



**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 MINJILA FISHERIES OFFICE**

**Employer:** State Department for Blue Economy & Fisheries  
**Project:** Kenya Marine Fisheries Socio-Economic  
Development Project (KEMFSED)  
**Contract Title:** **CONSTRUCTION OF MINJILA FISHERIES  
OFFICE**  
**Country:** Republic of Kenya  
**Loan No./Credit No./Grant No.:** 6540-KE  
**RFBNo.:** KE-MOMBE&MA-TR-2024-013-CW  
**Issued on:** 13<sup>TH</sup> FEBRUARY 2024

**VOLUME 2 OF 4**

**BILLS OF QUANTITIES**

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## **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.<sup>1</sup>

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<sup>1</sup> 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: BUILDING WORKS**
  4. **BILL NO.4: GATEHOUSE**
  5. **BILL NO.5: PERIMETER WALL & GATE**
  6. **BILL NO.6: FOUL DRAINAGE**
  7. **BILL NO.7 : MECHANICAL WORKS**
  8. **BILL NO.8: ELECTRICAL WORKS**
  9. **BILL NO.9: DRIVEWAY, PARKING, WALKWAYS & STORMWATER DRAINAGE**
  10. **BILL NO.10: ESMP**
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 SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>BILL NO. 3: OFFICE BLOCK</b>				
	<b>ELEMENT NO. 1</b>				
	<b>SUBSTRUCTURES (ALL PROVISIONAL)</b>				
	<b>Site clearance</b>				
3.1.1	Clear the site off grass, shrubs and all vegetation; cart away as directed by PE.	799	sm		
3.1.2	Excavate vegetable soil average 200mm deep and cart away as directed	799	sm		
	<b>Excavation</b>				
3.1.3	Excavate oversite to reduce levels commencing from stripped level average 300mm deep and spread on site av. 10 meters away	240	cm		
3.1.4	Excavate for strip foundation starting from reduced level not exceeding 1.50 meters deep and cart away as directed	96	cm		
3.1.5	Ditto in column bases	173	cm		
3.1.6	Extra over excavation for excavating in rock.	81	cm		
3.1.7	Return, fill-in and rum selected excavated material	315	cm		
3.1.8	Remove and cart away from site surplus excavated material as directed	193	cm		
	<b>Diposal of water</b>				
3.1.9	Keeping all excavations free from all water including spring or running water		Item		
	<b>Planking and strutting</b>				
3.1.10	Uphold the sides of all excavations		Item		
	<b>Filling</b>				
3.1.11	Hardcore filling in making up levels exceeding 300mm thick, depositing and compacting in layers of 150 mm maximum thickness .	959	cm		
3.1.12	50mm thick murram blinding to surfaces of fill	799	sm		
<b>CARRIED TO COLLECTION</b>					

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>Anti-termite treatment</b>				
3.1.13	TERMIDOR' or other equal and approved insecticide with a ten-years guarantee to surfaces of fill and tops of foundations	959	sm		
	<b>Concrete</b>				
3.1.14	50mm thick mass concrete mix (1:4:8) to bottoms of foundations	192	sm		
3.1.15	Ditto to column bases	115	sm		
	<b>Insitu concrete; reinforced; class 25 / (20mm); vibrated</b>				
3.1.16	Foundations in trenches irrespective of thickness	38	cm		
3.1.17	Ditto in column bases	35	cm		
3.1.18	Ditto in columns	6	cm		
3.1.19	150mm thick bed	765	sm		
	<b>Reinforcement</b>				
	<b>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</b>				
3.1.20	12mm bars	3,160	KG		
3.1.21	10mm bars	2,765	KG		
3.1.22	8mm bars	1,975	KG		
<b>CARRIED TO COLLECTION</b>					



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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>Fabric; B.S. 4483</b>				
3.1.23	Reference A142 mesh 200 x 200 mm , weight 2.22 KGs per square meter ( measured net - no allowance made for laps( including bends, tying wire and distance blocks	765	sm		
	<b>Sawn formwork to insitu concrete as described:-</b>				
3.1.24	Sides of foundations	128	sm		
3.1.25	Ditto to sides of columns	77	sm		
3.1.26	Edges of ground floor slab; 75 to 150mm wide	142	lm		
	<b>Walling</b>				
3.1.27	200mm thick approved local natural stone; roughly squared to foundation walling; bedding and jointing in cement sand (1:3) mortar	688	sm		
	<b>Damp proofing</b>				
3.1.28	Polythene; 500 gauge, 150mm laps (no allowance made to laps), horizontal; 1 no. layer laid on murram blinding (m/s)	765	sm		
3.1.29	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	320	lm		
3.1.30	<b>Insitu finishings</b> 14mm thick 2 No. coatwork cement sand (1:3) render; wood floated to concrete or blockwork base to walls; external	128	sm		
3.1.31	<b>Prepare and apply three coats black bituminous paint on:-</b> Rendered plinths, externally.	128	sm		
<b>CARRIED TO COLLECTION</b>					

PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	COLLECTION				
	From page BW/1				
	From page BW/2				
	From page BW/3				
TOTAL FOR SUBSTRUCTURES CARRIED TO SUMMARY					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 2 CONCRETE SUPERSTRUCTURE</b>				
	<b>In situ concrete; reinforced; class 25/ (20mm); vibrated</b>				
3.2.1	Beams	53	SM		
3.2.2	Columns	33	SM		
3.2.3	175mm Thick suspended slab	1,388	SM		
	<b>Reinforcement</b>				
	<b>T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers. Ribbed bars to KS ISO 6935- 2:2007</b>				
3.2.4	25mm diameter	3,784	KG		
3.2.5	20mm diameter	5,100	KG		
3.2.6	16mm diameter	6,909	KG		
3.2.7	12mm diameter	4,606	KG		
3.2.8	10mm diameter	9,870	KG		
3.2.9	8mm diameter	2,632	KG		
	<b>Sawn formwork to insitu concrete as described:-</b>				
3.2.10	To sides and soffits of slabs	1,388	sm		
3.2.11	Suspended floor slab over 75mm but not exceeding 150mm high	356	lm		
3.2.12	Sides and horizontal soffits of beams	608	sm		-
3.2.13	Vertical sides of columns	569	sm		-
<b>TOTAL FOR FRAME CARRIED TO SUMMARY</b>					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 3</b>				
	<b>STAIRCASES AND STAIRCASE FINISHES</b>				
	<b>INSITU CONCRETE : REINFORCED</b> Normal; class 25/20mm; Vibrated				
3.3.1	Steps, staircases or strings	9	CM		-
3.3.2	150mm thick concrete landings	15	SM		
	<b>REINFORCEMENT (REMEASURED)</b>				
	<b>T-Bars; Deformed steel ribbed reinforcement bars;</b> <b>B.S. 4449 including bends, hooks, tying wire, distance</b> <b>blocks, and spacers. Ribbed bars to KS ISO 6935-</b> <b>2:2007</b>				
3.3.3	12 mm Diameter	506	KG		
3.3.4	10 mm Diameter	619	KG		
	<b>FORMWORK TO INSITU CONCRETE</b>				
	<b>Formwork generally</b>				
	<b>Risers of steps and staircases</b>				
3.3.5	Girth 75m m to 150mm	126	m		
	<b>Edges of stringers of staircases; to profile</b>				
3.3.6	Over 225mm but not exceeding 300mm wide	39	m		
	<b>Vertical edge : suspended landing :</b>				
3.3.7	Over 150mm but not exceeding 225mm high	3	m		
	<b>To soffits; horizontal</b>				
3.3.8	Landing	15	m2		
	<b>Soffits; sloping</b>				
3.3.9	Waists of stairs and the like	39	m2		
<b>CARRIED TO COLLECTION</b>				<b>Ksh</b>	

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>METAL WORK</b>				
	<b>BALUSTRADES</b>				
	<b>ROLLED PLATES, BARS, SECTIONS AND TUBES</b>				
	Supply, assemble and fix 1150mm high purpose made stainless steel (grade 3.1.6) glazed balustrading comprising of 50mm x 12mm thick stainless steel double flat bar vertical support, balusters fixed to concrete floor at 1025mm centres including 200mm x 150mm x 15mm thick stainless steel base plate fixed to concrete reinforcement and at the top 3mm thick x 75mm diameter oval stainless steel handrail tube ; including all necessary cleats, stiffeners and the like; all to Architect's instructions and approval				
3.3.10	1150 mm high to detail	39	LM		
	<b>STAIRCASE FINISHES</b>				
	Supply and fix granito tiles; to approved pattern; bedding and jointing in approved adhesive with proprietary grouting laid on cement sand bed (m/s);				
	12 mm thick; butt joints strait both ways; to cement and sand base (m/s) ; generally to				
3.3.11	To treads; 300 mm wide	114	LM		
3.3.12	To risers; 150 mm high	126	LM		
3.3.13	To landing; tiles to approved sizes and pattern	15	SM		
3.3.14	Edges of stringers of staircases; to profile	39	LM		
3.3.15	Open edges of landing; 150 to 225mm; internal	3	m		
3.3.16	12 mm thick x 150 mm high skirting to stairs; internal	80	m		
<b>CARRIED TO COLLECTION</b>				<b>Ksh</b>	

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
3.3.17	Extra; 3 No. 5 mm wide x 3 mm deep anti slip grooves cut into 12 mm thick granito tiles finish (m/s)  <b>BEDS OR BACKINGS</b>  Screed ; Cement sand backing (1:4) 20mm thick one coat beds; wood floated to receive granite slab (m/s) to concrete or block work base; generally to	114	m		
3.3.18	Treads; 300 mm wide; internal	114	m		
3.3.19	Risers; 150 mm high; internal	126	m		
3.3.20	Landing	15	SM		
3.3.21	Edges of stringers of staircases; to profile	39	m		
3.3.22	Open edges of landing; 150 to 225mm; internal  15 mm thick one coat beds; wood floated to receive aluminium composite panels (m/s) to concrete or block work base; generally to	3	m		
3.3.23	Soffits of landing; horizontal	15	m <sup>2</sup>		
3.3.24	Soffits of stairs; sloping	39	m <sup>2</sup>		
<b>CARRIED TO COLLECTION</b>				<b>Ksh</b>	
	<b>COLLECTION</b>  From page BW/6  From page BW/7  From page BW/8				
<b>TOTAL FOR STAIRCASE CARRIED TO SUMMARY</b>					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 4</b>				
	<b>RAMPS AND RAMP FINISHES</b>				
	<b>INSITU CONCRETE : REINFORCED</b>				
	<b>Normal :class 25/20mm : Vibrated</b>				
	<b>Ramp</b>				
3.4.1	200 mm thick; sloping not exceeding 15 degrees from the horizontal; 50 mm thick top layer power float finish treated with an approved hardener applied to manufacturer's printed instructions	116	m2		
3.4.2	200mm thick concrete landings	8	m2		
	<b>150 mm up stand RC ramp wall</b>				
3.4.3	Generally	15	m2		
	<b>REINFORCEMENT (REMEASURED)</b>				
	<b>T-Bars; Deformed steel ribbed reinforcement bars; B.S.4449 including bends, hooks, tying wire, distance blocks, and spacers. Ribbed bars to KS ISO 6935-2:2007</b>				
3.4.4	12 mm Diameter	951	KG		
3.4.5	10 mm Diameter	1,134	KG		
	<b>FORMWORK TO INSITU CONCRETE</b>				
	<b>Formwork generally</b>				
	<b>Soffits; sloping not exceeding 15 degrees from the horizontal; internal; over 300 mm</b>				
3.4.6	Generally to ramps and landings	124	m3		
	<b>Edges of ramp and landings</b>				
3.4.7	Over 150mm but not exceeding 225mm wide	202	m		
	<b>To vertical or battering sides</b>				
3.4.8	Up stand walls; vertical	30	m2	-	
<b>CARRIED TO COLLECTION</b>				<b>Ksh</b>	

PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>METAL WORK</b>				
	<b>BALUSTRADES</b>				
	<b>ROLLED PLATES, BARS, SECTIONS AND TUBES</b>				
	Supply, assemble and fix 1150mm high purpose made stainless steel (grade 3.1.6) glazed balustrading comprising of 50mm x 12mm thick stainless steel double flat bar vertical support, balusters fixed to concrete floor at 1025mm centres including 200mm x 150mm x 15mm thick stainless steel base plate fixed to concrete reinforcement and at the top 3mm thick x 75mm diameter oval stainless steel handrail tube ; including all necessary cleats, stiffeners and the like; all to Architect's instructions and approval				
3.4.9	1150 mm high to detail	100	LM		
	<b>RAMP FINISHES</b>				
	Plaster; cement, sand and lime; with an approved integral waterproofing additive applied to manufacturer's instructions; steel trowelled; hard and smooth Soffits ;sloping not exceeding 15 degrees from the horizontal ; internal ;				
3.4.10	Generally to ramps	116	m2		
3.4.11	Walls; vertical;	30	m2		
	<b>To open edges of ramp</b>				
3.4.12	150mm; internal	202	m		
	<b>BEDS OR BACKINGS</b>				
	<b>Screed ; Cement sand backing (1:4)</b>				
	15 mm thick one coat beds; wood floated to receive terrazzo finish (m/s) to concrete base; generally to				
3.4.13	Ramp floor	116	m2		
<b>CARRIED TO COLLECTION</b>				<b>Ksh</b>	



**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
3.4.14	Supply and fix terrazzo floor finish; to approved pattern laid on cement sand bed (m/s); To ramp;	116	m2		
3.4.15	20 mm thick x 150 mm high skirting to ramp upstand; internal  <b>PAINTING AND DECORATING</b>  One coat approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction  To steel trowelled plastered surfaces of soffits ;sloping not exceeding 15 degrees from the horizontal ; internal ; over 300 mm	202	m		
3.4.16	Generally to ramps, sloping soffits	124	m2		
3.4.17	Walls; vertical; internal	30	m2		
<b>CARRIED TO COLLECTION</b>				<b>Ksh</b>	

PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	COLLECTION				
	From page BW/9				
	From page BW/10				
	From page BW/11				
TOTAL FOR RAMPS AND RAMP FINISHES CARRIED TO SUMMARY					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 5</b>				
	<b>WALLING.</b>				
	<b>EXTERNAL WALLING.</b>				
	Machine cut natural stone walling jointed in cement:sand mortar mix 1:3 including 25x4mm thick hoop iron at every alternate courses.				
3.5.1	200mm thick walling.	865	SM		-
	<b>INTERNAL WALLING.</b>				
	Machine cut natural stone walling jointed in cement/sand mortar as before described.				
3.5.2	200mm thick walling.	1,012	SM		-
3.5.3	150mm thick walling.	125	SM		-
	<b>Precast concrete vent blocks</b>				
3.5.4	200mm thick vent block walling	135	SM		-
	<b>Precast concrete coping</b>				
3.5.5	75mm thick weathered and throated saddled-back coping for 200mm thick walling	145	LM		-
3.5.6	Ditto 450 x 450mm pier cap ditto to columns	51	NO		-
	<b>Horizontal damp proof course ; one layer of 3 - ply bituminous felt or other equal and approved (measured nett - allow for laps)</b>				
3.5.7	200mm Wide levelled and bedded in cement and sand (1:3) mortar under walls.	325	LM		-
<b>TOTAL FOR WALLING CARRIED TO SUMMARY</b>					<b>-</b>

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 6</b>				
	<b>ROOFING</b>				
3.6.1	50 mm cement sand 1:3 water proof screed to flat roof slab laid to fall and crossfalls	SM	734		-
3.6.2	Apply one coat bituminous primer to surface of screed including gutters	SM	734		-
3.6.3	Supply, torch and apply bituminous membrane in 200mm overlaps ditto	SM	734		-
3.6.4	Ditto sides of wall 200mm high	LM	193		-
3.6.5	50 x 50mm internal angle fillet	LM	193		-
3.6.6	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	734		-
3.6.7	Ditto sides of wall 200mm high	LM	193		-
	<b>Rainwater goods</b>				
3.6.8	Extra over for running outlet	NO	7		-
3.6.9	100mm x 75 x 0.6mm PVC down pipes fixed to wall with holding clips at 1200mm centres	LM	48		-
3.6.10	Extra over for swan neck 1000mm long	NO	7		-
3.6.11	Extra over for shoe 1000mm long	NO	7		-
3.6.12	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	1	NO		
	<b>TOTAL FOR ROOFING CARRIED TO SUMMARY</b>				-

