



Federal Republic of Somalia
Ministry of Energy and Water Resources

Tender Announcement

Request for Proposals for the Drilling and equipping of four boreholes situated in various regions, namely Widhwidh – Ceyn Region, Dhusamareeb – Galgadud Region, Raage Ceelle- Middle Shabelle, and Tuulo- Barwaaqo Dhobley Districts.

Tender Reference No: MOEWR/RFP/0002/6/2024

The Ministry of Water, Somalia, hereby invites qualified drilling contractors registered in Somalia to submit proposals for the Drilling and equipping of four boreholes situated in various regions, namely Widhwidh – Ceyn Region, Dhusamareeb – Galgadud Region, Raage Ceelle- Middle Shabelle, and Tuulo- Barwaaqo Dhobley Districts.

The objective of this tender is to facilitate the provision of safe and sustainable drinking water supplies to communities in these regions.

Key Dates:

Date Issued: 22nd June 2024

Closing date and time: 7 July 2024, 04:30 Pm

Bid Validity Period: 15 days

Contact Information:

E-MAIL ADDRESS: procurement@moewr.gov.so

CC: dg@moewr.gov.so

Table of Contents

<i>MOEWR SPECIAL TERMS AND CONDITIONS</i>	3
1. PROCEDURES AND RULES	3
1.1. Organizational Background	3
1.2. Purpose of the Tender	3
1.3. RFPS and Desirable Contract Implementation Schedule	3
1.4. RFPS Clarification Policy	3
1.5. RFPS Response Format	4
1.6. Bidder's Response	4
1.6.1. Formal Submission Requirements	4
1.6.2. Response Contents	4
1.6.3. Mandatory Criteria	5
1.6.4. Technical Proposal	5
1.6.5. Financial Proposal	5
1.6.6. Bill of Quantities (BoQs)	5
2. Terms of Reference (TOR)	7
2.1. Objective	7
2.2. Scope of Work	7
3. Instructions to Bidders	8
<i>Annex 1: Request for Proposal for Services Form</i>	11
Annex (2): Bill of Quantities (BoQs)	12

MOEWR SPECIAL TERMS AND CONDITIONS

1. PROCEDURES AND RULES

1.1. Organizational Background

The Ministry of Energy and Water Resources was established in 2014 with overall responsibility of two sectors namely: Water Resources and Energy exploration, development, and distribution on an equitable basis to the Somali society.

1.2. Purpose of the Tender

The purpose of this tender is to invite proposals from experienced drilling contractors for the Drilling and equipping of four boreholes situated in various regions, namely Widhwidh – Ceyn Region, Dhusamareeb – Galgadud Region, Raage Ceelle- Middle Shabelle, and Tuulo-Barwaaqo Dhobley Districts.

The main objective is to enhance access to safe drinking water in these communities by Drilling and equipping boreholes with necessary infrastructure components.

Interested contractors are expected to equip the boreholes with a diverse array of essential infrastructure components. These include:

- ✓ Conduct Hydro-geological and Geophysical Survey
- ✓ Drilling New Boreholes and Equipping with pumping – solar pumping system.
- ✓ Construction of an Elevated Concrete Water Tank with a capacity of 50 cubic meters
- ✓ Construct of one Water Kiosk.
- ✓ Construct of Animal Troughs for camels and sheep/goats
- ✓ Establishment of a Caretaker Room
- ✓ Construction boundary Fence with Gate.

Participation in this tender is limited to drilling contractors possessing extensive experience and valid legal registration in Somalia, coupled with the requisite licenses and permissions for conducting drilling operations.

1.3. RFPS and Desirable Contract Implementation Schedule

The Ministry of Water has established a schedule for the tendering process and outlined targeted dates for the execution of this Request for Proposals (RFP). It is imperative to adhere to these dates to ensure the smooth progression of the procurement process. The schedule is as follows:

Deadline for requesting clarifications or further information on the RFP: **Monday, July 1, 2024.**

Closing date for proposal (RFP) submission: **Sunday, July 7, 2024, at 4:30 pm.**

1.4. RFPS Clarification Policy

All inquiries or requests for clarification regarding this Request for Proposals (RFPS) must be formally submitted in writing to the Ministry of Water, located at the former Mogadishu Water Agency building in KM5, Afgoye Road, Wadajir District. Alternatively, inquiries can be sent via

email to procurement@moewr.gov.so It is essential to include the RFPS reference number in the subject line of the email. Additionally, a copy of the request for information should be forwarded to dg@moewr.gov.so

Please note that if a question is of common interest, the response will be shared with all potential RFPS institutions and contractors.

