RACIDA
innovatively empowering the pastoralist communities

LETTER OF INVITATION TO TENDER

TENDER No. RACIDA/USAIDBHA-MDR2021/2022-0014

PROPOSED EXTENSION OF WATER SUPPLY IN 12 STRATEGIC KEYS

BOREHOLES IN HULLOW, MALAKMARI, WARANKARA, LANQURA, SHIMBIR FATUMA, KOBADHADDHI, HARBATI, GARBAB, DAGATURTUR,FIN0 2, DARWEED AND DEGMARER IN MANDERA COUNTY
IN MANDERA COUNTY.

CLOSING DATE –22ND September AT 4:00 PM

LETTER OF INVITATION TO TENDER NO.

RACIDA/USAIDBHA-MDR2021/2022-014

Rural Agency for community development and assistance RACIDA invites sealed tenders for the Extension of Water Supply in 12 Strategic Key Boreholes in Mandera County whose specifications are detailed in the Tender Documents, interested eligible Vendors are requested to submit the same free of charge. Bidders who choose to bid should submit their application to the procurement department.

Mandatory tender instruction.

1. Bidders' quotes should be net inclusive of all taxes, must be in Kenya Shillings and Shall remain valid for at least ninety (90) days from the closing date of the tender.
2. Bids must be accompanied by a bid security in the form and amount specified in the Tender Documents. The bid security must be valid for at least a period of thirty (30) days from the date of the tender opening.
3. Bidders must submit a proposed Works Programme, failure to which the tender will be non-responsive. Please note that the contract period will be Twelve (12) weeks.
4. Bidders MUST comply with Section A (Instructions to Tenderers) of the Tender Documents.
5. Bidders **MUST** fill all the forms in Section of the Tender Document except the Performance Bank Guarantee form and the Bank Guarantee for Advance Payment Form. **Failure To Fill The Forms Comprehensively Will Render The Bid Non-Responsive.**
6. Bidders MUST submit with their offer detailed technical specification technical data for the products they intend to supply as requested in the Tender Document.
7. Completed Tender documents are to be enclosed in plain sealed envelopes marked with the Tender name: Proposed extension of Water Supply in 11Strategic Key Boreholes In HULLOW, MALAKMARI, WARANKA, LANQURA, S H I M B I R F A T U M A , K O B A D H A D D H I , H A R B A T I , GARBAB, DAGATURTUR,FIN0 DARWEED AND DEGMARER in Mandera County and Tender Number RACIDA/USAIDBHA-MDR2021/2022-014 in accordance with the Instructions to Tenders in the tender documents and must be deposited in the tender box in RACIDA Mandera office on or before the date specified in the advertisement.

Bids must address to:

THE PROCUREMENT OFFICER,

RURAL AGENCY FOR COMMUNITY DEVELOPMENT AND ASSISTANCE –

RACIDA, MOI ROAD Behind Greenview hotel

MANDERA

So as to be received on or before **22ND SEPTEMBER,2022, at 4:00 PM Nairobi time.**

8. Tenders will be opened on the date specified in the advertisement thereafter in the presence of the candidates or their representatives who choose to attend at the above address.
9. Rural Agency for community Development and assistance (RACIDA) reserves the right to accept or reject in part or in whole any tender without giving reasons.

FORM OF TENDERER

To: THE PROCUREMENT OFFICER,
RURAL AGENCY FOR COMMUNITY DEVELOPMENT AND ASSISTANCE –
RACIDA, MOI ROAD NEXT TO Behind green view hotel
MANDERA

TENDER No. RACIDA/USAIDBHA-MDR2021/2022-014 PROPOSED EXTENSION OF WATER SUPPLY IN 11STRATEGIC BOREHOLES IN HULLOW, MALAKMARI, WARANKA, LANQURA, SHIMBIR FATUMA KOBADHADDHI, HARBATI, GARBAB, DAGATURTUR,FIN0 2, DARWEED AND DEGMARER IN MANDERA COUNTY.

1. In accordance with the Instructions to Tenderers, Conditions of Contract, Specifications and Bills of Quantities for the execution of the above-named Works, we, the undersigned offer to construct, install and complete such Works and remedy any defects therein for the sum of:

Kshs .....*[Amount in figures]*
Kenya Shillings.....
.....*[Amount in words]*

We undertake, if our tender is accepted, to commence the works as soon as is reasonably possible after the receipt of the management's notice to commence, and to complete the whole of the works comprised in the Contract within the time stated in the Appendix to Conditions of Contract.

1. We agree to abide by this tender for a period of 90 days from the date of tender opening, and shall remain binding upon us and may be accepted at any time before the expiry of that period.
2. Unless and until a formal Agreement is prepared and executed this tender together with your written acceptance thereof, shall constitute a binding Contract between us.
3. We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this …… day of..... 2022

Signature ……in the capacity of.....duly authorized to sign tenders for

and on behalf of:

…..... [Name of Tenderer]

of .....***[Address of Tenderer]***

PIN No.....VAT CERTIFICATE

No . ……

Witness: Name ..... Address …….

Signature ……

FORM OF TENDER SECURITY

WHEREAS..... (hereinafter called "the Tenderer") has

submitted his tender dated.....for the construction of ....(Name of Contract)

KNOW ALL PEOPLE by these presents that WE..... our registered office at ..... having

ound unto (hereinafter called "the Bank"), are b .....

n the sum of (hereinafter called "the Employer") i KShs.....

made for which payment well and truly to be

to the said Employer, the Bank bind itself, its successors and assigns by these presents sealed with

the Common Seal of the said Bank this.....Day of ..... 20.....

THE CONDITIONS of this obligation are:

1. If after tender opening the tenderer withdraws his tender during the period of tender Validity specified in the instructions to tenderers

   Or

2. If the tenderer, having been notified of the acceptance of this tender by the Employer during the period of tender validity:

   a. Fails or refuses to execute the form of Agreement in accordance with the Instructions to Tenderers, if required; or

   b. Fails or refuses to furnish the Performance Security, in accordance with the Instructions to Tenderers; or

   c. Rejects a correction of an arithmetic error in the tender

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand d the Employer will note that the amount claimed by him is due to him, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including thirty (30) days after the period of tender validity, and any demand in respect thereof should reach the Bank not later than the said date.

[Date]	*[Signature of the Bank]*
[Witness]	*[Seal]*

EXTENSION OFWATER SUPPLY IN 12 STRATEGIC BOREHOLES

Introduction

RACIDA has worked in Mandera County for the last 17 years and has focused on building the resilience of rural pastoralists' communities in the County. This is in line with the organizations core mandate of enhancing self-reliance and prosperity amongst vulnerable pastoralist communities through promotion of better livelihood systems and sustainable use of natural resources. By implementing this project and carrying our activities in WASH; agriculture and food security; in the proposed project, RACIDA is working toward achieving a lasting impact on the social and economic development of the targeted communities in Mandera County.

Currently, communities in Mandera County, Kenya, have faced significant economic and social crises due to current drought and climatic shocks. Since 2019, the County has been exposed consecutively to drought, conflict, multiple locust invasions, and more recently, in 2020, COVID-19. The failure of sequential rains through 2020 across Mandera has negatively impacted livestock productivity and household purchasing power for these communities whose primary livelihood is pastoralism. Responses to recurrent shocks have been slow, and communities have exhausted their local coping strategies, pushing them to rely on humanitarian aid. There are currently an estimated 216,8611people in need of humanitarian assistance including, access to water, food, Nutrition, WASH NFIs, fodder for livestock, and livestock vaccinations.

To address the pre-identified community needs, RACIDA proposes to Implement an integrated response to the triple crisis of drought, desert locusts and COVID-19 (IETC) by leveraging complementary and interventions across WASH, nutrition, and agriculture sectors. The IETC project activities will improve livestock livelihoods by improving livestock disease surveillance, vaccinations, and access to fodder and water. Simultaneously, RACIDA proposes to support improved access to water supply and hygiene services by rehabilitating water points, providing key hygiene messages and WASH NFIs. Water supply rehabilitation will also support health facilities that IETC is supporting with integrated WASH and nutrition activities. At each outreach site RACIDA and the Ministry of Health are providing social behavior change interventions in MIYCN-E, management of malnutrition activities, and supplemental nutrition assistance.

EXTENSION OFWATER SUPPLY IN 12 STRATEGIC BOREHOLES IN, MANDERA COUNTY

Extension of Water Supply In 12 Strategic Boreholes In HULLOW, MALAKMARI, WARANKA, LANQURA, SHIMBIR FATUMA 1, KOBADHADDHI, HARBATI, GARBAB, DAGATURTUR,FIN0 2, DARWEED AND DEGMARER In Mandera County.

These key strategic boreholes are high yielding and are used as emergency boreholes, especially during dry periods and in times of drought. The 12 No. Boreholes are HULLOW, MALAKMARI, WARANKA, LANQURA, SHIMBIR FATUMA 1, KOBADHADDHI, HARBATI, GARBAB, DAGATURTUR,FIN0 2,DEGMARER AND DARWEED in Mandera county.

The general location of the sites are as shown in the direction below. The sites can be accessed through several all-weather roads within the sub-county.

PRICE SCHEDULE

The rates and prices inserted in the Bills of Quantities/Price Schedule are to be the full inclusive costs of the works, described under the items, complete in place and in accordance with the specifications, including costs, expenses and profits which may be required in and for the construction of the works described, together with any temporary works and installations which may be necessary and all general risks, liabilities and obligations set forth or implied in the document

DESCRIPTION OF LOCATION OF SITES

1. **Garbab**: This borehole is located 30kms North of Olla town in Guticha ward. Particular information on this borehole is given below

GARBAB BOREHOLE INFORMATION

	BILL NO. 1: FOR BOREHOLE EQUIPING	**UNITS**	**QTY**	**RATE (KSHS)**	**AMOUNT (KSHS)**
	Borehole Equipping Bill of Quantities (Rates should be all inclusive; materials, equipment, labor, taxes, insurance and all other incidental costs)				
1	Preliminary items				
1.1	Mobilization of materials, equipment's and personnel	Kms	200		
1.2	Provide 152mm internal diameter threaded Borehole cap with 50mm diameter pipe threaded on both ends welded to it at the center to receive 50mm draw pipes and rising main and 20mm provision to receive Air line	No	1		
1.3	Provide a standard steel Borehole draw pipes assembly clamp	No	1		
1.4	Provide all other electrical, mechanical and plumbing tools and accessories (e.g. Insulation tapes, thread tapes, bitumen, welding rods, bolts and nuts, e.t.c) required for equipping of the Borehole	Item	L/S		
2.0.	Electro-mechanical works				
2.1	Supply and install AC powered 7.5KW Submersible pump-set complete with 3-phase motor and accessories including motor control panel with overload, phase failure, water level control relays capable of delivering 7,200lts of water against a total head of 300m	Set	1		
2.2	Supply and install a compatible Diesel powered 3-phase KVA Generator-set supplied complete with accessories, change-over	Set	1		

	switch and 3 months service fuel, oil and Air cleaner filter elements kits				
2.4	At least 16mm2 3-phase dual core motor cable	M	350		
2.5	1.5mm2 to 2.5mm2 twin insulated water level relay cables	M	380		
2.6	Water level control electrodes	No	2		
2.7	Water proof jointing/ Splicing Kit	No	1		
2.8	Dual core armored cable	M	30		
3.0.	Plumbing/ Pipefitting Works				
3.1	Supply and install 50mm diameter, standard 6m long each GS class "C" draws pipes with ditto submersible pump (Each pipe should have Steel steamed socket)	Lengths	50		
3.2	Supply and fit 50mm diameter GI Unions on rising main between Master meter and non-return valve	No	1		
3.3	Supply and fit 50mm diameter Master meter	No	1		
3.4	Supply and fit 50mm diameter Non-return valve	No	1		
3.5	Supply and fit 50mm diameter 90 Degree, M-F GI Elbows	No	3		
3.6	Supply and fit 50mm diameter GI Plain Nipples	No	4		
	TOTAL FOR BOREHOLE EQUIPPING				

