

**PROPOSED COMPLETION OF POST HARVESTING FACILITY (COLDROOMS AND PACK HOUSE) AT KALONGO IN MAKUENI COUNTY.- PHASE 2**

ITEM	DESCRIPTION	QNTY	UNIT	RATE	AMOUNT
	<b><u>ELEMENT NO.1</u></b>				
	<b><u>MAIN HOUSE -REPAIRS AND ALTERATIONS</u></b>				
	<b><u>Rain Water Goods</u></b>				
A	250mm for outlets	6	NO		
B	Ditto but elbow	2	NO		
C	200mm diameter heavy duty PVC rain water downpipe fixed to wall with holder clips.	42	LM		
D	Extra over ditto for swan neck	4	NO		
E	Ditto for horse shoe	4	NO		
F	250mm diameter support brackets	25	NO		
G	250mm diameter joint unions	6	NO		
	<b><u>Ventilation Appliances.</u></b>				
H	Supply and install stainless steel rotating roof cyclones ventilators, 500mm diameter, aluminium construction, powder coated finish complete with weather proof flashing and fasteners, including all necessary accessories.	4	NO		
I	Carefully demolish the existing ramp at the entrance,measuring 2400mm x3500mm longa and dispose all the debris away from site as directed by the P.M		item		
J	Provide Materials and construct steps/stairs size 2400mmx 4000mm long, to access the building at the main entry doors mid the front face, icluding all excavations, 200mm thick masonry wallings, 150mm thick concrete slab (class 20) forming standard risers and landings all to the Engineers details and approval	1	NO		
	<b>Total carried to Collection</b>				

ITEM	DESCRIPTION	QNTY	UNIT	RATE	AMOUNT
	<b><u>Floor Finishes</u></b>				
A	Carefully,Hack out the cracked floor sections approximately 10 SM in preparation for repairing, including making good the disturbed surfaces.		Item		
B	Supply and apply 3mm thick multiple layers of Epoxy floor finish laid to approval.	10	SM		
C	Provide and install 200x50mm thick timber as impact bearer at the of Loading and unloading bay.	25	LM		
D	Allow for the connection of the drainage system to the existing Manhole, approximately 20m including all necessary fittings, testing and commissioning.		Item		
	<b>Total carried to Collection</b>				
	<b><u>COLLECTION</u></b>				
	Total Brought forward from Pg 01				
	Total Brought forward from Pg 02 Above				
	<b>TOTAL FOR REPAIRS AND ALTERATIONS TO THE EXISTING BUILDING CARRIED TO SUMMARY PAGE.</b>				

**2.0 EQUIPPING**

ITEM	DESCRIPTION	QNTY	UNIT	RATE	AMOUNT
A	<b><u>Sorting Tables</u></b> Supply and install stainless steel soarting tables sizes 2400mmx1200mmx900mm high, with drain pipes to allow connction to the existing drainage system.	3	NO		
B	<b><u>Storage Racks</u></b> Supply and install 5 tier, stainless steel storage racks of size 2000mmx650mmx11675mm high, Each shelf shall be constructed in stainless steel sheets 3mm thick, with a 50mm up stand all round. Thw whole unit shall be substantially constructed such that shelves are evenly distributed, the frame shall be stainless steel 32mmx3mm thick, with adjustable sanitary feet.	1	NO		
C	Supply and fix stainless steel double sink complete with taps ,mansory stand and concrete top, finished with white glazed tiles , including drainage works and connection to the existing drainage system.	2	NO		
	<b>TOTAL FOR REQUIPING CARRIED TO SUMMARY PAGE.</b>				