All requests for additional information or clarifications must reach the Ministry of Water no later than **Monday, July 1, 2024**. Any inquiries received after this date will not be considered.

Bidders are strongly advised to thoroughly review all instructions related to the tender. Failure to do so may result in the bidder's risk and disadvantage.

1.5.RFPS Response Format

The response to this Request for Proposals (RFPS) must adhere strictly to the instructions outlined in the RFPS document. Proposals submitted in any other format will be deemed invalid. Full proposals must be received no later than **Sunday, July 7, 2024, at 04:30 PM**.

Submissions that deviate from the prescribed format in the RFPS, fail to maintain required confidentiality or are received after the specified deadline will be rejected. Any delays in mail delivery are the sole responsibility of the bidder.

All references to supporting materials should be included within the appropriate response sections, with the actual documents provided as annexes to the RFPS response. Additionally, bidders must ensure that their responses address each aspect of the Proposal Evaluation Criteria outlined in the RFPS document to facilitate fair assessment by the evaluation team.

1.6. Bidder's Response

1.6.1. Formal Submission Requirements

Bidders are required to adhere strictly to the formal submission requirements detailed in this Request for Proposal for Services. This includes compliance with specified forms and deadlines for submission, ensuring that no price information is included in the technical proposal and other relevant guidelines.

1.6.2. Response Contents

The RFPS form, once completed, must be signed and dated. It should be submitted alongside the response in hard copy format; email submissions will be accepted. For those bringing a hard copy to the Ministry office, Responses must be submitted in triplicate, with each copy signed and dated.

The response package should be enclosed in an outer envelope, with two inner envelopes contained within. The first inner envelope, marked "Technical Proposal," should contain all necessary documentation. The second inner envelope is marked "Financial Proposal".

Sealed proposals received before the specified closing time and date will remain unopened until the bid opening committee's designated time. No proposals received after this time will be considered.

1.6.3. Mandatory Criteria

All mandatory criteria stipulated in this Request for Proposal for Services and Terms of Reference must be thoroughly addressed and fulfilled in the bidder's response.

1.6.4. Technical Proposal

The Technical Proposal should comprehensively cover all aspects delineated in this RFPS, with meticulous attention to the scope of work, technical specifications, and evaluation criteria. The Terms of Reference encompass the following key areas:

- Project Background
- Description of the Assignment
- Deliverables
- Reporting Requirements
- Location and Duration
- Evaluation Process and Methods
- Project Management
- Payment
- Annex – Technical Specifications

Technical Proposals must be exhaustive and include all pertinent supporting documentation to enable the RFPS Evaluation Team to thoroughly assess and evaluate the proposal. No financial information must be included in the technical proposal.

1.6.5. Financial Proposal

The Financial Proposal should encompass the costs associated with all services to be provided, while duly considering the Evaluation Criteria. The proposal's currency must be in USD, and the price is non-negotiable, remaining unaffected by price or currency fluctuations.

The Bill of Quantities (Annex A) serves as the foundation of the Financial Proposal and must be appropriately priced. Contractors are expected to adhere to the payment schedule provided in the Terms of Reference.

1.6.6. Bill of Quantities (BoQs)

The Bill of Quantities (Annex A) presents a structured format for bidders to outline the prices for various items. Bidders are urged to thoroughly review the Technical Specifications and other relevant sections of the bid documents to grasp the full scope of requirements encompassed within each item before filling in the rates and prices in the Bill of Quantities.

Rates and prices specified in the Bill of Quantities should encompass all aspects of the works, ensuring their completion in all respects. Bidders must account for all requirements and obligations, explicit or implicit in all parts of the contract, including incidental and contingent

expenses and risks associated with the proper execution of the works. No additional payment claims will be entertained due to errors or misunderstandings in this regard.

The rates and prices entered in the Bill of Quantities should be deemed to cover the entire scope of works, encompassing overheads and profit. Should bidders encounter any ambiguity or uncertainty regarding the scope of any item, they are encouraged to seek clarification before submitting their bid.

2. Terms of Reference (TOR)

The Ministry of Water is currently undertaking the Drilling Boreholes intervention with support from UNICEF to address the critical need for improved water infrastructure in Somalia.