BILL NO. (i): CONSTRUCTION OF STANDARD MASONRY PUMP HOUSE

	ITEM DESCRIPTION	UNITS	QTY	RATE (KSHS)	AMOUNT(KSHS)
A	EXCAVATIONS & EARTHWORKS; -				
1	Excavation of over site soils and foundations	CM	14		
2	Backfilling and removal of extra excavated earth	CM	9.5		
B	SUBSTRUCTURE AND WALLING				
1	Ordinary Portland Cement	Bags	36		
2	Sand	Tones	15		
3	Ballast	Tones	10		
4	Approved Hardcore	Tones	10		
5	Approved Murram	Tones	5		
6	200mm thick x 300mm long Quarry Stone Blocks	No	390		

7	8mm dia. M.S. reinforcement bars	Length	10		
8	12mm dia. M.S. reinforcement bars	Length	5		
9	Anti-Termite Oil	Lts	10		
10	BRC Mesh fabric 125	LM	12		
11	DPC	LM	21		
12	12mm dia x 300mm long Anchor bolts	No	14		
C	SUPERSTRUCTURE				
1	150 X 25mm sawn timber formwork	LM	25		
2	100 x 50mm Wall plates	LM	60		
3	100 x 50mm Poles	LM	38		
4	100 x 50mm Braces	LM	22		
5	25 x 50mm Battens	LM	70		
6	50 x 50mm B.S. 125 weld mesh	SM	44		
7	Hoop iron	LM	128		
D	ROOF CONSTRUCTION USING SAWN, CELCURED SECOND GRADE CYPRESS; -				
1	100 x 50mm Rafters	LM	75		
2	100 x 50mm Ceiling joists	LM	36		
3	100 x50mm Purlins	LM	25		
4	12.5 x 200mm Facial board	LM	25		
5	25 x 100mm Steel plates	No	12		
E	28 GAUGE, G.C.I. ROOFING;				
1	2.5 m Corrugated galvanized iron sheets Gauge 28	No	15		
2	1.5 m long galvanized iron Cap ridges, Gauge 28	No	5		
F	FIXTURES AND IRON MONGERIES;				
1	1200 x 2100mm wooden double door in one section side slung, opening outwards, ledged, braced & complete with frame and padlock	No	1		
2	200mm Pressed steel tower bolts	Pairs	2		
3	125mm barrel bolts	No	2		
4	10mm dia. Prefabricated foundation bolts cast within 'ditto'	No	4		
G	FINISHES;				
1	Plastic emulsion paint	Lts	12		
2	Gloss enamel paints	Lts	4		
3	Wood Preservative	Lts	20		
H	MISCELLENOUS:				

1	Assorted Nails	Kgs	15		
	TOTAL FOR PUMP HOUSE				

BILL NO. (ii): PERIMITER FENCE OF THE BOREHOLE COMPOUND

		UNIT	QNTY	RATE (KSHS)	AMOUNT (KSHS)
1	Bush clearing of area along the girth of the fence 2m wide	M2	2025		
2	Excavate Pits for fencing Posts 100mm in diameter & 0.5m deep	No	90		
3	2.5M long 63mm Angle Line Fencing posts including Bracing Posts fabricated & with 8 No 10mm diameter holes drilled at same points on each fencing post to receive strainer wires	No	90		
4	Use Mass Concrete 1:2:4 in Pits to firmly hold Angle line Fencing Posts	M3	10		
5	Chain link to posts through drilled holes using binding wire	M2	400		
6	16gauge barbedB415:C418 wire as strainers and tied to chain-link using Binding wire	Roll	1		
7	Standard mesh steel double swing gate with locks with lockable pedestrian inlet	Item	1		
	TOTAL FOR PERIMETER FENCE				

BILL NO(iii) 25m3 MASONRY TANK as storage Tank

		UNIT	QNTY	RATE (KSHS)	AMOUNT (KSHS)
6.01	Excavate for above tank in soil for tank foundation to a depth not exceeding 1.5m	m3	10		
	MASONRY WALL				
6.02	Supply material and construct a 225mm				
	circular masonry wall	m2	18		
6.03	Ditto but 450mm circular masonry wall	m2	32		
6.04	Supply all material and plaster inside				
	of tank with 15.0mm water proof				
	sand/cement screed	m2	60		
6.05	Provide and fix 200mm thick bouder at				

	wall and floor interface	Ls	1		
	CONCRETE WORK				
6.07	Supply all material and place all class				
	30 concrete work to cover the foundation,				
	beams, and cover slab				
	Rate to Include formwork.	m3	25		
6.08	Supply, lay and compact hardcore for				
	wall foundation and base slab.	m3	30		
6.09	Supply all material and place class				
	15(20) concrete blinding	m3	2		
	STEEL REINFORCEMENT				
6.1	Supply, cut and place the following				
	steel reinforcement to BS 4466				
	(I) Y8	Kg	200		
	(ii) Y12	Kg	1000		
	(iii) Y10	Kg	400		
	Subtotal Masonry wall, Concrete and reinforcement of 225 tank)				
	PIPE WORK AND FITTINGS				
6.11	Supply and fix all pipe fittings as				
	shown below				
	(i) 75mm dia GS VJ flanged adapter	No.	9		
	(ii) 75mm dia G.I. Flanged gate valve	No.	3		
	(iii) 75mm dia GS flanged pipe 1m long	No.	2		
	(iv) 75mm dia GS flanged long radius	No.	4		
	900 bend				
	(v) 75mm dia GS flanged Pipe 2.2m long	No.	1		
	(vi) 75mm dia GS flanged pipe 1m long				
	with paddle flange	No.	1		
	(vii) 75mm dia flanged Glenfield ball				
	float valve	No.	1		
	(viii) 75mm dia GS flanged bell mouth	No.	3		
	(ix) 75mm dia GS flanged shovel				
	radius 900 bend	No.	2		
	(x) 75mm dia uPVC-B 6m outfall pipe	No.	5		
	(xi) 75mm dia GS flanged spigot 1m	No.	6		

	long				
	(xii) 75x75mm dia GS flanged Tee	No.	1		
	(xiii) 75mm dia flanged pipe 3m long	No.	1		
	(xiv) 75mm dia flanged pipe 1.5m long	No.	1		
	(xv) 75mm dia GS male threaded pipe				
	with paddle flange 400mm long	No.	1		
	(xvi) 75mm dia GS 900 bend female				
	Threaded	No.	2		
	(xvii) 75mm dia GS male threaded nipple	No.	1		
	(XVIII) 75 x 50mm GS Reducing Bushes	No.	2		
6.12	Supply all material and construct				
	outlet valve chambers as per the Engineers instruction				
		No.	1		
6.13	Supply all material and construct scour				
	and over flow valve chamber as per	No.	1		
6.14	Supply all material and construct inside				
	tank ladder	No	1		
6.15	Ditto but outside ladder	No.	1		
6.16	Supply and install 5mm galvanized				
	wire mesh on air vent pipe as per	Ls	1		
6.17	Test water tank for leakages as				
	described in the specifications,	Ls	1		
	disinfect and commission				
6.18	Reinstate ground at tank site	Ls	1		
	Subtotal For pipework and fittings				
	Subtotal For wall concrete and reinforcement of 50M3 tank (BF)				
	Total For 1 Number 50m3 ground level masonry tank				

BILL NO (iv) 2 NO CATTLE TROUGHS

		UNIT	QNTY	RATE (KSHS)	AMOUNT (KSHS)
	Excavations				
	Excavation including maintaining and supporting sides and keeping free from water, mud and fallen materials by bailing , pumping or otherwise				

1	Excavate bulk for pit 0.00-1.5 metres	21.7	CM		
2	Remove surplus excavated material from site	21.7	CM		
	Hardcore filling				
3	Supply, fill and ram 300mm thick approved Hardcore	39	Ton		
	Concrete work				
	Concrete in foundations				
4	mass concrete in Strip foundations	0.8	CM		
5	10mm diameter reinforcement bars 150mm centre to centre	11	lengths		
6	100mm thick reinforced concrete slab	1.3	CM		
7	Timber shattering provided to sides of floor slab	30	M		
8	Weld mesh Reinforcement	12.1	SM		
	SUBSTRUCTURES SUB-TOTAL				
	(II) SUPERSTRUCTURES				
	Walling				
9	225 mm Thick (building stones /rubble/interlocking soil blocks) walling in cement and sand mortar (1:3)	13.2	SM		
	Finishes				
	Cement and sand (1:3) render as described in:				
10	13mm Thick with finish to masonry walling	26.4	SM		
11	25mm thick floor finish	11	SM		
12	Prepare and apply three coats plastic emulsion paint to wall surfaces	13.2	SM		
	50mm diameter GI pipes and fittings				
13	50mm GI class B pipe	1	lengths		
14	50mm GI Barrel Nipples	6	No		
15	50mm GI Sockets	4	No		
16	50mm GI Unions	3	No		
17	50mm GI Gate Valves	2	No		
18	50mm GI Ball valve	1	No		
19	50mm GI Elbows	4	No		
20	Float Ball Valve O Male Thread 304 Stainless Steel Automatic	1	NO		
	SUPERSTRUCTURE SUB-TOTAL				
	TOTAL FOR ONE CATTLE TROUGH				
	GRAND TOTAL FOR 2 N0 CATTLE TROUGHS				

BILL NO (v) CONSTRUCTION OF MASONRY WATER KIOSK

Item	DESCRIPTION	UNITS	QTY	RATES (KSHS)	AMOUNT (KSHS)
	EXCAVATIONS & EARTHWORKS;				
1.	Excavate over site not exceeding 150mm deep, remove and deposit as directed.	CM	1.8		
2.	Excavate foundation trench not exceeding 0.8m deep	CM	7		
3.	Extra over "ditto" for excavation within rocky formation	CM	3.5		
4.	Backfill and ram	CM	3		
5.	Cart away remaining excavated earth material and deposit within site as directed.	CM	5.3		
	SUB-STRUCTURE;				
	STRIP FOUNDATIONS 600mm WIDE & 150mm THICK;				
6.	Reinforced concrete 1:2:4 in foundations	CM	1.5		
7.	10mm dia. Rod reinforcements	Length	4		
8.	8mm rod reinforcements	Length	2		
	WALLING IN 1:3 GAUGED MORTAR;				
9.	225mm thick Concrete Block walling	SM	12		
10.	Hoop iron belt reinforcement	Kgs	3		
	FLOOR SLAB;				
11.	250mm thick, approved hardcore	CM	2.5		
12.	50mm thick, mass concrete 1:4:8 blinding	CM	0.3		
13.	100mm thick mass concrete 1:2:4 floor slab	CM	0.6		
14.	Damp Proof Membrane	SM	6		
15.	Form work to sides of foor slab	SM	1.5		
	WALLING;				
16.	D.P.C. under walling	LM	16		
17.	225mm thick Concrete Block walling	SM	22		
18.	1,700x400x300mm Mass Concrete raised Apron	CM	0.15		
19.	Waste water collection and drainage area walling	SM	2.5		
	ROOFING;				
20.	200 X 300mm Reinforced Concrete Ring Beams	CM	1.8		
21.	12mm dia Ms Reinforcement bars	Length	10		
22.	8mm dia Ms Reinforcement bars	Length	5		
23.	Provide for form work along soffit and sides of ring beams	SM	23		
24.	150mm thick, reinforced concrete	CM	1.5		

	roofing				
25.	12mm dia Ms Reinforcement bars at 200mm centre to centre	Length	8		
26.	Provide for form work along soffit and sides of R.C roof	SM	9		
27.	PVC Tank mounted over R. C. Roof and accessories:				
28.	Supply and install at least 4,900 Cubic metres Plastic tank over reinforced concrete roof	Item	L/s		
29.	Excavate and cover with a RC slab a 1000x1000x2000mm soak pit	Item	L/s		
30.	Provide 1 coarse of 225mm walling over roof slab to guard Plastic Tank installed	SM	3.1		
31.	Construct one, 1700x500x75mm RC Kiosk counter reinforced with 50x50mm wire mesh	Item	L/s		
	FIXTURES;				
	Doors & windows: -				
32.	Standard 850 x 2100mm steel casement door complete with frame and locks	No	1		
33.	Upward opening 1000high x 800mm wide steel casement window that opens and closes in vertical swing motion complete with frame, protective burglar proofing and locks	No	2		
	FINISHES;				
34	20mm cement sand 1:3 plaster applied in 3 layers	SM	45		
35.	50mm cement: sand 1:3 floor screed placed in 2 layers	SM	4.6		
36.	Include red oxide powder	SM	4.6		
37.	Red oxide floor polish	SM	4.6		
38.	Emulsion paints	SM	45		
39.	Enamel paints	SM	38		
40	Artwork and sign writing as illustrated by drawings	Item	L/s		
	PLUMBING & PIPE FITTING;				
	Connection of the following pipes, fittings, and appurtenances				
41.	50mm dia. G.I. tee	No	1		
42	'Ditto' nipples	No	1		
43.	'Ditto' union	No	1		
44.	50 x25mm dia. Reducing bush	No	1		
45.	25mm dia. G.I. nipple	No	1		
44.	'Ditto' Gate valve	No	1		

