M deep	52	CM		
11.2.5	Extra over excavation in rock of any class	200	CM		
11.2.6	Return fill and ram selected excavated soil around walling	100	CM		
11.2.7	Cart away surplus excavated material	564	CM		
11.2.8	50mm thick blinding class 15/20	204	SM		
11.2.9	200mm thick reinforced concrete class 25/20 slab in surface bed	204	SM		
11.2.10	200mm thick ditto to external walls	228	SM		
11.2.11	Ditto in baffle wall	212	SM		
11.2.12	200mm thick reinforced concrete class 25/20 in cover slab	204	SM		
	Marineply formwork to:				
11.2.13	Sides of Rc external walling	456	SM		
11.2.14	Soffits of suspended slap	204	SM		
11.2.15	Sides of scum baffle wall	424	SM		
11.2.16	Edges of base slab 150-225mm girth	82	LM		
11.2.17	Edges of suspended slab 150-225mm girth	82	LM		
Carried to collection					

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT
KIDONGO, MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
11.2.18	Box out formwork to opening size 600x450mm High Tensile Reinforcement Bars to B. S. 4449 including cutting, bending and all necessary spacer blocks : (Provisional) :- Ribbed bars to KS ISO 6935-2:2007	20	NO		
11.2.19	Assorted sizes	16960	KG		
11.2.20	Form or leave hole in 250mm concrete walling for 100mm pipe including making good disturbed surfaces	16	NO		
11.2.21	15mm thick cement/sand (1:3) waterproof plaster to walls and soffit of cover slab	808	SM		
11.2.22	30mm thick cement/sand (1:3) waterproof screed to surface bed of internal floor	168	SM		
11.2.23	600x450mm heavy duty double air seal cast iron cover and frame	20	NO		
Carried to collection					
	BIODIGESTER Brought forward from page 11/3 Brought down from page 11/4				
TOTAL OF BIODIGESTER CARRIED TO ELEMENT SUMMARY					

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT
KIDONGO, MOMBASA**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	SUMMARY				
	ELEMENT				
1	External soil water drainage				
2	Biodigester & Bioreactor				
TOTAL FOR EXTERNAL FOUL WATER DRAINAGE CARRIED TO MAIN SUMMARY					

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM.	DESCRIPTION	UNIT	QTY	RATE	KSHS
	BILL NO. 12: WALKWAYS AND RAMPS				
	ELEMENT 1: SUBSTRUCTURES(All Provisional)				
	SITE PREPARATION				
	Excavations				
12.1.1	Excavate oversite to remove vegetable soil 200mm average depth, loads, wheel and deposit where directed on site and level	SM	266		
12.1.2	Ditto; for columns base	CM	122		
	Disposal				
12.1.3	Return, fill and ram extra excavation materials around foundation	CM	118		
12.1.4	Cart away surplus excavated materials to designated dumpsite	CM	4		
	Filling				
12.1.5	Average 300mm thick hardcore bed well watered leveled and compacted	CM	81		
12.1.6	50mm thick murrum blinding	SM	81		
12.1.7	Treat surface of hardcore filing with an approved insecticide according to the manufacture instructions.	SM	81		
	Mass Concrete				
12.1.8	50mm thick concrete blinding under strip footing, and column bases(class 15)	SM	81		
	Vibrated reinforced concrete class 25/20				
12.1.9	Column bases	CM	32		
12.1.10	Column starters	CM	4		
	Reinforcement				
	Ribbed Reinforcement Steel Bars Grade 100 to BS 4449 including cutting to length, bending, hoisting and fixing including all necessary tying wires and spacing blocks				
12.1.11	T12	KG	1667		
12.1.12	T8	KG	19312		
Carried to collection					

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM.	DESCRIPTION	UNIT	QTY	RATE	KSHS
	Formwork as Described. Allow for setting to special steel propping, strutting, fillets, nails, etc to				
12.1.13	Sides of column base	SM	86		
12.1.14	Sides of column starters	SM	48		
	ELEMENT 2: REINFORCED CONCRETE SUPERSTRUCTURE				
	Vibrated reinforced concrete class 25/20 in:-				
12.2.1	Beams	CM	97		
12.2.2	Columns	CM	4		
	Ditto in:-				
12.2.3	175mm thick suspended slab	SM	531		
	Reinforcement				
	Ribbed Reinforcement Steel Bars Grade 100 to BS 4449 including cutting to length, bending, hoisting and fixing including all necessary tying wires and spacing blocks				
12.2.4	T10	KG	19428		
	Formwork as Described. Allow for setting to special steel propping, strutting, fillets, nails, etc to				
12.2.5	Soffits of floor slab and beams	SM	531		
12.2.6	Vertical sides of columns	SM	11		
12.2.7	Sides of beams	SM	97		
	Ditto to edges of:-				
12.2.8	Suspended floor slab 150mm but not exceeding 225mm high	LM	62		
	ELEMENT 3: FINISHES				
	Floor Finish				
12.3.1	20 mm thick cement and sand screed (1:3) paving prepared to receive terrazzo finish	SM	531		
12.3.2	20mm thick terrazzo layer including waterproofing admixture, rough and smooth sanding and polishing with acid to floor including 32 x 3mm thick plastic dividing strip where required	SM	531		
Carried to collection					

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

ITEM.	DESCRIPTION	UNIT	QTY	RATE	KSHS
12.3.3	25 mm wide Slip-resistant Carborandum inserts on Terrazzo ramp bonded with an approved adhesive	3105	LM		
	Handrail -Stainless Steel				
12.3.4	Supply, assemble and fix 1000mm high purpose made stainless steel (grade 3.1.6) comprising of 50mm diameter x 3mm thick stainless steel tube handrail welded to 50mm diameter x 3mm thick stainless steel balusters at fixed to concrete floor at 1000mm centres; balusters fixed to and including 200mm x 150mm x 15mm thick stainless steel base plate fixed to concrete; complete with 4no. 25mm diameter x 3mm thick horizontal middle rails ; including all necessary cleats, brackets,lugs stiffeners and the like; all to Architect's instructions and approval	377	LM		
Carried to collection					
	COLLECTION WALKWAYS AND RAMPS Brought forward from page 12/1 Brought forward from page 12/2 Brought forward from page 12/3				
TOTAL FOR WALKWAYS AND RAMPS					

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM.	DESCRIPTION	UNIT	QTY	RATE	KSHS
	BILL NO. 13:				
	ELEMENT NO.1: PARKING, DRIVEWAY (ALL PROVISIONAL)				
13.1.1.	Excavation to reduced levels not exceeding 1.50 m deep starting from the ground level	CM	654		
	Imported Filling				
13.1.2.	Supply, spread, water and compact murram sub base material to maximum thickness of 300mm for the parking area. To atleast 100% MDD (AASHTO T99) compaction, including all necessary scarification and water in layers of at most 150mm.	CM	654		
13.1.3.	Provide, lay and compact hand packed hardcore as base material to maximum thickness of 300mm for the parking area. To atleast 100% MDD (AASHTO T99) compaction, including all necessary scarification and water in layers of at most 150mm.	CM	196		
	Sand Bed				
13.1.4.	50mm thick sand bed course to receive concrete paving blocks	SM	654		
	Herbicide Treatment				
13.1.5.	Herbicides to approval applied to the manufacturer's written instructions and subject to a TEN YEAR guarantee	SM	654		
	Concrete Paving Blocks				
13.1.6.	210 x 105 x 80 thick paving block minimum strength 49N/mm ² laid on 50 mm thick sand bed (m/s) and joint filled with sand and vibrated.	SM	654		
	Precast Concrete Channels class 20/20				
13.1.7.	Provide, lay and joint 200x100mm channel in and including concrete Class 15/20 bed and haunch. Include for all necessary excavation and formwork to Eng details	LM	170		
Carried to collection					