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 7</b>				
	<b>WINDOWS</b>				
	<b>Window Cills</b>				
	<b>Normal; class 20/(20 mm); vibrated; surface fair finish</b>				
3.7.1	250 x 100 mm ; twice weathered; twice throated ; reinforced as necessary for handling; bedding, jointing and pointing in cement mortar (1:4)	600	LM		-
	<b>Aluminium Windows</b>				
	Supply and fix powder coated aluminium framed windows, to be fabricated from approved composite extruded powder coated heavy duty hollow or angle sections (minimum 2 mm thick); including glazing with 6 mm thick one way laminated glass secured to framing using approved rubber glazing strips and aluminium beading; including aluminium louvered panels; frames and framing all round mitred at corners including reinforcing cleats, fixing with aluminium screws; plugging and fixing to jambs; sealing with mastic; oiling and adjusting on completion and all necessary ironmongery such as hinges, locking devices such as windows fasteners, stays locks, bolts sliding tracks etc to Architect's approval and in accordance with Architectural drawings				
3.7.2	Window size 2000 x 1900mm high	22	NO		-
3.7.3	Window size 3700 x 900mm high	2	NO		-
3.7.4	Window size 2600 x 900mm high	2	NO		-
3.7.5	Window size 1500 x 900mm high	5	NO		-
3.7.6	Window size 2000 x 900mm high	2	NO		-
<b>TOTAL FOR WINDOWS CARRIED TO SUMMARY</b>					-

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 8</b>				
	<b>DOORS.</b>				
	<b>Wrot mvule; prime grade, selected and kept clean</b>				
3.8.1	200x50mm frames; four labours	344	LM		-
3.8.2	40x25mm architrave.	307	LM		-
3.8.3	25mm Quadrant beading.	307	LM		-
3.8.4	Fanlight beading	181	LM		-
	<b>50mm thick solid mvule hardwood panelled door ; 300mm high top fixed light.</b>				
3.8.5	Double door overall size 1200 x2550mm high, overall	4	NO		-
3.8.6	Single leaf door overall size 1000x2550mm high	12	NO		-
3.8.7	Ditto but overall size 900x2550mm high	23	NO		-
3.8.8	Ditto but overall size 800x1950mm high, no fanlight	15	NO		-
	<b>Supply and fix the following ironmongery to timber or metal as "Union" catalogue or equal and approved.</b>				
3.8.9	5- lever mortice door lock with all necessary furniture.	4	NO		-
3.8.10	3- lever mortice door lock with all necessary furniture.	34	NO		-
3.8.11	150mm stainless steel butt hinges	72	Prs		-
3.8.12	150mm stainless steel double action butt hinges	15	Prs		-
<b>CARRIED TO COLLECTION</b>					-

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
3.8.13	38mm diameter cylindrical satin steel door stop fixed to floor or wall with screw to approval	68	NO		-
3.8.14	Indicator bolt "Vacant/Engaged"	16	NO		-
3.8.15	Coat and hat hook with rubber tip in stainless steel finish	10	NO		-
3.8.16	Stainless steel kick plate	48	NO		-
	<b>Glazing</b>				
	4 mm thick clear plate glass to metal with metal putty glazing compound in panes				
3.8.17	Over 0.10 but not exceeding 0.50 square metres	10	SM		-
	<b>Painting and Decorating</b>				
3.8.18	Prepare and prime before fixing wood frames not exceeding 100mm girth.	795	LM		-
3.8.19	Ditto over 100 but not exceeding 200mm girth.	344	LM		-
3.8.20	Prepare and apply undercoat and three finishing coats of vinyl matt paint on general surfaces of wood; both internaly and externaly	239	SM		-
3.8.21	Ditto not exceeding 100mm girth	795	LM		-
3.8.22	Ditto exceeding 100 but not exceeding 200mm girth.	344	LM		-
<b>CARRIED TO COLLECTION</b>				<b>Ksh</b>	
	<b>COLLECTION</b>				
	From page BW/16				-
	From page BW/17				-
<b>TOTAL FOR DOORS CARRIED TO SUMMARY</b>					-

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 9</b>				
	<b>FINISHES</b>				
	<b>FLOOR FINISHES.</b>				
	<b>Cement and sand (1:3) screed as described in:-</b>				
3.9.1	32mm thick backing wood floated to receive ceramic tiles (m/s)	121	SM		-
3.9.2	28mm thick backing wood floated to receive granito tiles (m/s)	533	SM		-
3.9.3	20mm thick backing wood floated to receive terrazzo finish (m/s)	444	SM		-
	<b>Ceramic floor tiles</b>				
3.9.4	300 x 300 x 8 mm premium quality non slip ceramic tiles; approved pattern and colour ; fixed on and including cement slurry and grouting joints with coloured cement	121	SM		-
	<b>Granito floor tiles</b>				
3.9.5	600 x 600 x 12 mm premium quality granito tiles; approved pattern and colour ; fixed on and including cement slurry and grouting joints with coloured cement	533	SM		-
3.9.6	100x20mm granito tile skirting.	320	LM		-
	<b>Terrazzo floor finish</b>				
3.9.7	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	444	SM		-
3.9.8	Ditto 100mm high skirting	286	LM		-
<b>CARRIED TO COLLECTION</b>					-



**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>WALL FINISHES.</b>				
	<b>External Wall Finishes</b>				
	<b>12mm Gauged lime plaster (1:2:9) : steel trowelled finish : on concrete or blockwork : to</b>				
3.9.9	Sides of walls, beams and openings	865	SM		-
	<b>Painting</b>				
	<b>Prepare and apply three coats interior quality eggshell paint as "Crown Paints" or other equal and approved paint to:-</b>				
3.9.10	Plastered surfaces of walls, beams and openings	865	SM		-
	<b>Internal Wall Finishes</b>				
	<b>12mm Gauged lime plaster (1:2:9) : steel trowelled finish : on concrete or blockwork : to</b>				
3.9.11	Sides of walls, beams and openings	2,649	SM		-
	<b>Painting</b>				
	<b>Prepare and apply three coats interior quality eggshell paint as "Crown Paints" or other equal and approved paint to:-</b>				
3.9.12	Plastered surfaces of walls, beams and openings	2,649	SM		-
	<b>Cement and sand (1:3) backing as described in:-</b>				
3.9.13	12mm thick with wood float finish: on concrete or blockwork: to receive ceramic wall tiles	490	SM		-
	<b>Ceramic wall tiles</b>				
3.9.14	300 x 300 x 8 mm premium quality ceramic wall tiles; approved pattern and colour ; fixed on and including cement slurry and grouting joints with coloured cement	490	SM		-
<b>CARRIED TO COLLECTION</b>					-

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>CEILING FINISHES.</b>				
	<b>15mm Gauged lime plaster (1:2:9) : steel trowelled finish : to:-</b>				
3.9.15	Soffits of slabs	1,098	SM		-
	<b>Painting and decorations</b>				
	<b>Prepare, skim and spray paint three coats sylk vinyl as 'Crown Paints' or other equal and approved to:-</b>				
3.9.16	Soffits of slabs	1,098	SM		-
	<b>EXTERNAL FINISHES</b>				
	<b>STEPS</b>				
	<b>Supply and fix non-slip ceramic tiles; to approved pattern; bedding and jointing in approved adhesive with proprietary grouting laid on cement sand bed (m/s);</b>				
	<b>600x600x12 mm thick; butt joints strait both ways; to cement and sand base (m/s) ; generally to</b>				
3.9.17	To treads; 300 mm wide	60	LM		
3.9.18	To risers; 150 mm high	60	LM		
3.9.19	Landing	50	SM		
	<b>BEDS OR BACKINGS</b>				
	<b>Screed ; Cement sand backing (1:4) 32mm thick; wood floated to receive ceramic tiles (m/s) to concrete or block work base; generally to</b>				
3.9.20	Treads; 300 mm wide; internal	60	m		
3.9.21	Risers; 150 mm high; internal	60	m		
3.9.22	Landing	50	SM		
3.9.23	Allow a Prime Cost of Shillings Three Million (3,000,000) for landscaping.				3,000,000.00
<b>CARRIED TO COLLECTION</b>					

PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	COLLECTION				
	From page BW/18				-
	From page BW/19				-
	From page BW/20				-
TOTAL FOR FINISHES CARRIED TO SUMMARY					-

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 10</b>				
	<b>FIXTURES AND FITTINGS</b>				
3.10.1	Allow a provisional sum of Ksh. Five Hundred Thousand only for the installation of kitchenette cabinets and countertops				500,000.00
3.10.2	Allow a provisional sum of Ksh. Five Hundred Thousand only for the installation of the reception desk and countertop				500,000.00
<b>TOTAL FOR FIXTURES AND FITTINGS CARRIED TO SUMMARY</b>					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>BUILDER'S WORK SUMMARY</b>				
1	SUBSTRUCRTURE				
2	SUPERSTRUCTURE				
3	STAIRCASE AND STAIRCASE FINISHES				
4	RAMPS AND RAMP FINISHES				
5	WALLING				
6	ROOFING				
7	WINDOWS				
8	DOORS				
9	FINISHES				
10	FIXTURES AND FITTINGS				
<b>TOTAL BUILDER'S WORK CARRIED TO GRAND SUMMARY</b>					<b>-</b>

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>BILL NO. 4: GATE HOUSE</b>				
	<b>ELEMENT NO 1.</b>				
	<b>SUBSTRUCTURE WORKS (All Provisional)</b>				
	<b>EXCAVATION AND EARTHWORKS</b>				
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	14	SM		
4.1.2	Excavate oversite average 250mm deep and cart away	14	SM		
4.1.3	Excavate trench for strip foundation: not exceeding 1.5m deep	14	CM		
4.1.4	Ditto but exceeding 1.50 m deep but not exceeding 3.0 m deep	7	CM		
4.1.5	Excavate for column pits: not exceeding 1.5m deep	9	CM		
4.1.6	Ditto but exceeding 1.50 m deep but not exceeding 3.0 m deep	8	CM		
4.1.7	Extra over excavation from rock of any class in any position	11	CM		
	<b>Disposal of excavated material</b>				
4.1.8	Return fill in and ram in excavations	30	CM		
4.1.9	Load and cart away surplus material	8	CM		
	<b>Disposal of Water</b>				
4.1.10	Allow for keeping the whole of the excavation free from mud, water and fallen materials	1	Item		
	<b>Planking and strutting</b>				
4.1.11	Allow for planking and strutting sides of excavation	1	Item		
	<b>Filling</b>				
4.1.12	300mm thick (minimum) approved hardcore handpacked in layers not exceeding 150mm	14	SM		
<b>Carried to collection</b>					

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4.1.13	50mm Thick Quarry dust blinding to the surface of hardcore rolled smooth to receive polythene sheeting	14	SM		
4.1.14	<b>Insecticide Treatment</b> Treat hardcore surface with approved antitermite applied in accordance with the manufacturer's instructions and subject to a TEN YEAR guarantee	14	SM		
4.1.15	<b>WATERPROOFING</b> 1000 gauge polythene sheet damp proof membrane including 300mm laps	14	SM		
4.1.16	<b>CONCRETE WORKS</b> Insitu concrete class 15/20: in 50mm thick concrete blinding to surfaces of strip footing	9	SM		
4.1.17	Ditto column bases <b>Vibrated reinforced concrete class 25/20</b>	9	SM		
4.1.18	Strip footing	2	CM		
4.1.19	Columns Bases	3	CM		
4.1.20	Columns	1	CM		
4.1.21	150mm thick floor slab <b>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</b>	14	SM		
4.1.22	8mm dia reinforcement bars	22	KG		
4.1.23	10mm dia reinforcement bars	75	KG		
4.1.24	12mm dia reinforcement bars	90	KG		
4.1.25	16mm dia reinforcement bars	75	KG		
4.1.26	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		
<b>Carried to collection</b>					

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>Marineply formwork as Described. Allow for setting to special steel proping, strutting, fillets, nails, etc to:</b>				
4.1.27	Edges of strip footing	6	SM		
4.1.28	Ditto but to column bases	8	SM		
4.1.29	Ditto but to sides of columns	8	SM		
4.1.30	Ditto but to edges of floor slabs 75-150mm girth	15	LM		
	<b>FOUNDATION WALLING</b>				
4.1.31	200mm solid coral block foundation wall in cement:sand (1:3) reinforced with hoop iron at every to alternative course	30	SM		
	<b>PLINTH FINISHES</b>				
4.1.32	15mm cement and sand (1:4) render trowelled smooth and comprising 12mm thick backing and 3mm finishing coat.	15	SM		
	<b>Painting and Decoration</b>				
4.1.33	Prepare and apply 3 coats of first quality bituminous paint or equal and approved to rendered surfaces	15	SM		
<b>Carried to collection</b>					
	<b>COLLECTION</b>				
	Brought forward from page GH/1				
	Brought forward from page GH/2				
	Brought down from page GH/3				
<b>TOTAL FOR SUBSTRUCTURE WORKS CARRIED TO SUMMARY</b>					



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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO 2.</b>				
	<b>SUPERSTRUCTURE REINFORCED CONCRETE WORKS</b>				
	<b>Vibrated reinforced concrete class 25/20</b>				
4.2.1	Beams	1	CM		
4.2.2	Gutters	1	CM		
4.2.3	Columns	1	CM		
4.2.4	150mm thick roof slab	26	SM		
	<b>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</b>				
4.2.5	Assorted Bars	790	KG		
	<b>Sawn Treated cypress formwork to: -</b>				
4.2.6	Sides of Ring Beams	12	SM		
4.2.7	Sides and soffits of gutter beams	11	SM		
4.2.8	Soffits of columns	8	SM		
4.2.9	To soffits of roof slab and canopy	26	SM		
4.2.10	To Edges of roof slab and canopy 75-150mm	20	LM		
<b>TOTAL SUPERSTRUCTURE CARRIED FORWARD TO SUMMARY</b>					

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 3</b>				
	<b>WALLING</b>				
	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				
4.3.1	200mm mm thick	30	SM		
4.3.2	200mm thick at parapet walling; including allowing for crenellation to architect's detail	9	SM		
	<b>Internal walling</b>				
	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				
4.3.3	150mm mm thick	12	SM		
	<b>WATERPROOFING</b>				
4.3.4	Hessian based bituminous felt damp proof course 200mm wide	15	LM		
4.3.5	Ditto 150mm	5	LM		
4.3.6	<b>Pre-cast concrete class 20/20 concrete coping</b> 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		
<b>TOTAL FOR WALLING CARRIED FORWARD TO SUMMARY</b>					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 4</b>				
	<b>ROOFING</b>				
	<b>FLAT ROOF FINISHES</b>				
4.4.1	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		
4.4.2	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				
4.4.3	To roof slabs	26	SM		
4.4.4	To gutters	7	SM		
4.4.5	Ditto sides of wall 200mm high	15	LM		
4.4.6	50 x 50mm internal angle fillet	15	LM		
	<b>Floor Finishes</b>				
4.4.7	<b>Cement and sand (1:4) screeding smooth trowelled</b> 32mm Thick floor screed to receive concrete tiles	26	SM		
4.4.8	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		
4.4.9	100mm high matching skirting	15	LM		
	<b>Rainwater goods</b>				
4.4.10	Extra over for running outlet	2	NO		
4.4.11	100mm x 75 x 0.6mm PVC down pipes fixed to wall with holding clips at 1200mm centres	6	LM		
4.4.12	Extra over for swan neck 1000mm long	2	NO		
4.4.13	Extra over for shoe 1000mm long	2	NO		
<b>TOTAL FOR ROOFING CARRIED TO SUMMARY</b>					

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 5</b>				
	<b>WINDOWS</b>				
	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				
4.5.1	Overall size 1500 x 750mm high as W03	3	NO.		
4.5.2	Overall size 600 x 900mm high as W04	2	NO.		
	<b>Window cills</b>				
4.5.3	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		
	<b>Glazing</b>				
	<b>laminated oneway glass fixed with and including beadings.</b>				
4.5.4	6mm thick glass in panes (0.50-1.00m <sup>2</sup> )	5	SM		
Carried to collection					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>Burglar proofing grilles-provisional</b>  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.				
4.5.5	Overall size 1500 x 750mm high	3	NO.		
4.5.6	Overall size 600 x 90mm high	2	NO.		
	<b>Carried to collection</b>				
	<b>COLLECTION</b>  Brought forward from page GH/7  Brought down from page GH/8				
<b>TOTAL FOR WINDOWS CARRIED FORWARD TO SUMMARY</b>					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 6</b>				
	<b>DOORS</b>				
	<b>Louvred Doors</b>				
	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	Single leaf door overall size 1100 x 2400mm high;complete with timber louvred fanlight size 1100x300mm high as D06	2	NO		
	<b>Panel Doors</b>				
	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 overall size 900 x 2400mm high; complete with timber louvred fanlight size 900x300mm high	1	NO		
4.6.3	<b>FRAMES (Wrot Mvule)</b> 150x50mm.rebated frame plugged	17	LM		
4.6.4	Ditto transome	3	LM		
4.6.5	50 x 25mm. Splayed architrave.	17	LM		
4.6.6	25mm quadrant moulds	17	LM		
Carried to collection					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>Ironmongery</b>				
	<b>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</b>				
4.6.7	3 - Lever mortice lock; complete with lockcase and handle	1	NO		
4.6.8	2 - Lever mortice lock; ditto with indicator	2	NO		
4.6.9	100mm. Pressed butt hinges	5	PRS		
4.6.10	38mm. Diameter door stop on floor / wall to approval	3	NO		
4.6.11	Heavy duty Door closer to an approved sample	3	NO		
4.6.12	800 x 200mm high stainless steel kick plate onto both sides to approval	2	NO		
4.6.13	150 x 150mm sex indicator plate	2	NO		
4.6.14	Coat and hat hook	2	NO		
	<b>Painting and Decoration</b>				
	<b>Prepare and apply three coats of premium quality marine grade clear varnish; Matt quality to:-</b>				
4.6.15	General surfaces of wood exceeding 200mm but not exceeding 300mm girth	37	LM		
4.6.16	Ditto; girth not exceeding 100mm	17	LM		
4.6.17	Doors both internally and externally	13	SM		
	<b>Prepare and apply one coat aluminium primer before fixing: to backing of wood</b>				
4.6.18	Surfaces over 200 but not exceeding 300mm	34	LM		
4.6.19	Surfaces not exceeding 100mm	17	LM		
	<b>Carried to collection</b>				

PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY

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



**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 7</b>				
	<b>FINISHES</b>				
	<b>EXTERNAL FINISHES</b>				
	<b>Walls</b>				
4.7.1	25mm thick cement and sand (1:3) render to: - 25mm thick cement and sand rendering to walls, finished with a wood float.	11	SM		
4.7.2	Ditto to receive natural stone cladding	44	SM		
4.7.3	<b>Prepare and apply one undercoat and two finishing coats marine grade weatheguard (silicone based) exterior paint as approved to:</b> Plastered surfaces of walls	11	SM		
	<b>Stone Cladding</b>				
4.7.4	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		
	<b>Ceiling Finishes</b>				
	<b>Concrete Finishes</b>				
4.7.5	15mm thick two coat gauged cement lime and sand (1:2:9) plaster steel trowelled smooth to concrete surfaces	12	SM		
4.7.6	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	-	
	<b>INTERNAL FINISHES</b>				
	<b>Wall and Concrete Finishes</b>				
4.7.7	15mm thick two coat gauged cement lime and sand (1:2:9) plaster steel trowelled smooth to walls and concrete surfaces	40	SM		
4.7.8	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		
<b>Carried to collection</b>					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4.7.9	12mm cement and sand (1:3) plaster to walls and concrete surfaces trowelled smooth; to receive wall tiles (m/s)	24	SM	-	
4.7.10	<b>Wall Tiles</b> 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		
4.7.11	12mm PVC Edgings	21	LM		
4.7.12	<b>Floor Finishes</b> <b>Cement and sand (1:4) screeding smooth trowelled</b> 32mm Thick floor screed to receive non slip ceramic tiles	10	SM		
4.7.13	<b>Ceramic floor tiles</b> 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		
4.7.14	Ditto 100mm high skirting	21	LM		
4.7.15	<b>Ceiling finishes</b> <b>Concrete Finishes</b> 15mm thick two coat gauged cement lime and sand (1:2:9) plaster steel trowelled smooth to concrete surfaces	10	SM		
4.7.16	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		
	<b>Carried to collection</b>				
	<b>COLLECTION</b>  Brought forward from page GH/12  Brought forward from page GH/13				
<b>TOTAL FOR FINISHES CARRIED TO SUMMARY</b>					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 8</b>				
	<b>FIXTURES AND FITTINGS</b>				
	<b>BENCH</b>				
4.8.1	100mm thick plain concrete class 15/20 in plinth	2	SM		
4.8.2	Reinforced concrete class 25/20 in 100mm worktops	2	SM		
	<b>Formwork to:-</b>				
4.8.3	Soffites of worktops	2	SM		
4.8.4	Edges of worktops and plinths 75-150mm high	6	LM		
4.8.5	10mm diameter high yield reinforcement bars as described before	20	KG		
4.8.6	100mm thick coral block walling in cement/sand 1:3 mortar; abd	2	SM		
4.8.7	15mm thick cement sand (1:3) plaster of worktop	2	SM		
4.8.8	Ditto walls	4	SM		
	<b>Polished Terrazzo paving</b>				
4.8.9	25mm thick insitu polished terrazzo laid on concrete in approved coloured aggregate finished smooth including sanding and polishing	6	SM		
	<b>Plastic dividing strips</b>				
4.8.10	32 x 3mm thick plastic dividing strips	9	LM		
<b>TOTAL FOR FIXTURES AND FITTINGS CARRIED TO SUMMARY</b>					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4.9.1	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 SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

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 SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>BILL NO.5: BOUNDARY WALL</b>				
	<b>ELEMENT NO. 1</b>				
	<b>SUBSTRUCTURES (ALL PROVISIONAL)</b>				
	<b>Site clearance</b>				
5.1.1	Clear the site off grass, shrubs and all vegetation; cart away as directed by PE.	126	sm		
5.1.2	Excavate vegetable soil average 200mm deep and cart away as directed	126	sm		
	<b>Excavation</b>				
5.1.3	Excavate for strip foundation starting from reduced level not exceeding 1.50 meters deep and cart away as directed	189	cm		
5.1.4	Ditto in column bases	132	cm		
5.1.5	Extra over excavation for excavating in rock.	96	cm		
5.1.6	Return, fill-in and rum selected excavated material	251	cm		
5.1.7	Remove and cart away from site surplus excavated material as directed	70	cm		
	<b>Diposal of water</b>				
5.1.8	Keeping all excavations free from all water including spring or running water		Item		
	<b>Planking and strutting</b>				
5.1.9	Uphold the sides of all excavations		Item		
	<b>Filling</b>				
5.1.10	Hardcore filling in making up levels exceeding 300mm thick, depositing and compacting in layers of 150 mm maximum thickness .	38	cm		
5.1.11	50mm thick murram blinding to surfaces of fill	126	sm		
	<b>Anti-termite treatment</b>				
5.1.12	TERMIDOR' or other equal and approved insecticide with a ten-years guarantee to surfaces of fill and tops of foundations	126	sm		
<b>CARRIED TO COLLECTION</b>					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>Concrete</b>				
5.1.13	50mm thick mass concrete mix (1:4:8) to bottoms of foundations	126	sm		
5.1.14	Ditto to column bases	88	sm		
	<b>In situ concrete; reinforced; class 25 / (20mm); vibrated</b>				
5.1.15	Foundations in trenches irrespective of thickness	25	cm		
5.1.16	Ditto in column bases	26	cm		
5.1.17	Ditto in columns	18	cm		
	<b>Reinforcement</b>				
	<b>Bars; high yield steel; cold worked to B.S. 4461 including bends, hooks, tying wire and distance blocks</b>				
5.1.18	12mm bars	2,800	KG		
5.1.19	10mm bars	2,450	KG		
5.1.20	8mm bars	1,325	KG		
	<b>Walling</b>				
5.1.21	200mm thick approved local natural stone; roughly squared to foundation walling; bedding and jointing in cement sand (1:3) mortar	252	sm		
	<b>Damp proofing</b>				
5.1.22	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	210	lm		
<b>TOTAL FOR SUBSTRUCTURES CARRIED TO SUMMARY</b>					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 2</b>				
	<b>CONCRETE SUPERSTRUCTURE</b>				
	<b>Insitu concrete; reinforced; class 25/ (20mm); vibrated</b>				
5.2.1	Columns	34	SM		
	<b>Reinforcement</b>				
	<b>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</b>				
5.2.2	12mm diameter	476	KG		
5.2.3	8mm diameter	272	KG		
	<b>Sawn formwork to insitu concrete as described:-</b>				
5.2.4	Vertical sides of columns	271	sm		
<b>TOTAL FOR SUPERSTRUCTURES CARRIED TO SUMMARY</b>					



**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 3</b>				
	<b>WALLING.</b>				
	<b>EXTERNAL WALLING.</b>				
	<b>Machine cut natural stone walling jointed in cement:sand mortar mix 1:3 including 25x4mm thick hoop iron at every alternate courses.</b>				
5.3.1	200mm thick walling.	462	SM		
	<b>Precast concrete coping</b>				
5.3.2	75mm thick weathered and throated saddled-back coping for 200mm thick walling	210	LM		
5.3.3	Ditto 450 x 450mm pier cap ditto to columns	61	NO		
<b>TOTAL FOR WALLING CARRIED TO SUMMARY</b>					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
5.4.1	<b>ELEMENT NO. 4</b>  <b>FINISHES</b>  <b>WALL FINISHES.</b>  <b>External Wall Finishes</b>  <b>12mm Gauged lime plaster (1:2:9) : steel trowelled finish : on concrete or blockwork : to</b>  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.	924	SM		
<b>TOTAL FOR WALLING CARRIED TO SUMMARY</b>					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 5</b>				
	<b>GATES</b>				
5.5.1	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		
5.5.2	Ditto but size 1425 x 2200mm high  <b>Prepare surface by sand blasting, apply one coat of 2 pack epoxy zinc phosphate primer; apply three coats of marine grade gloss paint</b>	1	NO		
5.5.3	To steel gates	36.27	SM		
<b>TOTAL FOR GATES AND GATEHOUSE CARRIED TO SUMMARY</b>					

PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY

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 SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>BILL NO.6: EXTERNAL WORKS</b>				
	<b>ELEMENT NO. 1</b>				
	<b>EXTERNAL SOIL WATER DRAINAGE</b>				
6.1.1	Excavate trench for drain pipe average 1500 mm deep, part return fill and ram and remainder cart away	83	LM		-
6.1.2	150 mm diameter "Golden Brown" UPVC pipe laid in trench and jointed	83	LM		-
	<b>Plain in situ concrete : class 15/20 : as per Engineer's detail</b>				
6.1.3	150mm bed and surround to 150mm diameter pipe : including all necessary formwork	83	LM		-
	<b>Inspection Chambers</b>				
	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				
6.1.4	Internal dimensions: 600x 450x 1000mm deep	19	NO		-
6.1.5	Ditto 850x1200x1500mm deep	2	NO		-
<b>TOTAL OF EXTERNAL SOIL WATER DRAINAGE CARRIED TO ELEMENT</b>					<b>-</b>

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO. 2</b>				
	<b>BIODIGESTER</b>				
6.2.1	Clear site of shrubs,grass and carting away the arisings	102	SM		-
6.2.2	Excavate pit for biodigester not exceeding 1.5m deep	153	CM		-
6.2.3	Ditto 1.5 - 3.0M deep	153	CM		-
6.2.4	Ditto 3 - 4.5M deep	26	CM		-
6.2.5	Extra over excavation in rock of any class	100	CM		-
6.2.6	Return fill and ram selected excavated soil around walling	50	CM		-
6.2.7	Cart away surplus excavated material	282	CM		-
6.2.8	50mm thick blinding class 15/20	102	SM		-
6.2.9	200mm thick reinforced concrete class 25/20 slab in surface bed	102	SM		-
6.2.10	200mm thick ditto to external walls	114	SM		-
6.2.11	Ditto in baffle wall	106	SM		-
6.2.12	200mm thick reinforced concrete class 25/20 in cover slab	102	SM		-
	<b>Marineply formwork to:</b>				
6.2.13	Sides of Rc external walling	228	SM		-
6.2.14	Soffits of suspended slap	102	SM		-
6.2.15	Sides of scum baffle wall	212	SM		-
6.2.16	Edges of base slab 150-225mm girth	41	LM		-
6.2.17	Edges of suspended slab 150-225mm girth	41	LM		-
<b>Carried to collection</b>					<b>-</b>

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
6.2.18	Box out formwork to opening size 600x450mm  <b>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</b>	10	NO		-
6.2.19	Assorted sizes	12720	KG		-
6.2.20	Form or leave hole in 250mm concrete walling for 100mm pipe including making good disturbed surfaces	8	NO		-
6.2.21	15mm thick cement/sand (1:3) waterproof plaster to walls and soffit of cover slab	404	SM		-
6.2.22	30mm thick cement/sand (1:3) waterproof screed to surface bed of internal floor	84	SM		-
6.2.23	600x450mm heavy duty double air seal cast iron cover and frame	10	NO		-
<b>Carried to collection</b>					-
	<b>BIODIGESTER</b>				
	Brought forward from page FD/3				-
	Brought down from page FD/4				-
<b>TOTAL OF BIODIGESTER CARRIED TO ELEMENT SUMMARY</b>					-

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	SUMMARY				
	ELEMENT				
1	External soil water drainage				-
2	Biodigester				-
TOTAL FOR EXTERNAL FOUL WATER DRAINAGE CARRIED TO MAIN					-



ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<p><i>(All Rates are V.A.T Inclusive)</i></p> <p><b><u>BILL NO. 4: MECHANICAL WORKS</u></b></p> <p><b><u>ELEMENT NO. 7.1 (INTERNAL PLUMBING):</u></b></p> <p><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></p> <p><b><u>PPR Pipes</u></b></p> <p><b>7.1.1</b> 20mm diameter pipework in wall chase LM 40</p> <p><b>7.1.2</b> 25mm Ditto LM 140</p> <p><b>7.1.3</b> 32mm ditto LM 88</p> <p><b>7.1.4</b> 40mm ditto LM 60</p> <p><b>7.1.5</b> 50mm ditto LM 140</p> <p><b>7.1.6</b> 63mm ditto LM 153</p> <p><b><u>Sockets;</u></b></p> <p><b>7.1.7</b> 20mm diameter socket No. 15</p> <p><b>7.1.8</b> 25mm ditto No. 35</p> <p><b>7.1.9</b> 32mm ditto No. 25</p> <p><b>7.1.10</b> 40mm ditto No. 47</p> <p><b>7.1.11</b> 50mm ditto No. 40</p> <p><b>7.1.12</b> 63mm ditto No. 30</p> <p><b><u>Bends</u></b></p> <p><b>7.1.13</b> 20mm diameter bends No. 40</p> <p><b>7.1.14</b> 25mm ditto No. 20</p> <p><b>7.1.15</b> 32mm ditto No. 15</p> <p><b>7.1.16</b> 40mm ditto No. 35</p> <p><b>7.1.17</b> 50mm ditto No. 33</p> <p><b>7.1.18</b> 63mm ditto No. 30</p> <p><b><u>Tees</u></b></p> <p><b>7.1.19</b> 20mm diameter equal tees No. 25</p> <p><b>7.1.20</b> 25mm ditto No. 50</p> <p><b>7.1.21</b> 32mm ditto No. 30</p> <p><b>7.1.22</b> 40mm ditto No. 25</p> <p><b>7.1.23</b> 50mm ditto No. 38</p> <p><b>7.1.24</b> 63mm ditto No. 15</p>				
	<b>TOTAL CARRIED TO NEXT PAGE</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b>BALANCE B/F FROM PREVIOUS PAGE</b>				
	<u><b>Reducers</b></u>				
7.1.25	25 x 20mm diameter Reducer	No.	32		
7.1.26	32 x 25mm ditto	No.	30		
7.1.27	40 x 32mm ditto	No.	12		
7.1.28	40 x 25mm ditto	No.	8		
7.1.29	50 x 32mm ditto	No.	10		
7.1.30	63 x 40mm ditto	No.	12		
	<u><b>Threaded Fittings</b></u>				
7.1.19	20mm diameter male/female threaded 90° bend/Elbow	No.	120		
7.1.20	25mm diameter mle/female PPR-M Adapter	No.	35		
7.1.21	32mm ditto	LM	40		
	<u><b>Nipples</b></u>				
7.1.22	20mm diameter G.I. nipple	No	10		
7.1.23	25mm ditto	No.	40		
	<u><b>Valves</b></u>				
7.1.24	20mm 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 hand joints to steel tubing and complete with round male threaded transition fittings.	No.	2		
7.1.25	25mm ditto	LM	10		
7.1.26	32mm ditto	LM	13		
7.1.27	40mm ditto	LM	14		
7.1.28	50mm ditto	LM	15		
7.1.29	63mm ditto	LM	16		
	<b>TOTAL INTERNAL PLUMBING CARRIED FORWARD TO MECHANICAL WORKS SUMMARY PAGE</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b><u>ELEMENT NO. 7.2:</u></b>				
	<b><u>SANITARY FITTINGS:</u></b> Supply,deliver,install,test and commission the following sanitary appliances complete with all the accessories including all connections to the services,waste,joining to water supply,overflows,supports and all plugging and screwing to walls and floors. <b><u>Note.</u></b> (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				
7.2.1	<b><u>Flexible Tubing</u></b> 15mm diameter x 300mm long flexible connectors complete with Integral chrome plated angle valve for connecting the Sanitary fitting to water supply.	No.	38		
7.2.2	<b><u>Robe Hook</u></b> Robe hook in approved vitreous mounted to concealed screw to wall wedges.	No.	1		
7.2.3	<b><u>Close Couple Water Closet Suite</u></b> 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.	No	11		
7.2.4	<b><u>Pedestal wash hand basin</u></b> 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 basin to be supplied and installed complete with 15mm diameter heavy duty chrome plated -Brass Basin Tap	No	14		
7.2.5	<b><u>Urinal Set</u></b> Urinal system comprising of approved 1No. Ceramic urinal bowl and division complete with doomed waste fitting, sparge and spreader including concealed Push Button-Type Urinal Flush Valve for 3/4" top spud urinals and accessories for proper functioning of the set	SET	2		
7.2.6	<b><u>Toilet Roll Holder</u></b> Semi recessed toilet roll holder in approved Vitreous of size 165 x 165mm in approved colour.	No.	15		
7.2.7	<b><u>Mirrors</u></b> 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	No	14		
7.2.8	As above but 1200mmX600mmX25mm	No.	14		
7.2.9	<b><u>Shower Fittings</u></b> Concealed shower fitting consisting of 25mm diameter x 2500mm long PPR riser pipe for showers,25mm diameter chrome plated brass cold water swivel/adjustable shower rose, Carina handle and Stop Cock	No.	1		
	<b>TOTAL CARRIED TO NEXT PAGE</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b>BALANCE B/F FROM PREVIOUS PAGE</b>				
7.2.10	<b><u>Soap Dispenser</u></b> 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.The soap dispenser shall be size125x100x290mm high.	No	14		
7.2.11	<b><u>Bib Tap</u></b> 15mm diameter heavy duty bib tap or other equal and to approved catalogue	No	5		
7.2.12	<b><u>Soap dish</u></b> Semi recessed built in soap dish in approved vitreous of size 150x150mm in approved colour.	No.	14		
7.2.13	<b><u>Towel Rail</u></b> Chrome plated 20mm diameter x 800mm long approved towel rail and brackets as one piece, plugged and screwed into the wall.	No	2		
7.2.14	<b><u>Single bowl, single drainer kitchen sink</u></b> 16SWG Double Bowl,single Drainer, stainless steel (Grade 316) kitchen sink suitable for mounting on counter of size 1200x600mm.The bowl size to be 450x420x 300mm deep complete with chrome plated 40mm diameter waste fittings,plugs,chain stays,overflow including 1No.15mm diameter heavy duty wall mount stainless steel bib tap.	No.	2		
7.2.15	<b><u>Disabled persons Water Closet and Wash Hand Basin Facility</u></b> Wheel chair accessible W.C facility Comprising of the following:- (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 approved viterous 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 (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 approved vitreous 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. (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 wheelchair accessible W.C facility. <b><u>Hand Drier</u></b> Automatic Hand Drier in approved colour operating on infra-red automatic sensing system with heating element,safety cut-out comlete with a 30-seconds safety timer,plastic rawl plugs and fixing screws.The hand drier to have a heating capacity of 3.1Kw and performance flow rate of 3.82 Litres/Min and to be of size270x264x143mm deep.It shall have anoise level of below72.5dBA at 1.5m.	SET	4		
7.2.16	Arabic Shattaf Bidet spray c/w tube and head and fixing to wall.	No	11		
7.2.17		NO	15		
	<b>TOTAL SANITARY FITTINGS CARRIED FORWARD TO MECHANICAL WORKS SUMMARY PAGE</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b><u>ELEMENT NO. 7.3:</u></b>  <b><u>FOUL DRAINAGE:</u></b>  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  <b><u>Internal</u></b> <b>7.3.1</b> 40mm diameter Grey UPVC waste pipe LM 40 <b>7.3.2</b> 50mm ditto LM 60 <b>7.3.3</b> 75mm ditto LM 15 <b>7.3.4</b> 100mm ditto LM 107  <b><u>Extra Ovetubing For:-</u></b> <b>7.3.5</b> 100x50mm diameter UPVC floor trap,grating and cover No 33 <b>7.3.6</b> 100mm WC connector No 16 <b>7.3.7</b> 40mm diameter access tee and cap No 13 <b>7.3.8</b> 50mm ditto No 13 <b>7.3.9</b> 100mm diameter inspection bend and acces cap. No 16  <b><u>Extra Ovetubing For Cont'd:-</u></b> <b>7.3.10</b> 100mm diameter vent cowl No 7 <b>7.3.11</b> 100mm diameter medium duty UPVC gulley trap,grating cover and waste NO 16  <b><u>External</u></b> <b>7.3.12</b> 100mm diameter Grey UPVC soil vent pipe with expansion coupling and fixing to wall with holder bats ducts LM 75 <b>7.3.13</b> 150mm diameter Golden Brown UPVC waste pipe in soil LM 150				
	<b>TOTAL FOUL DRAINAGE CARRIED FORWARD TO MECHANICAL WORKS SUMMARY PAGE</b>				