2.1. Objective

The primary objective of this assignment is to improve access to safe and adequate water supply services in Somalia by Drilling strategic boreholes in targeted regions.

2.2. Scope of Work

Qualified contractors are expected to undertake the rehabilitation and equipping of boreholes in the specified regions. The scope of work includes but is not limited to the following:

- Conduct Hydro-geological and Geophysical Survey
- Drilling New Boreholes and squibbing with pumping – solar pumping system.
- Construction of an Elevated Concrete Water Tank with a capacity of 50 cubic meters
- Construct of one Water Kiosk.
- Construct of Animal Troughs for camels and sheep/goats
- Establishment of a Caretaker Room
- Construction boundary Fence with Gate.

The assignment is divided into **four (4) lots**, each focusing on Drilling and equipping of water boreholes in specific geographical locations. The works to be carried out in each location include:

Lot (1): Drilling and Equipping of new Water Borehole in Widhwidth – Ceyn Region- SSC Khaatumo

Lot (2): Drilling and Equipping of new Water Borehole in Gaarigoyle- Dhusamareeb District – Galgadud Region. Galmudug

Lot (3): Drilling and Equipping of new Water Borehole in Daylabale - Raage Ceelle District- Middle Shabelle Region - Hirshabelle

Lot (4): Drilling and Equipping of new Water Borehole in Tuulo- Barwaaqo - Dhobley Districts- Jubaland.

Lot	Site Name/Village	District	Region	State / Administration
1	Geed dheer	Widhwidth	Ceyn	SSC Khaatumo
2	Gaariyole	Dhusamareeb	Galgaduud	Galmudug
3	Daylabale	Raage Ceelle	Middle Shabelle	Hirshabelle
4	Tuulo Barwaaqo	Dhobley	Lower Jubba	Jubaland

Bidders are invited to submit bids for any combination of lots. Each lot will be evaluated separately, and contracts awarded accordingly.

3. Instructions to Bidders

3.1. Marking and Returning Offers

- 3.1.1. Offers shall be submitted as indicated on the cover page of this document.
- 3.1.2. The Bid Form must be signed by the duly authorized representative of the submitting company and submitted together with the offer.
- 3.1.3. Proposers should note that offers will be invalidated if:

- ✓ Submitted without the Bid number.
- ✓ Sent to an incorrect address not prescribed in the Bid documents.
- ✓ Presented in a different form than prescribed in the Bid documents.
- ✓ Received after the stipulated closing time and date.

3.2. Sealed Offers

- 3.2.1. Sealed Offers must be securely enclosed in an appropriate envelope, clearly MARKED on the outside with the BID NUMBER, and dispatched to the MOEWR office no later than the indicated CLOSING TIME AND DATE.
- 3.2.2. Technical and Financial Offers must be sent in separate envelopes, each clearly indicating the BID NUMBER, COMPANY NAME, and either "Technical offer" or "Financial offer."
- 3.2.3. The Technical and Financial offers must be delivered in three (3) copies each, unless otherwise specified in the Specific Terms and Conditions.
- 3.2.4. The Bid Form must be signed and submitted together with the offer by the duly authorized representative of the submitting company.

3.3. Request for Information

- 3.3.1. Any requests for information regarding the specifications should be directed to the Contracting Officer indicated in this Bid document, and NOT to the Bid Section.
- 3.3.2. Inquiries received less than seven (7) calendar days prior to the Proposal closing date may not receive a response. Only written inquiries will be entertained.

3.4. Error in offers

- 3.4.1. Proposers are required to carefully examine all requirements and instructions pertaining to the work or Bid. Failure to do so will be at Proposers' own risk.

3.5. Corrections

- 3.5.1. Erasures or other corrections in the offer must be explained with the signature of the Proposer shown alongside.

3.6. Modification and Withdrawal

- 3.6.1. All changes to an offer must be received before the closing time and date. Modifications must clearly indicate that they supersede the earlier offer or state the changes from the original offer.
- 3.6.2. Offers may be withdrawn via emailed, faxed, or written request from Proposers before the closing time and date. Negligence on the part of the Proposer does not confer the right for withdrawal after the offer has been opened.

3.7. Validity of Offers

- 3.7.1. Offers should remain valid for 20 days from the date of submission.

3.8. Currency

- 3.8.1. All costs should be stated in USD.

