# SCOPE OF SERVICES FOR GEOTECHNICAL SERVICES

#### I. INTRODUCTION

The Coastal Protection and Restoration Authority (CPRA) is responsible for planning, designing, evaluating, permitting, implementing, maintaining, operating, and monitoring Coastal Restoration and Flood Protection projects in the Louisiana Coastal Zone. The proposed contracts will provide for geophysical surveying, geotechnical field investigations and geotechnical engineering services on projects initiated by CPRA.

A copy of the contract you will be required to sign if selected is attached. Please review the contract prior to submitting your proposal. No requests for changes to the contract language will be considered. It is anticipated no more than two (2) 36-month contracts will be awarded from this advertisement. Standardized rate sheets will be distributed to each Consultant selected from this advertisement. Rate sheets will include a negotiated Office Rate and a Field Rate for each of the labor categories. The Office Rate shall be inclusive of all costs associated with labor, overhead, administrative costs, software, account management, and any other costs associated with the provision of services (including but not limited to standard equipment, computers, field sampling supplies, office supplies, copies, and routine safety equipment and materials). The Field Rate shall consist of the items described in the Office Rate plus be inclusive of lodging, travel and per diem. Rates for specialized equipment should be submitted on a separate schedule. Compensation to the Consultant for services rendered in connection with each Task Order shall be based on negotiated work-hours using established billable rates mentioned above for the actual work performed on the Task Order or a negotiated lump sum compensation.

#### II. SCOPE OF WORK

Consultants will perform geotechnical engineering and related services for CPRA projects on an **as needed, Task Order basis.** Consultants will be required to execute a Task Order which will specify the scope of services, task schedule, and compensations. Each Task Order will become a part of the IDIQ (Indefinite Delivery Indefinite Quantity) Contract.

Consultants will be required to provide some or all of the following services for each Task Order.

#### A. Services Required

The specific services consist of the following:

1) <u>Geotechnical Investigations and Analysis</u>. Provide personnel and equipment to conduct geotechnical investigations including, but not limited to:

- Shallow and deep soil borings
- Soil Properties (e.g., moisture content, organic content, unit weight)
- Classification (e.g., Atterberg limits, grain size distribution)
- Strength tests (e.g., miniature vane, unconfined compression, triaxial)
- Geotechnical Engineering (e.g., global slope stability analysis, consolidation settlement of underlying soils, self weight consolidation of dredge material, settling column test, settlement curves, geotechnical instrumentation)
- Subsurface profiles
- Detailed engineering reports with analyses and recommendations
- Reviewing geotechnical reports prepared by other professionals
- Construction related geotechnical engineering services
- 2) <u>Geophysical and Geological Investigations</u>. Provide personnel and equipment to conduct reconnaissance level and detailed geophysical investigations for riverine and offshore sediment searches. Investigations may include collection and analysis of:
  - Bathymetric survey
  - Preliminary sampling plan (grab samples and vibracores)
  - Seismic survey / Sub-bottom profiling
  - Jet probing
  - Side scan sonar survey
  - Magnetometer survey
  - Evaluation of geophysical data
  - Borrow area delineation and volume calculations
  - Technical report writing

Sand search investigations should follow CPRA's General Guidelines for Exploration of Offshore Sand Sources.

### **B.** Personnel and Equipment Requirements

- 1) <u>General.</u> Provide the field personnel, engineers, office staff, and equipment necessary to accomplish the services as tasked by CPRA. Project sites may be located in remote areas (e.g., marsh, barrier island) requiring special access equipment of different size and capability. Typical requirements will include requesting site access from land owners prior to work being performed
- 2) <u>Field Work</u>. All soil sampling methods accomplished under this Scope of Services shall be performed under the supervision of a Louisiana Licensed Professional Engineer well versed in such work.
- 3) <u>Land Surveyor Requirements.</u> Surveying work accomplished under this Scope of Services will be performed in accordance with the laws and rules of the Louisiana Professional Engineering and Land Surveying Board (LAPELS).

- 4) <u>Engineer Requirements.</u> Engineering work accomplished under this Scope of Services will be performed in accordance with the laws and rules of the Louisiana Professional Engineering and Land Surveying Board (LAPELS).
- 5) <u>Equipment.</u> Provide the necessary instruments, vehicles, boats and other equipment best suited to accomplish the services required by CPRA.

## C. Typical Deliverables

- 1) Technical reports and presentations
- 2) Boring logs and field notes
- 3) Laboratory analysis results
- 4) Geophysical survey data and interpretation
- 5) Quantity calculations
- 6) Progress reports

A specific list of deliverables, with reporting format requirements, will accompany each Task Order when issued. All deliverables shall be accompanied by a typed Letter of Transmittal.