## **EXTERNAL WORKS**

ITEM	DESCRIPTION	QNTY	UNIT	RATE	AMOUNT
	<b><u>ELEMENT NO.2</u></b>				
	<b><u>EXTERNAL WORKS</u></b>				
	<b><u>1. ACCESS ROAD</u></b>				
	<b><u>Site Preparation</u></b>				
A	Cut to fill, Grade to level, and thoroughly compact formation to receive murrum fill (m/s)	240	SM		
	<b><u>Murrum</u></b>				
B	Provide, lay, water and compact to 98% B.S 200mm thick approved layer of murrum fill or other approved alternative.	72	CM		
	<b><u>Sand Blinding</u></b>				
C	Supply, lay and level 50mm thick sand blinding to receive paving blocks (m/s).	240	SM		
	<b><u>Cabro Paving Blocks</u></b>				
D	Supply and lay 60mm thick medium duty precast concrete paving blocks as "CABRO" including compaction to approval.	240	SM		
	<b><u>Channel</u></b>				
E	Provide and place 125 x 100mm Precast concrete channels including all excavation works, concrete class 15 in bed and haunching.	75	LM		
	<b><u>Draiage channel</u></b>				
F	Provide and place 200mm diameter half round IBD shallow Drain complete with precast concrete side slabs, including all excavation works, concrete class 15 in bed and haunching.	80	LM		
	<b><u>Total for Acess Road Carried to Summary</u></b>				

ITEM	DESCRIPTION	QNTY	UNIT	RATE	AMOUNT
	<b><u>2.0 PARKING AREA</u></b>				
	<b><u>Site Preparation</u></b>				
A	Mass excavation to spoil, Grade to level, and thoroughly compact formation to receive murram fill (m/s).	1,500	CM		
	<b><u>Murram</u></b>				
B	Provide, lay, water and compact to 98% B.S 300mm thick approved layer of murram fill or other approved alternative.	4,000	CM		
	<b><u>Sand Blinding</u></b>				
C	Supply, lay and level 50mm thick sand blinding to receive paving blocks (m/s).	920	SM		
	<b><u>Cabro Paving Blocks</u></b>				
D	Supply and lay 60mm thick medium duty precast concrete paving blocks as "CABRO" including compaction to approval.	920	SM		
	<b><u>Channel</u></b>				
E	Provide and place 125 x 100mm Precast concrete channels including all excavation works, concrete class 15 in bed and haunching.	165	LM		
	<b><u>Draiage channel</u></b>				
F	Provide and place 200mm diameter half round IBD Drain complete with precast concrete side slabs, including all excavation works, concrete class 15 in bed and haunching.	90	LM		
	<b><u>Precast concrete side slabs</u></b>				
G	Provide and lay precast concrete 600x600x50mm thick side slabs bedded in cement sand mortar with flush joints to sides of drain channels to approval.	48	SM		
	<b><i>Total for ParkingArea Carried to Summary</i></b>				

[illegible]

### 3. CHAINLINK FENCING AND GATE

ITEM	DESCRIPTION	QNTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO.1</b>				
	<b>Total Length = 195LM</b>				
	<b>Site Clearance</b>				
A	Clear the site off any Bushes, Cut down trees/ the euphobia live fence and remove the arising along the fence line, one metre on either side.	195	LM		
B	Excavate in <b>hard material</b> for holes (300x300x600mm deep) for commencing from existing ground level not exceeding 1.50M deep at spacing 2700mm centres.	5	CM		
	<b>Precast Concrete Posts</b>				
C	Supply and fix 125x100mm precast reinforced concrete posts, 3150mm long , with atleast 4 holes on the straight section (2700mm long) for plain wire and a 450mm crank with 3 holes for barbed wire, mortised in mass concrete surround placed at 3000mm intervals.	75	NO		
D	Ditto but 2000mm long struts at every corner and at every 30M interval, fixed both sides of the post being supported.	21	NO		
	<b>In-Situ Mass Concrete (1:3:6) class 15/20mm in.</b>				
E	Holes.	4	CM		
	<b>Plain Wire</b>				
F	10G High tensile Galvanized plain wire fixed to concrete posts to detail.	780	LM		
	<b>Barbed Wire</b>				
G	12.5G galvanized barbed wire fixed to concrete posts to detail.	585	LM		
	<b>Chainlink</b>				
H	Suply and fix 2100mm high, 14G galvanized chainlink wire with 50x50mm mesh, fixed to precast concrete posts and tied to plain wire with 1.6mm thick galvanised binding wire. The lower part of the chainlink should be buried 150mm below ground level and fastened to the ground with steel pegs at every 1M and mass concrete stripping to approval.	410	SM		
	<b>Total carried to collection</b>				