3.9. Content of Tenders

- Completed ‘Tenderers Relevant Experience Form’ & Evidence
- Certificate of incorporation
- Company registration with relevant insurance regulatory authorities
- Operation license
- Tax clearance certificate.
- Financial statement
- Details of facilities in Somalia
- Company Profile
- Copy of standard contract

3.10. Language of Offers

- 3.10.1. All bids should be submitted in English.

3.11. Bid Document Terms

- 3.11.1. The bid documents, along with any Proposal thereto, shall be considered the property of MOEWR and will not be returned to their originators. By submitting the offer, the

Proposer agrees to accept the decision of MOEWR regarding whether the offer meets the minimum requirements stated in the bid documents and the evaluation. Information provided in the offer will be treated as confidential unless otherwise noted by the Proposer.

3.12. Bid Invitation

- 3.12.1. Qualified contractors with experience in borehole rehabilitation are invited to submit proposals for the rehabilitation of the selected boreholes. The Ministry of Water will evaluate proposals based on technical expertise, proposed methodology, budget considerations, and compliance with regulatory requirements.

Annex 1: Request for Proposal for Services Form

This form must be completed, signed and returned to MOEWR.

Proposal must be made in accordance with the instructions contained in this request for proposal for services (RFPS).

Terms and conditions of Contract

Any contract resulting from this RFPS shall contain MOEWR General terms and condition for Somali Public procurement and any other specific terms and conditions detailed in RFPS.

Information

Any request for information regarding this RFPS must be forwarded by email to the person who prepared this document, with specific reference to the RFPS number.

The undersigned, having read the terms and conditions of RFPS No:

Set out in the attached document, hereby offers to execute the services specified in this document.

Name: _____ Title: _____ Company Name: _____


_____ Tel: _____ Email: _____

Validity of the Proposal: _____ Currency of the Proposal: _____

Signature: _____

Date: _____

Annex (2): Bill of Quantities (BoQs)

BoQ FOR DRILLING BOREHOLE & WATER FACILITIES					
	Source Name:				 <p>Ministry of Energy and Water Resource</p>
	Settlement Distance:				
	Status:	DRILLING			
	Depth to be drilled:	m			
	GPS:				
	Location:				
	HHS:				
1	Borehole Drilling Work				
ITEM		UNIT	QTY	RATE	AMOUNT
A	Hydrogeological survey				
	Hydrogeological survey, to identify sitting for borehole	LS	1		
B	BOREHOLE DRILLING AND INSTALLATION				
1	Mobilization and De-mobilization				
1.1	Allow for the cost of mobilization of all equipment, consumables for the entire borehole works and drilling team to the site and demobilization	Item	1		
1.2	Site clearance, levelling and other associated costs	Item	1		
1.3	Setting up and dismantling of the rig at the drilling site	Item	1		
1.4	Other related tasks such as water for drilling and camp use, maintenance of storage tanks, water injection systems and usage	Item	1		
2	BOREHOLE DRILLING				
	Drilling to a minimum of 12" and to an acceptable minimum depth as per hydro geological report:				
2.1	Drilling with min. 17" bit from 0-10m depth	m	10		
2.2	Drilling with min. 12" bit from 10m-xxx m depth	m	xxx		
2.3	Soil sampling and record keeping as detailed in specification	Item	1		
3	BOREHOLE INSTALLATION				
	Installation of PVC casings were applicable except for areas where screen casings will be installed				
3.1	Supply and installation of surface casing 14" (external Diameter). Minimum thickness 3mm. Upto 10m depth	m	10		
3.2	Supply and installation of PVC casing (plain or slotted) 8.625" minimum diameter. Minimum thickness 3mm up to xxx m depth	m	xxx		
3.3	Supply and install gravel pack in the borehole as detailed in the	tone	6		
4	BOREHOLE DEVELOPMENT				