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM.	DESCRIPTION	UNIT	QTY	RATE	KSHS
13.1.8.	Precast Concrete Kerbs class 20/20 Provide, lay and joint 250x125mm precast concrete half battered kerb including Class 20/20 bed and haunch. Include for all necessary excavation and formwork to Eng details	LM	170		
	ROAD AND PARKING MARKING Prepare and apply three coats of approved road marking thermoplastic paint on asphalt to surfaces not exceeding 100mm girth				
13.1.18.	Yellow in colour	SM	30		
	STORM OF WATER DRAINS OPEN DRAINAGE				
13.1.19.	600mm wide(internal) open "U" drainage in rectangular fair faced insitu vibrated reinforced concrete class 20/20;including 600mm high x 200 mm thick reinforced concrete walling in T12 bars, 200 mm thick bottom slab reinforced in BRC A142 ,50mm concrete class 15/20 blinding on 150mm hardcore filling; including all necessary excavations, strutting, formwork, plaster to all internal surfaces, plaster to all exposed external surfaces all as per Eng details.	LM	117		
13.1.20.	600mm wide mild steel channel grating : comprising 40 x 40 x 6mm edge frame : infilled with 40 x 6mm flats at 50mm centres : 40 x 40 x 6mm frame set in concrete with 150mm long mild steel end split lugs : smooth weld joints; Prepare surface by sand blasting, apply one coat of 2 pack epoxy zinc phosphate primer; apply three coats of marine grade gloss paint :	LM	117		
	BOX CULVERT				
13.1.21.	2000 x 2000 x 400mm thick insitu vibrated reinforced concrete class 25/20 box culvert ;including 600mm high x 200 mm thick; laid on and including 50mm concrete class 15/20 blinding on 150mm hardcore filling; including all necessary excavations, strutting, formwork, reinforcements; all as per Eng details.	LM	1		
Carried to collection					

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO,
MOMBASA**

ITEM.	DESCRIPTION	UNIT	QTY	RATE	KSHS
	Headwalls				
13.1.22.	Headwall comprising of 5000mm long x 2000mm high x 350mm thick insitu vibrated reinforced concrete class 20/20 on and including concrete class 20/20 base size 3700 x 950 x 400mm thick on 50mm concrete class 15/20 blinding;with 100mm thick quarry dust blinding on 150mm hardcore filling; including all necessary excavations, strutting, formwork, reinforcements; all as per Eng details.	NO	2		
	Invert Block Drains				
13.1.23.	300mm diameter round precast concrete invert blocks drain manufactured in accordance with BS 340 laid to slope and including 100mm murram bed;including 600 x 225 x 75mm thick side slabs : jointed and pointed in cement and sand 1:3 mortar : on compacted murram : as per Engineer's details jointing in cement and sand mortar;including all necessary excavations, strutting, formwork, reinforcements; all as per Eng details.	LM	117		
Carried to collection					
	COLLECTION				
	PARKING, DRIVEWAY, AND STORM WATER DRAINAGE				
	Brought forward from page DW/1				
	Brought forward from page DW/2				
	Brought down from page DW/3				
TOTAL FOR PARKING, DRIVEWAY, AND STORM WATER DRAINAGE SUMMARY					

