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(IUL)PSM-FP/PSM/2021/126	ردوس سرسره ير
PROC-66-21- PSM-PJ/2021/10	בָּצִער הל מפּ אַ בַּצִיתונים מנינסא :
04 نَحْرِمِ 2021 وَّ رَّتِورِدُهُ فُرُورُدُ 14:00 رَثَرُ	: 102 (27(1) 01 0x0 375 - 107(1) 25 1
و برد مرود مرود مرود المروسرد و الرود الروسرد و الروسرد	ם בכיר 20 - 20 - 20 - 20 - 20 - 20 - 20 - 20

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# INFORMATION TO BIDDERS (ITB) FOR GEOTECHNICAL SURVEY SOIL TEST

Public Service Media invites sealed tenders from eligible bidders for "Geotechnical Survey, of Lh. Hinnavaru PSM DTTB Site.

#### **Scope of Service**

The scope of work under this ITB consists of compiling a Geo technical survey & investigation report (Borehole Soil Test).

#### 1. Geo technical Survey

- 1. Mobilize drilling equipment and technicians.
- 2. Once Mobilized, to Determine the Exact Mode of Penetration.
- 3. To Ensure Safety & Coordination with Local Council.
- 4. This undertaking should be taken by engineers and technicians qualified.
- 5. To Ensure the works are being carried out in accordance with EPA regulations & standard.
- 6. Drill at least 2 Boreholes, for geotechnical investigation for 15m dept or up to refusal strata with SPT at every 1.5m or in accordance to EPA guidelines and collect soil samples/washed samples measuring CR&RQD if rock encounters, submit rock samples to lab for testing in core box.
  - a. Field tests.
    - i. Conduct Field Density Test to determine the in-situ dry density and degree of compaction.
    - ii. Any other relevant tests that are commonly required in relation to road pavement design.
  - b. Standard penetration test and soil sampling.
    - i. Detailed bore-logs indicating co-ordinates, reduced levels, ground water table etc., sub soil profiles along various profiles along various sections indicating borehole no. depth wise, and another lab results etc.
    - ii. Generalized soil profile of the underlying strata in cross section and longitudinal section wise, shall be furnished based on the bore log in grid pattern.
  - c. Soil laboratory tests.
    - i. Results obtained from various tests and other interpretation to evaluate various soil parameters.

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- ii. Conduct necessary laboratory tests, like Particle Size Distribution and index properties (Liquid Limit, Plastic Limit) tests in accordance with ASHTO test methods to classify the material as per the ASHTO M145.
- iii. Determine the laboratory maximum dry density and optimum moisture content.
- iv. Conduct the Laboratory CBR test to determine the CBR Ratio at 95% and 98% degree of compaction of material.
- v. Any other relevant tests that are commonly required in relation to road pavement design.
- d. Catchment Characterization
  - i. Conduct tests and provide report regarding determination of rates for groundwater infiltration.
  - ii. Conduct tests and provide report regarding determination soil parameters required for hydraulic and hydrologic design of storm water drainage system.
- e. Submission of detailed geotechnical investigation report both printed and Electronic.
- f. To include log sheets with SPT values combined, bearing capacity.
- g. To include recommendation for type of foundation along with Full Report,
  - i. To recommend in the report the suitable ground improvements to be adopted for, towers and other structures; the permissible bearing pressure expected at the founding level with allowable settlement, if any; details of soil improvements, if any and any other aspect which will have any bearing on the proposed construction.
  - ii. To provide the suggested filling materials characteristics/ parameters considering locally available soils and economics.
  - iii. To provide Ultimate and safe bearing capacity from shear as well as from settlement criteria

#### Report Submission

- 1. The Geo technical report should be submitted within 45 calendar days after the signing of the contract or issuance of a purchase order.
- 2. Upon completion of the project the bidder shall submit Detail Project Report, any Diagrams, Drawings in CADD, PDF format along with hardcopy.



#### **Eligibility:**

- 1. The Consultancy firm should have been in operation since at least 1 (one) year prior to the date of Bid Submission.
- 2. The Consultancy firm must have worked on at least 1 (one) project of similar scope within past 5 years.
- 3. The Consultancy Team shall consist of the following key personnel:
  - a. A member with at least a Bachelor's Degree in Civil Engineering or related field with minimum 05 years' experience in geotechnical related works.

The above must be supported by submission of the following documentation. Failure to do so WILL render the Bidder ineligible and lead to <u>disqualification</u>.

- a) Organization / Company / Consultancy firm registration certificate
- b) Company profile / work profile.
- c) The Consultant shall provide evidence satisfactory to PSM and as outlined in the Bidding document to indicate the following:
  - i. Academic Certifications of the personnel
  - ii. CV of the personnel
  - iii. Professional registrations
- d) Methodology and work plan

#### **Payment Terms**

- 1. No advance payments would be made for the undertaking, and the full payment would be settled after the submission of the entire report.
- 2. Payments would be processed through the Ministry of Finance & Treasury upon the successful completion and submission of documentations to PSM.
- 3. Price & tax amount for each of the work should be submitted separately.

#### **Point System**

1	Company Profile & Relevent Experience	10
2	Past Interraction & Successful Delivery Of Similer Works To PSM	15
3	Ease on Payment Terms	05
4	Price (Total, Including One Time & Recurring)	60
5	Delivery Period	10



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