45.	'Ditto' Union	No	1		
46.	'Ditto' class 'B' pipe	Length	1		
47.	'Ditto' 900 bends, M-F	No	4		
48.	25 x20mm dia. G.I. Reducing bush	No	1		
49.	20mm dia. G.I. nipples	No	9		
50.	'Ditto' Unions	No	5		
51.	'Ditto' Sockets	No	6		
52.	'Ditto' Tees	No	4		
53.	'Ditto' Gate valves	No	5		
54.	'Ditto' Plug	No	1		
55.	'Ditto' class 'B' pipe	Length	1		
56.	'Ditto' 900 Elbows, F-F	No	4		
57.	Float Ball Valve O Male Thread 304 Stainless Steel Automatic	No	1		
	TOTAL FOR ONE (1) WATER KIOSK				

	GRAND SUMMARY FOR THE BOREHOLE			AMOUNT
1	BORHOLE EQUIPING			-
2	CONSTRUCTION OF PUMPHOUSE			
3	RETICULATION PIPELINES			
4	PERIMETER FENCING			
5	CONSTRUCTION OF 50M3 MASONARY TANK			
6	CONSTRUCTION OF TWO NO CATTLE TRUGH			
7	CONSTRUCTION OF ONE WATER KIOSK			
	TOTAL COST			
	GRAND TOTAL			

2. **FINO 2** : This borehole is located 55km south of Mandera town.

FINO BOREHOLE INFORMATION

BILL NO. (i) FOR BOREHOLE EQUIPING

		Units	QTY	Unity Price (KSHS)	Total cost (KSHS)
	Borehole Equipping Bill of Quantities (Rates should be all inclussive; materials, equipment, labour, taxes, insurance and all other incidental costs)				
1	Preliminary items				
1.1	Mobilization of materials, equipment and personnel	Kms	220		
1.2	Provide 152mm internal diameter threaded Borehole cap with 50mm diameter pipe threaded on both ends	No	1		

	welded to it at the centre to receive 50mm draw pipes and rising main and 20mm provision to receive Air line				
1.3	Provide a standard steel Borehole draw pipes assembly clamp	No	1		
1.4	Provide all other electrical, mechanical and plumbing tools and accessories (e.g. Insulation tapes, thread tapes, bitumen, welding rods, bolts and nuts, e.t.c) required for equipping of the Borehole	Item	L/S		
2.0.	Electro-mechanical works				
2.1	Supply and instal AC powered 7.5KW Submersible pump-set complete with 3-phase motor and accessories including motor control panel with overload, phase failure, water level control relays capable of delivering 7,200lts of water against a total head of 300m	Set	1		
2.2	Supply and install a compatible Diesel powered 3-phase KVA Generator-set supplied complete with accessories, change-over switch and 3 months service fuel, oil and Air cleaner filter elements kits	Set	1		
2.4	At least 8mm2 3-phase dual core motor cable	M	350		
2.5	1.5mm2 to 2.5mm2 twin insulated water level relay cables	M	380		
2.6	Water level control electrodes	No	2		
2.7	Water proof jointing/ Splicing Kit	No	1		
2.8	Dual core armored cable	M	30		
3.0.	Plumbing/ Pipefitting Works				
3.1	Supply and install 50mm diameter, standard 6m long each GS class "C" draw pipes with ditto submersible pump (Each pipe should have Steel steamed socket)	Lengths	50		
3.2	Supply and fit 50mm diameter GI Unions on rising main between Master meter and non-return valve	No	1		
3.3	Supply and fit 50mm diameter Master meter	No	1		
3.4	Supply and fit 50mm diameter Non-return valve	No	1		
3.5	Supply and fit 50mm diameter 90 Degree, M-F GI Elbows	No	3		

3.6	Supply and fit 50mm diameter GI Plain Nipples	No	4		
	TOTAL FOR BOREHOLE EQUIPPING				

BILL NO. (ii) CONSTRUCTION OF STANDARD MASONRY PUMP HOUSE

	ITEM DESCRIPTION	UNITS	QTY	RATE (KSHS)	AMOUNT (KSHS)
A	EXCAVATIONS & EARTHWORKS; -				
1	Excavation of over site soils and foundations	CM	14		
2	Backfilling and removal of extra excavated earth	CM	9.5		
B	SUBSTRUCTURE AND WALLING				
1	Ordinary Portland Cement	Bags	36		
2	Sand	Tonnes	15		
3	Ballast	Tonnes	10		
4.	Approved Hardcore	Tonnes	10		
5	Approved Murram	Tonnes	5		
6	200mm thick x 300mm long Quarry Stone Blocks	No	390		
7	8mm dia. M.S. reinforcement bars	Length	10		
8	12mm dia. M.S. reinforcement bars	Length	5		
9	Anti-Termite Oil	Lts	10		
10	BRC Mesh fabric 125	LM	12		
11	DPC	LM	21		
12	12mm dia x 300mm long Anchor bolts	No	14		
C	SUPERSTRUCTURE				
1	150 X 25mm sawn timber formwork	LM	25		
2	100 x 50mm Wall plates	LM	60		
3	100 x 50mm Poles	LM	38		
4	100 x 50mm Braces	LM	22		
5	25 x 50mm Battens	LM	70		
6	50 x 50mm B.S. 125 weld mesh	SM	44		
7	Hoop iron	LM	128		
D	ROOF CONSTRUCTION USING SAWN, CELCURED SECOND GRADE CYPRESS; -				
1	100 x 50mm Rafters	LM	75		
2	100 x 50mm Ceiling joists	LM	36		
3	100 x50mm Purlins	LM	25		
4	12.5 x 200mm Facial board	LM	25		
5	25 x 100mm Steel plates	No	12		
E	28 GAUGE, G.C.I. ROOFING;				
1	2.5 m Corrugated galvanized iron sheets Gauge 28	No	15		
2	1.5 m long galvanized iron Cap ridges, Gauge 28	No	5		

F	FIXTURES AND IRON MONGERIES;				
1	1200 x 2100mm wooden double door in one section side slung, opening outwards, ledged, braced & complete with frame and padlock	No	1		
2	200mm Pressed steel tower bolts	Pairs	2		
3	125mm barrel bolts	No	2		
4	10mm dia. Prefabricated foundation bolts cast within 'ditto'	No	4		
G	FINISHES;				
1	Plastic emulsion paint	Lts	12		
2	Gloss enamel paints	Lts	4		
3	Wood Preservative	Lts	20		
H	MISCELLENOUS:				
1	Assorted Nails	Kgs	15		
	TOTAL FOR PUMP HOUSE				

BILL NO.(iii) RETICULATION PIPELINES

	B.O.Q No.2: RISING MAINS				
NO	ITEM DESCRIPTION	UNIT	QNTY	RATE (KSHS)	AMOUNT (KSHS)
	Preparation, Excavation, Pipe laying, joining and fittings				
1	Carry out bush clearing along rising main route 500mm wide	SM	450		
2	Excavate and backfill pipeline trench (after laying of pipe) 450mm wide and between 0.6m and 1.5m deep (50% in very rocky ground)	m.	450		
3	Provide and lay 75mm Rising mains using UPC (Class D) pipes with rubber joint	m.	450		
4	Provide the following fittings for joining of the pipes				
	i) Master meter 50mm diameter	NO	2		
	ii)75mm Valve Sockets	NO	2		
	iii) 75mm GI Nipple (Provisional)	NO	3		
	iv) 75mm GI 90 degrees Tees	NO	1		
	v) 50mm GI Non-return Valve	NO	2		
	vi) 75x 50mm GI Reducing Bushes	NO	3		
	vii) 75 x 20mm GI Reducing Bushes	NO	1		
	viii) 75mm GI Gate Valves	NO	4		
5	Provide, lay and join 50mm HDPE 6 Bar (Class B) pipes	m	40		
6	Provide the following fittings for joining of the pipes				

	i) Master meter 50mm diameter	No.	1		
	ii) 50mm Valve Sockets	No	6		
	iii) 50mm GI Nipple (Provisional)	No	4		
	iv) 50mm GI 90 degrees Tees	No	4		
	v) 50mm GI Non-return Valve	No	1		
	vi) 50 x 50mm GI Reducing Bushes	No	2		
	vii) 50 x 20mm GI Reducing Bushes	No	2		
	viii) 50mm GI Gate Valves	No	1		
	ix) 50mm GI Sockets	No	3		
7	Provide & fit 50mm dia GI Elbows	No	1		
8	Provide & fit 20mm Air Valves	No	8		
9	Provide & fit 20mm dia GI Gate Valves	No	1		
10	Provide & fit 20mm dia GI Barrel Nipples	No	3		
11	Provide & fit 20mm dia GI Sockets	No	2		
12	Provide & fit 20mm dia pieces of class A pipes 300mm long each and threaded on both ends to hold Air Valves	No	2		
13	Construct Valve Chambers for Air Valves and Wash-outs of size 1mx1mx1m	No	2		
14	Disinfect and test the pipeline	Item	2		
	TOTAL FOR RISING AND DISTRIBUTION PIPELINES				