ITEM	DESCRIPTION	QNTY	UNIT	RATE	AMOUNT
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	<b><u>Gate</u></b>				-
A	Supply and fix 6000x2400mm high mild steel double leaf gate comprising of 3mm thick plate welded to 50x50x3mm RHS frames, 20x20x2mm RHS struts at 200mm c/c welded to frames including all hinges, plates and bolts, and into Reinforced concrete columns, and Painting with gloss paint M/S all to Architects details.	1	NO		
B	Ditto but pedestrian gate size 1000 x 2400mm high ditto	1	NO		
	<b><u>Finishes</u></b>				
	<b><u>Cement sand plaster to walls surfaces (1:3) finished as described.</u></b>				
C	15mm thick render to sides of Columns to receive paint externally.	4	SM		
	<b><u>Painting and Decoration</u></b>				
	<b><u>Prepare and apply three coats plastic silk emulsion paint to:</u></b>				
D	Rendered sides of Columns externally	4	SM		
	<b><u>Prepare and apply three Coats of gloss paint to:</u></b>				
E	General surfaces of metal gate (both sides)	34	SM		
	<b>Total carried to collection</b>				
	<b><u>COLLECTION</u></b>				
	Brought forward from page 1				
	Brought forward from page 2 above				
	<b>TOTAL FOR CHAINLINK FENCE AND GATE CARRIED TO SUMMARY</b>				



	ELECTRICAL INSTALLATION IN KALONGO COLDROOM				
4.0	ELECTRICAL WORKS				
ITEM	DESCRIPTION	QTY	UNIT	RATE (Kshs)	AMOUNT (Kshs)
1	Lockable Meter box measuring 24 inch by 24 inch complete with all necessary accessories	1	NO		
1.2	16mm sq. 4 core CU/XLPE/PVC as EA cables or similar approved equivalent	20	LM		
1.3	Isolator Switch as Katko or approved equivalent	1	NO		
TOTAL FOR ELECTRICAL WORKS CARRIED TO MAIN SUMMARY					

KYEU WATER PROJECT - KALONGO COLD ROOM WATER SUPPLY

**Preamble:** All prices are inclusive of transport, labour costs, profits, overheads and 16% VAT. All materials supplied should have manufacturers design specifications as highlighted in bill of quantity and drawing adhering on them and shall be used in the project upon client representative approval.

## BILL 1) INTERCONNECTIONS

NO.	ITEM DESCRIPTION	UNIT	QTY	RATE	AMOUNT
					KSHS.
1.1	<b>INTERCONNECTION TO KALONGO COLD ROOM STORAGE TANKS</b>				
1.2	<b>Contractor to supply, deliver the following items, trench, lay, fix, test and commission the pipeline</b>				
1.3	50 mm dia. HDPE pipes PN12.5 (100 M Roll)	LM	150		
1.4	Site clearing, Trench Pipeline 450mm wide x 600mm and back fill the trench	LM	150		
1.5	Supply, deliver, install, and test metallic BAYLAN/KMEI master water meters (PN16, 2"). Cost to include allied HDPE/GI/GS adaptors.	No.	1.00		
1.6	Provide for all necessary fittings for interconnection to water storages including main pipe tee	Item	1/s		
1.7	Supply, deliver, install, and test 50 mm / 63 mm gate valves	No.	2		
1.8	Standard valve chambers 1 m x 1 m x 0.5m complete with concrete cover and a padlock to house all offtake appliances	No.	2		
1.9	<b>INTERCONNECTION TO RISING MAIN</b>				
1.1	<b>Contractor to supply, deliver the following items, trench, lay, fix, test and commission the rising main interconnection</b>				
1.11	provision for all necessary fittings to interconnect the pump to rising main including rehabilitation of 4" G.I pipeline, welding, threading and accessories	Item	1/s		
1.12	Supply, deliver, rehabilitate GI joint, and test 4" vj couplings	No.	20		
1.13	Clear, trench, and backfill 600mm deep pipeline trench as directed by site engineer. Keep trenches and other excavations free of water.	LM	300		
1.14	Supply, deliver lay, joint, test and backfill HDPE Pipes 1.5" PN12.5, costs inclusive of adaptors and connectors.	LM	300		
1.15	Supply PVC Nylon Braided 3/4" Inch Heavy Duty Industrial Grade Garden Hose Flexible Water Pipe	No.	1		

