

# **Bermuda Land Development Company Limited (BLDC)**

# Water and Wastewater Infrastructure Program

#### **Request for Qualifications**

# **General Contracting Services**

Submission Deadline: Monday 31st May 2021 03:00:00 PM AST

#### Introduction

The Bermuda Land Development Company (BLDC) is requesting Statements of Qualification (SOQ) from applicants interested in providing General Contracting services for a BLDC major water, wastewater Infrastructure Program. Also included in the program are specialty construction services such as fusion welding of HDPE pipe connections, sea bed pipe installations and wastewater treatment plant upgrades. The BDLC is seeking General Contractors who have the necessary qualifications, experience and capacity to perform these services within a very aggressive schedule that has a requirement for all works to be completed by the end of 2021.

## **Program Description**

The construction services and infrastructure as described above will be placed in the areas of Southside, St. David's and St. George's. The Program includes eighteen (18) separate Tender Packages that have been developed based on geographic area and specialty scope of work. Of the eighteen (18) Tender Packages seven (7) have been awarded or are currently in the tender phase. SOQ's are currently being accepted for the eleven (11) Tender Packages that have not yet been released to tender. Contractors can submit SOQ's on one or more of the eleven Tender Packages. Below you will find a brief description of these Tender Packages:

# Tender Package # 2F - Pumping Station Upgrades (St. George Club, Tiger Bay and Market Square Pumping Stations)

The Pumping Station Upgrades (St. George Club, Tiger Bay, and Market Square Pumping Stations) project encompasses the installation of a sanitary sewer lift station at the St. Georges Club and upgrades to the existing Tiger Bay and Market Square Pumping Station. The upgrades will include new pumps, valves, and piping to transfer the sanitary wastewater from St. George's Island to St. David's Island for treatment.

# Tender Package # 3A, 3B, 3C, 3D and 3E -Storm Water – Sanitary Sewer Separation Southside Area

The Storm Water – Sanitary Sewer Separation Southside Area project focuses on the separation of the combined sewer system into a separate system for storm water and a separate system for sanitary waste. The establishment of the separate systems will be accomplished in two ways. The first is the installation of a sanitary sewer force main from the Southside Wastewater Treatment Facility (WWTF) to the east side of the Stokes Point crossing. The new sanitary sewer force main will tie into existing gravity feed sanitary sewer infrastructure at certain points throughout the Southside sanitary sewer system. The second component of the separation will be to covert the existing combined sewer system into a storm water conveyance system. The design of the new sanitary sewer force main system will include lift and pumping stations as necessary.



The new sanitary sewer force main and associated lift and pumping stations will be located within property (roads or off road locations) under the ownership and control of the Bermuda Land Development Company (BLDC). The five (5) separate tender packages have been established to separate the overall project into smaller segments.

# Tender Package # 4 Southside Wastewater Treatment Facility Plant Upgrades

The Southside Wastewater Treatment Plant Facility upgrades project will increase the wastewater treatment plant capacity from approximately 40,000 usg/d to a capacity of approximately 200,000 ipg/d. The increased capacity will be achieved with the installation of multiple parallel wastewater treatment package units. The units will be pre-manufactured and delivered to the site. The units will either be installed on a slab on grade adjacent to the existing wastewater treatment plant facility. Final piping and power connections and commissioning of the entire system will be made after the package units have been installed. Additionally, effluent polishing apparatus will be installed at the Southside Wastewater Treatment Plant as well as a force main for effluent water to Reservoir 14. The work will also include miscellaneous improvements to the existing Southside Wastewater Treatment Plant. All works will be done on properties under the ownership and control of the Bermuda Land Development Company (BLDC).

