

ENGINEERING AND RELATED SERVICES

April 3, 2009

STATE PROJECT NO. 750-99-0157

DEVELOPMENT OF INSPECTION PROCESS FOR LEVEE SYSTEMS STATEWIDE

Under Authority granted by Title 48 of Louisiana Revised Statutes, the Louisiana Department of Transportation and Development (DOTD) hereby issues a Request for Qualification Statements (RFQ) on Standard Form 24-102 (SF 24-102), "Professional Engineering and Related Services", revised January 2003, from Consulting Firms (Consultant) to provide engineering and related services. **All requirements of Louisiana Professional Engineering and Land Surveying (LAPELS) Board must be met at the time of submittal.** One Prime-Consultant will be selected for this Contract.

Project Manager – Mr. Zahir "Bo" Bolourchi may be reached at (225) 274-4172.

PROJECT DESCRIPTION

The Louisiana DOTD Levee Safety Unit is charged with ensuring the integrity and longevity of levees within certain Louisiana levee districts, such that they do not present unacceptable risks to the public, property or the environment, and to minimize potential hazards in the event of a levee failure (R.S. 36:508.3, R.S. 38:306.C). The levee districts to be covered by this contract are: Bossier Levee District; Caddo Levee District; Fifth Louisiana Levee District; Natchitoches Levee and Drainage District; Nineteenth Louisiana Levee District; Red River, Atchafalaya and Bayou Boeuf Levee District; Red River Levee and Drainage District; and Tensas Levee District.

All specified levee districts are expected to meet a uniform standard for maintenance of levee and flood control systems so as to maintain and ensure the safety of the state's citizens and their property within areas protected by levees. Each levee system should be understood to include not only levees but flood control structures of various kinds, such as floodwalls, drainage structures, pump stations, etc. Both federal and non-federal levees must meet federal standards in order for areas protected by levees to remain eligible for federally subsidized flood insurance rates set forth by FEMA. In order to help meet this need, the selected consultant shall create a user-friendly levee inspection, evaluation and report process for use by the specified levee districts. The process is expected to include an electronic report format that can easily be filled out. The format will be customized for each levee district, and a minimum of one inspection will be conducted by each levee district in coordination with the consultant in order to introduce the new process to levee district personnel. Also, after the initial inspection is performed final adjustments shall be made to the customized template or procedure for each levee district as needed. All levees covered by the levee district in question are to be included, whether they are federally owned/funded or not.

SCOPE OF SERVICES

The selected Consultant will create a software-based, user-friendly levee inspection, evaluation and report process for use by specified levee districts.

The selected Consultant will be required to provide the following services:

- Task 1: Development of Levee Inspection Report Template
- Task 2: Customization of Levee Inspection Report Template
- Task 3: Introduction of Levee Inspection Process to Individual Levee Districts
- Task 4: Attend Additional Levee Inspections on an As-Needed Basis

The following outlines each task in detail.

Task 1: Development of Levee Inspection Report Template

The selected Consultant will review of all related federal, state and local laws within the specified levee districts of Louisiana, and development of a user-friendly software-based levee inspection, evaluation and report process. The following work should be performed by the Consultant:

- Review existing U.S. Army Corps of Engineers levee inspection procedures, forms and/or software.
- Review existing levee inspection procedures, forms and/or software created by DOTD.
- Review details of the new National Levee Safety Program (part of the Water Resources Development Act of 2007, H.R. 1495). Any proposed levee inspection procedures or template should comply with standards and procedures contemplated by that program.
- Review all levee maintenance and operation manuals used by the specified levee districts and incorporate any necessary information into the levee inspection template and procedure.
- Review all related federal, state and local laws that apply within the specified levee districts of Louisiana.
- Review existing levee management system software packages, such as HNTB's *Levee Vital Signs*TM software.

- Develop a customized levee inspection and documentation template and levee inspection procedures. The reporting system should be software-based and user-friendly.

Additional Details:

One component of any levee inspection is the identification of permitted facilities or activities, such as pipelines, utility easements, etc. The levee inspection template and procedures developed by the Consultant should take into account the permitting system already in place for that particular levee district. Information such as locations along a levee where permits are being requested or have been granted, including the applicable permit number, should be integrated into the levee inspection template, form or procedure.