4.1	Allow for borehole development work (surging by air of the completed well until the water is clean (Approx. 3hrs)	Hr	3		
4.2	Pump testing for the well using a submersible pump for at least 24-36 hours to estimate draw down and the yield	Hr	24		
4.3	Provide all materials and construct concrete top slab with well cap and engraving serial number	Sum	1		
4.4	Standby charges for reasons beyond contractor's control excluding force majeure conditions	Hr	1		
4.5	Borehole Completion Report and Water Chemical Analysis Report	Sum	1		
5	Pump Installation with Generator set				
5.1	Supply and installation of new submersible pump xxkW Grundfos	Item	1		
5.2	Supply and installation of rising main GI pipe 2" with all necessary	Item	xxx		
5.3	Supply and Installation of New Generator Set, KVA: xx Engine Type	item	1		
5.4	Cables of XXX meter per BH and fittings	m	xxx		
5.5	Control Panel	Item	1		
5.6	Water meter	Item	1		
5.7	Supply and Installation of Solar powered pump comprising of XXX No. Modules of XXX wp Poly crystalline Water Quality testing/analysis				
5.8	Grundfos RSI Inverter 3x380V IP66 15kW 31A	Item	1		
5.9	SOLAR PANELS XXXWp Poly crystalline	Item	XXX		
5.1	PV Disconnect 1000-40-5	Item	1		
5.1 1	16mm ² submersible pump 3-phase drop cable	m	XXX		
5.1 2	Well Probe Cable	m	xxx		
5.1 3	Well probe sensor	Item	1		
5.1 4	Cable splice kit 6-10sqmm	Item	2		
5.15	Float switch	Item	1		
5.16	Surge protector	Item	1		
5.17	Change over switch 100 Amps	Item	1		
5.18	Mounting structure installed (stainless steel iron bars) on a gradual gradient slope of 20cm for the solar panels to easily drain rain water as well as the panels should be mounted on 30° angle to attract enough sunlight	Item	75		
5.19	supply and installation of perimeter wall fencing with masonry basement of 0.6m height with build of wiremesh fencing superstructure 2m height x width 20m x length 20m to protect the solar	m ²	200		
6.10	Borehole Caretaker/ Operator training (installation, repair, and O&M)	LS	1		
	Total cost for Drilling 1 Borehole				
2	Construction of 50M³ RCC Elevated Water Storage Tank				
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
A	Excavation				
	<u>Excavation including maintaining and supporting sides and keeping free from water, mud and fallen materials by bailing, pumping or otherwise</u>				

1	Prepare site by stripping top 150 mm of soil to remove all debris including sand (if any) from site and carting away spoil	m ²	52		
2	Excavate trench commencing at reduced levels depth not exceeding 1.8m deep	M ³	14		
3	Extra-over for excavation in rock (optional)	M ³	5		
4	Remove surplus excavated material from site	M ³	4		
5	Backfill around foundation	M ³	10		
B	Filling				
	300 mm thick approved hardcore filling spread, well rammed and compacted in 150mm layers	M ³	16		
C	Concrete Work				
	<u>Mass Concrete class 15 (1:3:6) with 20mm thick maximum aggregate size in</u>				
1	50mm Thick blinding	M ³	3		
	<u>Vibrated Reinforced Concrete class 25 (1:1.5:3) with 20mm thick maximum aggregate size in</u>				
2	Footings(180cm*180cm*70cm height)	M ³	13		
3	Foundation beam(40cm width, 80cm height)	m ³	6		
4	Ground beam(40cm width, 30cm height)	m ³	2		
5	Columns(40cm*40cm)	m ³	10		
6	two tie beams(40cm width, 40cm height)	m ³	6		
7	final beams(40cm width, 65cm height)	m ³	5		
	<u>Vibrated Reinforced Concrete class 30 (1:1:2) with 20mm thick maximum aggregate size in</u>				
	200mm thick walls	m ²	48		
	200mm thick base slab	m ²	22		
	200mm thick cover slab	m ²	22		
	Reinforcement				
	Reinforcement Reinforcement bars (all sizes 16mm and 12mm) as shown on drawings	kg	2900		
	Swan Formwork				
	Formwork to sides of base slab girth over 150mm but not exceeding 225mm	m	17		
	Formwork to sides of cover slab girth over 150mm but not exceeding 225mm	m	17		
	Formwork to sides and soffites of beams	m ²	86		
	Formwork to soffites of base slab	m ²	19		
	Formwork to soffites of cover slab	m ²	19		
	Formwork to sides of wall	m ²	95		
	200mm wide PVC water bar	m	32		
	Finishes				
	<u>Cement and sand mortar (1:3) rendering in:</u>				
	25 mm Thick screed to base slab with waterproof cement	m ²	19		
	15mm internal plaster to cover slab with waterproof cement	m ²	19		
	15mm plaster to internal sides of wall with waterproof cement	m ²	46		
	12mm plaster to external sides of wall	m ²	49		

