



7<sup>th</sup> July 2020

## DETAILED TENDER NOTICE MWCT/BH/20/01

Maasai Wilderness Conservation Trust (MWCT) is a not-for-profit organisation registered under the Laws of Kenya and runs Conservation, Education and Health programs mainly in Southern Kenya. MWCT seeks to drill and equip a borehole to provide water for domestic use and sustainable agriculture for the benefit of the local community in Moilo village, Iltlal Location, Loitokitok Sub-county, Kajiado County.

Bids are invited from registered companies with capacity and experience in providing full borehole services as follows:

### a) **Hydrological Study and Survey**

The contractor should have the capacity to conduct a hydrological site survey using a registered hydrologist to establish the best point to drill a borehole within the proposed area. A detailed report clearly indicating the viability of drilling the borehole shall be a key deliverable at this stage.

### b) **Submission of Required Reports to Relevant Authorities**

The contractor should have the capacity to prepare and submit required reports to the Water Resources Management Authority (WRMA), the National Environment Management Authority (NEMA) and any other local authority for the purposes of obtaining mandatory clearance, permits and licenses for drilling.

### c) **Drilling & Casing**

The contractor should have the capacity to undertake the following:

- The drilling of one borehole of sufficient diameter to provide for a finished cased and screened borehole of 200mm diameter to the provisional depth of about 150 metres
- The provision and installation of plain high density synthetic, slotted synthetic casings, and gravel pack, borehole cap, together with cementation works as necessary
- The collection of formation samples at 2 meter interval of drilling progress to the bottom and also water sample at every aquifer struck and at the beginning and at the end of test pumping operation for both chemical and biological analysis

### d) **Test Pumping**

The contractor shall conduct a 24 hour continuous test pumping up to a maximum of 30 hours and 12 hour recovery test after the borehole has been completed, constructed and developed

### e) **Submersible Pump**

The contractor shall supply and install a suitable submersible borehole pump, complete with all the necessary controls and capable of achieving a pumping rate of 5m<sup>3</sup>/hour (provisional). The pump quality shall be approved by MWCT before installation.



**f) Solar Power System**

The contractor shall erect a solar structure of minimum 4 meters above the ground pitched at an angle less than 15 degrees with hollow mildsteel tubes of minimum dimensions 3 inches x 2 inches. The posts shall be anchored with concrete. The mounting rails shall be strong enough to withstand windy weather to avoid damage to the mounted solar panels. A solar pump inverter capable of automatically running the installed pump to ensure auto refill and auto detection of water level in the borehole shall be installed by the contractor. The solar power capacity shall be able to run the pump even during cloudy weather. The solar cabling shall be done with UV double sheathed PV cables not less than 6.0mmsq diameter. The installation shall also include solar PV combiner box, surge protector and PV disconnect. Any underground cable shall be of armoured type. The quality of the major solar power system components shall be approved by MWCT before installation.

**g) Water Tower**

The contractor shall supply and install of a suitable water tower (either concrete or metallic) at minimum height of 5 meters above ground level properly anchored with concrete capable of holding atleast a filled water tank of 10,000 litres on the top rack. A 10,000 litre plastic water tank shall be supplied and installed on the tower by the contractor.

**h) Water kiosk**

The contractor shall construct a suitable complete water kiosk with a reinforced concrete slab casting at roof level capable of holding a filled plastic water tank of atleast 10,000 litres. A suitable water meter shall be installed in the water kiosk to monitor water usage. A 10,000 litre plastic water tank shall be supplied and installed on the water kiosk rooftop by the contractor.

**i) Livestock Water Trough**

The contractor shall construct a suitable livestock water trough capable of holding 10 drinking cows at a time complete with all plumbing as needed. Water to the livestock trough shall be controlled from the metered water kiosk.

**j) Plumbing and Electrical Works**

It shall be the responsibility of the contractor to undertake all the needed plumbing and electrical works for this contract.

**k) Site Conditions**

It shall be deemed that the successful contractor has visited, at his/her cost, the proposed borehole site to ascertain for himself or herself all the conditions affecting this contract before submitting the application. Potential contractors who want to do site visit should contact MWCT via the provided contact information.

**l) Borehole Data**

- Total depth – 150 meters of 200mm diameter from surface (Provisional)
- Casings - 152mm diameter and unknwn screened depth
- Static water level – unknown
- Dynamic water level – unknown
- Pumping rate - 5m<sup>3</sup>/hour (provisional)



- Pump setting level – 50 meters (provisional)
- Total dynamic head – (unknown)

**m) Cessation of Work**

The contractor should take note of the following:

- Drilling shall only take place if steps (a) and (b) above are successful
- The provisional drilling depth and any other works can be varied by MWCT on the actual conditions encountered in the process of executing the works
- MWCT reserves the right to stop drilling if sufficient supply of water has been obtained or work is not being carried out in a satisfactory manner or further drilling is unlikely to be advantageous or for any other justifiable reason

**n) Handing over**

The contractor's work shall be considered complete upon satisfactory testing, operation and commissioning of the borehole, attached structures and equipment to MWCT

**o) Warranty**

The contractor shall provide to MWCT a written general warranty covering his/her workmanship for a period of 5 years after practical completion of the contract and ensure that applicable standard manufacturers' warranties on equipment are duly registered in favour of MWCT.