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>BILL NO. 14: MECHANICAL WORKS:</u>				
	<u>ELEMENT NO. 1 (INTERNAL PLUMBING):</u>				
	<i>Supply, deliver and install pipes, tubing and fittings as described and shown on the drawings. The pipes shall be PN 25PPR pipes where exposed to adverse weather conditions and all conforming to the current European standards for PPR installations and to the Engineers Approval. Pipe jointing shall be by polyfusion or use electric coupling, Rates must allow for all metal/plastic threaded adaptors where required for the connection of sanitary fixtures, valves, sockets, sliding and fixed joints support raceways, isolating sheaths, elastic materials, expansion arms and bends cross overs, couplings, clippings, connectors, joints etc. as required in the running lengths of pipe work 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 manufactures recommended testing pressures</i>				
	<u>PPR Pipes</u>				
14.1.1	25mm diameter pipe	200	LM		
14.1.2	32mm Ditto	90	LM		
14.1.3	40mm Ditto	70	LM		
14.1.4	50mm Ditto	45	LM		
14.1.5	63mm Ditto	50	LM		
	<u>Sockets;</u>				
14.1.6	25mm diameter socket	30	No.		
14.1.7	32mm ditto	19	No.		
14.1.8	40mm Ditto	23	No.		
14.1.9	50mm Ditto	22	No.		
14.1.10	63mm Ditto	15	No.		
	<u>Tees;</u>				
14.1.11	25mm diameter PPR equal tee	33	No.		
14.1.12	32mm diameter PPR equal tee	24	No.		
14.1.13	40mm diameter PPR equal tee	15	No.		
14.1.14	50mm diameter PPR equal tee	25	No.		
14.1.15	63mm diameter PPR equal tee	20	No.		
	TOTAL CARRIED TONEXT PAGE				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>TOTAL B/F FROM PREVIOUS PAGE</u>				
	<u>Bends</u>				
14.1.16	25mm diameter bends	45	No.		
14.1.17	32mm ditto	30	No.		
14.1.18	40mm Ditto	20	No.		
14.1.19	50mm Ditto	16	No.		
14.1.20	63mm Ditto	12	No.		
	<u>Tees</u>				
	Extra over GI tubing for the following:				
14.1.21	25mm diameter PPR 90° elbow	25	No.		
14.1.22	32mm diameter PPR 90° elbow	15	No.		
14.1.23	40mm diameter PPR 90° elbow	20	No.		
14.1.24	50mm diameter PPR 90° elbow	20	No.		
14.1.25	63mm diameter PPR 90° elbow	10	No.		
	<u>Reducers</u>				
14.1.26	50x32mm diameter PPR reducer tees	30	No.		
14.1.27	50x40mm diameter PPR reducer tees	10	No.		
14.1.28	63x50mm diameter PPR reducer tees	15	No.		
14.1.29	80x50mm diameter PPR reducer tees	10	No.		
	<u>Threaded Fittings</u>				
14.1.30	50 x 1"ø ditto Male threaded adaptors	12	No.		
14.1.31	25 x 3/4"ø dia Male threaded adaptors (Brass threads).	25	No.		
14.1.32	32 x 1"ø ditto	30	No.		
14.1.33	50 x 1 1/2"ø dia Male threaded adaptors	24	No.		
14.1.34	63 x 1 1/2"ø dia Male threaded adaptors (Brass threads)	10	No.		
	<u>Nipples</u>				
14.1.35	25mm diameter G.I. nipple	20	No		
14.1.36	32mm ditto	20	No.		
	<u>Valves</u>				
14.1.37	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 jopints to steel tubing and complete with round male threaded transion fittings.The gate valve to be as approved.	14	No.		
14.1.38	32mm ditto	8	No.		
14.1.39	40mm ditto	6	No.		
14.1.40	50mm ditto	6	No.		
	TOTAL INTERNAL PLUMBING CARRIED FORWARD TO BILL NO. 11 SUMMARY PAGE				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 2:				
	SANITARY FITTINGS: Supply,deliver,install,test and commission the following sanitary appliances complete with all the accessories including all connections to the services,waste,jointing to water supply,overflows,supports and all plugging and screwing to walls and floors. <u>Note.</u> (i). All sanitary fittings shall be in approved colour. (ii). The model and Ref. No. Indicated is only a guide to the type and quality of fittings. (iii). Equivalent and Approved models may be acceptable <u>Squatting Water Closet</u> Squatting Water Closet Suite in white Vitreous China comprising of WC bowl with S-Trap,Connector and Integral foot threads,9 Litre Ceramic Cistern and fittings,including siphon and pull chain,15mm diameter side inlet ball valve,20mm side overflow,first quality plastic 32mm flush pipe,Inlet connector and cistern supports,all to approval.The water closet suite to be as approved.				
14.2.1		4	No.		
14.2.2	<u>Pedestal wash hand basin</u> Wash Hand Basin with pedestal size 510x420mm with one tap hole and chain stay hole,32 mm diameter chrome-plated pop up chain waste and fittings,approved first quality plastic bottle trap(32mm bottle trap) with 75mm seal.The wash hand basin to be as approved.The basin to be supplied and installed complete with 15mm diameter heavy duty Brass Pillar Tap as approved	4	No		
14.2.3	450 x 280 mm counter top washhand basin with single taphole wall bracket and taphole plug. push delay tap, c/w Push open slotted basin, waste 1.25in #A38, bottle Trap 1.25" as approved	4	No		
14.2.4	<u>Toilet Roll Holder</u> Semi recessed toilet roll holder in Vitreous China of size 165 x 165mm in approved colour as approved.	19	No.		
	TOTAL CARRIED TONEXT PAGE				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>TOTAL B/F FROM PREVIOUS PAGE</u>				
14.2.5	<u>Soap Dispenser</u> Wall mounted soap dispenser with a capacity of about 1.5 Litre and having a press action soap release mechanism complete with fixing screws.including allowing for initial soap supply as approved.The soap dispenser shall be size125x100x290mm high and shall be as approved.	8	No		
14.2.6	<u>Mirrors</u> 610 X 610 X 6mm thick polished plate silver backed with beveled edges mirror fixed with clear silicon to 100 x 25mm thick wrot mahogany molded framing in 4 labors plugged to wall using 4No. Wall plugs with 75mm long stainless steel screws, painted in three coats polyurethane varnish all to approval	12	No		
14.2.7	<u>Bib Tap</u> 15mm diameter heavy duty chrome plated bib tap to an approved catalogue	24	No		
14.2.8	<u>Flexible Tubing</u> 15mm diameter x 300mm longg flexible connectors complete with Integral brass angle valve for connecting the Sanitary fitting to water supply, to be as approved.	17	No.		
14.2.9	<u>Robe Hook</u> Robe hook mounted to concealed screw to wall wedges as approved	25	No.		
14.2.10	<u>Shower Fittings</u> Concealed shower fitting consisting of 25mm diameter x 2500mm long PPR riser pipe for showers,25mm diameter Stainless Steel cold water swivel/adjustable shower rose, handle and Stop Cock	4	No.		
14.2.11	<u>Close Couple Water Closet Suite</u> Close Couple water closet suite in approved colour comprising of W.C. bowl,'p'or's' trap connector,heavy duty matching plastic seat and cover with metal top fixed to (chrome plated) hinges and secured to floor or wall and complete with horizontal outlet to BS 3402 with 6 litre valveless Ceramic cistern and fittings including siphon,15mm diameter side inlet ball valves,20mm diameter side overflow,plastic flush bend,inlet connection,and chrome-plated lever.	9	No.		
	<u>TOTAL CARRIED TONEXT PAGE</u>				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>TOTAL B/F FROM PREVIOUS PAGE</u>				
	Disabled persons Water Closet and Wash Hand Basin Facility				
	Wheel chair accessible W.C facility Comprising of the following:-				
14.2.12	<p>(i) Close coupled W.C with 7.5 litre cistern with bottom inlet and overflow.The bowl shall e of size 375 x 560 x 420mm high.The bowl and cistern shall be manufactured from vitreous china complying with B.S 3402.The unit shall be complete with valveless cistern fitting including syphon,15mm side inlet ball valve,20mm diameter side overflow,plastic flush bend,inlet connector and reversible metallic chrome plated cistern lever.There shall also be a heavy duty seat(25mm high) and cover with chrome plated metal hinges,toilet roll holder,900 x 450 x 6mm thick mirror and Robe hook</p> <p>(ii) Semi-recessed wall mounted W.H.B of size 600 x 500 x 545mm high with flexible connectors to water taps.The basin shall be manufactured from vitreous china complying with B.S 3402.It shall have one L/H tap hole with 15mm chrome plated lever action pillar tap,chrome plated waste,first quality bottle trap,pedestal and wall fixing bolts.</p> <p>(iii) Hinged support rail with toilet roll holder 770mm long manufactured in nylon coated aluminium and mounted on a wall fixing plate size 230x100mm,4No. 600mm grab rails with covered wall plates.The Disabled set shall be as approved.</p>	6	SET		
14.2.13	<p><u>Urinal Set</u> Urinal system comprising of approved 2No. Ceramic urinal bowls and 3 No. division complete with domed waste fitting, concealed Push Button-Type Brass Urinal Flush Valve for 1/2" and any other accessories for proper functioning of the set</p>	1	No.		
14.2.14	<p><u>Soap dish</u> Semi recessed built in soap dish in vitreous china of size 150x150mm in approved colour as approved .</p>	4	No.		
	TOTAL CARRIED TONEXT PAGE				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>TOTAL B/F FROM PREVIOUS PAGE</u>				
14.2.15	<u>Soap dish</u> Semi recessed built in soap dish in vitreous china of size 150x150mm in approved colour as approved .	12	No.		
14.2.16	<u>Towel Rail</u> Stainless Steel 20mm diameter x 800mm long approved towel rail and brackets as one piece, plugged and screwed (stainless steel screws) into the wall. The fitting ball shall be as approved.	4	No		
14.2.17	<u>Single Bowl Drop-in Sink</u> Heavy Duty 16SWG Stainless Steel (Grade 304) Single bowl sink,Size 510x310x225mm deep suitable for mounting on counter as manufactured by an approved manufacturer, complete with heavy duty swivel high/long neck brass pillar tap as approved.It shall also comprise of 40mm diameter stainless steel sink waste fitting,chain and plug and 40mm diameter x 75mm deep seal first quality chrome plated Bottle Trap,all to approved catalogue.	20	No.		
14.2.18	<u>Four Wheel Waste Bin</u> 660 litres Heavy Duty Polyethene four wheel waste bin with snap fit lid, locking handle and 4No. Wheels. All to approval	6	No		
14.2.19	<u>Terazzo wash hand basin</u> Wash Hand Basin with pedestal size 510x420mm with one tap hole and chain stay hole,32 mm diameter plastic waste grid and fittings,approved first quality plastic bottle trap(32mm bottle trap) with 75mm seal.The basin to be supplied and installed complete with 15mm diameter heavy duty chrome plated -Brass Basin Tap	4	No.		
14.2.20	Arabic Shattaf Bidet spray c/w tube and head and fixing to wall.	19	No.		
	TOTAL SANITARY FITTINGS CARRIED FORWARD TO BILL NO. 11 SUMMARY PAGE				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO.3:</u> <u>DRAINAGE:</u> Supply,deliver and install the following UpVC,MUpVC,soil and waste systems,respectively to B.S 5255 with fittings fixed Key Terrain High Grade Golden Brown and Grey UPVC soil and waste pipe and jointing in accordance with manufacture's printed instructions and manufactured by reputable manufacturers.Tenderers must allow in their pipework prices for all the couplings,clippingsconnectors,joints,e.t.c 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 <u>Internal:</u>				
14.3.1	40mm diameter Grey UPVC waste pipe in wall chase.	50	LM		
14.3.2	50mm ditto but boxed in concrete floor slab	60	LM		
14.3.3	100mm ditto	100	LM		
14.3.4	150mm ditto	60	LM		
	<u>Extra Ovetubing For:-</u>				
14.3.5	100x50mm diameter UPVC floor trap,grating and cover	15	No		
14.3.6	100mm diameter WC connector	13	No		
	<u>External:</u>				
14.3.7	100mm diameter Grey UPVC soil vent pipe with expansion coupling and fixing to wall with holder bats ducts	30	LM		
14.3.8	100mm diameter Golden Brown UPVC waste pipe in soil	200	LM		
14.3.9	200mm by 200mm u-shaped steel drainage channel	80	LM		
14.3.10	100mm dia Fulbora Outlets	30	No		
	TOTAL CARRIED TONEXT PAGE				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