	12mm plaster to cover slab	m ²	22		
	12mm plaster to soffits of base slab	m ²	19		
	12mm plaster to beams	m ²	75		
	25x25mm Bondex sealing compound	m	16		
	Water Supply System				
	<u>Galvanized Mild Steel pipes class "B" medium thickness with and including jointing, fittings and fixe as described</u>	m ³			
	50mm diameter inlet pipe 800mm long	No	1		
	50mm diameter draw off pipe Ditto	No	1		
	50mm diameter overflow pipe Ditto	No	1		
	75mm diameter scour pipe Ditto	No	1		
	20mm diameter brass gate valve with wheel and head	No	1		
	20mm diameter stop corks	No	1		
	600x600x6mm heavy gauge steel primed metal manhole cover on slab with and including metal framing all around	No	1		
	20mm Diameter bars, 'U' shaped to form steps with ends embedded into retaining wall, average length 450mm	No	6		
	TOTAL COST OF 50^o RCC ELEVATED STORAGE TANK				

3

Construction of Borehole Generator Room(5m*4m)

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	SUBSTRUCTURE				
	Excavation				
	Excavate for strip footing not exceeding 1.0 metres deep, starting from stripped levels(not exceeding 400mm width)	m ³	6.4		
	Over 50cm thick well compacted hardcore filling blinded with 50mm thick quarry dust or sand layer to receive surface bed	m ³	8		
	Chemical anti-termite treatment executed complete by an approved specialist under a ten-year guarantee, to surface of hard-core	m ²	16		
	1000 gauge polythene or other equal and approved damp proof membrane laid over blinded hardcore (measured separately) with 300mm side and end laps (measured nett-allow for laps)	m ²	16		
	Concrete Work				
	Reinforced Concrete class 25				
	Reinforced concrete class 20 as described in (with a 28-day 150mm cube crushing strength of 30MPa), cast into formworks and vibrated around rod reinforcement bars)				
	Plinth beam(200mm hight)	m ³	1.28		
	mesh fabricreinforcement ref No. A142 laid in floor slab with a minimum thickness of 150mm	m ²	16.00		
	Selected and approved rubble stone walling bedded jointed and pointed in cement and sand (1:3) mortar.				
	400mm thick walling(1200mm hight)	m ³	8.0		
	Walling				
	Approved hollow concrete block walls or other equal and approved; bedded and jointed in (1:3) cement and sand mortar				
	200mm thick walling externally(3m high)	m ³	48.0		
	Reinforced concrete in class C-30 (with a 28-day 150mm cube crushing strength of 30MPa), cast into formworks and vibrated around rod reinforcement bars				

	columns,Intermediate and final beams	m ³	1.28		
	Finishes				
	Plastering				
	20mm thick cement/sand (1:5) plaster as described to:				
	External and internal Walls	m ²	112.00 0		
	Painting				
	Prepare the surface and apply two coats of plastic emulsion paint of chosen type and color to :				
	Plastered walls(external and internal walls)	m ²	112.00		
	Doors and Windows				
	purpose made steel casement double door, manufactured from standard sections, finished with pressed steel horizontal louvers and complete with all necessary ironmongery, overall size of 2000*2100mm high	Item	1.00		
	provide metal grill window with wire mesh overall size of 1500mm*1200mm high	Item	1.00		
	Roofing				
	Supply and fix complete roof structure of the ward regarding following specifications; a: providing and fixing roof framing in trusses b: providing and fixing G-28 galvanized roof sheet, the job shall include all the necessary materials to complete the roof structure	m ²	16.00		
	Provisional Items				
	construction of Ramp in tamped to floor finish with 100mm concrete slab with entrance steps	Item	1.00		
	TOTAL COST FOR BOREHOLE GENERATOR ROOM				
4	Construction of Borehole Caretaker Room(4m*4m)				
	SUBSTRUCTURE				
	Excavation				
	Excavate for strip footing not exceeding 1.0 metres deep, starting from stripped levels(not exceeding 400mm width)	m ³	6.4		
	Over 50cm thick well compacted hardcore filling blinded with 50mm thick quarry dust or sand layer to receive surface bed	m ³	8		
	Chemical anti-termite treatment executed complete by an approved specialist under a ten-year guarantee, to surface of hard-core	m ²	16		
	1000 gauge polythene or other equal and approved damp proof membrane laid over blinded hardcore (measured separately) with 300mm side and end laps (measured nett-allow for laps)	m ²	16		
	Concrete Work				
	Reinforced Concrete class 25				
	Reinforced concrete class 20 as described in (with a 28-day 150mm cube crushing strength of 30MPa), cast into formworks and vibrated around rod reinforcement bars)				
	Plinth beam(200mm hight)	m ³	1.28		
	Selected and approved rubble stone walling bedded jointed and pointed in cement and sand (1:3) mortar.				
	400mm thick walling(1200mm hight)	m ³	7.7		
	Walling				
	Approved hollow concrete block walls or other equal and approved; bedded and jointed in (1:3) cement and sand mortar				
	200mm thick walling externally(3m high)	m ³	48.0		
	Reinforced concrete in class C-30 (with a 28-day 150mm cube crushing strength of 30MPa), cast into formworks and vibrated around rod reinforcement bars				
	columns,Intermediate and final beams	m ³	1.28		
	Finishes				

