

## REQUEST FOR BIDS

# Construction of Drainage and Irrigation Scheme



**Country:** Belize

**Project:** Resilient Rural Belize Programme

**Assignment Title:** Construction of Drainage and Irrigation Scheme

**Reference No.:** RRB.W.11

The Government of Belize through the Ministry of Finance, Economic Development and Investment has received financing from the International Fund for Agricultural Development (IFAD) and Green Climate Fund ("GCF") towards the cost of Resilient Rural Belize Programme and intends to apply part of the proceeds to the works for which this Request for Bids (RFB) is issued.

The works consist of: Construction of Drainage and Irrigation System at Valley of Peace, Cayo District as follows:

### IRRIGATION:

- 1 Water Supply Infrastructure:
  - Transfer Pump: 6" mobile self-priming trash pump with 44–55 HP diesel engine, trailer-mounted, with a capacity of at least 1,000 GPM.
  - Sluice Gates: Stainless steel, manually actuated 30" x 30" gates, mounted vertically for water control.
  - Containment Dikes: Two earthen dike structures (4 feet high, 20 feet wide), compacted in layers and reinforced with rip-rap for erosion resistance, incorporating a 24" HDPE culvert.
- 2 Canal Rehabilitation:
  - Excavation and reshaping of an existing canal with erosion control, using structural methods like grouted rip-rap or natural methods (planting bamboo) for stabilization.
- 3 Irrigation Materials for Farmland:
  - Supply and installation of SCH. 40 PVC piping (3" and 2" diameter) with adapters, bends, valves, and caps.
  - Sprinkler heads suitable for large areas and portable dual-fuel pumps for irrigation across 25 plots.
- 4 Monitoring and Additional Equipment:
  - Hydrologic Gauges: Installed along banks for water level monitoring.
  - Soil Moisture Probes: Digital probes with water resistance for soil moisture measurement.
  - Solar Well Pump: Submersible pump system, including solar panels, charge controller, and necessary mounting for deep-well water extraction.

### DRAINAGE:

1. Earthen Drains:
  - Excavation of earthen drains with specified dimensions:
    - Drain B with 1 ft. depth, 2 ft. height, and 3 ft. top width.
    - Drain B with 2 ft. depth, 3 ft. height, and 6 ft. top width.
  - Sloped at a minimum of 0.25% as per design requirements.
  - All debris and unsuitable material to be disposed of within a 3-mile radius.
2. Detention and Retention Ponds:
  - Detention Pond #1 (Rehabilitation): Cleaning and rehabilitation of the existing pond to integrate it into the drainage system, including vegetation and mud removal. Construction of outlets to the lagoon.
  - Detention Pond #2 (New): Excavation of a new pond measuring 50 ft. x 75 ft. x 5 ft., with an outlet to the lagoon.
  - Retention Pond: Excavation of a retention pond measuring 80 ft. x 275 ft. x 5 ft., including outlet construction to the lagoon.
3. Outlet Channels:
  - Excavation of channels connecting pond outlets to the lagoon system, with appropriate slopes and bank stability.
  - Reed-bed channels lined with geotextile fabric for erosion control, filled with clean, non-reactive rocks (4 to 6 inches in diameter) for stability.
  - Planting of robust aquatic vegetation, such as Bullrush, to promote phytoremediation and stabilize the channels according to wetland best practices.
4. Roadside Drainage:
  - Excavation and clearing of roadside drain along the main road to improve stormwater flow, with debris disposal within a 3-mile radius.

Qualification of the Bidder: to qualify for award of the contract, a Bidder shall meet the following minimum qualifying criteria:

- a) General Experience as a Contractor: At least 5 years' experience in industrial/earthworks/Drainage/Irrigation-related construction locally;
- b) Specific Experience as a contractor: At least one works' contract of similar nature, size and complexity equivalent to the works included in this Invitation completed within the last five years (to comply with this requirement, works cited should be at least 80% complete).
- c) The contractor must prove access to the following equipment, with stated production capacity and minimum age of equipment:

Item No.	Name of equipment and production capacity	Capacity	No of equipment	Age (max)
1	Excavator (long reach: 50 – 60 ft.)	36" - 48" bucket	1	10
2	Excavator (Standard reach)	24" - 36" bucket (winged)	2	10
3	Backhoe	0.5 - 1 cubic yard bucket	1	10
4	Dump trucks	15-ton	3	20

- d) The required key contractor personnel profile and years of experience are listed in the table below; The contractor must provide the following key staff and attach their respective CVs:

	Title	Years of General Construction Experience	Minimum Specific experience
1	Project Manager	10 (including earthworks)	Having completed at least one similar assignment in the past 10 years.
2	Site Foreman	5	Having completed at least one similar assignment in the past 5 years

- e) Evidence of access to financial resources to successfully complete the works i.e. access to cash, letter from a bank, credit institutions, or other financial intermediary, supporting the availability of liquid financial resources in the amount of BZD167,000.00.
- f) Average annual turnover over the past 3 years (2023, 2022, 2021), supported by financial statements, equivalent to: BZD1,200,000.00.

Completion Date: the works shall be completed as per the following completion schedule: Six (6) months.

The bidder must state exact completion time in its bid supported by its proposed construction schedule for the works.

The Ministry of Finance, Economic Development and Investment/Resilient Rural Belize Programme now invites construction firms to submit bids for the construction of works as outlined in the Request for Bids (RFB) documentation. Contractor/s will be selected using the national competitive bidding (NCB) method in accordance with the IFAD Procurement Handbook accessible at [www.ifad.org/project-procurement](http://www.ifad.org/project-procurement). The NCB process will include a review and verification of qualifications and past performance, including a reference check, prior to the contract award.

Bidders interested in submitting a bid, shall request the full bidding document by sending an e-mail, giving full contact details of the bidder, to the following point of contact. This will ensure that the bidders receive the full bidding document (RFB) as well as updates regarding this procurement procedure.

**Resilient Rural Belize Programme**  
**Attn: Lemuel Palacio, Senior Procurement Officer**  
**Hummingbird Highway**  
**National Agriculture Showgrounds,**  
**City of Belmopan, Belize**  
**E-mail: [lpalacio.rrb@med.gov.bz](mailto:lpalacio.rrb@med.gov.bz)**  
**Copied to: Nadia Vernon, [nvernon.rrb@med.gov.bz](mailto:nvernon.rrb@med.gov.bz)**

Please note that bids can be submitted either physically or electronically. In submitting a physical bid, the bidder must submit one (1) original and 2 copies, sealed in two separate inner envelopes, enclosed in one outer envelope, sealed and marked as per ITB 21.1 & 21.2, and addressed to the address stated above. In addition, one copy of the bid shall be an electronic copy saved on a flash drive also included in the sealed outer envelope. Electronic Bids shall be submitted by email, as a password protected, single attachment, in pdf format, by the deadline and to the email address stated above. Full details are provided in the complete RFB document.

The deadline for submission of bids shall be no later than **January 30, 2025 at 10:00 a.m. local time at the address above.**