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PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 4:				
	<u>STERILIZATION AND TESTING:</u>				
14.4.1	Allow for sterilization and flushing out of entire cold water installation with chlorine to the Engineer's Satisfaction	1	ITEM		
14.4.2	Ditto for setting to work and testing the whole of the plumbing and drainage installation works both during progress and at completion to the satisfaction of the Engineer's satisfaction and to leave the whole installation in good working condition	1	ITEM		
	TOTAL TESTING CARRIED FORWARD TO BILL NO. 11 SUMMARY PAGE				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 5:</u>				
	<u>ICE FLAKE MACHINE, ROOM INSULATION AND ACCESSORIES:</u>				
	Supply, deliver, install, test and commission the following Ice Flake Machine, Equipment and accessories as herebelow described and to position indicated on mechanical drawings and as instructed by the Engineer:- The works under this category should be done by an approved sub-contractor				
	<u>Ice Flake Machine</u>				
14.5.1	Modular Ice Flake Machine (Production Capacity 3T/24h, Refrigerating capacity 18Kw, Evaporating temperature -22°C, Power consumption 17.5kW, Approx dimensions 2000 X 1600 X 1490mm) comprising of an air cooled condenser, gear motor, water pump, salt mix pump control box and control panel with PLC , Low water sensor protection, Ice level thermostat, Ice knife and construction made from stainless steel, base frame made from galvanized steel, ice drum/cylinder with stainless steel inner and outer wall fitted with semi-hermetic compressors, stainless steel ball bearings including all other accessories for proper functioning of the unit. The unit shall be as approved and to approved catalogue	1	No		
	<u>Refrigeration Pipework</u>				
14.5.2	A set of Refrigeration Pipework complete with flared connections and fittings in approved copper tubing approx.10metres long,including flexible condensate drip line approx.6.0metres long,properly fixed and encased in 20mm diameter black PVC Conduit in conformity with 'APPROVED REFRIGERATION MANUAL'.The suction line shall be insulated with at least 25mm thickness of Armaflex or other equal and approved material	1	ITEM		
	<u>Testing</u>				
14.5.3	Allow for testing of the above Ice Flake Machine both during progress of installation and at completion to the Engineers satisfaction,including initial charging of the system with Refrigerant gas R.410A or other equal and approved and to leave the system in good and sound working condition	1	ITEM		
14.5.4	Allow for the instruction and training to the client staff (2 no.) on the operation and maintenance of the ice flake production plant for a period of not less than Two (2) weeks. The contractor to allow for structured training on all equipment on content to be agreed upon with the Engineer or his representative.	1	ITEM		
	TOTAL CARRIED TONEXT PAGE				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>TOTAL B/F FROM PREVIOUS PAGE</u>				
14.5.5	Allow for initial service and maintenance including spare parts for the ice flake production plants during the six months' defects liability period	1	ITEM		
14.5.6	Allow for the preparation of record (as installed) drawings and preparation of 2 No. sets of Maintenance and operation manuals	1	ITEM		
	<u>Ice flakes collection room</u>				
14.5.7	Double rebate type cold room door size 900mm wide x 2100mm high constructed from stainless steel tubes mullions transoms with interior lining to match the walls.	1	No		
14.5.8	Supply and install 100mm thick polystyrene insulation fixed to floor between 100 x 50 x 3mm kitchen grade stainless steel RHS bearers plugged to floor slab to receive 5mm thick Non-slip checkered stainless steel plate on the floor spaced at 1000mm center all to approval	11	sm		
14.5.9	Ditto but on the walls	30	sm		
14.5.10	Ditto but on the roof	10	sm		
14.5.11	Supply and install 0.5mm thick 304 Stainless Steel (grade 304) Sheet fixed firmly on the cold room walls and the ceiling complete with the corner panels. The cost to include any other accessory necessary for the installation.	25	sm		
14.5.12					
14.5.13	Supply and install 5mm thick Non-slip checkered stainless steel flooring for the cold room, to be firmly fixed on the floor all to approval. The cost to include any other accessory necessary for the installation.	11	sm		
14.5.14	Allow for application of an approved vapour barrier on the walls and water proofing of the floor to the satisfaction of the Engineer.	1	ITEM		
14.5.15	Supply and install a vapour-sealed bulkhead incandescent lighting fitting with suitably sized door operated switch complete with the associated wiring.	1	No		
14.5.16	Allow for the connection to electrical power supply from a local isolator.	1	ITEM		
	Allow for testing, commissioning and leaving it in good working condition.	1	ITEM		
	TOTAL CARRIED TONEXT PAGE				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<p><u>TOTAL B/F FROM PREVIOUS PAGE</u></p> <p><u>Chilly Bin</u></p> <p>120L Heavy Duty Ice box chilly bin, moulded, filled with polyurethane foam, freezer style sealing gasket, recessed leak proof drain plug. All to approval</p>	1	No		
14.5.17					
	<p>TOTAL ICE FLAKE MACHINE, ROOM INSULATION AND ACCESSORIES CARRIED FORWARD TO BILL NO. 11 SUMMARY PAGE</p>				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO.6:</u>				
	<u>BUILDER'S WORK IN CONNECTION WITH PLUMBING AND DRAINAGE</u>				
14.6.1	<u>Masonry Gulley Trap</u> Construct masonry gulley trap size 200x200mm, approx depth 300mm, complete with seal and Fibre Reinforced Plastics cover, including all disposal and form work	15	No.		
14.6.2	<u>Manholes and Covers</u> Construct Manholes size 600 x 450mm and averaging 750mm deep constructed in 100mm thick concrete base grade 15, approved 150mm block sides rendered all around in cement and sand (1:4). It shall have an approved Fibre Reinforced Plastics cover to approval, including all necessary excavations, disposal and form work.	25	No.		
14.6.3	<u>Excavations</u> Excavate trench not exceeding 1.5m deep, average depth 600mm for laying of drain pipes as earlier described, part back fill, part load and cart away remainder	70	LM		
14.6.4	<u>Chasing</u> Form chase in both 100mm and 200mm thick coral block wall to receive necessary pipe work and make good disturbed areas	50	LM		
14.6.5	<u>Holes</u> Make a hole through 100mm thick coral block wall for small pipe and make good disturbed areas	8	No.		
14.6.6	Ditto but 200mm thick and for large	6	No.		
	TOTAL BUILDERS WORK CARRIED FORWARD TO BILL NO. 11 SUMMARY PAGE				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO.7: <u>WATER RETICULATION - ALL PROVISIONAL</u> <u>Roof Top Water Tanks</u>				
14.7.1	Supply, deliver and install vertical close end plastic moulded tank of capacity 1,000 litres and (size 1160mm diameterx 1100mm high). The tank to be assembled complete with cover and having screwed connections fo inlet, outlet, overflow, 32mm high pressure ball valve, drain pipes and any other item necessary for its proper functioning. The tank shall be as approved	3	ITEM		
14.7.2	Supply, deliver and install vertical close end plastic moulded tank of capacity 2,000 litres and (size 1340mm diameterx 1460mm high). The tank to be assembled complete with cover and having screwed connections fo inlet, outlet, overflow, 32mm high pressure ball valve, drain pipes and any other item necessary for its proper functioning. The tank shall be as approved	6	ITEM		
