



## **URBAN WATER SECTOR REFORM AND PORT HARCOURT WATER SUPPLY AND SANITATION PROJECT**

### **REQUEST FOR EXPRESSION OF INTEREST DESIGN REVIEW AND FINALIZATION OF TENDER DOCUMENTS PORT HARCOURT WATER SUPPLY AND SANITATION PROJECT PHWSSP.**

#### **1. INTRODUCTION**

The Rivers State Government (hereinafter called) "Borrower" has received financing from the African Development Bank towards the cost of implementing the Urban Water Sector Reform and Port Harcourt Water Supply and Sanitation Project. The Port Harcourt Water Corporation (PHWC), an implementing agency of the Borrower, intends to apply a portion of the proceeds of this loan to eligible payments under the contract for which this invitation for Expressions of Interest (EOI) is issued.

The overall objective of the project is to establish the supply of potable water and improve sanitation facilities within Port-Harcourt and Obio/Akpor. The aim is to meet projected demand of these services up to the year 2040. This purpose will be achieved through the following results:

- The securing of water production for the project area, expansion of storage facilities and distribution networks and installation of new metered connections within Port-Harcourt and Obio/Akpor LGAs.
- The establishment of appropriate institutional and organizational arrangements for the effective operation and maintenance of the completed schemes.

To this effect, the project is structured around four components: (i) Rehabilitation and expansion of the existing water infrastructure; protection of the water source; and construction of public sanitation and some sewerage facilities; (ii) Institutional Support covering capacity building of the recently established Port-Harcourt Water Corporation, consumer outreach, environmental protection, and longer-term planning for comprehensive sanitation services; and (iii) Hygienic Sanitation and aEnvironment in Port-Harcourt (iv) Project Management. The population in the project area is primarily low income households, which requires special considerations in delivery mechanisms and tariff setting for affordability and sustainability.

A design was prepared for the project in 2011. This design was reviewed and tender documents prepared in 2014. However, in preparing for the project implementation it has been determined there is need to conduct a review of the design and finalize the tender documents within the current project scope in order to ensure optimisation of current and planned infrastructure documents.

#### **2. OBJECTIVE OF THE ASSIGNMENT**

The objectives of the Consultancy are:

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- (i) Review the full project design completed in 2015.
  - (ii) Review tender documents prepared in 2015.
  - (iii) Review the scope of the design in line with the current Project funded by the donors.
  - (iv) Finalize the engineering design, Bill of Quantities (BOQ) and cost estimates for the work and engineering drawings responding to the available resources.
  - (v) Produce standard tender documents according to the requirements of the African Development Bank (AfDB) and the World Bank (WB) for all the construction work.

### **3. SCOPE OF WORK**

The project design to be reviewed is broadly described in Section 1 and the consultant will be responsible for the following tasks:

- (i) Review and confirm the design criteria based on the results presented in the socio economic survey report;
- (ii) Check/optimize the scheme design, distribution network layout and reservoir locations responding to survey data and technical options for different target areas including low income households;
- (iii) Analyse various energy options and recommend the most economically viable and sustainable power supply system for the pumps, electro-mechanical components, small power and lighting systems.
- (iv) Ensure that the design reflects the expected effects of climate change, paying special attention to the protection of wells from flooding;
- (v) The design review will present opportunities for optimizing energy use by employing renewable energy powered pumps, employing low energy use materials and other interventions, The review consultant will identify the opportunities and indicate how they may be put into by writing a short concept
- (vi) Review pipe materials, diameters, water transmission networks, distribution towers and electrical device design characteristics;
- (vii) Review the revised Environmental and Social Impact Assessment (ESIA), the associated Environmental and Social Management Plan (ESMP) and Resettlement Action Plan (RAP) and where necessary incorporate recommendations that are relevant;
- (viii) Generate appropriate detailed working drawings, Bill of Quantities, cost estimates and produce revised tender documents;
- (ix) During the review the consultant should consider the priorities of any long or medium term urban planning that has been completed for the target area;
- (x) The Consultant shall note that in identifying and assessing technology options, the full lifecycle costs of the infrastructure shall be considered, emphasizing low cost operational technologies and materials;
- (xi) The Consultant shall prepare a short summary description of the main tasks to be carried out during the finalization of the tender documents as defined in this TOR, which will constitute the method statement for the performance of the future services.

### **4. SELECTION**

The PHWC now invites expressions of interest from Consultants to undertake the design review and finalization of tender documents for the Port Harcourt Water Supply and Sanitation Project. Interested Consultants must provide information indicating that they

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are qualified to perform the assignment (brochures, description and experience of similar assignments, availability of appropriate skills among staff, etc.). Specifically, Consultants are to provide the following information, at a minimum:

- (i) A full company profile, with all details (address, contract person, telephone/fax numbers, e-mail).
- (ii) General organizational capability and resources (staffing, years of experience).
- (iii) A company CV
- (iv) Evidence of joint venture partnership agreements where consultants intend to associate.
- (v) Specific CVs of the key expert listed below.

## 5. SELECTION CRITERIA

Criteria for the selection of the Consultant(s) include proven experience in similar assignments during the last 7 years. Furthermore:

- (i) The consultant(s) should have enough manpower, expertise, infrastructure and other facilities to conduct the entire assignment. A brief personnel profile table, indicating tentative manpower requirements for the assignment is given below:
- (ii) The consultant(s) should have the adequate capacity for training and the ability to produce quality reports in English.
- (iii) In addition to the characteristics below, all proposed staff must be fully computer literate in major Microsoft Office, e-mail, internet and utility functions.

**PERSONNEL PROFILES: Only the proposed personnel assessed will be accepted to undertake the assignment**

Personnel	Minimum Qualification
Water and Sanitation Engineer/Team Leader	Master's degree in Civil or Water Engineering or related. Not less than 15 years of experience in water system design/construction. At least 10 years' in management of design teams for urban water supply. Familiarity with AfDB/WB procurement and contracts procedures is desired. Specific experience in at least two infrastructure projects of comparable size. Experience in carrying out similar assignment in more than one country will be considered an advantage.
Quantity Surveyor	Degree in Quantity Surveying, Building, Civil Engineering or related fields with relevant post graduate training. Not less than 10 years' general experience in producing tenders, planning costs and preparation of Bill of Engineering Measurements and Evaluation (BEME) as well as familiarity with AfDB/WB procurement and contracts. Specific experience in at least two large infrastructure projects of comparable size. Familiarity with AfDB/WB procurement and contracts procedure is desired.

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Energy Expert	A graduate engineer or a related qualification with training and work experience that reflects significant background in power systems, sustainable energy use, sustainable sources of energy, conservation, alternatives, energy balances and cost benefit analysis. 10 years general experience and a minimum of 7 years specific experience in large projects of comparable size is desirable. Experience in carrying out similar assignment in more than one country will be considered an advantage.
Hydraulic Engineer	Degree in Civil or Water/Mechanical Engineering or any related fields with post graduate training. Not less than 10 years general experience, not less than 5 years specific experience in at least two urban water supply projects comparable size. Experience in carrying out similar assignment in more than one country will be considered an advantage.
Electro-mechanical Engineer	Degree in Electrical or Mechanical Engineering or any related fields with relevant post graduate training in Instrumentation/Control Engineering. Not less than 10 years' experience. Specific experience in at least 2 infrastructure projects of similar size/complexity as the PHWSSP is desired.

In addition,

- In order to increase the skills base of local youth, project consultants and construction contractors are required to recruit fresh graduates engineers, social scientists, financial experts etc to improve the employability of local graduates.
- The consultant should always, in so far as is possible, ensure a representative gender focus in hiring personnel, contact with project stakeholders in general and always adopting a gender sensitive focus in links with the client and Rumuola communities.

## **6. PROCUREMENT METHOD**

The procurement method shall be Selection based on the AfDB's Consultant's Qualification Selection (CQS). The Consultant will be evaluated based on their qualifications and references of executed assignments.

## **7. ELIGIBILITY**

Eligibility criteria, establishment of the short list and the selection procedure are in accordance with the African Development Bank's "Rules and Procedures for the use of Consultants" – May 2008 edition, revised July, 2012; which is available on the Bank's website at <http://www.afdb.org/en/projects-and-operations/procurement/>

## **8. DEADLINE AND DELIVERY**

Your Expression of Interest (EOI) should reach the address below on or before 12:00PM (local time) 19 August, 2016. Expressions of interest will be accepted only as printed, hard (paper) copies and must be accompanied by a soft copy on CD/DVD. Expressions of Interests by e-mail will not be accepted.

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