[illegible]

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b><u>ELEMENT NO. 7.5:</u></b>				
	<b><u>BUILDER'S WORK IN CONNECTION WITH PLUMBING AND DRAINAGE:</u></b>				
<b>7.5.1</b>	<b><u>Masonry Gulley Trap</u></b> Construct masonry gulley trap size 200x200mm, approx depth 300mm, complete with seal and concrete cover, including all disposal	No.	8		
<b>7.5.2</b>	<b><u>Manholes and Covers</u></b> Construct Manholes size 600 x 450mm and averaging 750mm deep constructed in 100mm thick concrete base(1:3:6), approved 150mm block sides rendered all around in cement and sand (1:4).It shall have an approved heavy duty Fibre Reinforced Plastic cover and frame ,Including all necessary excavations, disposal and form work.	No.	17		
<b>7.5.3</b>	<b><u>Excavations</u></b> Excavate trench in soil/murram for Water Mains supply pipes not exceeding 1200mm deep ,lay pipe,part return in fill, ram and surplus cart away	LM	170		
<b>7.5.4</b>	<b><u>Chasing</u></b> Form chase in both 100mm and 200mm thick coral block wall to receive necessary pipe work and make good disturbed areas	LM	328		
<b>7.5.5</b>	<b><u>Holes</u></b> Make a hole through 100mm thick coral block wall for small pipe and make good disturbed areas	No.	18		
<b>7.5.6</b>	Ditto but 200mm thick and for large	No.	12		
	<b>TOTAL BUILDERS WORK CARRIED FORWARD TO MECHANICAL WORKS SUMMARY PAGE</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b><u>ELEMENT NO. 7.6:</u></b>				
	<b><u>WATER RETICULATION - ALL PROVISIONAL</u></b>				
	<b><u>Roof Top Water Tanks</u></b>				
7.6.1	Supply, deliver and install vertical close end plastic moulded tank of capacity <b>5,000 litres</b> and. 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 flat roof base	ITEM	4		
	<b><u>Excavations</u></b>				
7.6.2	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	LM	120		
	<b><u>Pipe Work</u></b>				
7.6.3	100mm diameter PN 16 HDPE pump suction lines	LM	30		
7.6.4	100mm diameter Ditto but Delivery line	LM	70		
7.6.5	63mm diameter Ditto but Delivery line	LM	80		
7.6.6	32mm diameter (PN-20) PPR Pipe laid and jointed in trench from water mains	LM	60		
7.6.7	40mm ditto	LM	45		
	<b><u>Extra Overtubing for:</u></b>				
	<b><u>Sockets:</u></b>				
7.6.8	32mm diameter PPR Sockets	No.	20		
7.6.9	40mm ditto	LM	15		
7.6.10	63mm ditto	LM	15		
	<b><u>Bends</u></b>				
7.6.11	40mm diameter bend/Elbow	No.	10		
7.6.12	63mm ditto	No.	15		
	<b><u>Tees</u></b>				
7.6.13	40mm diameter (PN-20) PPR equal tee	No.	12		
	<b><u>Valves</u></b>				
7.6.14	32mm diameter supply mains full way approved gate valve	No.	14		
7.6.15	40mm ditto	No.	6		
7.6.16	63mm ditto	No.	8		
	<b><u>Water Connection to Supply mains &amp; Testing</u></b>				
7.6.17	50mm diameter G.I. equal tee	No	1		
7.6.18	50x40mm diameter G.I. reducer	No	1		
7.6.19	40mm diameter G.I. nipple	No	2		
7.6.20	50mm diameter PPR Adaptor	No	1		
7.6.21	40mm diameter full Way approved gate valve	No	1		
	<b><u>Meter Connection</u></b>				
7.6.22	Allow for 25mm diameter approved Meter Connection from the Local Water Authority including paying for all the necessary charges,if any	ITEM	1		
	<b><u>Stand Pipe</u></b>				
7.6.23	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 approved by the engineer	ITEM	8		
	<b>TOTAL CARRIED TO NEXT PAGE</b>				



ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b>BALANCE B/F FROM PREVIOUS PAGE</b>				
<b>7.6.24</b>	<p><b><u>Mains Valve Chamber</u></b></p> <p>Construct Mains Valve Chamber size 600x600x500mm deep with 100mm thick concrete block rendered all round in cement and sand mortar (1:4) including hinged iron cover and frame in grease</p>	ITEM	3		
<b>7.6.25</b>	<p><b><u>Booster Pump Sets</u></b></p> <p>Booster Pump Sets (2No) for Roof Top water Tanks mounted on a common Galvanized Steel base Frame and to approval, each set comprising of, One pump duty, One pump stand by, and each of capacity 5m<sup>3</sup>/hr against a Maximum Head of 40metres. 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 including all other accessories for proper functioning. The pumps shall be connected in that when the Running Duty pump fails the Standby Pump starts up automatically.</p>	ITEM	1		
<b>7.6.26</b>	<p><b><u>Testing</u></b></p> <p>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.</p>	ITEM	1		
<b>7.6.27</b>	<p><b><u>Surface Mounted Water Storage Tanks</u></b></p> <p>Supply, deliver and install vertical close end plastic moulded water storage tank of capacity 24,000 litres and (size 3220mm diameterx3400mm high). The tank to be assembled complete with cover and having screwed connections for 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).</p>	ITEM	2		
<b>7.6.28</b>	<p><b><u>Tank Base</u></b></p> <p>Allow for the construction of the above mentioned tank base Approx.size 3500mm 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 (1:2:4) concrete floor slab, 15mm thick screed on the general faces of the tank base in (1:3) cement/sand mortar, 600mm wide x 1500mm deep strip foundation, including all Excavations and disposal</p>	ITEM	2		
<b>7.6.29</b>	<p><b><u>Testing</u></b></p> <p>Allow for testing the general water supply and reticulation systems to level in sound working condition and to the Engineer's satisfaction</p>	ITEM	1		
	<b>TOTAL WATER RETICULATION CARRIED FORWARD TO MECHANICAL WORKS SUMMARY PAGE</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b>ELEMENT NO.7.7:</b>				
	<b><u>FIRE FIGHTING AND PROTECTION SERVICES</u></b>				
	<u>Supply,deliver and install the following fire fighting equipment in positions indicated on the contract drawings or as shall be instructed by the Engineer.Tenderers during pricing should allow for all fittings,jointings,couplings,including unions and clamps,where necessary for the proper functioning of the installation.</u>				
<b>7.7.1</b>	<b><u>Hose Reels.</u></b> 20mm diameter x 30Metre long swinging type hose reel complete with delivery hose,nozzle,mild steel feed pipe,isolation valve,guide,bracket and all other accessories.	No.	4		
<b>7.7.2</b>	<b><u>Hose Reel Fire Tank</u></b> Supply, deliever and install vertical close end plastic moulded tank of capacity <b>10,000 Litre (Size 1830 diameter x 2020mm high)</b> .The tank to be assembled complete with cover and having screwed connections for inlet, outlet and overflow, 32mm medium pressure ball valve, drain pipes and any other necessary item for its proper functioning. The tank shall be mounted on a flat roof slab.	ITEM	1		
<b>7.7.3</b>	<b><u>Pipework (G.I.)</u></b> 20mm diameter medium grade galvanized mild steel supply pipe	LM	12		
<b>7.7.4</b>	25mm ditto	LM	10		
<b>7.7.5</b>	32mm Ditto	LM	10		
<b>7.7.6</b>	40mm ditto	LM	30		
<b>7.7.7</b>	50mm Ditto	LM	60		
<b>7.7.8</b>	<b><u>Sockets</u></b> 25mm diameter (G.I.)socket	No.	8		
<b>7.7.9</b>	32mm Ditto	No.	5		
<b>7.7.10</b>	40mm ditto	No.	9		
<b>7.7.11</b>	50mm Ditto	No.	16		
<b>7.7.12</b>	<b><u>Unions</u></b> 20mm diameter (G.I.)union	No.	8		
<b>7.7.13</b>	<b><u>Bends/Elbows</u></b> 20mm diameter (G.I.) bend	No.	8		
<b>7.7.14</b>	32mm Ditto	No.	2		
<b>7.7.15</b>	40mm Ditto	No.	6		
<b>7.7.16</b>	<b><u>Tees</u></b> 25mm diameter (G.I.)equal tee	No.	2		
<b>7.7.17</b>	50mm Ditto	No.	5		
<b>7.7.18</b>	<b><u>Reducers</u></b> 25x20mm diameter G.I. Reducer	No.	2		
<b>7.7.19</b>	32x25mm ditto	No	2		
<b>7.7.20</b>	40x32mm ditto	No	2		
<b>7.7.21</b>	50x40mm ditto	No	2		
<b>7.7.22</b>	<b><u>Nipples</u></b> 20mm (G.I.) nipple	No.	4		
	<b>TOTAL CARRIED TO NEXT PAGE</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b>BALANCE B/F FROM PREVIOUS PAGE</b>				
<b>7.7.23</b>	<p><b><u>Painting</u></b></p> <p>Prepare prime and apply two coats of gloss oil paint - RED - on the general surfaces of the above described Hose Reel supply pipes</p>	ITEM	1		
<b>7.7.24</b>	<p><b><u>Hose Reel Booster Pump Set</u></b></p> <p>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 <b>12m<sup>3</sup>/hr</b> against a Maximum Head of <b>40(metres)</b>. 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 <b>300Litres</b> including all other accessories for proper functioning. The pumps shall be connected in that when the Running Duty pump fails the Standby Pump starts up automatically.</p>	ITEM	1		
<b>7.7.25</b>	<p><b><u>Testing</u></b></p> <p>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</p>	ITEM	1		
<b>7.7.26</b>	<p><b><u>Breeching Inlet /Booster inlets</u></b></p> <p>Supply and Install Fire service 4" x 2 way breeching inlet connection complete with Drain Valves complying with BS 336:2010, PN16 Rated and non-return valves. The breeching inlets to be manufactured to comply to BS 5041</p>	ITEM	1		
<b>7.7.27</b>	<p><b><u>Breeching Inlet Cabinet</u></b></p> <p>Supply and install breeching inlet cabinet, recessed type to accommodate 6" x 4 way breeching inlet manufactured to comply to BS5041-5</p>	ITEM	1		
<b>7.7.28</b>	<p><b><u>Valve Chamber</u></b></p> <p>Construct Mains Valve Chamber size 600x600x500mm deep with 100mm thick concrete block rendered all round in cement and sand mortar (1:4) including hinged iron cover and frame in grease</p>	ITEM	2		
<b>7.7.29</b>	<p><b><u>External Fire Hydrant</u></b></p> <p>Supply 2 way pillar type fire hydrant with dia 63 outlet to LCPB/EN 12845 standard</p>	ITEM	2		
<b>7.7.30</b>	<p><b><u>100 mm hydrant isolation valve</u></b></p> <p>UL Listed/ FM Approved, Connection: Flanged as BS EN 1092-2/ Flanged as ASME B16.1, PN 16</p>	ITEM	2		
<b>7.7.31</b>	<p><b><u>Underground Piping</u></b></p> <p>Supply, install below HDPE PN 20 to BS EN 12201, ISO 4427 ground pipe providing, fixing, jointing, testing in position &amp; commissioning, including excavation &amp; backfilling as required.</p>				
<b>7.7.32</b>	<p><b><u>Pipe connection, tees must be electrofusion/butt fusion fittings</u></b></p> <p>100Ø HDPE</p>	LM	160		
	<b>TOTAL CARRIED TO NEXT PAGE</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F FROM PREVIOUS PAGE				
	<u>Supply,deliver and install the following Portable Fire extinguishers to positions indicated on the contract drawings and as instructed by the Engineer:-</u>				
	<u>Dry Powder Fire Extinguisher</u>				
7.7.33	9Kg catridge type general purpose portable dry powder fire extingusher fully charged or equal and approved.	No.	4		
	<u>Carbon dioxide Gas Fire Extinguisher</u>				
7.7.34	5kg carbon dioxide gas portale fire extinguisher complete with pressure gauge,initial charge and mounting brackets	No.	4		
	<u>Water Carbon Dioxide Fire Extinguisher</u>				
7.7.35	9.0Litre Water carbon dioxide (WCo2) portable fire extinguisher complete wth pressure gauge,initial charge and mounting brackets.	No.	4		
	<u>Signage</u>				
7.7.36	Allow for the Signage of fire hose Reel,fire exits and fire instructions all as described in the particular specifications and to the Project Enginneer's Approval.	ITEM	4		
	<u>Testing</u>				
7.7.37	Testing the whole fire fighting equipments to leave in sound working condition and to the Engineer's satisfaction	ITEM	1		
	TOTAL FIRE FIGHTING CARRIED FORWARD TO MECHANICAL WORKS SUMMARY PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b>ELEMENT NO. 7.8:</b> <b>ON-SITE WASTEWATER TREATMENT PLANT</b> <b>Preliminaries, Drawings, Manuals, Handovers, Training,</b> <b>Regulatory Matters, Operation &amp; Maintenance</b>				
7.8.1	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. Personnel to be full capable of regular and routine maintenance tasks and reporting.	SUM	1		
7.8.2	Allow for Monthly Maintenance visits for period of Twelve (12) Months	SUM	1		
7.8.3	Allow to liaise with the NEMA authorities, assist client with submitting application and obtaining discharge licence for the Waste Water treatment Plant	SUM	1		
7.8.4	On completion of the Waste water treatment plant, take water samples as necessary to Certified Laboratory 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	SUM	1		
7.8.5	Allow for any other item not necessarily mentioned here to provide a complete working system to the satisfaction of the engineer	SUM	1		
	<b>WASTE WATER TREATMENT SYSTEM</b> <b>Waste Water Treatment Plant</b> 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 40Kgs per day, Ammonia Nitrogen load of 4Kgs per day. With minimum treated discharge requirement 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 specified discharge requirements.				
7.8.6	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.	NO	1		
7.8.7	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.	SUM	1		
7.8.8	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/m3. Required Surface Area specification shall be 675m2/m3.	SUM	1		
	<b>TOTAL CARRIED TO NEXT PAGE</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b>BALANCE B/F FROM PREVIOUS PAGE</b>				
7.8.9	Process Aeration Blowers 1.6 kW / 3 HP positive displacement (PD), one (1) duty, one (1) standby.	NO	2		
7.8.10	Fine bubble aeration system, in-basin pipes and connections to the top of the wall of the basin.	SUM	1		
7.8.11	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.	NO	35		
7.8.12	Allow for Coarse inlet Screen 2" slots for capture of large rags and solids. Fabricated with 50mm polypropelyne structure & Stainless Steel.	NO	1		
7.8.13	Allow for PolyLok PL-625 Effluent Filter with 1/32" linear feet filter slot size for capture of smaller fine solids. E.fluent Filter shall come with automatic shutoff ball for closing outlet to avoid solids wash through during servicing, as acting as a gas deflector.	NO	3		
7.8.14	1 HP submersible RAS/WAS pumps	NO	1		
7.8.15	Influent pumps, one (1) duty and one (1) standby	NO	2		
7.8.16	Chemical dosing pumps and controls for sodium hypochlorite, plus chemical makeup tank. System for Chlorine Disinfection of Treated Waste Water.	SUM	1		
7.8.17	All pipe & fittings as required to complete the interconnecting system and all necessary fittings, valves and accessories.	SUM	1		
7.8.18	All Electrical wiring as required to complete the interconnecting system and all necessary conduits, fittings and accessories.	SUM	1		
7.8.19	Allow for Installation of Wastewater Treatment Plant Equipment, incldue all Labour, Transport & Sundries Costs	SUM	1		
	<b><u>TOTAL FOR ON-SITE WASTEWATER TREATMENT PLANT CARRIED TO SUMMARY</u></b>				