14.7.3	Supply, deliver and install vertical close end plastic moulded tank of capacity 4,000 litres and (size 1800mm diameterx 1800mm high). The tank to be assembled complete with cover and having screwed connections fo inlet, outlet, overflow, 32mm high pressure ball valve, drain pipes and any other item necessary for its proper functioning. The tank shall be as approved	3	ITEM		
14.7.4	<u>Excavations</u> Excavate trench in soil/murram for Water Mains supply pipe not exceeding 1200mm deep ,lay pipe, part return in,fill ram and surplus cart away	100	LM		
14.7.5	<u>Pipe Work</u> 50mm diameter PPR (PN-20) pump suction lines	80	LM		
14.7.6	50mm ditto but delivery lines	60	LM		
14.7.7	40mm diameter (PN-20) PPR Riser in wall duct and on roof terrace	20	LM		
14.7.8	50mm distribution pipework laid and jointed on roof terrace and pipe drop	50	LM		
14.7.9	40mm diameter (PN-20) PPR distribution Pipe laid and jointed in trench	40	LM		
14.7.10	50mm ditto	50	LM		
14.7.11	32mm diameter (PN-20) PPR Pipe laid and jointed in trench from water mains	24	LM		
14.7.12	40mm ditto	40	LM		
	TOTAL CARRIED TONEXT PAGE				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>TOTAL B/F FROM PREVIOUS PAGE</u>				
	<u>Extra Overtubing for:</u>				
	<u>Sockets:</u>				
14.7.13	32mm diameter PPR Sockets	10	No.		
14.7.14	40mm ditto	18	No.		
14.7.15	50mm ditto	25	No.		
	<u>Bends</u>				
14.7.16	32mm diameter bend/Elbow	10	No.		
14.7.17	40mm ditto	20	No.		
14.7.18	50mm ditto	40	No.		
	<u>Tees</u>				
14.7.19	40mm diameter (PN-20) PPR equal tee	19	No.		
14.7.20	50mm ditto	23	No.		
	<u>Valves</u>				
14.7.21	40mm diameter supply mains full way gate valve as approved	12	No.		
14.7.22	50mm ditto	12	No.		
	<u>Water Connection to Supply mains & Testing</u>				
14.7.23	50mm diameter G.I. equal tee	10	No		
14.7.24	50x40mm diameter G.I. reducer	10	No		
14.7.25	40mm diameter G.I. nipple	9	No		
14.7.26	50mm diameter PPR Adaptor	8	No		
14.7.27	40mm diameter full Way gate valve as approved	8	No		
	<u>Stand Pipe</u>				
14.7.28	15mm diameter bib tap suitable for connecting to a hose pipe complete with threaded adaptors.The tap to be complete with 5-metre long 20mm diameter pipe,bends,e.t.c.The chrome plated bib tap to be as approved	8	ITEM		
	<u>Mains Valve Chamber</u>				
14.7.29	Construct Mains Valve Chamber size 600x600x500mm deep with 100mm thick concrete block rendered all round in cement and and sand mortar (1:4) including hinged iron cover and frame in grease	5	ITEM		
	<u>TOTAL CARRIED TONEXT PAGE</u>				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>TOTAL B/F FROM PREVIOUS PAGE</u>				
14.7.30	<u>Booster Pump Sets</u> Booster Pump Sets (2No) for Roof Top water Tanks (M/S) mounted on a common Mild Steel base Frame and to approval,each set comprising of, One pump duty, One pump stand by, and each of capacity 8m ³ /hr against a Maximum Head of 20(metres) as approved. Each pump set shall be complete with control panel, MCBS, Pressure and Float switches, Overload protection, ON/OFF Buttons, Indicator Lights, Non -Return and Gate valves, and a Pressure Vessel of Approx Capacity 60Litres as approved including all other accessories for proper fuctioning. The pumps shall be connected in that when the Running Duty pump fails the Standby Pump starts up automatically.	1	ITEM		
14.7.31	<u>Testing</u> Allow for connecting the above earlier described Booster pumps to the pump delivery and suction lines, including Test Pumping and testing the whole of the water Reticulation system both during progress and at commissioning to the Engineer's satisfaction and to leave the system in and good sound working condition	1	ITEM		
14.7.32	<u>Hose Reel Booster Pump Set</u> Booster Pump Set for Hose Reels consisting of 2No. parallel duty pumps mounted on a common Mild Steel base Frame to approval,each of capacity 12m ³ /hr against a Maximum Head of 30(metres). The pump set shall be complete with control panel, MCBS, Pressure and Float switches, Overload protection, ON/OFF Buttons, Indicator Lights, Non -Return and Gate valves and a Pressure Vessel of Approx Capacity 100Litres including all other accessories for proper fuctioning. The pumps shall be connected in that when the Running Duty pump fails the Standby Pump starts up automatically.	ITEM	1		
14.7.33	<u>Testing</u> Allow for connecting the above earlier described Booster pumps to the pump delivery and suction lines, including Test Pumping and testing the whole of the water Reticulation system both during progress and at commissioning to the Engineer's satisfaction and to leave the system in good and sound working condition	ITEM	1		
	<u>TOTAL CARRIED TONEXT PAGE</u>				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>TOTAL B/F FROM PREVIOUS PAGE</u>				
14.7.34	<u>Surface Mounted Water Storage Tanks</u> Supply, deliver and install vertical close end plastic moulded water storage tank of capacity 20,000 litres and (size 3370mm diameterx2550mm high). The tank to be assembled complete with cover and having screwed connections fo inlet, outlet, overflow, 32mm high pressure ball valve, drain pipes and any other item necessary for its proper functioning.. The tank shall be installed on a reinforced flat surface platform base approx. 900mm high (M/S) and shall be as approved	4	ITEM		
14.7.35	<u>Tank Base</u> Allow for the construction of the above mentioned tank base Approx.size 40000mm diameter x 900mm high consisting of 200mm thick coral block wall,100mm thick well compacted hardcore filling,50mm thick blinding,Approved Damp proof membrane,A142 BRC Mesh,100mm thick vibrated grade 20 concrete floor slab, 15mm thick screed on the general faces of the tank base in (1:3) cement/sand mortar, 600mm widex1500mm deep strip foundation,including all Excavations and disposal	4	ITEM		
14.7.36	<u>Testing</u> Allow for testing the general water supply and reticulation systems to level in sound working condition and to the Engineer's satisfaction	1	ITEM		
	TOTAL WATER RETICULATION CARRIED FORWARD TO BILL NO. 1 SUMMARY PAGE				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<p>ELEMENT NO.08 (FIRE FIGHTING AND PROTECTION SERVICES);</p> <p><u>Supply,deliver and install the following Air Conditioners to positions indicated on the conract drawings and as instructed by the Engineer:-</u></p> <p>HOSEREELS</p> <p><i>Supply , deliver and install galvanised mild steel tubing to BS 1387 Class C, socketed joints to BS21 and galvanised malleable iron fittings including fixing and jointing. Tenderers must allow in their pipework prices for all the couplings, connectors, joints etc.required in the running length of pipework and also where necessary, for pipe fixing clips, holderbats plugged and screwed, brackets and pipe sleeves through structural members.</i></p>				
14.8.1	25mm diameter GMS tubing Surface Mounted	25	LM		
14.8.2	40mm diameter GMS tubing Surface Mounted	120	LM		
	Extra over GMS tubing for the following:				
14.8.3	25mm diameter galvanised malleable iron elbow	5	No.		
14.8.4	40mm dia ditto	10	No		
	Tees				
14.8.5	25mm galvanised malleable iron equal tee	6	No		
14.8.6	40mm ditto	10	No		
	Reducing Bushes				
14.8.7	25 x 20mm galvanised malleable iron reducing bush	4	No		
14.8.8	40 x 25 mm ditto	3	No		
	Unions				
14.8.9	50mm diameter galvanised malleable iron union	4	No		
