

## MINISTRY OF WATER AND SANITATION INVITATION FOR BIDS FOR ENGINEERING, PROCUREMENT AND CONSTRUCTION (EPC) TURNKEY CONTRACT OF LILONGWE WEST WATER PROJECT INTERNATIONAL COMPETITIVE BIDDING (ICB)

## Proc. Ref. No.: DWR/GoM/2025/01

Date of Issue: 18th January, 2025

The Government of Malawi, through the Ministry of Water and Sanitation, has allocated funds for the development of High Yield Boreholes to be powered by solar energy. The initiative aims to enhance water access in Lilongwe West using the allocated borehole funds. This is in line with the Government of Malawi's Vision 2063 and the United Nations' Sustainable Development Goal 6 (SDG 6), the nation is dedicated to achieving universal and equitable access to safe and affordable drinking water by 2030. Vision 2063, particularly under Enabler 5 on Human Capital Development, prioritises water, sanitation, and hygiene as key strategic areas. As part of the Malawi 2063 First 10-Year Implementation Plan (MIP-1), the Ministry of Water and Sanitation intends to establish new solar-powered water supply systems, specifically focusing on rural areas. One of the key areas identified by the government for this initiative is Lilongwe West in Lilongwe District, which will reap significant benefits from the project.

The project is designed to implement a dependable power system for water pumping by integrating both Solar PV and diesel power generation into the borehole water supply scheme. The primary objective is to efficiently meet the domestic water needs of the local population while minimising costs. A key focus will be on reducing diesel fuel consumption, achieved by optimising the use of solar pumping solutions to maximise their efficiency. Additionally, the project will incorporate systems with advanced controls and protections, ensuring their ability to withstand adverse weather conditions. A crucial aspect of the project will be the development of an operation and maintenance program, which will include a detailed, hands-on training session lasting two days, aimed at equipping technicians from the Ministry and partnering organisations with the necessary skills to effectively maintain and operate the system.

## 1. The scope of the works include:

• Proposed project: The Lilongwe West Water Project Will feature **11 independent solar reticulated systems** which aim to enhance water accessibility in the area. Each system is designed to service a **minimum of 100 taps**, which are distributed across various locations and divided into three lots as follows;

No	Item	No. of Systems
1	Lot 1	4 Water Systems
2	Lot 2	4 Water Systems
3	Lot 3	3 Water Systems

- Preliminary works:
  - Conduct a hydrogeological assessment to identify drilling locations and methods.
  - Obtain water abstraction permits from NWRA.
- Drilling process:
  - Perform drilling followed by pumping tests to confirm yield and sustainability.
  - Design and install pumps and solar panels based on yield.
  - Install elevated storage tanks to ensure sufficient water pressure for distribution.
- Construction details:
  - Excavate trenches and lay pipes for the reticulation network.
  - Install taps at designated distribution points for community access.
- Solar farmhouse system:
  - Transport equipment and install a submersible pump with necessary components.
  - Erect support structures for solar panels, mounted at least 3 meters high, to withstand local weather.
  - Ensure all components are robust, corrosion-resistant, and have a 25-year lifespan.
- Additional installations:
  - Include protective equipment, solar controllers, grounding systems, and remote monitoring systems for real-time data.
  - Install an online chlorination system, conduct a 24-hour equipment test, and submit a commissioning report with operation and maintenance guidelines.
- Durability considerations:
  - Ensure installation is theft-resistant and minimises maintenance needs.
  - Recommended site visit before submission to assess solar panel space.
- Sustainability measures:

- Provide startup service package and conduct training for water users committee on system operation and maintenance.
- Drill groundwater monitoring well to track trends in groundwater levels and quality.
- Supply of water quality testing equipments/gudgets and consumables
- 2. The employer now invites sealed bids from eligible entities (bidders) for the execution, commissioning and handover of the project.
- 3. This IFB is open to all eligible bidders who wish to participate. Subject to the restrictions stipulated in the bidding document, eligible bidders may associate with other bidders to enhance their capacity to carry out the works successfully.
- A successful bidder will be selected using the International Competitive Bidding (ICB) procedures as contained in the Public Procurement and Disposal of Assets Act No. 17 of 2017 and Public Procurement Regulations 2020 of the Republic of Malawi.
- 5. A Site Visit *will* be held at the proposed site (Meeting place at Kabudula Filling Station), a proposed water supply area in Lilongwe District, on 22nd January 2025, from 09.00. Bidders will, however, be responsible for making their own travel arrangements.
- 6. Bidders interested in submitting a bid shall purchase the bidding document against payment of a non-refundable fee of *MWK50,000.00* or the equivalent of any freely convertible currency payable to the Ministry of Water and Sanitation at the address given below.
- Bids must be delivered to the address given at 10 below no later than 14:00 hrs local time on February 17<sup>th</sup>, 2025.
- 8. Bidders should be aware that late bids *will not* be accepted under any circumstance and will be returned unopened at the bidder's written request and cost. All bids must be accompanied by a bid declaration in the manner as specified in the bid data sheet and particular conditions
- 9. Please note that electronic bids *shall not* be accepted.
- 10. The address referred to above are:

For inspection, clarification and purchase of Bidding Documents:

Ministry of Water and Sanitation, Internal Procurement and Disposal Committee, MANOBEC HOUSE, City Centre, Near ACB Offices Private Bag 390, Lilongwe 3. Malawi

For Submission of Bid Documents:

The Chairman, Internal Procurement and Disposal Committee, Ministry of Water and Sanitation, MANOBEC House, City Centre, Near ACB Offices Private Bag 390, Lilongwe 3. Malawi

Yours sincerely,

Chairperson Internal Procurement and Disposal of Assets Committee Ministry of Water and Sanitation Private Bag 390 Lilongwe 3 Malawi