# TENDER FOR WATER YARD CONSTRUCTION KAPOETA (IRSS-Lot-12-WYC-03-22)

**BACKGROUND/INTRODUCTION**

Islamic Relief is an independent humanitarian and development UK-based organization, with an active presence in over 40 countries across the globe, we strive to make the world a better and fairer place for people still living in poverty. Islamic relief began its humanitarian operation in South Sudan in 2004 focusing on providing lifesaving aid and implementing developmental Programmes to support people affected by the flood, drought, and Conflict establishing three sub-sub-offices Narus (Kapoeta East), Wau, Warrap. A satellite office in Yei and the Main office in Juba.

As well as responding to disasters and emergencies, Islamic Relief promotes sustainable economic and social development by working with local communities - regardless of race, religion or gender.

## Our vision:

Inspired by our Islamic faith and guided by our values, we envisage a caring world where communities are empowered, social obligations are fulfilled and people respond as one to the suffering of others.

## Our mission:

Exemplifying our Islamic values, we will mobilize resources, build partnerships, and develop local capacity, as we work to:

Enable communities to mitigate the effect of disasters, prepare for their occurrence and respond by providing relief, protection and recovery.

Promote integrated development and environmental custodianship with a focus on sustainable livelihoods.

Support the marginalized and vulnerable to voice their needs and address root causes of poverty.

We allocate these resources regardless of race, political affiliation, gender or belief, and without expecting anything in return.

## INTRODUCTION

The Construction work of the water mini yard is expected to be implemented in the two targeted locations of Riwooto and Lotiir of Kapoeta North County-Eastern Equatorial state. The general work of the water yard to be done includes; drilling of new borehole, construction of water tank stands, installation of solar system including the control system, installation of submersible pump, plumbing work, construction of concrete water distribution points having 05 outlets, and construction of fence & spread of selected quality of aggregate in the fance. on the water for both the two sites. All cost of work should also include the cost of local materials, labour, transportation and any other related costs inclusive.

The activities are;

**Drilling of new borehole**. Thorough assessment for good yield site, drill the borehole, flash, pump test until the pump recovery is 80% after completion of the test in 30 minutes, Installation of Indian MK II pedestal.

**Installation of metallic tank stand:** Install a strong tank stand that will resist all the forces and bear 12000litres weight of water. Installation of two plastic water tanks of capacity 6000litres on one stand.

**Construction of concrete tap stand:** There are tree (03) tap stands for each water yard having 05 outlet taps, provide and fix the taps (3/4 Pegler taps). Construct a drainage channel and soak pit for the spilling waste water from the tap stand.

**Solar system:** Installation of solar power system and the control panel system to supply power to the submersible pump that will lift water from the borehole to the tank.

**Submersible pump:** Installation of submersible power pump to pump water from the borehole to the tank inclusive of provision for cable wire.

**Plumbing work:** Connection of all the plumbing system from the borehole to the tank and up to the tap stand. Provision of 2'' dia. HDP PVC pipe as main supply to the tap stand of length 450 meter (Riwooto) and 400 meters (Lotiir). 11/4'' GI pipe, Connectors, coupling, T-coupling, sockets, elbow, nipple, reducing bush, thread tape both GI and PVC plumbing materials.

**Fence:** There will be provision of fencing the area around the water tank with chain link, dimension of 6.0mx5.0m. Aggregates of selected quality 15-20mm diameter size to be spread in the fence to avoid mud and stagnant water under the tank in case of spilling water.

### 1. Objectives:

To construct 02 Water mini yards to supply clean and safe water for consumption and domestic use to increase the resilience, livelihood and protection and reduce the vulnerability to the pastoral communities of the selected areas of Kapoeta North.

### 2. Tasks and expected days of work

The contractor is expected to carry out the job accordingly, while assigning specific and clear task of jobs to specific team group e.g. Technicians and masons. The work is expected to take maximum 40 days including mobilization.

## 3. Roles and responsibilities

**The contractor**:

- Is solely responsible for provision of all the materials, services, transportation and personnel needed for the work, ensure that all materials/spare parts, services and personnel conform to approved grade, skills and standards.
- Responsible for the team deployed for the work, all their basic needs are catered for, should not interfere with the work.
- Regular update to WASH officer/technician in the field office, Challenges and constraints should be reported and challenges addressed.

**IRSS:**

- Responsible for coordination with authorities, communities and other stake holders in all matters pertaining to the construction work.
- Conduct regular monitoring visits, inspection of all materials and services involved in the work.
- Will provide guidance and advice and support as deemed necessary.

## 6 Interface

- Ensure there is very good line of communication and coordination between Islamic relief and the contracted company, is well established.
- All communication and coordination should be done through the company focal person assigned for that and the organization's officer in the field office.
- No direct communication between any company staff and IRSS, unless an informal one.
- IRSS engineer can be directly contacted any time for consultation and advice.

## 7. Reporting

- Contractor to report on each phase of work successfully completed, this includes: Phase Geophysical survey, drilling, pump testing, water quality testing, Installation of pedestal, construction of tank stands, Installation of solar and submersible pump, construction of tap stands, Inspection, decommissioning and handing over.