# Tender Package # 5A. 5B and 5C Potable & Reclaimed Water Reservoir Transfer Networks

The Potable Water Reservoir Transfer Network will involve the interconnection of six (6) existing potable water reservoirs across the Southside property. Two of the six (6) potable water reservoirs will require a new pumping station building. The six (6) pumping stations will provide distribution to the local customer zone as well as allow water to be transferred back into the network to other reservoirs. The existing RO Plant will discharge into Reservoir 13, and the new Reservoir 13 pumping station will supply water to Distribution Zone C and will be used as the primary transfer pumps to Reservoir 3 near Stoke's Point. Reservoir 3 and its new pumping station will be used as the primary distribution pump to St. George's across Stoke's Point. The Reclaimed Water Reservoir Transfer Network will include the addition of two (2) submersible pumps located at Building 609 that will receive reclaimed water from the Southside Wastewater Treatment Plant. The Building 609 pumps will deliver reclaimed water to Reservoir 6 where it will be transferred to the Ft. Victoria Flushing Tank on St. George's Island. All pumping stations will require new pumps, valving and distribution piping and will be connected with a fiber optic network laid in the trench with the potable and reclaimed water pipes. All trenching works will remain on BLDC property or public roadways.

## Tender Package # 6 Electrical & Fiber Optic Systems

The electrical and fiber optic systems includes the installation of fiber optic cable throughout the sanitary and reclaimed water system installed within Tender Packages 1-5. Also included is the electrical wiring and controls for the sanitary sewer system within St. David's Island. A detailed scope of services for this tender package includes:

- 1. Fabrication and installation of two Power Centers which consist of NEMA 4 cabinets with manual transfer switches, main breakers, feeder breakers and transient voltage protection.
- 2. Installation of 12 lift station control panels including the following items:
  - a. Installation of raceways from an existing wiring trough to the control panel for fiber, power and pump monitoring.



- b. Installation and termination of conductors and fiber as called out in the conduit and conductor tab.
- 3. Installation and termination of fiber in existing raceways per the fiber network block diagram.
- 4. Installation and termination of power and monitoring conductors per the one line diagrams of Tender Packages 3A, B, C, D and E and the conduit and conductor tab.
- 5. Termination of fiber to 12 lift station controllers and the wastewater treatment plant Master PLC.
- 6. Field calibration of level, flow and pressure transmitters.
- 7. Tuning of adjustable frequency drives.
- 8. Pre-functional testing of electrical and fiber installations.
  - a. Insulation testing of electrical conductors.
  - b. End to end bi-directional attenuation testing of fibers.
- 9. Functional Testing of:
  - a. Verify pump rotation direction
  - b. Verify pump and lift station Inputs/Outputs from primary device to local SCADA interface device.
  - c. Verify approximately 618 field digital and analog inputs from remote lift station, pump station and reservoir sites into the Wastewater Master PLC Human Machine Interface.
- 10. 160 person hours of assistance in the start-up of the system wide pump stations, lift stations and the wastewater treatment plant.

For the Work Under this tender package the BLDC shall furnish a Commissioning Agent to direct the work. Contractor to supply all meters required for primary element calibration with factory certified calibration certifications dated not more than 1 month prior to the work starting. Contractor shall submit resumes of personnel proposed for the work. All personnel involved in the pulling and termination of fiber, tuning of control loops, calibration of primary elements and start-up assistance of the systems shall have a minimum of 7 years of demonstrated experience performing similar work.

## Statement of Qualifications (SOQ) Submittal Requirements

Respondents can submit to the attention of Stephen Tucker, Special Projects Manager, either by:

- 1. <u>Submission Box at BLDC's Facilities Department office</u>
  Unit #16B, Commercial Park, Walters Point Road, St. David's
  - (1) One (1) unbound original and
  - (2) Three (3) bound of the completed SOQ in a sealed envelope.
- 2. Submission via Email to: stucker@bldc.bm

#### Cover Letter

The SOQ respondent should provide a cover letter identifying the name of the company, company ownership and ownership structure, the number of years in business and the primary type of works the company provides. The SOQ respondent should clearly identify the Tendering Packages (projects) that they



**are submitting their qualifications for.** The BLDC reserves the right to add or combine Tendering Packages as necessary to meet the overall goals of the program.

