



TERMS OF REFERENCE

HYDROGEOLOGICAL SUPERVISION OF DRILLING WORKS FOR SOLAR POWERED DEEP WELL AND GROUNDWATER MONITORING WELL IN T/A MASUMBANKHUNDA, LILONGWE DISTRICT

HFHM is requesting proposals from eligible firms/ Institutions to conduct hydrogeological supervision during drilling works of 1 solar powered deep well and 1 groundwater monitoring well.

1. Background

Habitat for Humanity Malawi (HFHM), affiliated to Habitat for Humanity International is a non-profit Christian organization aiming at improving housing conditions in Malawi. HFHM was established in Malawi in 1986 and has assisted over 75,000 families through different housing solutions. In addition to housing, HFHM has undertaken water and sanitation projects in peri-urban and rural areas of Lilongwe and rural areas of Chikwawa Districts.

2. Purpose and Objective

HFHM, in a bid to tackle rural poverty and enhance lives of vulnerable groups in Malawi, will be implementing a project on WASH in T/A Masumbankhunda in Lilongwe district. The project aims at Improving livelihoods through the introduction of sustainable WASH practices in rural communities of Thyolo District. The project is being funded by Government of Germany (BMZ).

The project will enable HFHM assist 800 households in 8 communities with an estimated population of 4,000 people with access to affordable and safe drinking water, improved sanitation, and hygiene by September 2027.

3. Scope of work

a. Supervision Of Drilling Works for Solar Powered Deep Well

Below are some of the specific tasks that will be expected to be performed by hydrogeological team during drilling works and installation of the solar powered water reticulation system:

- Supervision of construction works for the solar water pumping system including the provision of monthly progress report and final report with visual documentation.

- Lead in all site meetings
- Ensure presence at all times during drilling works. The driller shall not proceed with works in the absence of the supervising entity.
- Ensure that all required parameters are being recorded appropriately and safely kept.
- Check quality of materials and workmanship during installation of the solar powered water reticulation system.
- Ensure a durable, effective, and functional water distribution system in all 8 communities.
- Coordinate the collection of water and geology samples and their testing as required.
- Report to Habitat for Humanity Malawi and the District Water Office on the progress of works
- Ensure the completion of the construction of the solar water pumping system within the timeframe of the project.
- Ensure and supervise the compilation of the Operation and Maintenance (O&M) manual and training of Water Users Association by the Contractor, as part of the handover process.
- Ensure observance of health and safety measures during all stages of construction works.
- Preparing monthly progress reports to be submitted at the beginning of each subsequent month, in addition to a completion report at the end of the project.
- Approving materials supplied by the Contractor, based on the specifications.
- Conduct pumping tests during drilling works.
- Report writing for the works conducted (The data to be collected should be as per NWRA Regulations and data required in the Water Rights/Permits.)
- Inspection of works and checking materials used and their quantities.
- Collection of hydrogeological data generated.
- On-site modifications of the borehole design and facilitating discussions with villagers who are the beneficiaries.

b. Supervision of Groundwater monitoring well

The following are some of the specific tasks that will be expected to be performed by hydrogeological team during installation of a groundwater monitoring well:

- In consultation with the Water Resources Department, identify a suitable location for the groundwater monitoring well in T/A Masumbankhunda.
- Verify and specify a suitable water level logger equipped with telemetric technology that will enable remote monitoring of groundwater levels and water quality at set intervals.
- Supervise well development and installation of monitoring equipment.
- Submission of reports to HFHM and Department of Water Resources

4. Time Frame

As specified by client and design team

5. Budget

The consultant/ firm should submit detailed and easy to follow budgets of the following;

1. Hydrogeological supervision for 1 solar powered deep well
2. Hydrogeological supervision for 1 monitoring well.

This should include all anticipated taxes.

6. Consultant/ firm Profile and Experience

Given the nature of the task, the following skills will be required:

- Experienced personnel such as Hydrogeologists, Civil Engineer or Water Resources Engineers (these professionals will be expected on site)
- Required equipment available or leased. (these will be expected to be seen on site). Key equipment shall be; hand held water quality device, level meter and v notch weir,
- Experience in ground water resources through the provision of data management consultancy and hydrogeological supervisory services (should be according to National Water Resources Authority Regulations and the Malawi Water Resources Act of 2013)
- Experience in water quality parameters and requirements
- Three traceable evidences of experience in similar Works or activities with Referees.

Short proposal and budget should be sent through hard copies to:

The Chairperson

Internal Procurement Committee

Habitat for Humanity

P.O Box 1638

Lilongwe

Deadline: 30th October, 2023

Note: for questions or clarification please contact: mkapito@habitat.mw, fsande@habitat.mw or ugondwe@habitat.mw