BILL NO(iv) 25m3 MASONRY TANK as storage Tank

				Rate (KSHS)	Price (KSHS)
6.01	Excavate for above tank in soil for tank foundation to a depth not exceeding 1.5m	m3	10		
	MASONRY WALL				
6.02	Supply material and construct a 225mm				
	circular masonry wall	m2	18		
6.03	Ditto but 450mm circular masonry wall	m2	32		
6.04	Supply all material and plaster inside				
	of tank with 15.0mm water proof				
	sand/cement screed	m2	60		
6.05	Provide and fix 200mm thick bouder at				
	wall and floor interface	Ls	1		
	CONCRETE WORK				
6.07	Supply all material and place all class				
	30 concrete work to cover the foundation,				
	beams, and cover slab				
	Rate to Include formwork.	m3	25		
6.08	Supply, lay and compact hardcore for				

	wall foundation and base slab.	m3	30		
6.09	Supply all material and place class				
	15(20) concrete blinding	m3	2		
	STEEL REINFORCEMENT				
6.1	Supply, cut and place the following				
	steel reinforcement to BS 4466				
	(I) Y8	Kg	200		
	(ii) Y12	Kg	1000		
	(iii) Y10	Kg	400		
	Subtotal Masonry wall, Concrete and reinforcement of 225 tank)				
	PIPE WORK AND FITTINGS				
6.11	Supply and fix all pipe fittings as				
	shown below				
	(i) 75mm dia GS VJ flanged adapter	No.	9		
	(ii) 75mm dia G.I. Flanged gate valve	No.	3		
	(iii) 75mm dia GS flanged pipe 1m long	No.	2		
	(iv) 75mm dia GS flanged long radius	No.	4		
	900 bend				
	(v) 75mm dia GS flanged Pipe 2.2m long	No.	1		
	(vi) 75mm dia GS flanged pipe 1m long				
	with paddle flange	No.	1		
	(vii) 75mm dia flanged Glenfield ball				
	float valve	No.	1		
	(viii) 75mm dia GS flanged bell mouth	No.	3		
	(ix) 75mm dia GS flanged shovel				
	radius 900 bend	No.	2		
	(x) 75mm dia uPVC-B 6m outfall pipe	No.	5		
	(xi) 75mm dia GS flanged spigot 1m long	No.	6		
	(xii) 75x75mm dia GS flanged Tee	No.	1		
	(xiii) 75mm dia flanged pipe 3m long	No.	1		
	(xiv) 75mm dia flanged pipe 1.5m long	No.	1		
	(xv) 75mm dia GS male threaded pipe				
	with paddle flange 400mm long	No.	1		
	(xvi) 75mm dia GS 900 bend female				
	Threaded	No.	2		
	(xvii) 75mm dia GS male threaded nipple	No.	1		
	(XVIII) 75 x 50mm GS Reducing Bushes	No.	2		
6.12	Supply all material and construct				
	outlet valve chambers as per the Engineers instruction				
		No.	1		
6.13	Supply all material and construct scour				
	and over flow valve chamber as per	No.	1		
6.14	Supply all material and construct inside				

	tank ladder	No	1		
6.15	Ditto but outside ladder	No.	1		
6.16	Supply and install 5mm galvanized				
	wire mesh on air vent pipe as per	Ls	1		
6.17	Test water tank for leakages as				
	described in the specifications,	Ls	1		
	disinfect and commission				
6.18	Reinstate ground at tank site	Ls	1		
	Subtotal For pipework and fittings				
	Subtotal For wall concrete and reinforcement of 50M3 tank (BF)				
	Total For 1 Number 25m3 ground level masonry tank				

	BILL NO 6. 2 NO CATTLE TROUGHS				
	Excavations				
	Excavation including maintaining and supporting sides and keeping free from water, mud and fallen materials by bailing , pumping or otherwise				
1	Excavate bulk for pit 0.00-1.5 metres	21.7	CM		
2	Remove surplus excavated material from site	21.7	CM		
	Hardcore filling				
3	Supply, fill and ram 300mm thick approved Hardcore	39	Ton		
	Concrete work				
	Concrete in foundations				
4	mass concrete in Strip foundations	0.8	CM		
5	10mm diameter reinforcement bars 150mm centre to centre	11	lengths		
6	100mm thick reinforced concrete slab	1.3	CM		
7	Timber shattering provided to sides of floor slab	30	M		
8	Weld mesh Reinforcement	12.1	SM		
	SUBSTRUCTURES SUB-TOTAL				
	(II) SUPERSTRUCTURES				
	Walling				
9	225 mm Thick (building stones /rubble/interlocking soil blocks) walling in cement and sand mortar (1:3)	13.2	SM		
	Finishes				
	Cement and sand (1:3) render as described in:				
10	13mm Thick with finish to masonry walling	26.4	SM		

11	25mm thick floor finish	11	SM		
12	Prepare and apply three coats plastic emulsion paint to wall surfaces	13.2	SM		
	50mm diameter GI pipes and fittings				
13	50mm GI class B pipe	1	lengths		
14	50mm GI Barrel Nipples	6	No		
15	50mm GI Sockets	4	No		
16	50mm GI Unions	3	No		
17	50mm GI Gate Valves	2	No		
18	50mm GI Ball valve	1	No		
19	50mm GI Elbows	4	No		
	SUPERSTRUCTURE SUB-TOTAL				
	TOTAL FOR ONE CATTLE TROUGH				
	GRAND TOTAL FOR 2 N0 CATTLE TROUGHS				

BILL NO (vi) CONSTRUCTION OF MASONRY WATER KIOSK

Item	DESCRIPTION	UNITS	QTY	RATES	AMOUNT
	EXCAVATIONS & EARTHWORKS;				
	Excavate over site not exceeding 150mm deep, remove and deposit as directed.	CM	1.8		
	Excavate foundation trench not exceeding 0.8m deep	CM	7		
	Extra over "ditto" for excavation within rocky formation	CM	3.5		
	Backfill and ram	CM	3		
	Cart away remaining excavated earth material and deposit within site as directed.	CM	5.3		
	SUB-STRUCTURE;				
	STRIP FOUNDATIONS 600mm WIDE & 150mm THICK;				
	Reinforced concrete 1:2:4 in foundations	CM	1.5		
	10mm dia. Rod reinforcements	Length	4		
	8mm rod reinforcements	Length	2		
	WALLING IN 1:3 GAUGED MORTAR;				
	225mm thick Concrete Block walling	SM	12		
	Hoop iron belt reinforcement	Kgs	3		
	FLOOR SLAB;				
	250mm thick, approved hardcore	CM	2.5		
	50mm thick, mass concrete 1:4:8 blinding	CM	0.3		
	100mm thick mass concrete 1:2:4 floor	CM	0.6		

	slab				
	Damp Proof Membrane	SM	6		
	Form work to sides of foor slab	SM	1.5		
	WALLING;				
	D.P.C. under walling	LM	16		
	225mm thick Concrete Block walling	SM	22		
	1,700x400x300mm Mass Concrete raised Apron	CM	0.15		
	Waste water collection and drainage area walling	SM	2.5		
	ROOFING;				
	200 X 300mm Reinforced Concrete Ring Beams	CM	1.8		
	12mm dia Ms Reinforcement bars	Length	10		
	8mm dia Ms Reinforcement bars	Length	5		
	Provide for form work along soffit and sides of ring beams	SM	23		
	150mm thick, reinforced concrete roofing	CM	1.5		
	12mm dia Ms Reinforcement bars at 200mm centre to centre	Length	8		
	Provide for form work along soffit and sides of R.C roof	SM	9		
	PVC Tank mounted over R. C. Roof and accessories:				
	Supply and install at least 4,900 Cubic metres Plastic tank over reinforced concrete roof	Item	L/s		
	Excavate and cover with a RC slab a 1000x1000x2000mm soak pit	Item	L/s		
	Provide 1 coarse of 225mm walling over roof slab to guard Plastic Tank installed	SM	3.1		
	Construct one, 1700x500x75mm RC Kiosk counter reinforced with 50x50mm wire mesh	Item	L/s		
	FIXTURES;				
	Doors & windows: -				
	Standard 850 x 2100mm steel casement door complete with frame and locks	No	1		
	Upward opening 1000high x 800mm wide steel casement window that opens and closes in vertical swing motion complete with frame, protective burglar proofing and locks	No	2		
	FINISHES;				
	20mm cement sand 1:3 plaster applied	SM	45		

	in 3 layers				
	50mm cement:sand 1:3 floor screed placed in 2 layers	SM	4.6		
	Include red oxide powder	SM	4.6		
	Red oxide floor polish	SM	4.6		
	Emulsion paints	SM	45		
	Enamel paints	SM	38		
	Artwork and sign writing as illustrated by drawings	Item	L/s		
	PLUMBING & PIPE FITTING;				
	Connection of the following pipes, fittings, and appurtenances				
	50mm dia. G.I. tee	No	1		
	'Ditto' nipples	No	1		
	'Ditto' union	No	1		
	50 x25mm dia. Reducing bush	No	1		
	25mm dia. G.I. nipple	No	1		
	'Ditto' Gate valve	No	1		
	'Ditto' Union	No	1		
	'Ditto' class 'B' pipe	Length	1		
	'Ditto' 900 bends, M-F	No	4		
	25 x20mm dia. G.I. Reducing bush	No	1		
	20mm dia. G.I. nipples	No	9		
	'Ditto' Unions	No	5		
	'Ditto' Sockets	No	6		
	'Ditto' Tees	No	4		
	'Ditto' Gate valves	No	5		
	'Ditto' Plug	No	1		
	'Ditto' class 'B' pipe	Length	1		
	'Ditto' 900 Elbows, F-F	No	4		
	TOTAL FOR ONE (1) WATER KIOSK				

	GRAND SUMMARY FOR THE BOREHOLE			AMOUNT
1	BORHOLE EQUIPING			
2	CONSTRUCTION OF PUMPHOUSE			
3	RETICULATION PIPELINES			
4	CONSTRUCTION OF 25M3 MASONARY TANK			
5	CONSTRUCTION OF TWO NO CATTLE TRUGH			
6	CONSTRUCTION OF ONE WATER KIOSK			
	TOTAL COST			

3. DARWET This borehole is located 5km from Takaba Town toward Banisa town.

DARWET BOREHOLE INFORMATION

BILL NO (i): SUPPLY AND INSTALLATION OF SOLAR POWERED CENTRIFUGAL PUMP

	Item Description	Unity	Quantity	Rates (KSHS)	Price (KSHS)
1	Submersible Solar pump PS 4000 CSJ8-15 producing 20m³ /Hr (assuming 7 hrs of sunshine/ day) with controller PS 4000	Set	1		
2	Solar panel Array to run above pump-set	Item	1		
3	Water level Sensor for run dry protection	No	1		
4	Ground kit and cable	No	1		
5	PV Disconnect 440-20-6	No	1		
6	Sun Switch light sensor	No	1		
7	Splicing kit for 4mm2	No	2		
8	Submersible cable 4 core 10mm Sq	M	15		
9	Submersible cable 2 core 2.5mm Sq	M	15		
10	Sun Switch light sensor	No	1		
11	Safety rope stainless steel 6mm2	M	6		
12	2" HDPE pipe in meters 10 bar	M	10		
13	Assorted GI fittings 2" (Lot)	Lot	1		
14	Assorted PE fittings(Lot)	Lot	1		
15	4mm DC cable (30m red and 30m black)	M	60		
16	Flex conduit 1"1/4	M	100		
17	Fastners-Grip, cable ties,I/Tapes-LOT/bolts	Lot	1		
18	Stand Structure with Solar module mounting	No	4		
19	Aggregates, hard core, sand	Tons	20		
20	Technical Installation	Pers	2		
21	Mobilization	Way	2		
22	Transportation of Materials from Nairobi	Kms	1000		
	TOTAL FOR SOLAR POWER				

4. **DAGAXTURTUR**: This borehole is located North West of Ashabito. P a r t i c u l a r information on this borehole is given below

DAGAXTURTUR BOREHOLE INFORMATION

BILL NO (i) SUPPLY AND INSTALLATION OF SOLAR POWERED CENTRIFUGAL PUMP

Borehole Equipping Bill of Quantities (Rates should be all inclusive; materials, equipment, labour, taxes, insurance and all other incidental costs)