	Gate Valves				
	<i>25mm dia approved high pressure screw- down full way non-rising stem solid wedge disc gate valve to BS 5154 PN 16 for Series B Rating with wheel head and joints to</i>				
14.8.10	steel tubing. As "Crane Model 156 " or equal and approved	2	No		
14.8.11	40 mm Ditto	9	No		
	Reducing Tee				
14.8.12	50x25 mm malleable iron galvanised reducing tee	4	No		
	TOTAL CARRIED TONEXT PAGE				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>TOTAL B/F FROM PREVIOUS PAGE</u>				
14.8.13	<u>Hosereels</u> Non recessed swinging type hosereel complete with 30 metres of 20mm internal diameter rubber fire hose with nylon spray/jet shut off nozzle , conforming to BS 5274	2	No		
14.8.14	Wire brush , clean, and paint complete installation with one coat of red oxide primer, undercoat, and gloss coat to Architects colour including banding and colour coding to British Standards	2	Sum		
14.8.15	<u>Portable Fire Extinguisher</u> 9Kg catridge type general purpose portable dry powder fire extinguisher fully charged or equal and approved.	7	No.		
14.8.16	<u>Carbon dioxide Gas Fire Extinguisher</u> 5kg carbon dioxide gas portale fire extinguisher complete with pressure gauge,initial charge and mounting brackets	7	No.		
14.8.17	<u>Water Carbon Dioxide</u> 9.0Litre Water carbon dioxide (WCo2) portable fire extinguisher complete wth pressure gauge,initial charge and mounting brackets.	7	No.		
14.8.18	<u>Signage</u> Allow for the Signage for fire exits and fire instructions all as described in the particular specifications and to the Project Enginneer's Approval.	1	ITEM		
14.8.19	<u>Testing</u> Allow for testing the whole fire fighting equipments to leave in sound working condition and to the Engineer's satisfaction	1	ITEM		
	TOTAL FIRE FIGHTING CARRIED FORWARD TO BILL NO. 11 SUMMARY PAGE				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO.9:</u> <u>ON-SITE WASTEWATER TREATMENT PLANT</u> <u>Preliminaries, Drawings, Manuals, Handovers,</u> <u>Training, Regulatory Matters, Operation &</u> <u>Maintenance</u>				
14.9.1	Allow for Start-Up & Training Programme of Clients designated Site Operators & Maintenance Personnel. A start-up and operator training program enables the operator to learn about the treatment process and the equipment used in the process. Start-up involves pre-commissioning checks of the process mechanical and electrical equipment. After wet-testing procedures, maintenance and servicing requirements are given. When the process has been commissioned, operator training will take place so that the operator/s can learn operational monitoring, process cycle changes, and troubleshooting. Personel to be full capable of of regular and routine maintence tasks and reporting.	1	SUM		
14.9.2	Allow for Monthly Maintenance visits for period of Twelve (12) Months	1	SUM		
14.9.3	Allow to liase with the NEMA authorities, assit client with submitting application and obtaining discharge licence for the Waste Water treatment Plant	1	SUM		
14.9.4	On completion of the Waste water treatment plant, take water samples as necessary to Certified Laboritory for testing. Submit tests and results to NEMA along with all necessary application forms and obtain NEMA approval and licence to operate the Waste Water treatment Plant	1	SUM		
14.9.5	Allow for any other item not necessarily mentioned here to provide a complete working system to the Satisfaction of the engineer	1	SUM		
	<u>Waste Water Treatment Plant</u>				
14.9.6	Supply, Install, Test and Commission the Moving Bed Biofilm Reactor (MBBR) Waste Water Treatment System, With a capacity of treating 100PE with an average flow rate of 15,000 lts per day . With a BOD load of 6Kgs per day , Ammonia Nitrogen load of 4Kgs per day . With minimum treated discharge requirment of BOD <30mg/lit, TSS <30mg/lit, Ammonia Nitrogen <20mg/lit . Complete with all Media, Screens, Pumps, Aeration Blowers, Aeration Diffusers, Manifolds, Level sensors, Valves, Piping, Fittings and Accessories to fully conform to the specifiied discharge requirements.	1	Item		
	TOTAL CARRIED TO NEXT PAGE				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BALANCE B/F FROM PREVIOUS PAGE				
14.9.7	Main control panel (MCP), NEMA 4 free-standing enclosure with forced air ventilation. The MCP is the "intelligence" of the treatment process. Electrical Control Panel with PLC, electrical isolators, overload protection, Equipment running and trip indication lights, automatic and manual override switches. Minimum IP 55 enclosure. Audio-visual alarm indicator to be provided outside the control shed. Allow for PLC complete with Graphical Human Machine Interface (HMI). Alarm, fault and process indicators will be displayed on the process control panel.	1	NO		
14.9.8	Allow for high specification internet based Remote Monitoring & Control using GSM/GPRS/IoT technology with real-time monitoring, control and alerts of the status and alarms of the plant's operations by both supplier and client parties. User access via mobile phone App, web portal, SMS/Email alerts for critical plant condition.	1	SUM		
14.9.9	Allow for MBBR media of High Quality Virgin High Density Polyethylene (HDPE). Quality of media shall have Specific Gravity of 0.96 and bulk density of 125kg/m ³ . Required Surface Area specification shall be 675m ² /m ³ .	1	SUM		
14.9.10	Process Aeration Blowers 1.6 kW / 3 HP positive displacement (PD), one (1) duty, one (1) standby.	2	NO		
14.9.11	Fine bubble aeration system, in-basin pipes and connections to the top of the wall of the basin.	1	SUM		
14.9.12	9" Fine Bubble Disc diffusers. Specification is PTFE coated EPDM membranes. PTFE protective layer is to ensure extended useful lifespan of diffusers over standard EPDM diffuser products.	35	NO		
14.9.13	Allow for Coarse inlet Screen 2" slots for capture of large rags and solids. Fabricated with 50mm polypropylene structure & Stainless Steel.	1	NO		
14.9.14	Allow for PolyLok PL-625 Effluent Filter with 1/32" linear feet filter slot size for capture of smaller fine solids. Effluent Filter shall come with automatic shutoff ball for closing outlet to avoid solids wash through during servicing, as acting as a gas deflector.	3	NO		
14.9.15	1 HP submersible RAS/WAS pumps	1	NO		
14.9.16	Influent pumps, one (1) duty and one (1) standby	2	NO		
	TOTAL CARRIED TO NEXT PAGE				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BALANCE B/F FROM PREVIOUS PAGE				
14.9.117	Chemical dosing pumps and controls for sodium hypochlorite, plus chemical makeup tank. System for Chlorine Disinfection of Treated Waste Water.	1	SUM		
14.9.118	All pipe & fittings as required to complete the interconnecting system and all necessary fittings, valves and accessories.	1	SUM		
14.9.119	All Electrical wiring as required to complete the interconnecting system and all necessary conduits, fittings and accessories.	1	SUM		
14.9.120	Allow for Installation of Wastewater Treatment Plant Equipment, include all Labour, Transport & Sundries Costs	1	SUM		
	<u>Bio- Reactor</u>				
	<u>Supply, install, test and commission the following</u>				
14.9.21	5000lts/ hr Bio- Reactor DAF- Dissolved Air Floation-system with a bubble size of less than 10um, Dissolved gas efficiency is over 95%, the solid suspended matter content in effluent to be less than 20 mg/L	1	ITEM		
	<u>TOTAL FOR ON-SITE WASTEWATER TREATMENT PLANT CARRIED TO SUMMARY</u>				

PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

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PROPOSED WORKS AT KILIFI CENTRAL LANDING SITE IN KILIFI NORTH SUB-COUNTY - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>BILL NO. 1 SUMMARY PAGE:-</u>				
14.1	INTERNAL PLUMBING				
14.2	SANITARY FITTINGS				
14.3	DRAINAGE				
14.4	TESTING				
14.5	ICE FLAKE MACHINE, ROOM INSULATION AND ACCESSORIES				
14.6	BUILDERS WORK				
14.7	WATER RETICULATION				
14.8	FIRE FIGHTING				
14.9	WASTE WATER TREATMENT				
14.10	GENERAL ITEMS				
	TOTAL FOR MECHANICAL WORKS CARRIED FORWARD TO GRAND SUMMARY PAGE				

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT
KIDONGO, MOMBASA**

Item	Description	Unit	Qty	Rate	Amount
	BILL NO. 16: DAYWORKS				
	<u>The dayworks rates priced below should include all overheads and profits</u>				
	<u>Provision of labour</u>				
16.1.1	Porter	Hrs	10		
16.1.2	Semi-skilled	Hrs	10		
16.1.3	Mason/	Hrs	10		
16.1.4	Steel fixer	Hrs	10		
16.1.5	Carpenter	Hrs	10		
16.1.6	Painter	Hrs	10		
16.1.7	Tile fixer	Hrs	10		
16.1.8	Welder/Electrician	Hrs	10		
16.1.9	Foreman	Hrs	10		
16.1.10	Carpenter for joinery	Hrs	10		
16.1.11	Plumber	Hrs	10		
16.1.12	Electrician	Hrs	10		
	<u>Provision of plant</u>				
	<u>Any plant to be provided must be in good working condition. The day works rate provided must be inclusive of all running costs and overheads</u>				
16.2.1	Lorry (minimum 8 tonne capacity - or similar)	Hrs	5		
16.2.2	Tipper (8 tonne capacity - or similar)	Hrs	5		
16.2.3	Compressor	Hrs	5		
16.2.4	Roller	Hrs	5		
16.2.5	Plate compactor	Hrs	5		
16.2.6	Wheel loader	Hrs	5		
16.2.7	Grader	Hrs	5		
16.2.8	Crawl loader	Hrs	5		
16.2.9	Jack hammer	Hrs	5		
16.2.10	Dewatering pump	Hrs	5		
16.2.11	Concrete mixer	Hrs	5		
16.2.12	Dumper	Hrs	5		
16.2.13	Hand tools (power drills, grinders, torque wrenches, etc.)	Hrs	5		
16.2.14	Excavator	Hrs	5		
16.2.15	Bulldozer	Hrs	5		
16.2.16	Motor grade	Hrs	5		
16.2.17	Portable generator	Hrs	5		
16.2.18	3-Phase power generator	Hrs	5		
16.2.19	Vibrator	Hrs	5		
	Carried to Collection				
Item	Description	Unit	Qty		

**PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT
KIDONGO, MOMBASA**

<u>Provision of material</u> <u>Any materials to be provided must be of good quality and upto standard for use in permanent works. The rate provided must be inclusive of all delivery costs and overheads</u>					
16.3.1	Ordinary portland cement @ 50kg bags	Bags	10		
16.3.2	Clean river sand	m3	10		
16.3.3	12-20mm graded course aggregate	m3	10		
16.3.4	Manufactured sand / Quarry dust / 0-6mm aggregate	m3	10		
16.3.5	Graded crushed stone (crusher run - 0 to 60mm)	m3	10		
16.3.6	Murram	m3	10		
16.3.7	Hardcore	m3	10		
16.3.8	Redsoil	m3	10		
16.3.9	Reinforcement steel	Kg	100		
16.3.10	Sawn timber formwork	m2	10		
16.3.11	6mm thick clear glass	m2	10		
16.3.12	Water	lts	100		
16.3.13	Diesel fuel	lts	10		
Carried to Collection					
Bill No. 14					
DAYWORKS					
<u>BILL SUMMARY- DAYWORKS</u>					
Total Brought Forward from Page No.			Page No.		
			.16/1		
			.16/2		
Carried to Final Summary					
Bill No. 14					
DAYWORKS					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
17.0.1	<p>(All Rates are V.A.T Inclusive) BILL NO. 17; ESMP <u>PRELIMINARIES FOR HEALTH AND SAFETY, AIR AND NOISE MONITORING & CONTROL, WASTE MANAGEMENT</u></p> <p><u>The Tenderer's attention is drawn to the fact that the Employer reserves the right to hold back the amount priced against below items either in full or in part due to any non-performance on the Contractor's part of his obligations.</u></p> <p><u>SAFETY, HEALTH AND WELFARE OF WORKERS</u> The Contractor shall allow for providing for the safety, health and welfare of work people and for complying with any relevant Ordinances, Regulations or Union Agreement</p> <p>In addition to complying with the requirements of the Occupational Safety & Health Act 2007 and the Factories Act, the Contractor and Sub-Contractors shall be required to comply in all respects with the Factories (Building Operations and Work of Engineering Construction) rules together with the Construction Safety Plan in compliance with International Labour Organizations (ILO) Regulations.</p> <p>The Contractor will further be required to identify a Site Environment Health and Safety Officer in accordance with the above Rules who will be responsible for the health and safety of workers on the site. This includes awareness and sensitization on environmental protection, occupational and community health and safety, code of conduct for contractors personnel, risk of spread of communicable diseases including sexually transmitted diseases such as HIV/AIDS, Gender Equity, Sexual Harassment and abuse amongst workers in the workplace, Spread of COVID-19 amongst community members during the consultation processes and Grievance redress mechanism.</p> <p>The Contractor will also be required to provide approved personal protective equipment such as good quality hard hats, gumboots, safety boots and other necessary protective gear for all workers on site including Sub-Contractors' workers and also for the exclusive use by the Clerk of Works and representatives of the Employer and Consultants.</p> <p>The tenderer's attention is further drawn to the fact that he is required to submit with his tender a detailed write-up on how he intends to implement the above Construction Safety Plan. It should be noted that this write-up will form a heavily weighted criteria in the evaluation of the tenders.</p> <p>The contractor will be required to provide adequate temporary Notices and Signs shall be posted to indicate e.g. that "construction is in progress" and "entry is at ones own risk" or "trespassers are liable to be prosecuted" or such other Notices and Signs as the Architect may consider necessary from time to time. The design and location of such signs will be to the approval of the Architect.</p>	Item	1	1,500,000.00	1,500,000.00
	Total Carried to Collection			Ksh	1,500,000.00