	<i>BILL 1.0 TOTAL CARRIED TO SUMMARY</i>				
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<b>BILL 2) PROJECT REHABILITATION</b>					
NO.	ITEM DESCRIPTION	UNIT	QTY	RATE	AMOUNT
					KSHS.
2.1	Supply,deliver and install a Solar Powered Submersible Multistage Centrifugal Pump Set of Duty Point: 13 m <sup>3</sup> /hr at a Total Head of 250 meters with 11/13KW Motor. The pump Efficiency at duty point should be 60%. The pump Impellers should be of Stainless Steel. Provide Copies of Pump Characteristic/Performance Curves (Brochures). Install as directed by the Supervising Engineers	Set	1		
2.2	Supply, deliver and install a 3 phase, 415Vac, approved pump control panel incorporating: - i) 11/13 kW S/D Starter, c/w appropriate rating contactors, i.e. Main, Star & Delta ii) Appropriate rating overload relay as iii) Panel door mounted ammeter, >200Amps , c/w CTs iv) panel door mounted voltmeter, 0 - 500Vac, c/w voltage selector switch v) Water Level Relay, with sensitivity sensor in % vi) Phase failure relay, c/w max/min control vii) Indicator lamps: Green - run; Red - trip; Yellow - low water viii) Hand/auto selector switch, Start/stop push button ix) ADD OPTION - MA (ABOVE 11 KW) x) 3phase integral circuit breaker, >250Amps xi) Auxiliary circuit protective fuses, 3No xii) fully wired and labelled; provide 2 copies of schematic and control wiring diagram	No.	1		
2.3	Supply and install DC enclosure complete with inline 1100VDC fused isolator	NO	1		
2.4	Sensor Cable, Twin, Double Insulated, 1.5mm <sup>2</sup>	M	40		
2.5	Fit well probe, set, sensor, electrodes	set	1		
2.6	Allow for system earthing, lightening arrestor c/w surge protector and copper strip and balance of system	Lot	1		
2.7	Splicing Kit, large Packet	No.	1		

2.8	<b>Fittings and Accessories</b>				
2.9	<b>Supply, deliver , fix, test and commission the following materials:</b>				
2.1	Armored Copper Cable, 6mm <sup>2</sup> X 4 core	M	30		
2.11	Submersible copper cable, 6mm x 4 core	M	20		
2.12	Armored Copper Cable, 1.5mm <sup>2</sup> X 2 core	M	40		
2.13	UPVC Conduit, HG, 1"Ø	No.	4		
2.14	Cable Glands, 25mmL	No.	4		
2.15	Cable Glands, 20mmL	No.	2		
2.16	Splicing Kit, Medium Packet	No.	2		
2.17	Cable Ties, Large Packet, Manila	No.	1		
2.18	Insulating Tapes, Large	No.	10		
2.19	Adaptor Set, 3"Ø, stainless steel	Set	1		
2.2	<b>Booster pump</b>				
2.21	Supply a booster pump to deliver 3 m3 at 15 m head	No	1		
2.22	provide for a steel lockable chamber for housing booster pump	No	1		
2.23	Provide for electrical wiring c/w conduit and switch	Item	1		
2.24	Supply, deliver, install and test O/D 32 mm (1") PPR pipes from outlet to elevated tank	LM	100		
2.25	<b>Genset Rehabilitation</b>				
2.26	Allow for generator service, repair and testing including wiring, battery, filter and oil replacement	Item	1		
2.27	Allow for 200 litres for testing	Ltrs	200		
2.28	Electrical repairs of the existing control panel including replacement of electrical accessories	Item	1		
	<b>BILL 2.0 TOTAL CARRIED TO SUMMARY</b>				

BILL 3.0	CONTINGENCIES				
3.1	Add provisional sum of one hundred and fifty thousand kenya shillings for contingency to be expended on exclusive direction of the project manager upon evident project need				
	<b>BILL 3.0 TOTAL CARRIED TO SUMMARY</b>				
	<b>BUILDERS WORKS SUMMARY</b>				
BILL 1.0	INTERCONNECTIONS				
BILL 2.0	PROJECT REHABILITATION				
BILL 3.0	CONTINGENCIES				
	<b>BUILDERS' WORKS TOTAL COST CARRIED TO GRAND SUMMARY</b>				