## 8. Handing over

- Final inspection will be jointly conducted with the ministry and directorate of water resources including the representative from the respective communities. Various components of the facility will be inspected and verified, according to the check list. In case of defaults in any component, has to be rectified before final handing over is done.
- After the facility is handed over, IRSS will carry out post construction monitoring for a period of three months for any defect liability that may show up.
- Each water yard will be branded with visibility having IRW logo as specified in the BOQ.

BILL OF QUANTITIES

**Please also use our table when filling the prices. If you do not have the item just keep it empty. Your offer should be for the quantity that we request, not less and not more.**
**Please only use USD ($) as the currency for your offers as per the guidelines.**

## SITE LOCATIONS.

| SITE | LOCATION | PAYAM | DISTANCE FROM KAPOETA SOUTH TOWN |
|---|---|---|---|
| Site 01 | Riwooto | Lomeyen | 35 km |
| Site 02 | Lotiir | Naakwa | 65 km |

**BILL OF QUANTITY FOR CONSTRUCTION OF WATER YARD:**

**Lot 01: DRILLING AND INSTALLATION OF BOREHOLE**

| S/no | Item description | Quantity | Unit | Unit cost-USD | Amount - USD |
|---|---|---|---|---|---|
| **1.00** | **Preliminary.** | | | | |
| 1.1 | Mobilization of resources and site visit, transportation of all equipment, personnel, materials to project site and decommissioning at completion of job | job | sum | | |
| Sub total | | | | | |
| **2.0** | **Borehole drilling** | | | | |
| 2.1 | Conduct geophysical survey using recommended equipment, resistivity meter to identify the most promising site for drilling successful borehole | 01 | Survey | | |
| 2.2 | Carryout drilling 8'' borehole to minimum 80 meters depth using air and DTH hammer or with form, mud rotary with form or polymer depending on the nature of the formation for that site. | 100 | meters | | |
| 2.3 | Supply and install 125mm(5 inch) nominal internal diameter UPVC casing | 90 | meters | | |
| 2.4 | Supply and install 125mm (5 inch) nominal internal diameter slotted UPVC casing including UPVC end cup | 10 | meters | | |
| 2.5 | Supply and install permanent casing 8 inch nominal internal diameter UPVC plain casing up to hard formation | 06 | meters | | |
| 2.6 | Supply and insert filter gravel packing 2-4mm size of round and clean siliceous materials | 2.5 | $M^3$ | | |

| | | | | | |
|---|---|---|---|---|---|
| 2.7 | Insert sanitary seal 1:1:2 grout cement ne 1.5m deep from ground level | 1.5 | $M^3$ | | |
| Sub total | | | | | |
| **3.0** | **Borehole development** | | | | |
| 3.1 | Allow for borehole development work surging by air until the water is clear | 03 | hours | | |
| 3.2 | Pump test the completed well until the pump recovery is around 80% after removal | 06 | hours | | |
| 3.3 | Allow for water quality test based on the recommended parameters both physical chemical and bacteriological | 01 | test | | |
| Sub total | | | | | |
| **4.0** | **Apron construction** | | | | |
| 4.1 | Provide and place BRC mesh as apron reinforcement, reinforced concrete on the platform, Construct apron elevated foundation in 1:4 cement to sand mortar well blinded and finish. | 2.0 | $M^3$ | | |
| 4.2 | Provide and install Indian MKII hand pump pedestal | 01 | set | | |
| 4.3 | Provide and install Indian MKII water tank with dual outlets | 01 | set | | |
| Sub total | | | | | |
| **General total** | | | | | |
| **Grand total x 2** | | | | | |

**Lot 2: CONSTRUCTION AND INSTALLATION OF WATER YARD**

| S/no | Item description | Quantity | Unit | Unit cost-USD | Amount - USD |
|---|---|---|---|---|---|
| **1.0** | Preliminary. | | | | |
| 1.1 | Mobilization of resources and site visit. | job | sum | | |
| 1.2 | Allow for site clearance | job | sum | | |
| 1.3 | Excavate vegetable soil n.e 150mm deep, level and dispose offsite not less than 5m distance away | job | sum | | |
| Sub total | | | | | |
| **2.0** | **Base/Concrete Footing** | | | | |
| 2.1 | Excavate column foundation of length 0.8 by 0.8m width and 1.0m | 06 | columns | | |