	Supply and fit the following pumping equipment and accessories	UNITS	QTY	RATE (KSHS)	AMOUNT (KSHS)
1	Mobilisation of materials, equipments and personnel	Kms	220		
2	Submersible Solar pump PS 4000 CSJ8-15 producing 4m³ /hr (assuming 7 hrs of sunshine/ day) with controller PS 4000	Set	1		
3	Solar panel array to run above pump-set	Item	1		
4	Water level Sensor for run dry protection	No	1		
5	Ground kit and cable	No	1		
6	PV Disconnect 440-20-6	No	1		
7	Sun Switch light sensor	No	1		
8	Splicing kit for 4mm2	No	2		
9	Submersible cable 4 core 6mm Sq	M	15		
10	Submersible cable 2 core 2.5mm Sq	M	15		
11	Sun Switch light sensor	No	1		
12	Safety rope stainless steel 6mm2	M	6		
13	2" HDPE pipe in meters 10 bar	M	10		
14	Assorted GI fittings 2" (Lot)	Lot	1		
15	Assorted PE fittings(Lot)	Lot	1		
16	4mm DC cable (30m red and 30m black)	M	60		
17	Flex conduit 1"1/4	M	100		
18	Fastners-Grip, cable ties,I/Tapes-LOT/bolts	Lot	1		
19	Stand Structure with Solar module mounting	No	4		
20	Aggregates, hard core, sand	Tons	20		
21	Technical Installation	Pers	2		
22	Mobilization	Way	2		
23	Transportation of Materials from Nairobi	Kms	1000		
	TOTAL FOR SOLAR POWER				

B.O.Q	BILL NO. 2: RETICULATION PIPELINES				

No.2: RISING MAIBNS					
NO	ITEM DESCRIPTION	UNIT	QNTY	RATE	AMOUNT
	Preparation, Excavation, Pipe laying, joining and fittings				
1	Carry out bush clearing along rising main route 500mm wide	SM	450		
2	Excavate and backfill pipeline trench (after laying of pipe) 450mm wide and between 0.6m and 1.5m deep (50% in very rocky ground)	m.	450		
3	Provide and lay 75mm Rising mains using UPC (Class D) pipes with rubber joint	m.	450		
4	Provide the following fittings for joining of the pipes				
	i) Master meter 50mm diameter	NO	2		
	ii)75mm Valve Sockets	NO	2		
	iii) 75mm GI Nipple (Provisional)	NO	3		
	iv) 75mm GI 90 degrees Tees	NO	1		
	v) 50mm GI Non return Valve	NO	2		
	vi) 75x 50mm GI Reducing Bushes	NO	3		
	vii) 75 x 20mm GI Reducing Bushes	NO	1		
	viii) 75mm GI Gate Valves	NO	4		
5	Provide, lay and join 50mm HDPE 6 Bar (Class B) pipes	M	40		
6	Provide the following fittings for joining of the pipes				
	i) Master meter 50mm diameter	No.	1		
	ii) 50mm Valve Sockets	No	6		
	iii) 50mm GI Nipple (Provisional)	No	4		
	iv) 50mm GI 90 degrees Tees	No	4		
	v) 50mm GI Non return Valve	No	1		
	vi) 50 x 50mm GI Reducing Bushes	No	2		
	vii) 50 x 20mm GI Reducing Bushes	No	2		
	viii) 50mm GI Gate Valves	No	1		
	ix) 50mm GI Sockets	No	3		
7	Provide & fit 50mm dia GI Elbows	No	1		
8	Provide & fit 20mm Air Valves	No	8		
9	Provide & fit 20mm dia GI Gate Valves	No	1		
10	Provide & fit 20mm dia GI Barrel Nipples	No	3		
11	Provide & fit 20mm dia GI Sockets	No	2		
12	Provide & fit 20mm dia pieces of class A pipes 300mm long each and threaded on both ends to hold Air	No	2		

	Valves				
13	Construct Valve Chambers for Air Valves and Wash-outs of size 1mx1mx1m	No	2		
14	Disinfect and test the pipeline	Item	2		
	TOTAL FOR RISING AND DISTRIBUTION PIPELINES				

BILL NO.(ii) PERIMITER FENCE OF THE BOREHOLE COMPOUND

	Item description:	UNIT	QNTY	RATE (KSHS)	AMOUNT (KSHS)
1	Bush clearing of area along the girth of the fence 2m wide	M2	2025		
2	Excavate Pits for fencing Posts 100mm in diameter & 0.5m deep	No	90		
3	2.5M long 63mm Angle Line Fencing posts including Bracing Posts fabricated & with 8 No 10mm diameter holes drilled at same points on each fencing post to receive strainer wires	No	90		
4	Use Mass Concrete 1:2:4 in Pits to firmly hold Angle line Fencing Posts	M3	10		
5	Chain link to posts through drilled holes using binding wire	M2	400		
6	16gauge barbedB415:C418 wire as strainners and tied to chainlink using Binding wire	Roll	1		
7	Standard mesh steel double swing gate with locks with lockable pedestrian inlet	Item	1		
	TOTAL FOR PERIMTTER FENCE				

BILL NO(iv) 2 NO CATTLE TROUGHS

		UNIT	QNTY	RATE (KSHS)	AMOUNT (KSHS)
	Excavations				
	Excavation including maintaining and supporting sides and keeping free from water, mud and fallen materials by bailing , pumping or otherwise				
1	Excavate bulk for pit 0.00-1.5 metres	21.7	CM		
2	Remove surplus excavated material from site	21.7	CM		
	Hardcore filling				

3	Supply, fill and ram 300mm thick approved Hardcore	39	Ton		
	Concrete work				
	Concrete in foundations				
4	mass concrete in Strip foundations	0.8	CM		
5	10mm diameter reinforcement bars 150mm centre to centre	11	lengths		
6	100mm thick reinforced concrete slab	1.3	CM		
7	Timber shattering provided to sides of floor slab	30	M		
8	Weld mesh Reinforcement	12.1	SM		
9	Float Ball Valve O Male Thread 304 Stainless Steel Automatic	1	SM		
	SUBSTRUCTURES SUB-TOTAL				
	(II) SUPERSTRUCTURES				
	Walling				
9	225 mm Thick (building stones /rubble/interlocking soil blocks) walling in cement and sand mortar (1:3)	13.2	SM		
	Finishes				
	Cement and sand (1:3) render as described in:				
10	13mm Thick with finish to masonry walling	26.4	SM		
11	25mm thick floor finish	11	SM		
12	Prepare and apply three coats plastic emulsion paint to wall surfaces	13.2	SM		
	50mm diameter GI pipes and fittings				
13	50mm GI class B pipe	1	lengths		
14	50mm GI Barrel Nipples	6	No		
15	50mm GI Sockets	4	No		
16	50mm GI Unions	3	No		
17	50mm GI Gate Valves	2	No		
18	50mm GI Ball valve	1	No		
19	50mm GI Elbows	4	No		
	SUPERSTRUCTURE SUB-TOTAL				

	BILL NO 6. CONSTRUCTION OF MASONRY WATER KIOSK				
Item	DESCRIPTION	UNITS	QTY	RATES	AMOUNT
	EXCAVATIONS & EARTHWORKS;				
	Excavate over site not exceeding 150mm deep, remove and deposit as directed.	CM	1.8		

	Excavate foundation trench not exceeding 0.8m deep	CM	7		
	Extra over "ditto" for excavation within rocky formation	CM	3.5		
	Backfill and ram	CM	3		
	Cart away remaining excavated earth material and deposit within site as directed.	CM	5.3		
	SUB-STRUCTURE;				
	STRIP FOUNDATIONS 600mm WIDE & 150mm THICK;				
	Reinforced concrete 1:2:4 in foundations	CM	1.5		
	10mm dia. Rod reinforcements	Length	4		
	8mm rod reinforcements	Length	2		
	WALLING IN 1:3 GAUGED MORTAR;				
	225mm thick Concrete Block walling	SM	12		
	Hoop iron belt reinforcement	Kgs	3		
	FLOOR SLAB;				
	250mm thick, approved hardcore	CM	2.5		
	50mm thick, mass concrete 1:4:8 blinding	CM	0.3		
	100mm thick mass concrete 1:2:4 floor slab	CM	0.6		
	Damp Proof Membrane	SM	6		
	Form work to sides of foor slab	SM	1.5		
	WALLING;				
	D.P.C. under walling	LM	16		
	225mm thick Concrete Block walling	SM	22		
	1,700x400x300mm Mass Concrete raised Apron	CM	0.15		
	Waste water collection and drainage area walling	SM	2.5		
	ROOFING;				
	200 X 300mm Reinforced Concrete Ring Beams	CM	1.8		
	12mm dia Ms Reinforcement bars	Length	10		
	8mm dia Ms Reinforcement bars	Length	5		
	Provide for form work along soffit and sides of ring beams	SM	23		
	150mm thick, reinforced concrete roofing	CM	1.5		
	12mm dia Ms Reinforcement bars at 200mm centre to centre	Length	8		
	Provide for form work along soffit and sides of R.C roof	SM	9		
	PVC Tank mounted over R. C. Roof and accessories:				

	Supply and install at least 4,900 Cubic metres Plastic tank over reinforced concrete roof	Item	L/s		
	Excavate and cover with a RC slab a 1000x1000x2000mm soak pit	Item	L/s		
	Provide 1 coarse of 225mm walling over roof slab to guard Plastic Tank installed	SM	3.1		
	Construct one, 1700x500x75mm RC Kiosk counter reinforced with 50x50mm wire mesh	Item	L/s		
	FIXTURES;				
	Doors & windows: -				
	Standard 850 x 2100mm steel casement door complete with frame and locks	No	1		
	Upward opening 1000high x 800mm wide steel casement window that opens and closes in vertical swing motion complete with frame, protective burglar proofing and locks	No	2		
	FINISHES;				
	20mm cement sand 1:3 plaster applied in 3 layers	SM	45		
	50mm cement:sand 1:3 floor screed placed in 2 layers	SM	4.6		
	Include red oxide powder	SM	4.6		
	Red oxide floor polish	SM	4.6		
	Emulsion paints	SM	45		
	Enamel paints	SM	38		
	Artwork and sign writing as illustrated by drawings	Item	L/s		
	PLUMBING & PIPE FITTING;				
	Connection of the following pipes, fittings, and appurtenances				
	50mm dia. G.I. tee	No	1		
	'Ditto' nipples	No	1		
	'Ditto' union	No	1		
	50 x25mm dia. Reducing bush	No	1		
	25mm dia. G.I. nipple	No	1		
	'Ditto' Gate valve	No	1		
	'Ditto' Union	No	1		
	'Ditto' class 'B' pipe	Length	1		
	'Ditto' 900 bends, M-F	No	4		
	25 x20mm dia. G.I. Reducing bush	No	1		
	20mm dia. G.I. nipples	No	9		

	'Ditto' Unions	No	5		
	'Ditto' Sockets	No	6		
	'Ditto' Tees	No	4		
	'Ditto' Gate valves	No	5		
	'Ditto' Plug	No	1		
	'Ditto' class 'B' pipe	Length	1		
	'Ditto' 900 Elbows, F-F	No	4		
	TOTAL FOR ONE (1) WATER KIOSK				

	GRAND SUMMARY FOR THE BOREHOLE			AMOUNT
	CONSTRUCTION OF SOLAR POWER			
	RETICULATION PIPELINE			
	PERIMETER FENCING			
	CONSTRUCTION OF 25M3 MASONARY TANK			
	CONSTRUCTION OF TWO NO CATTLE TRUGH			
	CONSTRUCTION OF ONE WATER KIOSK			
	TOTAL COST			
	GRAND TOTAL			

5.Degmarer Borehole

The borehole is located north west of Rhamu town toward Rhamu Dimtu -Malkamari Road

Borehole Equipping Bill of Quantities (Rates should be all inclusive; materials, equipment, labour, taxes, insurance and all other incidental costs)