	Plastering				
	20mm thick cement/sand (1:5) plaster as described to:				
	External and internal Walls	m ²	112.00	0	
	Painting				
	Prepare the surface and apply two coats of plastic emulsion paint of chosen type and color to :				
	Plastered walls(external and internal walls)	m ²	112.00		
	provide 600*600*8mm thick approved ceramic floor tiles to regular bedding and joining to match with adhesive	m ²	16.00		
	Doors and Windows				
	purpose made steel casement double door, manufactured from standard sections, finished with pressed steel horizontal louvers and complete with all necessary ironmongery, overall size of 2000*2100mm high	Item	1.00		
	provide metal grill window with wire mesh overall size of 1500mm*1200mm high	Item	1.00		
	Roofing				
	Supply and fix complete roof structure of the ward regarding following specifications; a: providing and fixing roof framing in trusses b: providing and fixing G-28 galvanized roof sheet, the job shall include all the necessary materials to complete the roof structure	m ²	16.00		
	provide ceilings 50*50mm soft wood brandering	m ²	16.00		
	Provisional Items				
	Electric works	Item	1.00		
	TOTAL COST FOR BOREHOLE CARETAKER ROOM				

5

Construction Water kiosks for Borehole

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	<u>Water kiosk superstructure</u>				
1.1	Site clearance levelling and clear unnecessary materials	M ²	40		
1.2	Excavation foundation trench and level (4.5m x 4 x0.4)	M ³	7.2		
1.3	Mass concrete of 50mm thick blinding layer (1:2:4 mix) under the foundation wall (4.5m x 4 x 0.05)	M ³	0.9		
1.4	250mm hardcore filling and well compacting for slab area(4.5mx4mx0.25m)	M ³	4.5		
1.5	RC concrete (1:2:4 mix) in conc. floor slab 15 cm thick(4.5mx4mx0.1m)	M ³	1.8		
1.6	20cm thick hollow block walling in cement & sand mortar 1;3 mix ()	M ²	6.2		
1.7	Construct 200mm block bended with mix ratio of 1:4cement/sand (1.6mx0.6m)	M ²	8		
1.8	Cast 20cm Mass concrete 1:3:6 mix design of the area (1.6x0.2x0.2m)	M ³	0.064		
1.9	External & internal plastering , 12 mm thick, cement and sand mix 1:4, with wood float finish	M ²	14.2		
2.91	Apply two coats of whitewash	M ²	14.2		
2.92	30 mm thick 1:3 cement/sand floor screed	M ³	6.72		
2.93	soak pit excavation commencing at reduced levels depth not exceeding 1.5m deep(Construct 200mm block bended with mix ratio of 1:4cement/sand) . With required connection to the drainage channels	LS	1		
2.94	GI pipes for water Kiosk 1"	Pcs	5		
2.95	Install 5m perimeter fencing around water kisok using wire mesh hinged with strong iron bar pillars cemented on the ground to firmly hold the wire mesh fence not collapse or blown away by strong winds (10m length x 10m width)	M ²	25		
2.96	<u>Fittings on the Water Kiosk</u>				
2.97	GI Reducer 2" -1"	Pcs	1		
2.98	900 GI Elbow 1"	Pcs	1		

2.99	1" GI Double Tee	Pcs	2		
2.991	1" GI Single Tee	Pcs	1		
2.992	Reducer socket 1"-3/4"	Pcs	8		
2.993	Nipple GI	Pcs	8		
2.994	Branch pipes, 3/4", galvanized (long pipe 300mm threaded on both sides)	Pcs	8		
2.995	3/4" taps	Pcs	8		
2.996	Painting and donor visibility (1mx1.2m) on the walls of the water kiosk	LS	1		
Total Cost of Water kiosk for Borehole					