# **Project Specific Experience**

The SOQ respondent should provide a written summary describing how their company and proposed subcontractors are qualified and prepared to complete the scope of works as described in the Tendering Packages listed above. Your written summary should provide evidence of successful experience in the following areas:

- 1. Description of successfully completed projects of similar scope, scale, complexity and schedule requirements. Include the specific scope of work performed, duration of the works and the contract value. Also provide references for each project presented.
- 2. Identify types and numbers of equipment owned or rented
- 3. Traffic Management
- 4. Utility Company Coordination
- 5. Trenching via trenching machine and/or back hoe
- 6. HDPE Pipe Installations with fusion welded connections
- 7. Trench Backfill and Roadway Restoration
- 8. Lift & Pumping Station Installations
- 9. Construction of Pumping Stations
- 10. Wastewater Treatment Plant equipment and infrastructure installations
- 11. Electrical services connections and low voltage controls works
- 12. Estimated daily production rates for utility trenching and pipe installation
  - a. With Trenching Machine
  - b. With Back Hole machine

## **Staffing and Project Team Organization**

For each of the Tendering Packages that the respondent is submitting their qualifications for provide the following:

Completed Annex A - General Contractor / Sub Contractor Staffing Plan identifying the General Contractor and Sub-Contractors being proposed for each work task.

Provide a written description of the proposed project staffing and how the team will be organized. Base your proposed project staffing on the completion of all works by the end of 2021. Include in your written description the in house staff or sub-contractors who will be providing services.

In support of the written description provide:

- 1. Organizational chart for the project that contains the names and job titles of the employees in key positions that will be committed to the project on full time basis until the completion of the works at the end of 2021.
- 2. Resumes and availability for employees in key positions. Resumes should demonstrate technical experience in projects of similar scope, size and complexity.



- 3. Percentage of local Bermudian workers proposed to work on the project
- 4. Number of crews that can be deployed on a full time basis until the end of 2021
- 5. List of projects currently under construction and/or committed to until the completion of the works at the end of 2021.

# **Quality Control**

Provide a description of the Contractor's quality control philosophy, quality control program and processes used during construction to ensure conformance to the project plans and specifications.

#### **Evaluation Criteria**

The purpose of this Request for Qualifications is the enable the BLDC to prequalify the Contractor's capable of constructing the works described in the Tendering Packages listed above by the end of 2021. The BLDC will assemble a review committee to evaluate Contractor SOQ responses. The review committee will include representative from BDLC, Ministry of Public Works and Consultants as necessary.

The BLDC will evaluate all SOQ's and prequalify Contractor's that in the sole discretion of the BLDC can fully meet the requirements of the program based upon the following criteria:

- 1. Conformance with the required content specified in the RFQ.
- Demonstrated sufficient experience and technical competence of the General Contractor and Subcontractors, considering the types of construction works required, the complexity of the project, the aggressive schedule and the strength and adequate experience of the key personnel who will be dedicated for the project.
- 3. Demonstrated sufficient experience and technical competence to install and commission packaged wastewater treatment systems (Tender Package # 4)
- 4. Demonstrated sufficient experience and technical competence to install and commission fiber optic and electrical service systems (Tender Package # 6)
- 6. Staff capacity, depth and ability to dedicate multiple crews to the works on a full time basis until the completion of the works at the end of 2021.
- 5. Training and experience of key personnel
- 6. Successfully completed projects of similar scope, scale, complexity and schedule requirements.
- 7. Reference checks
- 7. Ability to provide the equipment (owned or rented) necessary to execute the works on a full time basis until the completion of the works at the end of 2021.
- 8. Ability to achieve the daily production rates that will be necessary to successfully complete the works by the end of 2021.