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
17.0.2	<p><u>SANITATION OF THE WORKS</u></p> <p>The sanitation of the works shall be provided, maintained and removed on completion of works by the Contractor to the satisfaction of the Architects, health department and local Authorities.</p> <p>The sanitation facilities should be gender sensitive (separate for male and female) shall be for the use by Contractors and sub-Contractors workmen etc without charge.</p> <p>The Latrine/toilet shall be enclosed plastered and painted masonry wall, corrugated sheets roofs ,with concrete tiled floors to facilitate washing. Their location shall be agreed with the Architects and the works shall not be commenced before the sanitary accommodation has been approved by the above mentioned authorities.</p> <p>The Contractor will be required to pay all conservancy charges and shall ensure clean daily maintenance and disinfecting of the latrines/toilet, and not less than once per week, the whole area shall be sprayed with disinfectant and insecticides and any temporary drains shall be removed and all works and surfaces disturbed made good and then the whole area disinfected and left clean and free from pollution to the satisfaction of the Architect and local authorities.</p>	Item	1	300,000.00	300,000.00
17.0.3	<p><u>PREVENTION OF DISTURBANCE AND NUISANCE</u></p> <p>Tenderers should note that normal activities shall be continuing in the surrounding buildings during the construction period.</p> <p>Minimum disturbance by noise, dust, water or movement of vehicles, materials, labour or plant must be caused to the function of the existing adjacent buildings in the vicinity and the occupants and staff therein. The Contractor shall comply with all instructions issued by the Employer or Architect with regard to minimizing such disturbances.</p> <p>The Contractor shall not directly or indirectly or otherwise by himself or through his agents cause nuisance. Should he do so he shall be directly responsible for such acts.</p> <p>The works and such sections of the site necessary shall be under the entire care and control of the contractor during the whole period of the contract and shall take all possible precautions to prevent any nuisance, inconvenience or injury to the holder or occupiers of the existing or surrounding properties and to the public generally, and shall at all times keep all paths and roads affected by the works in a safe and clear state, and shall use proper precautions to ensure the safety of all wheeled traffic and pedestrians.</p>	Item	1	200,000.00	200,000.00
17.0.4	<p><u>GRIEVANCE REDRESS MECHANISM (GRM) WORKER</u></p> <p>The Contractor shall employ, maintain and equip throughout the project duration staff assigned the functions for GRM and the implementation of social safeguard issues.</p>	Item	1	960,000.00	960,000.00
	Total Carried to Collection			Ksh	1,460,000.00

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
17.0.5	<p><u>CLEANING, REMOVAL OF PLANT AND RUBBISH ETC</u></p> <p>The Contractor shall upon completion of the works remove and clear away all temporary buildings, scaffolding, plant, rubbish and unused materials, surplus excavated materials and shall leave the whole of the site of the works in a clean and tidy state to the satisfaction of the Architect, including clearing away and making good all traces of dirt.</p> <p>Particular care shall be taken in leaving windows, floors and fittings clean and the removal of all paint and cement stains therefrom.</p> <p>He shall also remove all rubbish and dirt from the site as it accumulates or as directed by the Architect. The Contractor is to find his own dump and shall pay all charges in connection therewith.</p>	Item	1	50,000.00	50,000.00
17.0.6	<p><u>AMBIENT AIR QUALITY AND NOISE MONITORING</u></p> <p>The Contractor to carry out continuous monitoring of the ambient air quality and Noise measurements as well as vibration monitoring on quarterly basis during the construction phase and this should be done at different weather and seasons to ensure that all the weather patterns are taken into consideration during the monitoring process.</p>	Item	1	450,000.00	450,000.00
	Total Carried to Collection Below			Ksh	500,000.00
	<p><u>SECTION SUMMARY- ESMP</u></p> <p>Total Brought Forward from Page 17/1</p> <p>Total Brought Forward from Page 17/2</p> <p>Total Brought Forward from Above</p>				<p>1,500,000.00</p> <p>1,460,000.00</p> <p>500,000.00</p>
	TOTAL FOR ESMP TO GRAND SUMMARY				3,460,000.00

PROPOSED CONSTRUCTION OF FISH BANDA, SOCIAL HALL, ABLUTION BLOCK, AND ACCESS ROAD AT KIDONGO, MOMBASA

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21. GRAND SUMMARY

Contract Name: CONSTRUCTION OF KIDONGO FISH LANDING SITE

RFBNo.: KE-MOMBE&MA-MSA-2024-008-CW

<i>General Summary</i>	<i>Page</i>	<i>Amount</i>
Bill No.1 GENERAL PRELIMINARIES	GP/14	
Bill No.2 PARTICULAR PRELIMINARIES	PP/9	
Bill No.3 ABLUTION BLOCK	3/18	
Bill No.4 FISH BANDA	4/25	
Bill No.5 SOCIAL HALL	5/12	
Bill No.6 FISH GEAR MENDING SHED	6/10	
Bill No.7 PUMP ROOM	7/14	
Bill No.8 POWER HOUSE	8/16	
Bill No.9 BOUNDARY WALL	9/7	
Bill No.10 GATEHOUSE	10/16	
Bill No.11 FOUL WATER DRAINAGE	11/4	
Bill No.12 WALKWAYS AND RAMPS	12/3	
Bill No.13 DRIVEWAY AND PARKING	13/3	
Bill No.14 MECHANICAL WORKS	MECH/30	
Bill No.15 ELECTRICAL WORKS	ELEC/22	
Bill No.16 DAYWORKS	16/2	
Bill No.17 ENVIRONMENT AND SOCIAL MANAGEMENT (ESMP)	17/3	3,460,000.00
<i>Subtotal of Bills</i>	<i>(A)</i>	
<i>Total for Daywork (Provisional Sum)*</i>	<i>(B)</i>	
<i>Provisional Sum of Kenya Shillings Five Million Only (Kes 5,000,000.00) for fluctuationsⁱⁱ</i>	<i>(C)</i>	<i>5,000,000.00</i>
<i>Total of Bills Plus Provisional Sums (A + B + C)ⁱ</i>	<i>(D)</i>	
<i>Add Provisional Sum of Kenya Shillings Five Million Only (Kes 5,000,000.00) for Contingency Allowanceⁱⁱ</i>	<i>(E)</i>	<i>5,000,000.00</i>
<i>Bid Price (D + E) (Carried forward to Letter of Bid)</i>	<i>(F)</i>	

i) All Provisional Sums are to be expended in whole or in part at the direction and discretion of the Engineer in accordance with Sub-Clauses 13.4 and 13.5 of the General Conditions except with respect to DAAB Fees and Expenses for which Sub-Clause 13.4 of the Particular Conditions – Part B shall apply.

ii) To be entered by the Employer.* For evaluation purposes, Provisional Sum, other than Daywork will be excluded