**REQUEST FOR PROPOSAL  
SPECIFICATION OF WORKS**

**Procurement No:** **50-W001-23**

## Specification Summary for Supply of the Betio Power House

### Background

This document specifies the design for manufacture and supply of a prefabricated building to be used to house six (6) diesel power generation stations, each including a generator/alternator combination, transformer and switching unit, along with control room, workshop and equipment handling equipment, located in the Republic of Kiribati.

The remote location of the site severely restricts availability of the materials and labor required to permit conventional construction methods to be practically applied to this project, therefore all the building components will be prefabricated offshore, shipped to the site delivery port. Assembly of the building will be by others.

Offshore remote prefabrication requires manufacturers to complete shop drawings to a level of detail that yield BOMs that assure all piece parts are accounted for when the manufacturing is complete, in order to assure that the delivered system can be fully assembled with no missing parts on site. To achieve this end, the building has been divided into four primary sub-assemblies as follows:

1. Substructure
   1. Foundation
   2. Floor Slab
2. Superstructure with Building Services
   1. Building Frame, Siding and Roof
   2. Interior and Exterior Lighting
   3. Electrical and Data Transmission System
   4. Drainage
3. Control Room and Workshop Modules
   1. Individual modules fully complete for installation and connection on site
   2. Modules will also serve as a mezzanine-level storage area
4. Crane
   1. 25T overhead gantry crane that covers the full length of the building, including mezzanine storage

The sub-assemblies listed above shall be procured by tenderers under a single assembly manufacturing program in order to ensure coordinated delivery times, shipment and the arrival of the complete assembly kit on site. The substructure and superstructure with building services shall be procured according to the detailed designs provided in this specification; the control room, workshop and crane shall be procured as components based on the fit, form and functions provided in this specification. On site technical support for assembly of the components should be included in tenders on a daily rate basis; travel and accommodation will be provided by the Procuring Agency.

Tenders will include delivery of all sub-assemblies along with materials and instructions required to complete assembly of the building on site. All deliveries will be made to Tarawa Port, Republic of Kiribati. Tenderers are advised to secure competent logistics and shipping support to ensure complete delivery from all manufacturing locations to Tarawa port. Tenders must include logistics and delivery requirements, schedules and costs.

### General Requirements

In order to assure effective and complete prefabrication, the following requirements must be passed on to all subcontractors that manufacture any component of the substructure and superstructure:

1. The following documents, which are included in this tender package, specify the building for manufacture (note that these are numbered according to the tender package list of documents:
   1. 4b. Betio Power House - Building and MEP Specification - 2023-01
   2. 4c. Betio Power House - Structure Specification - 2023-01
   3. 4d. Betio Power House - Building and MEP Drawings - 2023-01
   4. 4e. Betio Power House - Structure Drawings - 2023-01

A link to the 3D Revit model of the substructure and superstructure is provided in the drawing files.

1. The Tenderer shall list in detail any deviations or changes from the reference specifications.
2. All manufactured components will be based on the detailed design referred to in this specification.
3. Each subcontractor is required to prepare a complete set of shop drawings that include all details necessary to assemble the building in its entirety on site using the first delivery of components only. Details include but are not limited to:
   1. Cable and pipes, cut to required lengths and sizes
   2. Connectors, joints, junction boxes and all components necessary to complete the sub-assembly
   3. Attachment points for all components to the building, including locations of all mounting points, bracketry, mounting requirements and sequences
   4. All consumables necessary to complete assembly of the prefabricated components
4. All shop drawings must include an associated Bill of Materials (BOM), which can be used to confirm the inclusion of all materials required to assemble the prefabricated building before shipment.
   1. The BOM must include quantities and all material specifications
5. All shop drawings must be taken from an accurate 3D model using the Autodesk Revit system. Accuracy of fit, form and function of all parts in the prefabricated sub-assembly must be checked by each manufacturer as part of the quality assurance inspection process.
6. All sub-assemblies will be inspected to the piece-part level before packing for shipment
7. Manufacturers will be required to demonstrate checking of 3D model, shop drawings and BOMs prior to acceptance and shipment of the sub-assembly
8. All tender documentation shall be in English.

### Project Time & Final Delivery

<insert requested project & delivery time(s), if general, otherwise in the table below>

## Description of the Works

*Here, list all items to be Tendered*

*(This part may be replaced by a Procuring Entity or proprietary Contractor description)*

|  |  |  |  |
| --- | --- | --- | --- |
| Pos. | Description | Delivery Time (to be Tendered) | Price (to be Tendered) |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |

## Tenderer’s References

### Relevant similar deliveries carried out in the last five years

Provide information on each delivery for which your firm/entity, either individually as a corporate entity or as one of the major companies within an association, was legally contracted.

|  |  |  |  |
| --- | --- | --- | --- |
| Works delivered | Reference | Contact details | Value |
|  |  |  |  |
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