| | | | | | |
|---|---|---|---|---|---|
| | deep from the leveled site, screed to receive the column. | | | | |
| 2.2 | Provide and cast 800mmx800mmx300mm high footing from the ground level in 1:2:4 cement sand aggregate RC to receive the tower columns. 400mmx400mm main reinforcement, Y-12mm standard reinforcement bars, Y-12mm standard main rebar and R8 stirrups | 06 | columns | | |
| Subtotal | | | | | |
| **3.0** | **Steel Tower** | | | | |
| 3.1 | Provide and Install a metallic tank stand of 6'' diameter square and 6.0m high column from the concrete base, well braced to resist wind and axial loads. | 06 | Columns | | |
| 3.2 | Provide and fix 50mmx50mm hollow section pipes in joist/trusses/ ties. Guard rails all round, 800mm high to prevent fall off of the tank. Fix hand rail to 6000mm height | 01 | set | | |
| 3.3 | Provide and fix 200mmx120mm, 2 in no 'H' steal bar as primary bearer | 12 | meters | | |
| 3.4 | Provide and fix 50mmx50mm hollow section pipe in secondary barrier | 27 | meters | | |
| 3.5 | Provide and fix 3mm thick iron plate on the secondary barrier to receive 2 water tanks of capacity 5000litres each. | 18 | $M^2$ | | |
| Sun total | | | | | |
| **4.0** | **Water tank** | | | | |
| 4.1 | Provide and fix plastic water tanks 6000litres capacity, 2 in no with all the fittings to receive water and discharge to tap stands. | 02 | pc | | |
| Sub total | | | | | |
| **5.0** | **Concrete Tap stands/Distribution point infrastructure** | | | | |
| | Construct concrete tap stands 03 in no of 05 outlets each, fix taps ready to distribute water. | 03 | | | |
| | Provide and fix 2'' PVC pipe as main, connecting to the tap stands from the tank | 450 | meters | | |

| | | | | | |
|---|---|---|---|---|---|
| Sub total | | | | | |
| **6.0** | **Solar pump system** | | | | |
| 6.1 | Provide and install solar panel infrastructure/mounting. | 01 | mounting | | |
| 6.2 | Provide and fix solar panel kit 150watts 6 panels | 06 | panels | | |
| 6.3 | Provide and install 01 control panel system and accessories | 01 | panel | | |
| 6.4 | Provide and fix submersible motor cable 4mm | 140 | meters | | |
| 6.5 | Provide and fix solar powered submersible pump (Grandfos SQF 1.4Kw IHP DC IPC. | 01 | pc | | |
| 6.6 | Provide 2/3 PPR pipe and connectors | 80 | meters | | |
| Sub total | | | | | |
| **7.0** | **Fittings/Connectors** | | | | |
| 7.1 | Provide 11/4 GI pipe, connectors and fittings, dual gate valves, sockets, nipples, elbows, reducing bushes, coupling, reducing socket, thread tape, tank connectors both PVC and GI. | 01 | set | | |
| Sub total | | | | | |
| **8.0** | **Fence** | | | | |
| 8.1 | Provide fencing with chain link 6.0mx5.0m all-round with concrete base of 1:2:4, and door provided | 01 | item | | |
| 8.2 | Provide 15-20mm size diameter well graded clean aggregates on the floor under the tank and all over the fence. | 2.0 | $M^3$ | | |
| 8.3 | Visibility (metallic 1.0m x 0.8 m)with IRW logo and information that will be provided by communication officer, fixed on the tank stand. | 01 | pieces | | |
| 8.4 | Decommissioning- allow for removal and safe disposal of all wastes generated from concrete work. | 01 | Sites | | |
| Sub total | | | | | |
| **General total** | | | | | |
| **Grand total x 2** | | | | | |

| S/No | Item | Total cost |
|---|---|---|
| **Lot 01** | **Drilling and installation of borehole** | |
| **Lot 02** | **Water yard Installation** | |
| **General total** | | |
| **Grand total X2** | | |

**The Supplier is required to work as per the below guidelines;**

## APPENDIX 1

a. Price

b) Profile

c) General Experience

d) Specified Commodity Experience

e) Delivery Location(s)

f) Delivery Time

g) Validity of Quotation

h) Bank Statement (Latest three months 3 Months)

i) Experience with IRSS

**NB. All above documents should be in the same sequence and divided by separators arrange chronologically from a to i failure to abide by may lead to disqualification from the process and extra marks is given for correct arrangement of the documents.**

All tenders are required to be submitted before **28th -Mar-2022 at 4 PM CAT** pursuant to the attached guidelines for submitting a quotation and be returned to; **HAND DELIVERY TO IRSS TENDER BOX** upon registration on the bid receipt form. The sealed envelopes are to be dropped at IRSS tender box Hai Cinema, 2nd class, Plot no 52, Block B-XV.

For any issues relating to the tender or its contents please email directly to; IRSS.Tender@islamic-relief.com.ss

**All quotation providers are requested to fill in Appendix 1 and 2 below when submitting their proposal to IRW.**

APPENDIX 2

**Summary of Bid Prices**

| *No.* | *Description* | *Total Price in USD ($)* |
|---|---|---|
| **1** | **Grand Total Bid Price** | |
| **2** | **Discount Ratio (if any) … % and the amount** | |
| **3** | **Grand Total after Discount** | |
| **4** | **Delivery time scales (in days)** | |
| **5** | **Quotation Validity** | |

We have carefully checked and examined all bid documents and we are offering the costs above on a fixed basis and they are not subject to any changes or alterations including those due to currency fluctuations.

Total Price **USD ($)**

**In words** **[_____]**

Bidder's Signature Stamp Date

**Bidder is required to stamp this document with their legal company stamp no bid will be accepted without a genuine company stamp.**