**SUPPLY AND INSTALLATION OF FIRE FIGHTING EQUIPMENT**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
A	Purchase and supply of Occupational First Aid Kits	NO	1		
B	Purchase and supply of Fire Balls [4 kg]	NO	2		
C	Purchase and supply of Portable Extinguishers Co2 5 Kgs	NO	1		
D	Servicing Portable Fire Extinguishers Co2 5 Kgs	NO	4		
E	Fabricate, Supply and Install a fire assembly point, signage, comprising of mild steel plate G14, 50mmx5mmx2.5mm steel tube fixed firmly to the Ground with concrete surround, including all excavations and Painting works to Approval	NO	1		
F	Supply of fire signage-exit routes (as per structural design/layout) Luminous	NO	2		
G	Ditto but Non Luminous	NO	4		
H	Purchase and installation of Hose reel connectors complete with connectors and accessories	LM	30		
I	Purchase installation and testing High pressure Booster Pump-complete set	NO	1		
	<b>Sub -Total 1</b>				
	<b>Provisional sums</b>				
J	Allow for provisional sum of ten thousand Kenya Shillings for relocation of installed fire extinguishers and alarm bells		SUM		
K	Design and supply Fire action plans and display appropriately		SUM		
L	Design and display an architectural emergency response plan for the premises and display appropriately		SUM		
M	Allow for provisional sum of Kenya shillings ten thousand for end use training for operating extinguishers, fire safety, evacuation procedures and means of escape		SUM		
	<b>TOTAL FOR FIRE FIGHTING CARRIED TO MAIN SUMMARY</b>				

ITEM	SECTION DETAILS				AMOUNT
	<u>SUMMARY</u>				
A	REPAIRS AND ALTERATIONS TO PACKHOUSE				
B	EQUIPING				
C	EXTERNAL WORKS-CIVIL WORKS				
D	CHAINLINK FENCE AND GATE				
E	ELECTRICAL WORKS				
F	WATER SUPPLY, STORAGE AND DISTRIBUTION				
G	FIRE FIGHTING EQUIPMENT				
	<b>GRAND TOTAL CARRIED TO GRAND SUMMARY</b>				

ITEM	DESCRIPTION	QNTY	UNIT	RATE	AMOUNT
	<b><u>ELEMENT NO.7</u></b>				
	<b><u>PRIME COST &amp; PROVISIONAL SUMS</u></b>				
A	Provide a Provisional Sum of Kenya Shillings Two Hundred Thousand ( Kshs 200,000.00) for Supply of office furniture and Equipment.		SUM		200,000.00
B	Provide a Provisional Sum of Kenya Shillings One Hundred Thousand ( Kshs 100,000.00) for Project Management Committee (PMC)		SUM		100,000.00
C	Provide a Provisional Sum of Kenya Shillings One Hundred Thousand (Kshs 100,000.00) for Monitoring and Evaluation (M&E)		SUM		100,000.00
F	Provide a Provisional Sum of Kenya Shillings One Hundred Thousand (Kshs 100,000.00) for Community Outreach		SUM		100,000.00
G	Provide a Provisional Sum of Kenya Shillings Two Hundred and Fifty Thousand (Kshs 250,000.00) for Project Technical Supervision,		SUM		250,000.00
H	Provide a Provisional Sum of Kenya Shillings One Hundred and Fifty Thousand (Kshs 150,000.00) for Contingency Sums to be deducted in whole or in part at the discretion of the Project Manager.		SUM		150,000.00
	<b>PRIME COST &amp; PROVISIONAL SUMS CARRIED TO GRAND SUMMARY</b>				<b>900,000.00</b>



ITEM	SECTION DETAILS				AMOUNT
	<b><u>GRAND SUMMARY</u></b>				
A	PRELIMINARIES				
B	COMPLETION WORKS				
	Sub-Total 1				
C	Public Procurement Capacity Building Levy order 2023 which is 0.03% of the total cost before tax pursuant to PPRA Circular No. 1 of 2024.  ADD 16% VAT				
	Sub-Total 2				
D	PRIME COST & PROVISIONAL SUMS				900,000.00
	<b>GRAND TOTAL CARRIED TO FORM OF TENDER.</b>				

AMOUNT IN WORDS:

DATE: