



GUYANA POWER AND LIGHT INC

PROCUREMENT OF SERVICES

IFB #GPL-PD-041-2021

**CONSULTANCY FOR THE PROVISION OF GEOTECHICAL AND LAND
SURVEY SERVICES – RIVERSIDE PROTECTION AT BELLE VUE TOWER
LOCATION, EAST BANK BERBICE.**

July 2021

**Closing Date: Thursday August 17, 2021 @ 14:00 hrs.
Bid Opening: Thursday August 17, 2021 @ 14:30 hrs.**

Note: Any bidder/representative who chooses to attend the opening of this bid will be subjected to entry protocols in keeping with the COVID-19 pandemic. Only one (1) representative is allowed per entity and the representative will be subject to body temperature test, hand sanitizing and mandatory use of face mask at all times. Failed body temperature test and/or resistance to comply with the aforementioned will prohibit your participation in the bid opening.



**Invitation for Bids (IFB)
Guyana**

**CONSULTANCY FOR THE PROVISION OF GEOTECHICAL AND LAND SURVEY
SERVICES – RIVERSIDE PROTECTION AT BELLE VUE TOWER LOCATION,
EAST BANK BERBICE.**

**IFB# GPL-PI-041-2021
Guyana Power & Light Inc.
Major Projects Department**

The Guyana Power & Light Inc. (GPL invites sealed bids for the delivery of consultancy services to provide preliminary data for the redesign of the protective riverside structure at Belle Vue, East Bank Berbice.

1. The Projects Department serves as the implementation agency for this project. Bidders may obtain further information from the Senior Project Officer, **Major Projects Department, Guyana Power & Light Inc. @ 257/259 Middle Street, Cummingsburg, Georgetown, Tel. 623-8156 or 225-7929, ypratt@gplinc.com**
2. A complete set of bidding documents in English is attached to this invitation
3. A bid Security of 2 % of the tendered amount must be submitted along with the bid.
4. Late Bids will be rejected. Bids will be opened in the presence of the bidders' representatives who choose to attend in person at **14:30 hours** on the closing date in **GPL'S Board Room, 91 Duke Street, Kingston**. All Bids must be accompanied by **valid GRA and NIS Compliance Certificates**.
5. Bidders downloading the bid document are advised to forward a registration email to kwilson@gplinc.com, gpersaud@gplinc.com or proc_mng_sect@gplinc.com stating the following: Bid Number, Name of Bidder, Address, Contact No and Email address
6. **A mandatory Pre bid Meeting will be held at the Project Site on August 04, 2021 at 10:00 hrs.**
7. The Guyana Power & Light Inc. is not obligated to accept the lowest or any bid.

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1. Background

- 1.1 GUYANA POWER & LIGHT INC. (GPL) is the largest supplier of electricity in Guyana, South America with its franchise area encompassing all three counties of Demerara, Berbice and Essequibo. GPL supplies all its domestic customers with voltage ranging from 110 to 220 Volts depending on the area. The voltage distribution system of GPL is quite unique since it delivers both 50 and 60 cycle power.
- 1.2 Key to the delivery of our service is the Demerara Berbice Interconnected System. The System provides the means for the transmission and distribution of electricity to our consumers, especially along the coastal settlements of Demerara and Berbice counties. In the Berbice region, the company owns four towers, of which the Belle Vue location is the focus and presents the area of work.
- 1.3 The Guyana Power & Light Inc. (GPL) intends to contract for the delivery of consultancy services to provide preliminary data for the redesign of the protective riverside structure at Belle Vue, East Bank Berbice.

2. Objective

- 2.1 The primary objective relates to consultancy services for the redesign of a riverside structure at Belle Vue, Transmission Tower Site, East Bank Berbice. Specifically, Geotechnical Engineering and Preliminary Site Surveys expertise are to be provided to Guyana Power and Light (GPL) for the proposed redesign.
- 2.2 Kindly note respondents can submit proposals for one or both work packages; if both, then separate proposals should be offered.

3. Tasks

- 3.1 The primary tasks of this assignment are to undertake site investigations at the Belle Vue transmission tower site. The goals of the assignment are to present:
 - I. A Geotechnical Engineering Report specific to the riverside area adjacent to the Belle Vue Transmission tower, consisting of results of subsurface exploration, laboratory testing, and evaluation and recommendations for anchored sheet piling and rip-rap options.
 - II. A Preliminary Site Survey Report for the site of the Belle Vue Transmission Tower and its adjacent riverside area, consisting of:
 - a. Cadastral /Boundary Surveys
 - b. Feature & Topographic Surveys

- 3.2 GPL will share with the awarded consultant all relevant data and make available all relevant staff to aid the consultant carrying out their assignment in a timely and professional manner.
- 3.3 Feasibility studies, planning, design and construction all require reliable and relevant data about the ground conditions of a potential site. A site investigation is the overall process for the collection of information, appraisal of data, assessment and reporting.

4. **Recipient**

- 4.1 The recipient of the services is the Guyana Power & Light Inc.