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ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<u>MECHANICAL WORKS SUMMARY PAGE:</u>				
7.1	INTERNAL PLUMBING				
7.2	SANITARY FITTINGS				
7.3	FOUL DRAINAGE				
7.4	TESTING				
7.5	BUILDERS WORK				
7.6	WATER RETICULATION				
7.7	FIRE FIGHTING				
7.8	ON-SITE WASTEWATER TREATMENT PLANT				
7.9	GENERAL ITEMS				
	TOTAL FOR MECHANICAL WORKS CARRIED FORWARD TO GRAND SUMMARY PAGE				



ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b>(All Rates are V.A.T Inclusive)</b> <b>BILL NO. 5: ELECTRICAL WORKS</b>				
	<b>SCHEDULE 1:</b> <b>GROUND FLOOR &amp; GATE HOUSE</b> Supply Install, Test and Commission Following:-				
	<b>LIGHTING POINTS</b>				
8.1.1	Lighting points wired in 3x4.5mm <sup>2</sup> PVC/SC copper cables drawn in concealed 20mm diameter heavy gauge PVC conduit including all boxes, saddles and accessories for i) One way switching ii) Two Way switching	No. No.	39 36		
8.1.2	<b>10A plastic switch plates as follows</b> i) One gang one way ii) One gang two way iii) Two gang two way iv) Three gang two way	No. No. No. No.	18 4 4 2		
	<b>LIGHTING FITTINGS</b>				
8.1.3	Light fittings complete with all the necessary fixing accessories and rated energy lamps as follows:- i) Exit Light ii) Type 600X600 iii) Type 2 iv) Type 2D v) Type 4 vi) Type N viii) Type 4C ix) Type M	No. No. No. No. No. No. No. No.	4 7 14 6 4 33 1 6		
8.1.4	Motion Sensors for lighting in washrooms	No.	4		
	<b>POWER OUTLETS</b>				
8.1.5	Socket outlet point in Ring wiring of 3x2.5 mm <sup>2</sup> PVC-SC-Cu cables drawn inside 20mm diameter HG conduits	No.	46		
8.1.6	13A Twin switched moduled socket outlet plate	No.	46		
8.1.7	20A Double Pole outlet point comprising of wiring in 3x4.0 mm <sup>2</sup> PVC-SC-Cu cables drawn inside 20mm diameter HG conduits	No.	10		
8.1.8	20A Double pole switch complete with neon light	No.	10		
	<b>KITCHENETTE</b>				
8.1.9	Cooker point comprising wiring in 3x6.0mm <sup>2</sup> PVC SC Cu cables drawn inside trunking	No.	1		
8.1.10	45A Cooker Control Unit incorporating a 13A switched socket outlet and neon indicator	No.	1		
8.1.11	Cooker connector	No.	1		
	<b>ELECTRICAL SWEEP FANS</b>				
8.1.12	Ceiling fan points wired in 3x2.5mm <sup>2</sup> PVC/SC copper cables drawn in concealed 20mm diameter heavy gauge PVC conduit including all boxes, saddles and all accessories	No.	7		
8.1.13	<b>CEILING FANS</b> i) 49W 1400mm 3-arm 5- speed, Ceiling fan complete with the regulator	No.	7		
8.1.14	Ceiling fan hook (M-10) complete with rawl bolt.	No.	7		
	<b>TOTAL C/F TO NEXT PAGE</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b>BALANCE B/F/ FROM PREVIOUS PAGE</b>				
	<b><u>FIRE DETECTION AND ALARM SYSTEM</u></b>				
8.1.15	Fire alarm panel/Fire alarm bell/Break glass Unit Points/Smoke detector points comprising iring in 3×1.5mm <sup>2</sup> fire risistant cables concealed in PVC conduits concealed in ceiling space but excluding bell and break glass unit	No.	24		
8.1.16	Addressable Call point	No.	4		
8.1.17	Addressable Sounder complete with beacon	No.	4		
8.1.18	Addressable Smoke detectors complete with base	No.	14		
8.1.19	Heat detectors complete with base	No.	1		
8.1.20	Single Loop, Expandable to 8, Intelligent Addressable fire alarm panel with atleast 200 addresses complete with full network capability,stand-by batteries and intergral battery charger, touch screen, thermal printer and CAN modules	No.	1		
	<b><u>TELEVISION, CCTV AND DATA WORKS</u></b>				
8.1.21	16 SWG,(450 × 300 × 100)mm <sup>3</sup> flush mounted galvanised powder coated draw box for telephone & data works	4	No		
8.1.22	Telephone/Data outlet point comprising of concealed 20mm diameter HG PVC conduits plus draw wire	28	No		
8.1.23	RJ45, Single Data outlet plate a) Single b) Double	2 24	No No		
	<b><u>DISTRIBUTION BOARDS</u></b>				
8.1.24	10-Way TP/N distribution board flush mounted complete 1No. 125A TPN integral isolator.	No.	1		
8.1.25	4- way SP/N Consumer Unit flush mounted complete 1No. SP/N intergral isolator	No	1		
8.1.26	<b>MCBs for the above boards</b> i)16A SP ii)20ASP iii)32ASP iv)45ASP v) 80ATP vi) Blanking Plates	No. No. No. No. No. No.	6 9 4 1 1 6		
	<b><u>SUB-MAINS CABLES</u></b>				
8.1.27	4 core 25mm <sup>2</sup> PVCC/SWA/PVC (armoured) + 1X16mm <sup>2</sup> single Core copper cables drawn inside HG conduits	LM	100		
8.1.28	3 core 10mm <sup>2</sup> PVC/SWA/PVC (armoured) copper cables drawn inside 50mm diameter HG conduits	Lm	30		
	<b>TOTAL C/F TO NEXT PAGE</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F/ FROM PREVIOUS PAGE				
8.1.29	Cable glands for the above cable	No.	4		
8.1.30	Cable lugs for the above cable complete with hydraulic crimping	No.	16		
8.1.31	Single phase isolator point comprising of wiring in 3x6.0 mm <sup>2</sup> PVC-SC-Cu cables drawn inside 20mm diameter HG conduits	No	2		
8.1.32	32A Single phase Isolator complete with 3 pin industrial socket and plug	No	2		
8.1.33	Powder Coated Electrical Pedestal Socket Box with provision for 4No. Standard Twin sockets and 4 No. Standard double data outlet	No.	10		
	TOTAL GROUND FLOOR C/F TO COLLECTION SUMMARY PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b><u>SCHEDULE 2:</u></b>				
	<b><u>FIRST FLOOR</u></b>				
	<b><u>Supply Install, Test and Commission Following:-</u></b>				
	<b><u>LIGHTING POINTS</u></b>				
8.2.1	Lighting points wired in 3x4.5mm <sup>2</sup> PVC/SC copper cables drawn in concealed 20mm diameter heavy gauge PVC conduit including all boxes, saddles and accessories for				
	i) One way switching	No.	69		
	ii) Two Way switching	No.	36		
8.2.2	<b>10A plastic switch plates as follows</b>				
	i) One gang one way	No.	16		
	ii) One gang two way	No.	4		
	iii) Two gang two way	No.	6		
8.2.3	<b><u>LIGHTING FITTINGS</u></b>				
	Light fittings complete with all the necessary fixing accessories and rated energy lamps as follows:-				
	i) Exit Light	No.	4		
	ii) Type 600X600	No.	12		
	iii) Type 2	No.	11		
	iv) Type 2D	No.	4		
	v) Type 4	No.	5		
	vi) Type N	No.	32		
	vii) Type CH	No.	1		
8.2.4	Motion Sensors for lighting in washrooms	No.	4		
	<b><u>POWER OUTLETS</u></b>				
8.2.5	Socket outlet point in Ring wiring of 3x2.5 mm <sup>2</sup> PVC-SC-Cu cables drawn inside 20mm diameter HG conduits	No.	51		
8.2.6	13A Twin switched moduled socket outlet plate	No.	51		
8.2.7	20A Double Pole outlet point comprising of wiring in 3x4.0 mm <sup>2</sup> PVC-SC-Cu cables drawn inside 20mm diameter HG conduits	No.	9		
8.2.8	20A Double pole switch complete with neon light		9		
	<b><u>KITCHENETTE</u></b>				
8.2.9	Cooker point comprising wiring in 3x6.0mm <sup>2</sup> PVC SC Cu cables drawn inside trunking	No.	1		
8.2.10	45A Cooker Control Unit incorporating a 13A switched socket outlet and neon indicator	No.	1		
8.2.11	Cooker connector	No.	1		
	<b><u>ELECTRICAL SWEEP FANS</u></b>				
8.2.12	Ceiling fan points wired in 3x2.5mm <sup>2</sup> PVC/SC copper cables drawn in concealed 20mm diameter heavy gauge PVC conduit including all boxes, saddles and all accessories	No.	8		
8.2.13	49W 1400mm 3-arm 5- speed, Ceiling fan complete with the regulator	No.	8		
	<b>TOTAL C/F TO NEXT PAGE</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b>BALANCE B/F FROM PREVIOUS PAGE</b>				
8.2.14	Ceiling fan hook (M-10) complete with rawl bolt.	No.	8		
	<b><u>FIRE DETECTION AND ALARM SYSTEM</u></b>				
8.2.15	Fire alarm panel/Fire alarm bell/Break glass Unit Points/Smoke detector points comprising iring in 3×1.5mm <sup>2</sup> fire risistant cables concealed in PVC conduits concealed in ceiling space but excluding bell and break glass unit	No.	22		
8.2.16	Addressable Call point	No.	4		
8.2.17	Addressable Sounder complete with beacon	No.	4		
8.2.18	Addressable Smoke detectors complete with base	No.	13		
8.2.19	Addressable Heat detectors complete with base	No.	1		
	<b><u>TELEVISION, CCTV AND DATA WORKS</u></b>				
8.2.20	16 SWG, (450 × 300 × 100)mm <sup>3</sup> flush mounted galvanised powder coated draw box for telephone & data works	4	No		
8.2.21	Telephone/Data outlet point comprising of concealed 20mm diameter HG PVC conduits plus draw wire	29	No		
8.2.22	RJ45, Data outlet plate a) Single b) Double	4 25	No No		
8.2.23	TV outlet point comprising of 75Ω aerial cable (Co-axial) drawn in 25mm Ø full length heavy gauge plastic conduits cast in floor slab and concealed in the walls but without the outlet plate running from the TV point to the MATV on the roof	1	NO		
8.2.24	Single TV face plate	1	NO		
	<b><u>DISTRIBUTION BOARDS</u></b>				
8.2.25	8-Way TP/N distribution board flush mounted complete 1No. 100A TPN integral isolator.	No.	1		
8.2.26	<b>MCBs for the boards above</b> i)16A SP ii)20ASP iii)32ASP iv)45A SP v)Blanking Plates	No. No. No. No. No.	5 10 7 1 2		
8.2.27	<b><u>SUB-MAINS CABLES</u></b> 4 core 16mm <sup>2</sup> PVCC/SWA/PVC (armoured) + 1X16mm <sup>2</sup> single Core copper cables drawn inside HG conduits	LM	105		
8.2.28	Cable glands for the above cable	No.	4		
8.2.29	Cable lugs for the above cable complete with hydraulic crimping	No.	20		
8.2.30	Powder Coated Electrical Pedestal Socket Box with provision for 4No. Standard Twim sockets and 4 No. Standard Single Sockets	No.	9		
	<b>TOTAL FOR FIRST FLOOR C/F TO SUMMARY PAGE</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
8.3.1	<p><b><u>SCHEDULE 5 MAIN POWER DISTRIBUTION</u></b></p> <p>Free-standing purpose made front access sub main switchboard, modular, metal clad, manufactured in 12 SWG galvanised mild steel sheet and finished in cream (or appropriate colour) powder coating as shown on the schematic. The switchboard should consist of a PLC section. The switchboard to be complete with the following:-</p> <p>i) Digital multimeter with CTs and fuse protection capable of measuring voltage in the range 0 – 1000V, 3-phase, current in the range 0-630A, 3-phase, and all power system parameters (KW, KVA, KW/Hr, KVARs, Frequency, P.F., harmonics and all the parameters). The multimeter should be complete with selector switches for viewing/displaying the various parameters.</p> <p>ii) Set of neon phase presence indicator lamps</p> <p>iii) 150A adjustable TPN MCCB main incomer and having a short-circuit breaking capacity of 100KA at 415Vac, 50Hz.</p> <p>iv) 4 No. 150A TPN copper bus bars</p> <p>v) 3 No. 100A 3 P TPN MCCBs</p> <p>vi) 1 No. 63A SPN MCBs</p> <p>vii) 2 No. 32A TPN MCBs</p> <p>viii) Sufficient spare capacity for future development all fitted with 2 No. 63A SP MCBs &amp; 2 No. 100A TP MCCB</p> <p>x) Sealable studs for all cover plate screws and all necessary accessories</p> <p>xi) 6mm perspex viewing window</p> <p>xii) Heavy duty rubber lining for all the perspex viewing windows</p> <p>xiii) 415V three-phase surge diverter, wired as shown, complete with enclosure with viewing window.</p> <p>xiv) 20 KVAR's automatic Power Factor Correction Capacitor Bank comprising the following:-</p> <p>a) 1 No 10 KVAR's 415 V, 50Hz, 3-Phase</p> <p>b) 2 No 5 KVAR's 415 V, 50Hz, 3-Phase</p> <p>c) 3 No Special contactors for capacitor switching</p> <p>d) 3 No Fuse bases and fuses for each capacitor protection</p> <p>e) 3 No Step indicator lamps</p> <p>f) 3 No Control circuit protection fuse/fuse holder</p> <p>g) 1 No. 5-Step automatic control regulator for maintaining power factor at the set level and regulating the switching of capacitor steps</p> <p>h) 1 No 150/5A Current transformer (to be mounted after the mains incoming circuit breaker)</p> <p><b><i>The bank to be made from low-loss bio-degradable capacitive units, complete with earthed enclosure. All the contactors, controls and indicator lamps, including a digital read-out screen, to be included.</i></b></p> <p>xv) Allow for Fireman's switch connection as indicated in the schematic drawing</p> <p>xvi) Comprehensive protective multiple earthing of the board in 1500mm long 12mm diameter pure electrolytic copper earth rod deep driven to permanent moisture level, copper clamp. 120mm<sup>2</sup> green earth lead complete with all accessories. (Note: Use parallel rods if effective earthing cannot be achieved with 1 No. rod).</p>	Item	1		
	<b>TOTAL C/F TO NEXT PAGE</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b>BALANCE B/F FROM PREVIOUS PAGE</b>				
<b>8.3.2</b>	50mm <sup>2</sup> PVC/SWA/PVC 4C armoured copper cable laid in ducts in trench from KPLC Meter to main low voltage board complete with glands and lugs	LM	100		
	<b>UNDERGROUND CABLE DUCTING</b>				
<b>8.3.3</b>	Allow for 300mm deep trenching and back filling for the cable mentioned before, Telecommunication and street lighting.	Lm	365		
<b>8.3.4</b>	Ducting for the above in 150mm HGPVC Pipes complete with haunching	Lm	365		
<b>8.3.5</b>	Allow for cable markers in concrete tiles marked "HATARI" for the item above	No.	36		
	<b>WATER PUMPS PROVISIONS</b>				
<b>8.3.6</b>	3 core 6mm <sup>2</sup> PVC/SWA/PVC (armoured) copper cables drawn inside 32mm diameter HG conduits	Lm	60		
<b>8.3.7</b>	32A Single phase Isolator complete with 3 pin industrial socket and plug	No.	2		
	<b>BIO- DIGETSTER PROVISIONS</b>				
<b>8.3.8</b>	4 core 25mm <sup>2</sup> PVC/SWA/PVC (armoured) copper cables drawn inside 32mm diameter HG conduits	Lm	50		
<b>8.3.9</b>	Cable glands for the above cable	No.	2		
<b>8.3.10</b>	Cable lugs for the above cable complete with hydraulic crimping	No.	10		
<b>8.3.11</b>	8-Way TP/N distribution board flush mounted complete 1No. 100A TPN integral isolator.	No.	1		
<b>8.3.12</b>	<b>MCBs for the boards above</b> i)16A SP ii)20ASP iii)32ASP iv)63A TP v)Blanking Plates	No. No. No. No. No.	4 11 4 1 4		
<b>8.3.13</b>	Single phase isolator point comprising of wiring in 3x6.0 mm <sup>2</sup> PVC-SC-Cu cables drawn inside 20mm diameter HG conduits	No.	2		
<b>8.3.14</b>	Three phase isolator point comprising of wiring in 5x6.0 mm <sup>2</sup> PVC-SC-Cu cables drawn inside 20mm diameter HG conduits	No.	3		
<b>8.3.15</b>	32A Single phase Isolator complete with 3 pin industrial socket and plug	No.	2		
<b>8.3.16</b>	63A Three phase Isolator complete with 3 pin industrial socket and plug	No.	3		
<b>8.3.17</b>	150 x 100mm 12 gauge galvanised steel perforated cable tray for support of the cables.	Lm,	150		
<b>8.3.18</b>	Build 600 x 600 x 600mm deep power/communications manhole complete with internal plaster and heavy duty EAFW/ steel cover.	No.	20		
	<b>TOTAL FOR POWER DISTRIBUTION C/F TO SUMMARY PAGE</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b><u>SCHEDULE 6</u></b>				
	<b><u>45KW SOLAR SYSTEM</u></b>				
8.4.1	72- cell 575W Monocrystalline Solar Modules, Efficiency 80%, Cell Specific Safety - Class II, Application Class A, Life time - 25Years, Guarantee - 10Years Rated Current (Im) 8.8A Rated voltage (Vm) 17.5v, Cell Efficiency - 15.0%	No.	80		
8.4.2	10KWh Deep Cycle Gel Battery Life span - 5Years, Guarantee - 2 Years	No.	1		
8.4.3	DC/AC off-grid 48V Power inverter full protection function: over-voltage, over-frequency, over-current, over-temperature, AC short-circuit automatic protection Rated Output power 45KW MPPT efficiency of upto 99.5% Pure Sinewave output	No.	1		
8.4.4	Solar MPPT charge controller with the following characteristics; PV open circuit voltage 500V, Max PV power 45KW, PV rated current 100A, MPPT input voltage 100-150vdc  LCD display: Solar panel current, Solar panel voltage, Solar panel power, Battery group voltage, charge & current Protection function against solar reverse charge, solar reverse connection, battery reverse connection, battery overcharge, battery overcurrent	No.	1		
8.4.5	Racks to fit Solar panels above. To be Alluminium or approved equivalent resisting corrosion	No.	80		
8.4.6	Non-corrosive brackets to fit Solar panels above	No.	80		
8.4.7	Non-corrosive brackets to fit inverter above	No.	2		
8.4.8	Non-corrosive brackets to fit MPPT above	No.	1		
8.4.9	Solar surge protection device rated for 60VDC or to the Engineers approval	No.	1		
8.4.10	List any other item necessary to complete the installation of the 45KW solar system  <i>Contractor to note that the inverter and batteries together with their associate works should be housed in a container. Rates included should include the container housing</i>	Lot	1		
	<b>TOTAL FOR HYBRID SOLAR POWER C/F TO SUMMARY PAGE</b>				



ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b><u>SCHEDULE 7</u></b>				
	<b><u>STANDBY POWER SUPPLY SYSTEM (GENERATOR SET)</u></b>				
	<b><u>GENERATING SET</u></b>				
8.5.1	Supply, deliver to site, install, test and commission a prime rated 50 KVA 3 phase, 415V, 50Hz diesel generating set with a continuous power factor of 0.8 lagging as directed by the Engineer's specifications. The generator set is to be complete with a sound attenuated canopy and an integral base/belly daily service fuel tank with an operational running capacity of 8 hours.	No	1		
8.5.2	Supply, deliver to site and install a steel exhaust pipe of not less than 14 SWG and of adequate diameter running from the generating set to the outside of the generator house	LM	10		
8.5.3	Connect the exhaust pipe above in item above using steel pipes of adequate diameter, and flexible piping off engine exhaust manifold complete with heavy duty silencer	Item	1		
8.5.4	Complete earthing of generating set to electrical engineer's approval	Item	1		
	<b><u>AMF CONTROL PANEL</u></b>				
	<b>Supply, deliver to site, install, test and commission the following:</b>				
8.5.5	An electrical control panel complete with 150A incoming MCCBs and contactors for automatic change over operation and complete with all other control accessories	No	1		
8.5.6	Suitable rated manual by-pass switch with clearly labeled <b>NORMAL-OFF-BYPASS</b> positions, and shall such be wired that when the switch is on either OFF or BYPASS position, the generator shall receive no signal to start	No.	1		
8.5.7	240V AC/12V DC mains power supply trickle battery charger as directed by the Engineer's specifications. The trickle charger shall charge the battery when the set is on <b>IDLE mode</b> , otherwise when the set is <b>RUNNING</b> , the battery shall be charged by the generator charger.	No.	1		
8.5.8	12 volts battery as directed by the Engineer's specifications	No.	1		
	<b><u>RECOMMENDED SPARE PARTS AND LUBRICATORS</u></b>				
	<b>For the supply to the site of the following spare parts and lubricators:</b>				
8.5.9	Oil Filters	No.	2		
8.5.10	Air Filters	No.	2		
8.5.11	Fuel filters to suit the set	No.	2		
8.5.12	Set of Fan belts to suit the set	No.	1		
8.5.13	10 litres container of sump oil of grade.....*	No.	1		
	<b>TOTAL C/F TO NEXT PAGE</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b>BALANCE B/F FROM PREVIOUS PAGE</b>				
8.5.14	2 kilogram grease in a tin of grade .....*	No.	1		
8.5.15	10 litre plastic container of distilled water	No.	1		
8.5.16	20 litre of engine oil in a tin of grade .....*	No.	1		
8.5.17	Any other spare parts recommended by Tenderer **	Sum	1		
	<b>*The tenderer to fill in the Grade quality to be supplied</b>				
	<b>**The tenderer to fill in the details and price of items but the price not to be included in total carried forward to summary page</b>				
	<b><u>SCHEDULE 4 -TOOLS TO BE SUPPLIED WITH THE SET</u></b>				
	<b>For the supply to site of the following tools:</b>				
8.5.18	Metal tool box with lock and two keys	No.	1		
8.5.19	Set of 8 No. Chrome vanadium ring spanners in sizes to suit the set	No.	1		
8.5.20	Set of 3 screwdrivers, 75mm, 200mm and 300mm plus one 200mm Philips type	No.	1		
8.5.21	- ditto -but open ended spanners	No.	1		
8.5.22	Set of feeler gauges	No.	1		
8.5.23	Set of 8 No. Ratchets in sizes to suit the set	No.	1		
8.5.24	Grease gun to suit greasing points complete with compressor	No.	1		
8.5.25	Oil can, trigger type	No.	1		
8.5.26	Any other special tools which the tenderer recommends should be purchased as an optional:*	Item	1		
	<b>NOTE* Tenderer should give detail and prices of item 5.7.26 but the price not to be included in total carried forward.</b>				
	<b>TOTAL FOR 50KVA GENERATOR C/F TO SUMMARY PAGE</b>				

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ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b><u>SCHEDULE 7</u></b>				
	<b><u>LIGHTNING PROTECTION</u></b>				
	<b>Air Termination</b>				
8.7.1	15mm diameter multiple point copper air terminal complete with base	No.	3		
8.7.2	Copper junction clamps for tape.	No.	3		
8.7.3	25 x 3mm turned copper tape	Lm	60		
8.7.4	Copper ridge saddle	No.	10		
8.7.5	D.C. tape clip	No.	27		
	<b>Down Conductors</b>				
8.7.6	25 x 3mm turned copper tape	Lm	30		
8.7.7	D.C. tape clip	No.	15		
8.7.8	Oblong test/junction clamp	No.	3		
8.7.9	Diameter 38mm HG PVC conduits for the down conductors above.	Lm	30		
	<b>Earth Termination</b>				
8.7.10	15mm diameter, 1200mm long solid copper earth rod, complete with driving stud and spike.	No.	3		
8.7.11	Earth rod-to-tape clamp type A.	No.	3		
8.7.12	Concrete inspection earth pit with 5 hole earth bar	No.	3		
8.7.13	1500mm x 1500mm copper earth mat made from 25mm x 3mm copper tape at 300mm spacing, buried at permanent moisture level and complete with all clamps, welding joints and 6m long 25mm x 3mm insulated copper tape clamped to the down conductors.	No.	3		
8.7.14	Soil treatment around the earth pits with marconite to achieve the required conductivity and obtain acceptable reading	Item	1		
8.7.15	Bonding and clamping to all metal work including water pipes, gas pipes, hand-rails, air-conditioning units, window frames, cladding, metal roof etc. and the main earth for the building.	Item	1		
	<b>TOTAL FOR LIGHTNING ARRESTORS C/F TO SUMMARY PAGE</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b>ELEMENT 10.9</b> <b><u>Supply, install, test, commission and set to work (To the full satisfaction of all parties to the contract) the following: -</u></b>				
	<b><u>CCTV</u></b>				
8.9.1	<b>Dome Camera</b> 4MP resolution, Excellent low light performance, Efficient H.265+ compression technology, IP67, 24/7 colourful imaging	No.	12		
8.9.2	Ditto but Bullet Cameras	No.	5		
8.9.3	Network Video Recording System base to be mounted in a 42U data Cabinet with the following features:-  <ul style="list-style-type: none"> <li>• Up to 32 channel IP cameras can be connected</li> <li>• Up to 576 Mbps high incoming bandwidth ensures IP cameras can be connected</li> <li>• 2 HDMI (different source) and 1 VGA interfaces16 HDD can be used for continuous video recording</li> <li>• 16 HDD can be used for continuous video recording</li> <li>• Supports some specialist cameras, including people counting camera/ANPR (automatic number plate recognition) camera/fisheye camera</li> <li>• Advanced streaming technology enables smooth live view in poor network conditions</li> <li>• Supports RAID 0, 1, 5, 6, 10 and N+1 hot spare for even more reliable data storage, effectively avoids data loss risks</li> </ul>	No.	1		
8.9.4	24 Port layer 2 100Mbps POE SFP Switch with Min 30W Power availability per port	No.	2		
8.9.5	GBIC transceiver modules (LC to LC) multimode for the switches above	No.	2		
8.9.6	Fibre Patch Panels for Data cable termination	No.	2		
8.9.7	9 U 600X600 wall mounted data cabinet complete with all accessories including power supply points	No.	2		
8.9.8	10TB Surveillance Hard Disk Drive	No.	8		
8.9.9	STP Cat 6 structured cables	Rolls	10		
8.9.10	STP Cat. 6 patch cord, 3M for the Cameras.	No.	15		
8.9.11	UPT Cat. 6A patch cord, 1M	No.	15		
8.9.12	Associated Fiber and UTP (CAT 6) cabling between field devices and Main Switch	Item	1		
	<b>TOTAL FOR CCTV CARRIED FORWARD TO SUMMARY PAGE</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b>ELEMENT 10.10</b> <u>Supply, install, test, commission and set to work (To the full satisfaction of all parties to the contract) the following: -</u>				
	<b>ICT</b> <i>Horizontal Cabaling</i>				
8.10.1	CAT 6A cable for Data/Telephone outlets	10	Rolls		
8.10.2	24 port CAT 6 Data Modular Patch Panel for 4-Pair UTP termination	2	No.		
8.10.3	1M Factory terminated Cat 6 4 pair-SFTP RJ 45- RJ 45 patch cords to be used inside cabinet <b>(includes 15No Spares)</b>	56	No.		
8.10.4	3M Factory terminated Cat 6 4 pair-SFTP RJ 45- RJ 45 patch cords for data outlets <b>(includes 15No Spares)</b>	56	No.		
8.10.5	2U Cable managers/organisers	2	No.		
	<b>ACTIVE EQUIPMENT</b>				
8.10.7	24 Port layer 2 100Mbps POE SFP Switch with Min 30W/ Power availability per port	2	No.		
	<b>BACKBONE CABLING</b>				
8.10.8	24 Port ST Multimode, sliding Fibre Optic patch panel complete with LC type connectors for Multimode fibre	2	No.		
8.10.9	1M Factory Terminated Fibre optic patch cords complete with LC-LC TYPE connectors to be used inside cabinet	41	No.		
8.10.10	8 core Loose tube multimode fibre optic cable linking floor edge switches to core switch in the Server room	450	LM		
8.10.11	RJ45-ST media converters for each edge switch	2	No.		
	<b>SERVER</b>				
8.10.12	42U Server rack cabinet, black complete with mounting angles and rails in Server Room as described in the particular specification of this tender document	1	No.		
8.10.13	24 port Core network switch for routing voice	1	No.		
8.10.14	24 port Core network switch equivalent for routing data	1	No.		
8.10.15	Router	1	No.		
8.10.16	2U Cable managers/organisers	2	No.		
8.10.17	Wireless Access point	8	No.		
<b>TOTAL C/F TO NEXT PAGE</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b>BALANCE B/F FROM PREVIOUS PAGE</b>				
	<b>TELEPHONY</b>				
<b>8.10.18</b>	Hybrid IP-PABX capable of handling 50 extensions to include GSM modules plus all accessories to work	1	No.		
<b>8.10.19</b>	Standard UC Phone complete with all accessories	40	No.		
<b>8.10.20</b>	Executive UC Phone complete with all accessories	5	No.		
<b>8.10.21</b>	Operator Phones complete with all accessories. Each takes up to 16 concurrent lines	4	No.		
<b>8.10.22</b>	Voice Gateways with 2 x E1 Cards each and 1 x 4 Port FXO Cards. These can host total of 136 ISDN + CO Lines	1			
<b>8.10.23</b>	Any other items necessary to complete the system installation satisfactorily. (List, give quantities and price of the items) i)..... ii)..... ii)..... iv).....				
<b>TOTAL FOR ICT ARRIED FORWARD TO SUMMARY PAGE</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<b><u>SCHEDULE 12</u></b>				
	<b><u>GENERAL ITEMS</u></b>				
8.11.1	Carry out comprehensive 24-hour power analysis, after installing main switchboard, but before switching on load with a digital power meter (with printer) to:	Item			
8.11.2	i) Record and print all the power system parameters. ii) Submit 3 copies of the print-outs. <i>(Note: Parameters must be satisfactory before building is switched on).</i>				
8.11.3	Allow for presentation of all the required samples as per specifications, Bills of Quantities and Drawings.	Item			
8.11.4	<b>Working/ Shop Drawings</b> Prepare and submit three sets of record (shop) plan and isometric layout drawings to easily readable scale, A1 or A0 paper size format as follows: i) general arrangement drawings of all mechanical services, equipment, plant etc ii) routes-types and sizes and arrangement of all pipeworks iii) any other details as per specifications Drawings are to be submitted in soft copy (AutoCad/REVIT 2023) and hard copy to the client, the architect and the engineer. The soft copies to be stored in SSD drive. Allow for preparation and submitting draft and three final copies of operation, instruction and maintenance manuals to Engineers approvals.	Item			
8.11.4	<b>As Installed Drawings</b> As above but for as built/ installed drawings	Item			
8.11.5	Prepare and submit Maintenance Manuals for all items installed.				
8.11.6	All other items of general preliminary to cover, but not limited to:- i)Attendance on all other sub-contractors, such as for Communication Services, Mechanical Installations, Security Installations, Sound Equipment/ Wiring Installations, Generator Installations, Lift Services, Solar Water Heating, V-Sat services etc. ii)Hiring and keeping a Supervisor/Foreman on site iii)Constant supervision of the works. iv)Provision of all the required spares. v)Testing and Inspection of materials/works. vi)Provision of labour camps. vii)Storage of materials. viii)Initial maintenance (During Defects Liability) ix)Providing water/electricity for the works. x)Protection of the works/materials xi)Clearing away on completion. xii)Preparing Final Account. xiii)Providing all Test Certificates, etc.  Provisional Sum for Contribution to KPLC for power upgrade	Item			
	<b>TOTAL C/F TO NEXT PAGE</b>				



ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
8.11.7	<b>BALANCE B/F FROM PREVIOUS PAGE</b>  Allow for sub-contractors charges for liaison with Kenya Power and Lighting comprising the following:- i)Extracting load details from the drawings ii)Calculating total load, together with necessary diversity iii)Verifying the details with the engineer. iv)If need be getting the required documentation and letters from client for the purposes of Additional Load Applications v)Filling all the required forms, and generating correspondences for power application. vi)Presenting application and getting reference number. vii)Making regular follow-ups with Kenya Power viii)Facilitating inspection, approvals and certification by Kenya Power ix)Providing attendance and materials required for power connection. x)Filling out and submitting Commencement and Completion certificates xi)Handing over all approved drawings and certificates to the client. xii)Performing all other services required for power supply to site.  xiii)Building/modifying all power manholes to KPLC standards. xiv)All other incidental KPLC requirements/charges.				
	<b>TOTAL FOR AUDITORIUM AUDIO-VISUAL C/F TO SUMMARY PAGE</b>				
	<u><b>ELECTRICAL INSTALLATIONS SUMMARY PAGE</b></u>  8.1 <b>TOTAL FOR SCHEDULE 1 GROUND FLOOR</b> 8.2 <b>TOTAL FOR SCHEDULE 2 FIRST FLOOR</b> 8.3 <b>TOTAL FOR SCHEDULE 3 MAINS DISTRIBUTION</b> 8.4 <b>TOTAL FOR SCHEDULE 4 SOLAR POWER</b> 8.5 <b>TOTAL FOR SCHEDULE 5 STANDBY GENERATOR</b> 8.6 <b>TOTAL FOR SCHEDULE 6 SOLAR STREET LIGHTING</b> 8.7 <b>TOTAL FOR SCHEDULE 7 LIGHTNING PROTECTION</b> 8.9 <b>TOTAL FOR SCHEDULE 9 CCTV</b> 8.10 <b>TOTAL FOR SCHEDULE 10 ICT</b> 8.11 <b>TOTAL FOR SCHEDULE 8 GENERAL ITEMS</b>				
	<b>TOTAL FOR ELECTRICAL WORKS, CARRIED TO GRAND SUMMARY</b>				

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM.	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<b><u>BILL NO. 9: PARKING, DRIVEWAY AND WALKWAYS ALL PROVISIONAL</u></b>				
9.1.1.	<b>Excavation</b> to reduced levels not exceeding 1.50 m deep starting from the ground level	598	CM		
9.1.2.	<b>Imported Filling</b> 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.	598	CM		
9.1.3.	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.	179	CM		
9.1.4.	<b>Sand Bed</b> 50mm thick sand bed course to receive concrete paving blocks	598	SM		
9.1.5.	<b>Herbicide Treatment</b> Herbicides to approval applied to the manufacturer's written instructions and subject to a TEN YEAR guarantee	598	SM		
9.1.6.	<b>Concrete Paving Blocks</b> 210 x 105 x 80 thick cabro paving block minimum strength 49N/mm <sup>2</sup> laid on 50 mm thick sand bed (m/s) and joint filled with sand and vibrated.	598	SM		
9.1.7.	<b>Precast Concrete Channels</b> 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	123	LM		
9.1.8.	Ditto curved to plan	18	LM		
<b>Carried to collection</b>					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM.	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<b>Precast Concrete Kerbs</b>				
9.1.9.	Provide, lay and joint 250x125mm precast concrete half battered kerb including Class 15/20 bed and haunch. Include for all necessary excavation and formwork to Eng details	123	LM		
9.1.10.	Ditto curved to plan	18	LM		
	<b><u>WALKWAY</u></b>				
9.1.11.	<b>Excavation</b> to reduced levels average depth not exceeding 300 mm deep and cart away	169	SM		
	<b>Imported Filling</b>				
9.1.12.	Supply, spread, water and compact marrum 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.	51	CM		
9.1.13.	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.	51	CM		
9.1.14.	50 mm thick sand bed course to receive paving blocks	169	SM		
9.1.15.	Herbicides to approval applied to the manufacturer's written instructions and subject to a TEN YEAR guarantee	169	SM		
	<b>Concrete Paving Blocks</b>				
9.1.16.	210 x 105 x 80 thick cabro paving block minimum strength 49N/mm <sup>2</sup> laid on 50 mm thick sand bed (m/s) and joint filled with sand and vibrated.	169	SM		
	<b>Precast Concrete Channels</b>				
9.1.17.	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	189	LM		
<b>Carried to collection</b>					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM.	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<b>Precast Concrete Kerbs</b>				
9.1.18.	Provide, lay and joint 250x125mm precast concrete half battered kerb and 200x100mm channel on and including Class 15/20 bed and haunch. Include for all necessary excavation and formwork to Eng details	189	LM		
	<b>ROAD AND PARKING MARKING</b>				
	Prepare and apply three coats of approved road marking thermoplastic paint on asphalt to surfaces not exceeding 100mm girth				
9.1.19.	Yellow in colour	50	SM		
	<b><u>STORM OF WATER DRAINS</u></b>				
	<b>OPEN DRAINAGE</b>				
9.1.20.	600mm wide(internal) open "U" drainage in rectangular <b>fair faced</b> 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.	72	LM		
9.1.21.	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 :	72	LM		
	<b>BOX CULVERT</b>				
9.1.22.	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.	2	LM		
<b>Carried to collection</b>					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,  
AQUACULTURE AND BLUE ECONOMY**

ITEM.	DESCRIPTION	QTY	UNIT	RATE	KSHS
	<b>Headwalls</b>				
9.1.23.	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.	2	NO		
	<b>Invert Block Drains</b>				
9.1.24.	300mm diameter round precast concrete invert blocks drain manufactured in accordance with BS 340 laid to slope and including 100mm murrum bed; including 600 x 225 x 75mm thick side slabs : jointed and pointed in cement and sand 1:3 mortar : on compacted murrum : as per Engineer's details jointing in cement and sand mortar; including all necessary excavations, strutting, formwork, reinforcements; all as per Eng details.	72	LM		
<b>Carried to collection</b>					
	<u><b>COLLECTION</b></u>  <u><b>PARKING, DRIVEWAY, WALKWAYS AND STORM WATER DRAINAGE</b></u>  Brought forward from page DW/1  Brought forward from page DW/2  Brought down from page DW/3  Brought down from above page DW/4				
<b>TOTAL FOR PARKING, DRIVEWAY, WALKWAYS AND STORM WATER</b>					

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<b>BILL NO. 10: ESMP</b>				
	<b>PRELIMINARIES FOR HEALTH AND SAFETY, AIR AND NOISE MONITORING &amp; CONTROL, WASTE MANAGEMENT</b>				
	<b>SAFETY, HEALTH AND WELFARE OF WORKERS</b>				
10.1.1	<p>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 &amp; 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 Safety Officer in accordance with the above Rules who will be responsible for the health and safety of workers on the site. This include awareness and sensitization of risk of spread of HIV/AIDS ,Gender Equity, Sexual Harassment and abuse amongst workers in the workplace,Spread of COVID-19 amongst community members during consultation processes and Grievance redress mechanism.</p> <p>The Contractor will also be required to provide approved good quality hard hats, gumboots and other necessary protective gear for all workers on site including Sub-Contractors' workers and also for the exclusive use by the Clerk of Works and representatives of the Employer and Consultants.</p> <p>The Contractor will also be required to provide approved good quality hard hats, gumboots and other necessary protective gear for all workers on site including Sub-Contractors' workers and also for the exclusive use by the Clerk of Works and representatives of the Employer and Consultants.</p> <p>The Tenderer's attention is drawn to the fact that the Employer reserves the right to hold back the amount priced against this Clause either in full or in part due to any non-performance on the Contractor's part of his obligations under this Clause.</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>Adequate temporary Notices and Signs shall be posted to indicate e.g. that "building operations are in progress" and "entry is at ones own risk" or "trespassers are liable to be prosecuted" or such other Notices and Signs as the 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	1,000,000	1,000,000
<b>Carried to Collection</b>					<b>1,000,000</b>

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
10.1.2	<p><b>SANITATION OF THE WORKS</b></p> <p>The sanitation of the works shall be provided, maintained and removed on completion by the Contractor to the satisfaction of the Architects, health department and local Authorities.</p> <p>The sanitation 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	300,000
10.1.3	<p><b>PREVENTION OF DISTURBANCE AND NUISANCE</b></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	150,000	150,000
<b>Carried to Collection</b>					<b>450,000</b>

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
10.1.4	<b>CLEANING, REMOVAL OF PLANT AND RUBBISH ETC</b>				
	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.				
	Particular care shall be taken in leaving windows, floors and fittings clean and the removal of all paint and cement stains therefrom.				
	He shall also remove all rubbish and dirt from the site as it accumulates or as directed by the Architect. The Contractor is to find his own dump and shall pay all charges in connection therewith.	Item	1	50,000	50,000
	<b>AMBIENT AIR QUALITY AND NOISE MONITORING</b>				
10.1.5	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.	Item	1	400,000	400,000
	Carried to Collection			Ksh	<b>450,000</b>
	Section No. 1				
	ESMP				
	<b>SECTION SUMMARY- ESMP</b>				
	Total Brought Forward from Page No.		Page No. 22/1		1,000,000
			22/2		450,000
			22/3		450,000
	<b>Carried to Final Summary</b>			Ksh	<b>1,900,000</b>
	Section No. 22 ESMP				



**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY**

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**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
	<i>(All Rates are V.A.T Inclusive)</i> <b><u>BILL NO.1: PARTICULAR PRELIMINARIES</u></b>	
1.1.1	<p><b>EMPLOYER</b></p> <p>The Employer is <b>Kenya Marine Fisheries Socio Economic Development Project (KEMFSED)</b></p> <p>The term "Employer" and "KEMFSED" wherever used in the contract document shall be synonymous.</p>	
1.1.2	<p><b>PROJECT MANAGER</b></p> <p>The term "PM" 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 on behalf of the employer.</p>	
1.1.3	<p><b>ARCHITECT</b></p> <p>The term "Architect" shall be deemed to mean "The ARCHITECT " as defined above whose address unless otherwise notified is ARPRIM CONSULTANTS P.O. BOX 12969-00400, NAIROBI.</p>	
1.1.4	<p><b>QUANTITY SURVEYOR</b></p> <p>The term "Quantity Surveyor" shall be deemed to mean "The QUANTITY SURVEYOR " as defined above whose address unless otherwise notified is ARPRIM CONSULTANTS P.O. BOX 12969-00400, NAIROBI.</p>	
1.1.5	<p><b>ELECTRICAL ENGINEER</b></p> <p>The term "Electrical Engineer" shall be deemed to mean "The ELECTRICAL ENGINEER " as defined above whose address unless otherwise notified is ARPRIM CONSULTANTS P.O. BOX 12969-00400, NAIROBI.</p>	
1.1.6	<p><b>MECHANICAL ENGINEER</b></p> <p>The term "Mechanical Engineer" shall be deemed to mean "The MECHANICAL ENGINEER " as defined above whose address unless otherwise notified is ARPRIM CONSULTANTS P.O. BOX 12969-00400, NAIROBI.</p>	
1.1.7	<p><b>STRUCTURAL ENGINEER</b></p> <p>The term "Structural Engineer" shall be deemed to mean "The STRUCTURAL ENGINEER " as defined above whose address unless otherwise notified is ARPRIM CONSULTANTS P.O. BOX 12969-00400, NAIROBI.</p>	
1.1.8	<p><b>PROJECT ENGINEER (PE) (Member of NPCU, State Department of Fisheries)</b></p> <p>The term "Project Engineer" shall be deemed to mean "The ENGINEER" as defined above whose address unless otherwise notified is National Project Coordination Unit (NPCU), State Department of Fisheries.</p>	
	<i>Carried to collection</i>	-

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR  
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
1.1.9	<p><b>LOCATION OF SITE</b></p> <p>The site of the proposed works is in Minjila Town Office, Tana River County. 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>	
1.1.10	<p><b>DESCRIPTION OF THE WORKS</b></p> <p>The works to be carried out under this contract is the construction of Kwale CPIU office Block at Minjila Town in Tana River County. The project consists of the following:</p> <ol style="list-style-type: none"> <li>1. Substructures</li> <li>2. Concrete works</li> <li>3. Walling.</li> <li>4. Roofing.</li> <li>5. Doors</li> <li>6. Windows</li> <li>7. Fittings.</li> <li>8. Finishes.</li> <li>9. Electrical works.</li> <li>10. Mechanical works</li> </ol>	
1.1.11	<p><b>FORM OF CONTRACT</b></p> <p>The Form of Contract shall be as stipulated in the Republic of Kenya's Standard Tender Document for Procurement of Building Works(2006 Edition Revised December 2015) included herein The Conditions of Contract are also included herein Conditions of Contract These are numbered from 1 to 37 as set out in pages 26 to 51 of these tender documents. Particulars of insertions to be made in the Appendix to the Contract Agreement will be found in the Particular Preliminaries part of these Bills of Quantities</p>	
1.1.12	<p><b>BID BOND</b></p> <p>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.</p>	
1.1.13	<p><b>CLEARING AWAY</b></p> <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.The whole of the works shall be delivered up clean, complete and in perfect condition in every respect to the satisfaction of the ENGINEER.</p>	
1.1.14	<p><b>WORKING CONDITIONS</b></p> <p>The Contractor shall allow in his rates for any interference that he may encounter in the course of the works for the Client may in some cases ask the Contractor not to proceed with the works until some activities within the site are completed, as the facility will be operating as usual during the course of the contract.The contractor must allow for compliance with all County &amp; Statutory Authorities' laws &amp; regulations.</p>	
	<i>Carried to collection</i>	-

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
1.1.15	<b>CLAIMS</b> It shall be a condition of this contract that upon it becoming reasonably apparent to the Contractor that he has incurred losses and / or expenses due to any of the contract conditions, or by any other reason whatsoever, he shall present such a claim or intent to claim notice to the ENGINEER within the contract period. No claim shall be entertained upon the expiry of the said contract period.	
1.1.16	<b>LABOUR CAMPS</b> 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.	
1.1.17	<b>PRICING RATES</b> The tenderer shall fill in rates and prices for all items of the Works described in the Bill of Quantities. <b>Items for which no rate or price is entered by the tenderer will not be paid for when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities.</b> 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. Prices quoted should be net inclusive of all taxes, must be in Kenya shillings. Prices shall remain valid for One Hundred and twenty (120) days from the closing date of tender. The rates and prices quoted by the tenderer shall only be subject to adjustment during the performance of the Contract if provided for in the Appendix to Conditions of Contract and provisions made in the Conditions of Contract.	
1.1.18	<b>MATERIALS FROM DEMOLITIONS</b> Any materials arising from demolitions SHALL NOT BE re-used shall become the property of the client unless otherwise advised.	
1.1.19	<b>URGENCY OF THE WORKS</b> The Contractor is notified that these “ <b>works are urgent</b> ” and should be completed within the period stated in these Particular Preliminaries. The Contractor shall allow in his rates for any costs he/ she deems that he/she may incur by having to complete these works within the stipulated contract period.	
1.1.20	<b>PAYMENTS GENERALLY</b> The tenderer’s attention is drawn to the fact that the CLIENT WILL NOT MAKE ADVANCE PAYMENTS but pays for work done and materials delivered to sit: all in accordance with the Conditions of Contract Agreement. In order to facilitate this, a list of the general component elements for the works is given at the summary page of these specifications and the tenderer is requested to break down his tender sum commensurate to the said elements. The contractor is advised to deliver & concur on his claim for payment with the ENGINEER before the following site visit to enable approval of the same by the Acceptance & Approval Committee. The claim shall be prepared in the same format as these bills clearly showing quantities & rates (both work & materials). Both the ENGINEER & contractor should be able to locate & identify the items claimed from the main bill	
1.1.21	<b>PAYMENT FOR MATERIALS ON SITE</b> All materials for incorporation in the works must be stored on site before payment is effected, unless specifically exempted by the ENGINEER. This is to include materials of the Contractor, nominated sub-Contractors and nominated suppliers.	
	<i>Carried to collection</i>	-
1.1.22	<b>ADVANCE PAYMENTS</b> The tenderer’s attention is drawn to the fact that the Client does not make any advance payments	