**p) Taxes**

All quoted prices shall be deemed to be inclusive of all applicable taxes such as VAT, withholding taxes etc and the contractor is duly registered for the taxes charged. In this regard, all applicants shall attach a copy of their KRA PIN certificate.

**q) Payments**

The successful contractor is expected to have financial capacity to undertake this contract. The agreed contract price shall be paid as follows:

- 10% upon signing of contract
- 25% upon commencement of borehole drilling works
- 25% upon commencement of borehole equipping works
- 25% upon commencement of works on water storage and distribution structures
- 15% upon commissioning of the complete project

**r) Form of Tender**

All quoted prices shall be assumed to be inclusive of all applicable taxes and any omitted item or section prices shall be assumed to be included in another part or section. Priced Bills of Quantities shall be submitted in the following format:

PROPOSED MWCT BOREHOLE AT MOILO VILLAGE, ILTILAL LOCATION  
PRICED BILL OF QUANTITIES FOR BOREHOLE DRILLING, EQUIPPING, WATER  
STORAGE AND DISTRIBUTION



Item No.	Description	Unit	Qty	Rate KES	Total KES
A	Allow for conducting an hydrological site survey to determine the viability of a borehole in the proposed area and if viable the best position of drilling.	Item	1		
B	Allow for application and acquisition of drilling permit from WRMA	Item	1		
C	Allow for EIA and application and acquisition of a drilling permit from NEMA	Item	1		
	The drilling will only proceed if items A, B and C are successful				
D	Mobilization / demobilization of drilling unit, equipment, materials, personnel and all other required supplies	Sum	1		
E	Drilling and complete casing 200mm diameter borehole from 0 to 150 meters (provisional) below surface	LM	150		
F	Supply and installation of filler gravel pack as needed (8 ton provisional)	Ton	8		
G	Test pumping for atleast 24 hours to determine the borehole yield, taking recovery measurements and any other required details for production of test pump results	Item	1		
H	Construction of concrete plinth around wellhead and borehole capping	Item	1		
I	Allow for physical and chemical analysis of borehole water for completion report	Item	1		
J	Supply and complete installation of a suitable submersible pump capable of pumping 5m <sup>3</sup> /hr positioned at a depth of 50 meters (provisional)	No.	1		
TOTAL CARRIED TO SUMMARY					



# MAASAI WILDERNESS CONSERVATION TRUST

Item No.	Description	Unit	Qty	Rate KES	Total KES
A	Supply and complete installation of a solar power system capable of supporting the selected pump for continuous pumping for at least 6 hours per day	Item	1		
B	Supply and installation of a water tower at close proximity to the borehole capable of holding a filled plastic water tank of at least 10,000 litres at a height of at least 5 meters above ground level	Item	1		
C	Construction of a complete water kiosk with a reinforced concrete slab casting at roof level capable of holding a filled plastic water tank of at least 10,000 litres	Item	1		
D	Supply and installation of 2 plastic water tanks each with a capacity of at least 10,000 litres	No.	2		
E	Construction of cattle water trough capable of holding at least 10 drinking cows	Item	1		
F	All plumbing and electrical works	Sum	1		
G	Any other items needed to complete the works (please specify)	Item	1		
TOTAL CARRIED TO SUMMARY					

## SUMMARY

Item No.	Description	Amount KES
	TOTAL BROUGHT FORWARD FROM	
1	PAGE 4	
2	PAGE 5	
3	SUB TOTAL	



# MAASAI WILDERNESS CONSERVATION TRUST

4	ADD CONTIGENCY SUM (5%)	
	<b>GRAND TOTAL</b>	

Total cost in words (Kenya shillings).....

Name of Tenderer .....

Address .....

Delivery Period ..... Validity Period .....

.....  
Authorised Signature

Official Stamp

.....  
Name & Position

.....  
Date (dd/mm/yyyy)

### s) Application Documents

Interested qualified applicants should submit the following documents

- Updated company profile demonstrating overall capacity (technical and financial) and relevant experience over the the last 2 years
- A priced Bill of Quantities in the provided format
- Copy of company's Certificate of Incorporation
- Copy of company KRA PIN certificate
- Evidence of due registration with other relevant statutory bodies
- Any other capacity or quality the applicant wishes to disclose

### t) Contact Information

All applications should be emailed to **admin@maasaitrust.org** by the indicated deadline with the email subject being **Tender Notice MWCT/BH/20/01**. Only successful applicants will be contacted.