	BILL NO. 1: FOR BOREHOLE EQUIPING	**UNITS**	**QTY**	**RATE (KSHS)**	**AMOUNT (KSHS)**
	Borehole Equipping Bill of Quantities (Rates should be all inclussive; materials, equipment, labour, taxes, insurance and all other incidental costs)				
1	Preliminary items				
1.1	Mobilisation of materials, equipments and personnel	Kms	200		
1.2	Provide 152mm internal diameter threaded Borehole cap with 50mm diameter pipe threaded on both ends welded to it at the centre to receive 50mm draw pipes and rising main and 20mm provision to receive Air line	No	1		
1.3	Provide a standard steel Borehole draw pipes assembly clamp	No	1		
1.4	Provide all other electrical, mechanical and plumbing tools and accessories (e.g. Insulation tapes, thread tapes, bitumen,	Item	L/S		

	welding rods, bolts and nuts, e.t.c) required for equipping of the Borehole				
2.0.	Electro-mechanical works				
2.1	Supply and instal AC powered 7.5KW Submersible pump-set complete with 3-phase motor and accessories including motor control panel with overload, phase failure, water level control relays capable of delivering 7,200lts of water against a total head of 300m	Set	1		
2.2	Supply and instal a compartible Diesel powered 3-phase KVA Generator-set supplied complete with accessories, change-over switch and 3 months service fuel, oil and Air cleaner filter elements kits	Set	1		
2.4	At least 16mm2 3-phase dual core motor cable	M	350		
2.5	1.5mm2 to 2.5mm2 twin insulated water level relay cables	M	380		
2.6	Water level control elecctrodes	No	2		
2.7	Water proof jointingt/ Splicing Kit	No	1		
2.8	Dual core armoured cable	M	30		
3.0.	Plumbing/ Pipefitting Works				
3.1	Supply and install 50mm diameter, standard 6m long each GS class "C" draw pipes with ditto submersible pump (Each pipe should have Steel steamed socket)	Lengths	50		
3.2	Supply and fit 50mm diameter GI Unions on rising main between Master meter and non-return valve	No	1		
3.3	Supply and fit 50mm diameter Master meter	No	1		
3.4	Supply and fit 50mm diameter Non-return valve	No	1		
3.5	Supply and fit 50mm diameter 90 Degree, M-F GI Elbows	No	3		
3.6	Supply and fit 50mm diameter GI Plain Nipples	No	4		
	TOTAL FOR BOREHOLE EQUIPPING				

BILL NO. (i): CONSTRUCTION OF STANDARD MASONRY PUMP HOUSE

	ITEM DESCRIPTION	UNITS	QTY	RATE (KSHS)	AMOUNT(KSHS)
A	EXCAVATIONS & EARTHWORKS; -				
1	Excavation of over site soils and foundations	CM	14		
2	Backfilling and removal of extra excavated	CM	9.5		

	earth				
B	SUBSTRUCTURE AND WALLING				
1	Ordinary Portland Cement	Bags	36		
2	Sand	Tonnes	15		
3	Ballast	Tonnes	10		
4	Approved Hardcore	Tonnes	10		
5	Approved Murram	Tonnes	5		
6	200mm thick x 300mm long Quarry Stone Blocks	No	390		
7	8mm dia. M.S. reinforcement bars	Length	10		
8	12mm dia. M.S. reinforcement bars	Length	5		
9	Anti-Termite Oil	Lts	10		
10	BRC Mesh fabric 125	LM	12		
11	DPC	LM	21		
12	12mm dia x 300mm long Anchor bolts	No	14		
C	SUPERSTRUCTURE				
1	150 X 25mm sawn timber formwork	LM	25		
2	100 x 50mm Wall plates	LM	60		
3	100 x 50mm Poles	LM	38		
4	100 x 50mm Braces	LM	22		
5	25 x 50mm Battens	LM	70		
6	50 x 50mm B.S. 125 weld mesh	SM	44		
7	Hoop iron	LM	128		
D	ROOF CONSTRUCTION USING SAWN, CELCURED SECOND GRADE CYPRESS; -				
1	100 x 50mm Rafters	LM	75		
2	100 x 50mm Ceiling joists	LM	36		
3	100 x50mm Purlins	LM	25		
4	12.5 x 200mm Facial board	LM	25		
5	25 x 100mm Steel plates	No	12		
E	28 GAUGE, G.C.I. ROOFING;				
1	2.5 m Corrugated galvanized iron sheets Gauge 28	No	15		
2	1.5 m long galvanized iron Cap ridges, Gauge 28	No	5		
F	FIXTURES AND IRON MONGERIES;				
1	1200 x 2100mm wooden double door in one section side slung, opening outwards, ledged, braced & complete with frame and padlock	No	1		
2	200mm Pressed steel tower bolts	Pairs	2		
3	125mm barrel bolts	No	2		
4	10mm dia. Prefabricated foundation bolts cast within 'ditto'	No	4		
G	FINISHES;				
1	Plastic emulsion paint	Lts	12		
2	Gloss enamel paints	Lts	4		
3	Wood Preservative	Lts	20		

H	MISCELLENOUS:				
1	Assorted Nails	Kgs	15		
	TOTAL FOR PUMP HOUSE				

BILL NO. (ii): PERIMITER FENCE OF THE BOREHOLE COMPOUND

		UNIT	QNTY	RATE (KSHS)	AMOUNT (KSHS)
1	Bush clearing of area along the girth of the fence 2m wide	M2	2025		
2	Excavate Pits for fencing Posts 100mm in diameter & 0.5m deep	No	90		
3	2.5M long 63mm Angle Line Fencing posts including Bracing Posts fabricated & with 8 No 10mm diameter holes drilled at same points on each fencing post to receive strainer wires	No	90		
4	Use Mass Concrete 1:2:4 in Pits to firmly hold Angle line Fencing Posts	M3	10		
5	Chain link to posts through drilled holes using binding wire	M2	400		
6	16gauge barbedB415:C418 wire as strainers and tied to chain-link using Binding wire	Roll	1		
7	Standard mesh steel double swing gate with locks with lockable pedestrian inlet	Item	1		
	TOTAL FOR PERIMETER FENCE				

BILL NO(iii) 25m3 MASONRY TANK as storage Tank

		UNIT	QNTY	RATE (KSHS)	AMOUNT (KSHS)
6.01	Excavate for above tank in soil for tank foundation to a depth not exceeding 1.5m	m3	10		
	MASONRY WALL				
6.02	Supply material and construct a 225mm				
	circular masonry wall	m2	18		
6.03	Ditto but 450mm circular masonry wall	m2	32		
6.04	Supply all material and plaster inside				
	of tank with 15.0mm water proof				
	sand/cement screed	m2	60		
6.05	Provide and fix 200mm thick bouder at				
	wall and floor interface	Ls	1		
	CONCRETE WORK				
6.07	Supply all material and place all class				
	30 concrete work to cover the foundation,				
	beams, and cover slab				
	Rate to Include formwork.	m3	25		
6.08	Supply, lay and compact hardcore for				

	wall foundation and base slab.	m3	30		
6.09	Supply all material and place class				
	15(20) concrete blinding	m3	2		
	STEEL REINFORCEMENT				
6.1	Supply, cut and place the following				
	steel reinforcement to BS 4466				
	(I) Y8	Kg	200		
	(ii) Y12	Kg	1000		
	(iii) Y10	Kg	400		
	Subtotal Masonry wall, Concrete and reinforcement of 225 tank)				
	PIPE WORK AND FITTINGS				
6.11	Supply and fix all pipe fittings as				
	shown below				
	(i) 75mm dia GS VJ flanged adapter	No.	9		
	(ii) 75mm dia G.I. Flanged gate valve	No.	3		
	(iii) 75mm dia GS flanged pipe 1m long	No.	2		
	(iv) 75mm dia GS flanged long radius	No.	4		
	900 bend				
	(v) 75mm dia GS flanged Pipe 2.2m long	No.	1		
	(vi) 75mm dia GS flanged pipe 1m long				
	with paddle flange	No.	1		
	(vii) 75mm dia flanged Glenfield ball				
	float valve	No.	1		
	(viii) 75mm dia GS flanged bell mouth	No.	3		
	(ix) 75mm dia GS flanged shovel				
	radius 900 bend	No.	2		
	(x) 75mm dia uPVC-B 6m outfall pipe	No.	5		
	(xi) 75mm dia GS flanged spigot 1m long	No.	6		
	(xii) 75x75mm dia GS flanged Tee	No.	1		
	(xiii) 75mm dia flanged pipe 3m long	No.	1		
	(xiv) 75mm dia flanged pipe 1.5m long	No.	1		
	(xv) 75mm dia GS male threaded pipe				
	with paddle flange 400mm long	No.	1		
	(xvi) 75mm dia GS 900 bend female				
	Threaded	No.	2		
	(xvii) 75mm dia GS male threaded nipple	No.	1		
	(XVIII) 75 x 50mm GS Reducing Bushes	No.	2		
6.12	Supply all material and construct				
	outlet valve chambers as per the Engineers instruction				
		No.	1		
6.13	Supply all material and construct scour				
	and over flow valve chamber as per	No.	1		
	Supply all material and construct inside				
6.14	tank ladder	No	1		
6.15	Ditto but outside ladder	No.	1		

	Supply and install 5mm galvanized				
6.16	wire mesh on air vent pipe as per	Ls	1		
	Test water tank for leakages as				
6.17	described in the specifications,	Ls	1		
	disinfect and commission				
6.18	Reinstate ground at tank site	Ls	1		
	Subtotal For pipework and fittings				
	Subtotal For wall concrete and reinforcement of 50M3 tank (BF)				
6.22	Total For 1 Number 50m3 ground level masonry tank				

BILL NO (iv) 2 NO CATTLE TROUGHS

		UNIT	QNTY	RATE (KSHS)	AMOUNT (KSHS)
	Excavations				
	Excavation including maintaining and supporting sides and keeping free from water, mud and fallen materials by bailing , pumping or otherwise				
1	Excavate bulk for pit 0.00-1.5 metres	21.7	CM		
2	Remove surplus excavated material from site	21.7	CM		
	Hardcore filling				
3	Supply, fill and ram 300mm thick approved Hardcore	39	Ton		
	Concrete work				
	Concrete in foundations				
4	mass concrete in Strip foundations	0.8	CM		
5	10mm diameter reinforcement bars 150mm centre to centre	11	lengths		
6	100mm thick reinforced concrete slab	1.3	CM		
7	Timber shattering provided to sides of floor slab	30	M		
8	Weld mesh Reinforcement	12.1	SM		
	SUBSTRUCTURES SUB-TOTAL				
	(II) SUPERSTRUCTURES				
	Walling				
9	225 mm Thick (building stones /rubble/interlocking soil blocks) walling in cement and sand mortar (1:3)	13.2	SM		
	Finishes				
	Cement and sand (1:3) render as described in:				
10	13mm Thick with finish to masonry walling	26.4	SM		
11	25mm thick floor finish	11	SM		
12	Prepare and apply three coats plastic	13.2	SM		

	emulsion paint to wall surfaces				
13	50mm diameter GI pipes and fittings				
14	50mm GI class B pipe	1	lengths		
15	50mm GI Barrel Nipples	6	No		
16	50mm GI Sockets	4	No		
17	50mm GI Unions	3	No		
18	50mm GI Gate Valves	2	No		
19	50mm GI Ball valve	1	No		
20	50mm GI Elbows	4	No		
21	Float Ball Valve O Male Thread 304 Stainless Steel Automatic	1	NO		
	SUPERSTRUCTURE SUB-TOTAL				
	TOTAL FOR ONE CATTLE TROUGH				
	GRAND TOTAL FOR 2 N0 CATTLE TROUGHS				