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR  
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ITEM	DESCRIPTION	AMOUNT
1.1.23	<b>EXISTING SERVICES</b> 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.	
1.1.24	<b>TENDER DOCUMENTS</b> Tender documents are as listed in Clause 2.1 of the Instruction to Tenderer's Page 8	
1.1.25	<b>DELIVERY OF TENDER</b> 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.	
1.1.26	<b>SIGNING OF THE TENDER DOCUMENTS</b>  The bidder shall append his / her signature and / or company 's rubberstamp on each and every page of tender document.	
1.1.27	<b>MEASUREMENTS</b> 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 ENGINEER in accordance with Clause 22 of the Conditions of Contract. The discrepancies shall then be treated as a variation and be dealt with in accordance with Clause 22 of the said Conditions.	
1.1.28	<b>VALUE ADDED TAX</b> The Contractor's attention is drawn to the Legal Notice in the Finance Act part 3 Section 21(b) operative from 1 <sup>st</sup> September, 1993 which requires payment of VAT on all contracts. The Contractor should therefore include allowance in his rates and prices for prices for VAT and any other Government taxes currently in force. <b>NB:</b> The Contractor should therefore include the tax within the rates.	
<i>Carried to collection</i>		-

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
1.1.29	<b>ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (E.S.I.A)</b> Allow a provisional sum of Kenya Shillings One Million Five Hundred Thousand (KSHs. 1,500,000) only for implementation of Environmental and Social Management Plan (ESMP), NEMA administrative costs and EHS approvals Allow a percentage sum for the contractors administrative costs and profits for the above (5%)	1,500,000 75,000
1.1.30	<b>CONTRACT COMPLETION PERIOD</b> The contract completion period in accordance with conditions of the Conditions of contract must be adhered to.  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.	
1.1.31	<b><u>PARTICULARS OF INSERTIONS TO BE MADE IN APPENDIX TO CONTRACT AGREEMENT</u></b>  The following are the insertions to be made in the appendix to the Contract Agreement: -  <b>Period of Final Measurement - 3 Months From Practical completion</b>  <b>Defects Liability Period - 6 Months from Practical completion</b>  <b>Date for Possession - To be agreed with the ENGINEER</b>  <b>Date for Completion - 52 Weeks from date of Possession</b>  <b>Liquidated and Ascertained - At the rate of Kshs.. 100,000... per week or part thereof:</b>  <b>Prime cost</b> sums for which the Contractor desires to tender .....  <b>Period of Interim Certificates - Monthly</b>  <b>Period of Honouring Certificates - 30 days</b>  <b>Percentage of Certified Value Retained - 10%</b>  <b>Limit of Retention Fund - 5%</b>	
	<i>Carried to collection</i>	<b>1,575,000</b>

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR  
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ITEM	DESCRIPTION	AMOUNT
	<b><u>COLLECTION</u></b>	
	Brought forward from page PP/1	-
	Brought forward from page PP/2	-
	Brought forward from page PP/3	-
	Brought forward from page PP/4	-
	Brought forward from page PP/5	1,575,000
<b>TOTAL FOR PARTICULAR PRELIMINARIES CARRIED TO GRAND SUMMARY</b>		

ITEM	DESCRIPTION	AMOUNT
	<p align="center"><i>(All Rates are V.A.T Inclusive)</i></p> <p align="center"><b>BILL NO.2: GENERAL PRELIMINARIES</b></p>	
2.1.1	<p><b>PRICING OF ITEMS OF PRELIMINARIES AND PREAMBLES</b></p> <p>The term "Employer" and "TANA RIVER" wherever used in the contract document shall be synonymous. Prices will be inserted against items of Preliminaries in the Contractor's priced Bills of Quantities and Specification.</p> <p>The Contractor shall be deemed to have included in his prices or rates for the various items in the Bills of Quantities or Specification for all costs involved in complying with all the requirements for the proper execution of the whole of the works in the Contract. 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 ENGINEER, then the value of such works shall be deducted from the very immediate certificate issued to the contractor.</p> <p><b>MoPW current rates, JBC, IQSK, manufacturers or fair rates shall be used by the ENGINEER in valuation of unpriced items which the contractor shall fail to execute.</b> 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>	
2.1.2	<p><b>FIRM PRICE CONTRACT</b></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>	
2.1.3	<p><b>VISIT SITE AND EXAMINE DRAWINGS</b></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>	
2.1.4	<p><b>SUFFICIENCY OF TENDER</b></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>	
2.1.5	<p><b>BONDS</b></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>	
	<i>Carried to collection</i>	-



**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR  
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ITEM	DESCRIPTION	AMOUNT
2.1.6	<p><b>PERFORMANCE BOND</b></p> <p>5% bond shall be required from the specified institution.</p> <p>The period for supplying the bond shall be 14 days. 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. 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 ENGINEER and client. The handing over only kick-starts the process and is not a waiver to bond conditions. The bond for the due performances of the Contract shall be valid up to the date of completion as certified by the ENGINEER. Any bond which provides otherwise or attempts to vary the duration of validity shall be invalid. 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>	
2.1.7	<p><b>EXCEPTION TO THE STANDARD METHOD OF MEASUREMENT</b></p> <p><b>Attendance ;</b> 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><b>Fix Only:-</b></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 SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR  
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ITEM	DESCRIPTION	AMOUNT
2.1.8	<p><b>ABBREVIATIONS</b></p> <p>The site of the proposed works is in Minjila Town Office, Tana River County. 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> <p><b>C.M.</b> Shall mean cubic metre</p> <p><b>S.M.</b> Shall mean square metre</p> <p><b>L.M.</b> Shall mean linear metre</p> <p><b>MM</b> Shall mean Millimetre</p> <p><b>Kg.</b> Shall mean Kilogramme</p> <p><b>No.</b> Shall mean Number</p> <p><b>Prs.</b> Shall mean Pairs</p> <p><b>B.S.</b> Shall mean the British Standard Specification Published by the British Standards Institution, 2 Park Street, London W.I., England.</p> <p><b>"K.S"</b> Shall mean the current Kenya Standard specification published by the Kenya Bureau of Standards, P.O. Box 54974, NAIROBI, Kenya.</p> <p><b>Ditto</b> Shall mean the whole of the preceding description except as qualified in the description in which it occurs.</p> <p><b>m.s.</b> Shall mean measured separately.</p> <p><b>a.b.d</b> Shall mean as before described.</p> <p><b>"Approved"</b> <i>Shall mean approved by the ENGINEER and the Employer in writing.</i></p> <p><b>"As directed"</b> <i>Shall mean as directed by the ENGINEER and the Employer in writing.</i></p> <p><b>"Demolish"</b> 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><b>"Remove"</b> Shall mean taking down, hacking up, breaking down, removing etc., and clearing away from Site and all other expenses thereby entailed.</p> <p><b>"Make good"</b> 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><b>To "match"</b> Shall mean to be equal to relevant existing work in design, workmanship and all other respects.</p> <p><b>"Re-fix"</b> 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>	
2.1.9	<p><b>PLANT, TOOLS AND VEHICLES</b></p> <p>Allow for providing all scaffolding, plant, tools and vehicles required for the works except in so far as may be stated otherwise herein and except for such items specifically and only required for the use of nominated Sub-Contractors as described herein. No timber used for scaffolding, formwork or temporary works of any kind shall be used afterwards in the permanent work.</p>	
2.1.10	<p><b>TRANSPORT.</b></p> <p>Allow for transport of workmen, materials, etc., to and from the site at such hours and by such routes as may be permitted by the competent authorities.</p>	
	<i>Carried to collection</i>	-

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR  
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ITEM	DESCRIPTION	AMOUNT
2.1.11	<p><b>MATERIALS AND WORKMANSHIP.</b></p> <p>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.</p>	
2.1.12	<p><b>SIGN FOR MATERIALS SUPPLIED.</b></p> <p>The Contractor will be required to sign a receipt for all articles and materials supplied by the 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 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 ENGINEER</p>	
2.1.13	<p><b>STORAGE OF MATERIALS</b></p> <p>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 ENGINEER Nominated Sub-Contractors are to be made liable for the cost of any storage accommodation provided especially for their use.</p>	
2.1.14	<p><b>ORDERING OF MATERIALS</b></p> <p>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 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.</p>	
2.1.15	<p><b>SAMPLES</b></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 ENGINEER for his approval until such samples are approved by the ENGINEER and the ENGINEER, may reject any materials or workmanship not in his opinion to be up to approved samples. The 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 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 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 &amp; covers, tiles &amp; timber shall be required for approval by the ENGINEER 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>	
	<i>Carried to collection</i>	-

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR  
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ITEM	DESCRIPTION	AMOUNT
2.1.16	<p><b>PUBLIC AND PRIVATE ROADS.</b></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 ENGINEER.</p>	
2.1.17	<p><b>EXISTING PROPERTY.</b></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 ENGINEER.</p>	
2.1.18	<p><b>ACCESS TO SITE AND TEMPORARY ROADS.</b></p> <p>Means of access to the Site shall be agreed with the 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 ENGINEER.</p>	
2.1.19	<p><b>AREA TO BE OCCUPIED BY THE CONTRACTOR</b></p> <p>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 ENGINEER.</p>	
2.1.20	<p><b>SECURITY OF WORKS ETC.</b></p> <p>The Contractor shall be entirely responsible for the security of all the works stores, materials, plant, personnel, etc., both his own and sub-contractors' and must provide all necessary watching, lighting and other precautions as necessary to ensure security against theft, loss or damage and the protection of the public.</p>	
2.1.21	<p><b>PROGRESS CHART.</b></p> <p>The Contractor shall provide within two weeks of Possession of Site and in agreement with the ENGINEER a Progress Chart for the whole of the works including the works of Nominated Sub-Contractors ; one copy to be handed to the 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.</p>	
2.1.22	<p><b>INSURANCE</b></p> <p>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 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 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 ENGINEER's inspection.</p>	
	<i>Carried to collection</i>	-

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ITEM	DESCRIPTION	AMOUNT
2.1.23	<p><b>CONTRACTOR'S SUPERINTENDENCE/SITE AGENT</b></p> <p>The Contractor shall constantly keep on the works a literate English speaking Agent or Representative, competent and experienced in the kind of work involved who shall give his whole 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 ENGINEER and such directions shall be deemed to have been given to the Contractor in accordance with the Conditions of Contract.</p>	
2.1.24	<p><b>PROVISIONAL WORK</b></p> <p>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 ENGINEER. Immediately the work is ready for measuring, the Contractor shall give notice to the ENGINEER. If the Contractor makes default in these respects he shall if the ENGINEER so directs uncover the work to enable all measurements to be taken and afterwards reinstate at his own expense.</p>	
2.1.25	<p><b>PROVISIONAL SUMS.</b></p> <p>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.</p>	
2.1.26	<p><b>ADJUSTMENT OF PROVISIONAL SUMS.</b></p> <p>In the final account all Provisional Sums shall be deducted and the value of the work properly executed in respect of them upon the 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.</p>	
2.1.27	<p><b>PRIME COST (OR P.C.) SUMS.</b></p> <p>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 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.</p>	
	<i>Carried to collection</i>	-

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ITEM	DESCRIPTION	AMOUNT
2.1.28	<p><b>ADJUSTMENT OF P.C. SUMS.</b></p> <p>In the final account all P.C. Sums shall be deducted and the amount properly expended upon the ENGINEER'S order in respect of each of them added to the Contract sum. The Contractor shall produce to the 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.</p>	
2.1.29	<p><b>NOMINATED SUB-CONTRACTORS</b></p> <p>When any work is ordered by the 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".</p>	
2.1.30	<p><b>DIRECT CONTRACTS</b></p> <p>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.</p>	
2.1.31	<p><b>ATTENDANCE UPON OTHER TRADESMEN, ETC.</b></p> <p>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 ENGINEER and the work will be measured and paid for to the extent executed at rates provided in these Bills.</p>	
	<i>Carried to collection</i>	-

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR  
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ITEM	DESCRIPTION	AMOUNT
2.1.32	<p><b>OFFICE ETC. FOR THE ENGINEER</b></p> <p>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 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 "ENGINEER" a modern and accurate level together with levelling staff, ranging rods and 50 metre metallic or linen tape.</p>	
2.1.33	<p><b>WATER AND ELECTRICITY SUPPLY FOR THE WORKS</b></p> <p>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 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.</p>	
2.1.34	<p><b>SANITATION OF THE WORKS</b></p> <p>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 ENGINEER.</p>	
2.1.35	<p><b>SUPERVISION AND WORKING HOURS</b></p> <p>The works shall be executed under the direction and to the entire satisfaction in all respects of the 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.</p>	
	<i>Carried to collection</i>	-

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR  
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ITEM	DESCRIPTION	AMOUNT
2.1.36	<b>PROTECTION OF THE WORKS.</b> 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 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	
2.1.37	<b>WORKS TO BE DELIVERED UP CLEAN</b> 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 ENGINEER.	
2.1.38	<b>GENERAL SPECIFICATION.</b> 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.	
2.1.39	<b>TRAINING LEVY</b> 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.	
2.1.40	<b>MATERIALS ON SITE</b> All materials for incorporation in the works must be stored on or adjacent to the site before payment is effected unless specifically exempted by the ENGINEER. This includes the materials of the Main Contractor, Nominated Sub-Contractors and Nominated Suppliers.	
2.1.41	<b>HOARDING</b> 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.	
2.1.42	<b>ALTERATIONS TO BILLS, PRICING, ETC.</b> 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 SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
2.1.43	<p><b>PREVENTION OF ACCIDENT, DAMAGE OR LOSS</b></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 thus instructed to take reasonable care in the execution of the works as to prevent accidents, damage or loss and disruption of activities being carried out by the Client. The Contractor shall allow in his rates any expense he deemed necessary by taking such care within the site.</p>	
2.1.44	<p><b>GOVERNMENT ACTS REGARDING WORK, PEOPLE ETC.</b></p> <p>Allow for complying with all Government Acts, Orders and Regulations in connection with the employment of Labour and other matters related to the execution of the works. In particular the Contractor's attention is drawn to the provisions of the Factory Act 1950 and his tender must include for all costs arising or resulting from compliance with any Act, Order or Regulation relating to Insurances, pensions and holidays for workpeople or so the safety, health and welfare of the workpeople.</p> <p>The Contractor must make himself fully acquainted with current Acts and Regulations, including Police Regulations regarding the movement, housing, security and control of labour, labour camps, passes for transport, etc. It is most important that the Contractor, before tendering, shall obtain from the relevant Authority the fullest information regarding all such regulations and/or restrictions which may affect the organisation of the works, supply and control of labour, etc., and allow accordingly in his tender. No claim in respect of want of knowledge in this connection will be entertained.</p>	
2.1.45	<p><b>BLASTING OPERATIONS</b></p> <p>Blasting will only be allowed with the express permission of the 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 ENGINEER governing the use and storage of explosives.</p>	
2.1.46	<p><b>SIGNBOARD</b></p> <p>Allow for providing, erecting, maintaining throughout the course of the Contract and afterwards clearing away a signboard as designed, specified and approved by the ENGINEER.</p>	
2.1.47	<p><b>NUISANCE</b></p> <p>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</p>	
2.1.48	<p><b>PROTECTION OF TREES</b></p> <p>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 ENGINEER and relevant authorities. He must at all times liaise with the ENGINEER in this regard. The cost of obtaining any necessary permits will be borne by the Contractor.</p>	
2.1.49	<p><b>EXTENDED PRELIMINARIES</b></p> <p>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.</p>	
2.1.50	<p><b>TIMELY PAYMENT FOR LABOURERS</b></p> <p>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,</p>	
	<i>Carried to collection</i>	-

**PROPOSED CONSTRUCTION OF SUB-COUNTY FISHERIES OFFICES IN MINJILA FOR THE STATE DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
	COLLECTION	
	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	-
<b>TOTAL FOR GENERAL PRELIMINARIES CARRIED TO GRAND SUMMARY</b>		

## 11. GRAND SUMMARY

Contract Name: CONSTRUCTION OF MINJILA FISHERIES OFFICE

RFBNo.: KE-MOMBE&MA-TR-2024-013-CW

<i>General Summary</i>	<i>Page</i>	<i>Amount</i>
BILL NO. 1: PARTICULAR PRELIMINARIES		
BILL NO. 2: GENERAL PRELIMINARIES		
BILL NO.3: BUILDING WORKS		
BILL NO.4: GATEHOUSE		
BILL NO.5: PERIMETER WALL & GATE		
BILL NO.6: FOUL DRAINAGE		
BILL NO.7 : MECHANICAL WORKS		
BILL NO.8: ELECTRICAL WORKS		
BILL NO.9: DRIVEWAY, PARKING, WALKWAYS & STORMWATER DRAINAGE		
BILL NO.10: ESMP		1,900,000.00
<i>Subtotal of Bills</i>	<i>(A)</i>	
<i>Total for Daywork (Provisional Sum)*</i>	<i>(B)</i>	
<i>Provisional Sum of Kenya Shillings Three Million Only (Kes 3,000,000.00) for fluctuations<sup>ii</sup></i>	<i>(C)</i>	3,000,000.00
<i>Total of Bills Plus Provisional Sums (A + B + C)<sup>i</sup></i>	<i>(D)</i>	
<i>Add Provisional Sum of Kenya Shillings Six Million Only (Kes 6,000,000.00) for Contingency Allowance<sup>ii</sup></i>	<i>(E)</i>	6,000,000.00
<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