6 CONSTRUCTION OF ONE ANIMAL TROUGH (SHEEP/GOAT 4.1m*1.6m*0.75m) IN BOREHOLE					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Site clearance: leveling and clear unnecessary materials	m2	40.00		
	Excavation foundation trench and level (11m x 0.4m x 0.2m)	m3	0.88		
	Mass concrete of 50mm thick blinding layer (1:2:4 mix) under the foundation wall (4.5m x 2.2m x 0.05)	m3	0.50		
	RC foundation construction (11m x 0.5m x 0.3m)	m3	1.65		
	Construction of RC foundation ring beams (11m x 0.2m x 0.1)	m3	0.24		
	Laying of hardcore bed (4.1m x 1.6m x 0.20m)	m3	1.31		
	Laying 100mm RC floor reinforced with m.s D8mm mesh @ 200mm centre both ways (4.1 m x 1.6m x 0.1m)	m3	0.66		
	Construction of trough walls (11m x 0.4m x 0.2m)	m2	5.00		
	Construction of 100mm R.C ring beam over the constructed walls (11m x 0.2m x 0.1m)	m3	0.56		
	Render the internal walls 12mm wood float cement plaster with cement slurry finish on top true to plumb	m2	8.80		
	laying 40mm new cement screed on trough floor with cement slurry finish on top gently sloping towards the cleaning pipe hole	m2	1.80		
	render the external face of the enclosing wall 12mm wood float cement plaster true to plumb	m2	9.40		
	paint the external walls two coats of a mix of good lime and white glue	m2	9.40		
	Galvanized mild steel pipes class "B" medium thickness with and including jointing fittings and fixed as described	No	3.00		
	50mm diameter inlet pipe chased through masonry wall 300 mm long with and including stop cork	No	3.00		
	32mm diameter PVC draw off pipe 300mm long with and including gate valve	No	3.00		
TOTAL COST FOR BOREHOLE ANIMAL TROUGHS (GOATS)					

7 CONSTRUCTION OF ONE ANIMAL TROUGH (CAMEL, 4.1m*1.6m*0.45m) IN BOREHOLE					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Site clearance: leveling and clear unnecessary materials	m2	40.00		
	Excavation foundation trench and level (11m x 0.4m x 0.2m)	m3	0.88		
	Mass concrete of 50mm thick blinding layer (1:2:4 mix) under the foundation wall (4.5m x 2.2m x 0.05)	m3	0.50		
	RC foundation construction (11m x 0.5m x 0.3m)	m3	1.65		
	Construction of RC foundation ring beams (11m x 0.2m x 0.1)	m3	0.24		
	Laying of hardcore bed (4.1m x 1.6m x 0.20m)	m3	1.31		
	Laying 100mm RC floor reinforced with m.s D8mm mesh @ 200mm centre both ways (4.1 m x 1.6m x 0.1m)	m3	0.66		
	Construction of trough walls (11m x 1m x 0.2m)	m2	11.00		
	Construction of 100mm R.C ring beam over the constructed walls (11m x 0.2m x 0.1m)	m3	0.56		

	Render the internal walls 12mm wood float cement plaster with cement slurry finish on top true to plumb	m2	8.80		
	laying 40mm new cement screed on trough floor with cement slurry finish on top gently sloping towards the cleaning pipe hole	m2	1.80		
	render the external face of the enclosing wall 12mm wood float cement plaster true to plumb	m2	9.40		
	paint the external walls two coats of a mix of good lime and white glue	m2	9.40		
	Galvanized mild steel pipes class "B" medium thickness with and including jointing fittings and fixed as described	No	3.00		
	50mm diameter inlet pipe chased through masonry wall 300 mm long with and including stop cork	No	3.00		
	32mm diameter PVC draw off pipe 300mm long with and including gate valve	No	3.00		
	TOTAL COST FOR BOREHOLE ANIMAL TROUGHS (CAMEL)				

	TOTAL SUMMARY BOREHOLE				
1	Borehole Drilling Work Cost				
2	Construction of 50M ³ RCC Elevated Water Storage Tank				
3	Borehole Generator Room Construction Cost				
4	Borehole Caretaker Room Construction Cost				
5	Borehole water kiosk Construction Cost				
6	Construction of animal trough (Goats/Shoat)				
7	Construction of animal trough (Camel)				
	TOTAL COST OF BOREHOLE DRILLING AND CONSTRUCTION				