BILL NO (v) CONSTRUCTION OF MASONRY WATER KIOSK

Item	DESCRIPTION	UNITS	QTY	RATES (KSHS)	AMOUNT (KSHS)
	EXCAVATIONS & EARTHWORKS;				
1.	Excavate over site not exceeding 150mm deep, remove and deposit as directed.	CM	1.8		
2.	Excavate foundation trench not exceeding 0.8m deep	CM	7		
3.	Extra over "ditto" for excavation within rocky formation	CM	3.5		
4.	Backfill and ram	CM	3		
5.	Cart away remaining excavated earth material and deposit within site as directed.	CM	5.3		
6.	SUB-STRUCTURE;				
7.	STRIP FOUNDATIONS 600mm WIDE & 150mm THICK;				
8.	Reinforced concrete 1:2:4 in foundations	CM	1.5		
9.	10mm dia. Rod reinforcements	Length	4		
11.	8mm rod reinforcements	Length	2		
12.	WALLING IN 1:3 GAUGED MORTAR;				
13.	225mm thick Concrete Block walling	SM	12		
14.	Hoop iron belt reinforcement	Kgs	3		
15.	FLOOR SLAB;				
16	250mm thick, approved hardcore	CM	2.5		
17.	50mm thick, mass concrete 1:4:8 blinding	CM	0.3		
18.	100mm thick mass concrete 1:2:4 floor slab	CM	0.6		
19.	Damp Proof Membrane	SM	6		
20.	Form work to sides of foor slab	SM	1.5		
	WALLING;				
1.	D.P.C. under walling	LM	16		
2.	225mm thick Concrete Block walling	SM	22		

3.	1,700x400x300mm Mass Concrete raised Apron	CM	0.15		
4.	Waste water collection and drainage area walling	SM	2.5		
	ROOFING;				
1.	200 X 300mm Reinforced Concrete Ring Beams	CM	1.8		
2.	12mm dia Ms Reinforcement bars	Length	10		
3.	8mm dia Ms Reinforcement bars	Length	5		
4.	Provide for form work along soffit and sides of ring beams	SM	23		
5.	150mm thick, reinforced concrete roofing	CM	1.5		
6.	12mm dia Ms Reinforcement bars at 200mm centre to centre	Length	8		
7.	Provide for form work along soffit and sides of R.C roof	SM	9		
8.	PVC Tank mounted over R. C. Roof and accessories:				
9.	Supply and install at least 4,900 Cubic metres Plastic tank over reinforced concrete roof	Item	L/s		
10.	Excavate and cover with a RC slab a 1000x1000x2000mm soak pit	Item	L/s		
11.	Provide 1 coarse of 225mm walling over roof slab to guard Plastic Tank installed	SM	3.1		
12.	Construct one, 1700x500x75mm RC Kiosk counter reinforced with 50x50mm wire mesh	Item	L/s		
	FIXTURES;				
1.	Doors & windows: -				
2.	Standard 850 x 2100mm steel casement door complete with frame and locks	No	1		
3	Upward opening 1000high x 800mm wide steel casement window that opens and closes in vertical swing motion complete with frame, protective burglar proofing and locks	No	2		
	FINISHES;				
1.	20mm cement sand 1:3 plaster applied in 3 layers	SM	45		
2.	50mm cement: sand 1:3 floor screed placed in 2 layers	SM	4.6		
3.	Include red oxide powder	SM	4.6		
4.	Red oxide floor polish	SM	4.6		
5.	Emulsion paints	SM	45		
6.	Enamel paints	SM	38		
7	Artwork and sign writing as illustrated by drawings	Item	L/s		

	PLUMBING & PIPE FITTING;				
1.	Connection of the following pipes, fittings, and appurtenances				
2.	50mm dia. G.I. tee	No	1		
3.	'Ditto' nipples	No	1		
4.	'Ditto' union	No	1		
5.	50 x25mm dia. Reducing bush	No	1		
6.	25mm dia. G.I. nipple	No	1		
7.	'Ditto' Gate valve	No	1		
8.	'Ditto' Union	No	1		
9.	'Ditto' class 'B' pipe	Length	1		
10	'Ditto' 900 bends, M-F	No	4		
11	25 x20mm dia. G.I. Reducing bush	No	1		
12	20mm dia. G.I. nipples	No	9		
13	'Ditto' Unions	No	5		
14	'Ditto' Sockets	No	6		
15	'Ditto' Tees	No	4		
16	'Ditto' Gate valves	No	5		
17	'Ditto' Plug	No	1		
18	'Ditto' class 'B' pipe	Length	1		
19	'Ditto' 900 Elbows, F-F	No	4		
20	Float Ball Valve O Male Thread 304 Stainless Steel Automatic	No	1		
	TOTAL FOR ONE (1) WATER KIOSK				

	GRAND SUMMARY FOR THE BOREHOLE			AMOUNT
1	BORHOLE EQUIPING			
2	CONSTRUCTION OF PUMPHOUSE			
3	RETICULATION PIPELINES			
4	PERIMETER FENCING			
5	CONSTRUCTION OF 50M3 MASONARY TANK			
6	CONSTRUCTION OF TWO NO CATTLE TRUGH			
7	CONSTRUCTION OF ONE WATER KIOSK			
	TOTAL COST			
	GRAND TOTAL			

E. RACIDA/USAIDBHA-MDR2021/2022-014/01/06 **HULLOW BOREHOLE**

Required fast moving spare parts	**Units**	**Unit cost**	**Total Cost**
11kw controller panel	1.00		
11kw submersible pump and submersible cables	1.00		
Accessories for plumbing	1.00		

Genset 30KVA	1.00		
Sub-Total			
Add VAT 16%			
Total Cost in KES			

***F. RACIDA/USAIDBHA-MDR2021/2022-014/01/07 MALKAMARI* BOREHOLE**

Required fast moving spare parts	**Units**	**Unit cost**	**Total Cost**
5.5kw controller panel	1.00		
5.5kw submersible pump and submersible cables	1.00		
Accessories for plumbing	1.00		
Genset 30KVA	1.00		
Sub-Total			
Add VAT 16%			
Total Cost in KES			

G.RACIDA/USAIDBHA-MDR2021/2022-014/01/08 **HARBATI BOREHOLE**

Required fast moving spare parts	Units	Unit cost	Total Cost
7.5kw controller panel	1.00		
7.5kw submersible pump and submersible cables	1.00		
Accessories for plumbing	1.00		
Genset 25KVA	1.00		
Sub-Total			
Add VAT 16%			
Total Cost in KES			

H. RACIDA/USAIDBHA-MDR2021/2022-014/09 **WARANKARA BOREHOLE**

Required fast moving spare parts	Units	Unit cost	Total Cost
5.5kw controller panel	1.00		
5.5kw submersible pump and submersible cables	1.00		
Accessories for plumbing	1.00		
Genset 20KVA	1.00		
Sub-Total			
Add VAT 16%			
Total Cost in KES			

J. RACIDA/USAIDBHA-MDR2021/2022-014/01/10 **LANQURAC BOREHOLE**

Required fast moving spare parts	Units	Unit cost	Total Cost
4kw controller panel	1.00		
4kw submersible pump and submersible cables	1.00		

Accessories for plumbing	1.00		
Genset 20KVA	1.00		
Sub-Total			
Add VAT 16%			
Total Cost in KES			

K.RACIDA/USAIDBHA-MDR2021/2022-014/01/11 **SHIMPIR FATUMA 1 BOREHOLE**

Required fast moving spare parts	**Units**	**Unit cost**	**Total Cost**
7.5kw controller panel	1.00		
7.5kw submersible pump and submersible cables	1.00		
Accessories for plumbing	1.00		
Genset 25KVA	1.00		
Sub-Total			
Add VAT 16%			
Total Cost in KES			

L.RACIDA/USAIDBHA-MDR2021/2022-014/01/012 **KOBADHADHI BOREHOLE 1**

Required fast moving spare parts	**Units**	**Unit cost**	**Total Cost**
7.5kw controller panel	1.00		
7.5kw submersible pump and submersible cables	1.00		
Accessories for plumbing	1.00		
Genset 25KVA	1.00		
Sub-Total			
Add VAT 16%			
Total Cost in KES			

,Delivery of Fast-moving spare parts

a) Fino

Borehole Depth	300M
Total head (dynamic head)	260m
Installed submersible Pump Rating	5.5kw submersible pump and set submersible cables.
Installed Diesel Generator Power Rating	30kva genset and 5.5kw Controller panel

b).Malka Mari borehole information

Borehole Depth	305M
Total head (dynamic head)	240m
Installed submersible Pump Rating	5.5kw submersible pump and set submersible cables.
Installed Diesel Generator Power Rating	30kva genset, 5.5kw controller panel

c).Harbati borehole information.

Borehole Depth	260M
Total head (dynamic head)	270M
Installed Pump Rating	7.5kw submersible pump and set submersible cables.
Installed Diesel Generator Power Rating	25kva genset, 7.5kw controller panel

d).Warankara borehole information

Borehole Depth	230M
Total head (dynamic head)	250M
Installed Pump Rating	5.5kw submersible pump set and submersible cables.
Installed Diesel Generator Power Rating	25kva genset, 5.5kw controller panel

e). Lanqura Borehole information

Borehole Depth	305M
Total head (dynamic head)	358M
Installed Pump Rating	4kw submersible pump set, and submersible cables.
Installed Diesel Generator Power Rating	25kva genset, 4kw controller panel

f)Shimbir Fatuma 1 borehole information

Borehole Depth	195M
Total head (dynamic head)	190M
Installed Pump Rating	7.5kw submersible pump set, and submersible cables.
Installed Diesel Generator Power Rating	25kva genset, 7.5kw controller panel

g)Kobadhadhi borehole information.

Borehole Depth	250m
Total head (dynamic head)	260m
Installed Pump Rating	7.5kw submersible pump set, and submersible cables.
Installed Diesel Generator Power Rating	25kva genset, 7.5kw controller panel

BILLS OF QUANTITIES

NOTE:

All Prices quoted shall include **VAT**

1. Statement of Compliance

a) I confirm compliance of all clauses of the General Conditions, General Specifications and Particular Specifications in this tender.

b) I confirm I have not made and will not make any payment to any person, who can be perceived as an inducement to win this tender.

Signed.....*for and on behalf of the Tenderer*

Date: ……

Official Rubber Stamp: ……

SUMMARY

Summary price for the eleven sites;

SITE	AMOUNT (KSH)
RACIDA/USAIDBHA-MDR2021/2022-014/01-GARBAB BOREHOLE	
RACIDA/USAIDBHA-MDR2021/2022-014/02-FINO 2 BOREHOLE	
RACIDA/USAIDBHA-MDR2021/2022-014/03-DAWEED BOREHOLE	
RACIDA/USAIDBHA-MDR2021/2022-014/04-DAGAXTUR BOREHOLE	
RACIDA/USAIDBHA-MDR2021/2022-014/05-HULLOW BOREHOLE	
RACIDA/USAIDBHA-MDR2021/2022-014/06-MALKAMARI BOREHOLE	
RACIDA/USAIDBHA-MDR2021/2022-014/07-HARBATI BOREHOLE	
RACIDA/USAIDBHA-MDR2021/2022-014/08-WARANKARA BOREHOLE	
RACIDA/USAIDBHA-MDR2021/2022-014/09-LANQURAC BOREHOLE	
RACIDA/USAIDBHA-MDR2021/2022-014/010-DEGMARER BOREHOLE	
RACIDA/USAIDBHA-MDR2021/2022-014/011-SHIMPIR FATUMA 1 BOREHOLE	
RACIDA/USAIDBHA-MDR2021/2022-014/01/012- KOBADHADHI BOREHOLE 1	

TOTAL	

WARRANTY

The pump equipment and accessories should have a warranty of at least 2 years, from date of installation for failures caused by faulty design, materials or workmanship. The Terms of Warranty should be provided in the product catalogue and brochures.