5. **Team Composition and Qualifications Requirement for the key Experts**

- 5.1 The consultant team must consist of qualified experts in geotechnical engineering, and land surveying. It is for the consultant to propose the exact make up of their team, however the team total expertise must be sufficient to satisfactorily carry out this assignment.
- 5.2 The Geotechnical Engineer shall be a qualified geotechnical engineer and demonstrate extensive experience in geotechnical engineering specific to river and sea defense structures.
- 5.3 The Lead Surveyor shall be a licensed surveyor.
- 5.4 All key expert(s) will have to demonstrate appropriate academic qualification in their respective area of expertise, combined with a minimum of 7 years of relevant experience handling similar assignments related to site investigations.

6. **Scope of Service**

- 6.1 A site investigation is the overall process for the collection of information, appraisal of data, assessment and reporting. This data must be gained competently, in a timely manner, and to a degree which is adequate and appropriate. In this way risk and liability are minimized, the potential for an economical and safe design is maximized and the project is more likely to be completed on time and within budget. The proposed site investigation for the redesign of riverside protection at Belle Vue transmission tower site consists of two (2) Work Packages as follows:

A. Work Package 1 - Preliminary Site Survey consisting of Cadastral / Boundary Survey and Feature & Topographic Survey:

- 1. Carrying out cadastral/boundary survey for reference and cross-checking.
- 2. Carrying out feature/topographic survey.

3. Providing results electronically in AutoCAD/Civil 3D and PDF formats showing all site details including mature trees, tower/foundation structures, drains, existing revetment, land and riverside/riverbed relief with ten meter (10m) contour intervals (on land) and five meter (5m) contour intervals in the river and outfall.

B. Work Package 2 - Geotechnical Engineering Report consisting of subsurface exploration and laboratory testing results and recommendations/specifications for riverside protective structures.

1. The goal of the geotechnical survey for each site is to gather enough data to determine site soil characteristics, soil corrosivity, soil strength profile, soil bearing capacity, groundwater level, etc.
2. The geotechnical survey shall include but not be limited to the following:
 - i. Logging of boreholes and collection of disturbed and undisturbed soil samples
 - ii. Conducting soil corrosivity testing
 - iii. Conducting Soil Classification tests
 - iv. Conducting Deformation tests (1 D consolidation)
 - v. Conducting Strength Tests (Triaxial Compression and/or Direct Shear tests)
 - vi. Conducting groundwater level assessment
 - vii. Analyzing and providing recommendations for riverside protective structures. (Must consider anchoring sheet pile as well as rip-rap options.)

6.2 Following the field and laboratory programs, the test data should be evaluated, and a report of geotechnical engineering recommendations prepared. This should include recommendations for subgrade preparation, fill and backfill construction, lateral earth pressures, friction values, unit weight of site soils, the handling of ground and surface water during construction and other soil related items suggested by the subsurface data.

7. Prices

- 7.1 Bid Prices should be submitted for Work Packages 1 & 2 separately. All duties, taxes, and other levies payable under the current legislation of Guyana should be included in the bid price. Bid prices should remain valid for 90 days.
- 7.2 Performance Security shall be 10% of the Contract Sum.
- 7.3 Retention sum shall be 10% of each payment pending the completion of the assignment and acceptance of final report.
- 7.4 Liquidated damages shall be calculated at 0.05% per day for a maximum of 5% of the Contract Sum.

7.5 Mobilisation Advance shall be no more than 20% of the Contract Sum upon the provision of a bond.

8. Project Schedule

No.	Activities	Wk-1	Wk-2	Wk-3	Wk-4	Wk-5
2	Conduct site surveys					
3	Prepare survey drawings and report					
4	Conduct field geotechnical investigation					
5	Conduct geotechnical laboratory testing					
6	Prepare geotechnical report					

9. Reporting

9.1 The consultant will report to the Major Projects Department, Guyana Power and Light (GPL). The main point of contact for (GPL) for this assignment will be, Yonnick Pratt, Senior Project Officer, Project Management Department, GPL; ypratt@gplinc.com.

10. Evaluation Criteria

10.1 The Employer will award the Contract to the Bidder whose bid is determined to be substantially responsive to the bidding documents, and who offered the Lowest Evaluated Bid Price, provided that this Bidder has been determined to be eligible and have met the qualification requirements in accordance with the table below.

(A) General Experience of the Firm	
(i) Team Leader	
<ul style="list-style-type: none"> • <i>Qualification</i> 	5 points
<ul style="list-style-type: none"> • <i>Experience</i> <ul style="list-style-type: none"> - <i>Over 7 years</i> - - <i>7 yrs – 3 yrs</i> - - <i>Below 3 years</i> 	10 points
	5 points
	3 points

(ii) Other staff	
• <i>Qualification</i>	5 points
• <i>Experience</i>	10 points
- <i>Over 7 years</i>	-
- <i>7 yrs – 3 yrs</i>	5 points
- <i>Below 3 years</i>	3 points
TOTAL	30 points
(B) Specific/competence of key personnel to Particular Assignment	
• Specific Qualification related to the assignment	15 points
• Specific Experience related to the assignment	25 points
TOTAL	40 points
(C) Adequacy of approach	
Adequacy of work plan	5 points
Quality of work plan	5 points
Technical approach	10 points
Methodology	10 points
TOTAL	30 points
GRAND TOTAL	100 points