PERFORMANCE BANK GUARANTEE (UNCONDITIONAL)

To: THE PROCUREMENT OFFICER,

RURAL AGENCY FOR COMMUNITY DEVELOPMENT AND ASSISTANCE - RACIDA, MOI ROAD NEXT TO **Behind green view hotel - Mandera**

Dear Sir,

WHEREAS ……(hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. …… dated .....to execute …..... (hereinafter called "the Works");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of: Kshs .....(*amount of Guarantee in figures*) Kenya Shillings ……
……(*amount of Guarantee in words*), and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of Kenya Shillings …….. …..... (*amount of Guarantee in words*) as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change, addition or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any change, addition, or modification.

This guarantee shall be valid until the date of issue of the Certificate of Completion.

SIGNATURE AND SEAL OF THE GUARANTOR …….

Name of Bank..... Address

…..Date

……

TENDER QUESTIONNAIRE

Please fill in block letters.

1. Full names of Tenderer:

……

2. Full address of Tenderer to which tender correspondence is to be sent (unless an agent has been appointed below):

……

3. Telephone number (s) of Tenderer:

……

4. Telex/Fax Address of Tenderer:

……

5. Name of Tenderer's representative to be contacted on matters of the tender during the tender period:

……

6. Details of Tenderer's nominated agent (if any) to receive tender notices. This is essential if the Tenderer does not have his registered address in Kenya (name, address, telephone, telex):

……

……

_____

Signature of Tenderer

Make copy and deliver to

THE PROCUREMENT OFFICER,

RURAL AGENCY FOR COMMUNITY DEVELOPMENT AND ASSISTANCE - RACIDA, MOI ROAD NEXT TO Behind green view hotel- MANDERA

CONFIDENTIAL BUSINESS QUESTIONNAIRE

You are requested to give the particulars indicated in Part 1 and either Part 2 (a), 2 (b) or 2(c) and (2d) whichever applies to your type of business.

You are advised that it is a serious offence to give false information on this Form.

Part 1 – General

Business Name ..... Location of business

premises: Country/Town……

Plot No…… Street/Road ..... Postal

Address…… Tel No…….. Nature of

Business…….. Current Trade License

No…… Expiring date……

Maximum value of business which you can handle at any time:
Kenya Shillings..... Name of your

bankers……

Branch ..... ***Part 2 (a) – Sole***

Proprietor

Your name in full…… Age……

Nationality…… Country of Origin ..... Citizenship details

……

Part 2 (b) – Partnership

Give details of partners as follows:

	Name in full	*Nationality*	*Citizenship Details*	*Shares*
1.	……	…….	…….	……
2.	……	…….	…….	……
3.	……	……	……	……
4.	……	……	……	……

Part 2(c) – Registered Company

Private or Public..... State the nominal and

issued capita of the company:

Nominal KShs. ……..

Issued KShs. ……..

Give details of all directors as follows:

	Name in full	*Nationality*	*Citizenship Details**	*Shares*
1.	…….	……	…….	…….
2.	…….	……	…….	…….
3.	…….	……	…….	…….
4.	…….	……	…….	…….

Part 2(d) Interest in the Firm:

Is there any person/persons in the employment of Rural Agency for Community Development and Assistance WHO has interest in this firm? Yes/No ..... (Delete as necessary)

I certify that the above information is correct.

…….	…….	…….
Title	Signature	Date

* *Attach proof of citizenship*

KEY PERSONNEL

Qualifications and experience of key personnel proposed for administration and execution of the Contract. **(Signed CVs and copies of certificates MUST be attached)**

POSITION	NAME	YEARS OF EXPERIENCE (GENERAL)	YEARS OF EXPERIENCE IN PROPOSED POSITION
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.			

I certify that the above information is correct.

…….. ……. ……. ……. ……

Title Signature Date

SCHEDULE OF CONTRACTS COMPLETED IN THE LAST FIVE (3) YEARS

Work performed on works of a similar nature, complexity and volume over the last 3 years.
(Copies of Completion Certificates, handing over Certificates or Final payment MUST be attached as proof).

PROJECT NAME	NAME OF CLIENT	TYPE OF WORK AND YEAR OF COMPLETION	VALUE OF CONTRACT (Kshs.)

I certify that the above works were successfully carried out and completed by ourselves.

.....	.....	.....
Title	Signature	Date

SCHEDULE OF ON-GOING PROJECTS

Details of on-going or committed projects, including expected completion date.
(Copies of letter of offer MUST be attached as proof).

PROJECT NAME	NAME OF CLIENT	CONTRACT SUM	% COMPLETED	COMPLETION DATE

I certify that the above works are currently being carried out by ourselves.

…….	……	…….
Title	Signature	Date

FINANCIAL REPORTS FOR THE LAST TWO YEARS

(Balance sheets, Profits and Loss Statements, Auditor's reports, etc. List below and attach copies)

1. ._____.

2. ._____.

3. ._____.

4. ._____.

5. ._____.

6. ._____.

7. ._____.

8. ._____.

9. ._____.

10 ._____.

I certify that the above works information is correct.

…….	……	…….
Title	Signature	Date

EVIDENCE OF FINANCIAL RESOURCES TO MEET QUALIFICATION REQUIREMENTS

(Cash in Hand, Lines of credit, etc. List below and attach copies of supportive documents.)

1. ._____.

2. ._____.

3. ._____.

4. ._____.

5. ._____.

6. ._____.

7. ._____.

8. ._____.

9. ._____.

10 ._____.

I certify that the above works information is correct.

…….	……	…….
Title	Signature	Date

DECLARATION FORM

To

Date

The Tenderer i.e. _____ *(name and address)* Declare the following:

a) Has not been debarred from participating in the public procurement.

b) Has not been involved and will not be involved in corruption and fraudulent practices regarding public procurement

Title Signature Date

(To be signed by authorized representative and officially stamped)

CONFIDENTIAL BUSINESS QUESTIONNAIRE FORM (FOR YOUTH, WOMEN & DISADVANTAGED GROUPS)

All Tenderers are requested to give the particulars indicated in Part 1 and either Part 2 (a), 2 (b) or 2 (c) whichever applies to your type of business. Tenderers are advised that it is a serious offence to give false information on this form.

Part 1 – General

Business Name……

Location of business premises……

Plot No. ……Street/ Road …….. Postal Address

…….. Postal Code ……. Tel

No……..

Facsimile……..

Mobile and CDMA No…….

E-mail:……

Nature of your business ……. Registration Certificate No.……

Maximum value of business which you can handle at any time KSh…….. Name of your

Bankers ……..Branch… ……

*Names of Tenderer's contact person(s) …….

Designation/ capacity of the Tenderer's contact person(s) …… Address,

Fax and E-mail of the Tenderer's contact person(s) …….

……..

Part 2 (a) Sole Proprietor

Your name in full …….

Age……. Nationality ……Country of origin ……..…..

Part 2 (b) Partnership

Give details of partners as follows: -

Names Nationality Age Shares (%)

1.……

2.……

3.……

4.……

5.……

Part 2 (c) Registered Groups

Give details of members as follows: -

Names Nationality Age Gender Shares (%)

1.……

2.……

3.……

4.……

5.……

Part 2 (d) Registered Company

Private or Public .....State the nominal and issued capital of company-

*Nominal in KSh. …….

*Total Issued KSh. ……

Give details of all directors as follows

Name Nationality Age Shares (%)

1.……

2.……

3.……

4.……

5.……

Name of duly authorized person to sign for and on behalf of the Tenderer

……

Capacity of the duly authorized person .....Signature of the duly authorized person……..

***NOTES TO THE TENDERERS ON THE QUESTIONNAIRE**

3. *Bidders shall attach their copies of the National Identity Card/ Passport*

2. *The address and contact person of the Tendered provided above shall at all times be used for purposes of this tender.*

3. *The details on this Form are essential and compulsory for all Tenderers.* **Failure to provide all the information requested shall lead to the Tenderer's disqualification.**

TENDER SECURITY DECLARATION FORM
(FOR YOUTH, WOMEN & DISADVANTAGED GROUPS)

(The Bidder shall complete in this form in accordance with the instructions indicated)

Date:……
(insert date (as day, month, year) of Bid Submission)

Tender No.....(Insert number of bidding process)

To:

Rural AGENCY FOR COMMUNITY DEVELOPMENT AND ASSISTANCE
P.O. BOX 82– 70300 MANDERA

We, the undersigned declare that.

1. We understand that, according to your conditions, bids must be supported by a bid-securing declaration.

2. We accept that we will be automatically be suspended from being eligible for bidding in any contract with the purchaser for the period of the time of (insert the number of months or years) starting on (insert date), if we are in breach of our obligation(s) under the bid conditions, because we-

    a. Have withdrawn our bid during the period of bid validity specified by us in the bidding data sheet: or

    b. Having been notified of the acceptance of our bid by the purchaser during the period of bid validity,

        i. Fail or refuse the contract, if required, or
        ii. Fail or refuse to finish the performance security, in accordance with the ITT

3. We understand that this bid securing declaration shall expire if we are not the successful bidder, upon the earlier of
    i. Our receipt of a copy of your notification of the name of the successful bidder; or

    ii. Twenty-eight days after the expiration of our tender.

4. We understand that if we are a joint venture, the bid securing declaration must be in the name of the joint venture that submits the bid, and the joint venture has not been legally constituted at the time of bidding, the bid securing declaration shall be in the names of all future partners as named in the letter of intent.

Signed:……..
(insert signature of person whose name and capacity are shown)

in the capacity of……(insert legal capacity of person signing the bid securing declaration)

Name:……

(insert complete name of person signing the bid securing declaration)
Duly authorized to sign the bid for and on behalf of:
…..(insert complete name of bidder)

Date on…… Day of…….. (insert date signing)

EVALUATION CRITERIA

There are three levels of evaluation criteria subjected to Companies that bid for the Extension of Water Supply In 12 Strategic Boreholes In Hullow, Malkamari, Warankara, Lanqura, Shimpir Fatuma 1, Kobadhaddi, Harbati, Garbab, Dagaturtur, Fino 2, Darweed And Degamarer in Mandera County.

. These are: -

1. Mandatory Requirements
2. Technical evaluation
3. Financial Evaluation

1. MANDATORY REQUIREMENT

This is a compulsory requirement and if a company fails to meet any of the mandatory requirements, it is deemed non-responsive. The following table shows the mandatory requirements

S/NO	REQUIRED DOCUMENTS	YES	NO
1	**Certified copy** of Certificate of incorporation		
2	**Certified Copy** of Valid Tax Compliance certificate (will be verified via TCC)		
3	Current Business Permit		
4	2 % Bid Bond		
5	NCA 7 and above – Building Construction, water worker		
6	Pagination (BQ Must be serialized)		
7	Financial reports for the last two years		
	TOAL SCORE		
	Add VAT		
	GRAND SUMMARY		

2. TECHNICAL EVALUATION

This is also a must for a firm or company to have and if a company fails to attain 70% of the technical requirements, it will not proceed to financial evaluation. The following table shows the technical requirements.

NO	REQUIRED DOCUMENTS	SCORE RATE	SCORE	RESPONSIVE/NON-RESPONSIVE
1	Dully filled business questionnaire	5		
2	Original and a copy of the properly filled and bounded BoQ	5		
3	Dully filled tender form	5		
4	Updated Company Profile	10		
5	Detailed work schedule should be provided	15		
6	CVs of Key personnel: a) Have at least a degree	15		
7	Work experience: a) Number of completed project in the last three years b) Value of the works executed in the last three years	25		
8.	List of Equipment to be used	5		
9.	Reference list	5		
	TOAL SCORE	**80**		

NB: Only tenderers with 70 score shall proceed to Financial evaluation stage

3. FINANCIAL EVALUTION

NO	REQUIRED DOCUMENTS	SCORE RATE	SCORE/RANK
1	At least two years Audited Financial Report (2020/ & 2021)	20	

T+F= (_____)