A system of tracking problems/deficiencies and corrective actions taken should also be an integral part of the levee inspection template and procedures. For example, any levee inspection template or form created by the consultant should note locations of problems or deficiencies along a levee and any remedial measures taken to correct such conditions. If relief wells are installed, they should be inspected to ensure they function as intended. The new levee inspection, evaluation and report process is expected to document the effectiveness of the levee maintenance program so that the levee system will continue to function as originally intended.

Levee Inspection Overview:

The Consultant should be aware that inspections are to be conducted at intervals not exceeding 90 days, and in particular an inspection should be conducted each quarter of the Louisiana state fiscal year. An inspection shall include all accessible features of the levee system, including but not limited to floodwalls, gates, control structures and pump stations. Particular attention should be given to detecting evidence of leakage, erosion, seepage, instability, undue settlement, displacement, tilting, cracking or deterioration. The adequacy and quality of maintenance and operating procedures as they pertain to the safety of the levee should also be assessed. Digital photographs and drawings should be freely used to record conditions in order to supplement and support written descriptions.

The field inspection should at a minimum include review of the following:

- Embankment structures including settlement, slope stability, seepage, drainage systems, slope protection, etc.
- Utility crossings, including pipelines, power lines, etc.
- Flood control structures including pumps, control gates and operating machinery, etc.
- Easements, including access points, roads, buildings, wells, etc.

An inspection report shall encompass information obtained from a pre-inspection review and will report the results of the field inspection. The content of the report should include, but is not limited to, the following:

- Inspection Summary
- Description of Project Features
- Instrumentation
- Field Inspection
- Structural Stability
- Adequacy of Maintenance and Methods of Operations
- Conclusions
- Recommendations
- Certification

Deliverables:

The Consultant shall submit to DOTD a generalized levee inspection report and documentation template and levee inspection procedures. The reporting and documentation system should be software-based and user-friendly. A draft submittal should be made to allow DOTD to review prior to final preparation and customization.

Task 2: Customization of Levee Inspection Report Template

The Consultant will meet with the appropriate representatives from each of the designated levee districts in order to develop a customized levee inspection and documentation template and levee inspection procedures for each of the specified levee districts.

Deliverables:

The Consultant will submit to DOTD a separate levee inspection report and documentation template and levee inspection procedures for each of the specified levee districts. The reporting and documentation system should be software-based and user-friendly. A draft submittal should be made for each to allow DOTD to review prior to final preparation.

Task 3: Introduction of Levee Inspection Process to Individual Levee Districts

The Consultant will introduce the levee district personnel to the new format:

- The Consultant will conduct training of levee district personnel in use of the new levee inspection, evaluation and report process, including training in use of the new report and documentation template.
- The Consultant will choose a portion of the levee system to inspect that includes most if not all of the features or issues that are particular to the levee district in

question, so as to make sure the customized levee inspection template, form or procedure functions as intended. Regardless of what part of the levee system is inspected, the Consultant shall ensure all features or elements of the levee inspection template, form or procedure are made clear to levee district personnel.

- The Consultant will review all available DOTD-maintained inspection reports, construction as-built drawings, instrumentation records, project modifications, drawings, and other available information prior to each field inspection that they attend.
- The Consultant will send at least one professional engineer with experience in levee construction and maintenance (see Minimum Personnel Requirements) to attend a minimum of one inspection with each levee district in order to introduce the levee district personnel to the new format.
- The Consultant will assist levee district personnel in completion of levee inspection report.

Additional Details:

Levee district personnel are expected to make comments on the new levee inspection process and their feedback shall be used in finalizing changes to the customized template, form or procedure for the levee district in question.

Any levee inspection template, form or procedure created by the Consultant shall be uniform in its measurement of various deficiencies pertaining to a levee. Consistency of grading particular aspects of a levee is a key part of Task 3. All levee districts should be made to understand the measurement system so there is no confusion as to what a particular grade means in one levee district compared to another. This is a primary part of the Consultant's introduction of the new levee inspection process to levee district personnel.

Deliverables:

The Consultant will submit to DOTD the completed levee inspection report and documentation form for the segment of levee inspected within each of the specified levee districts. The Consultant should also submit an evaluation and any recommendations for each inspection report submitted. The Consultant will also submit a list of all levee district personnel that took part in the inspection or had a part in creating the report for each inspection the Consultant has attended.

Task 4: Attend Additional Levee Inspections on an As-Needed Basis

If funds are available, the Consultant may attend additional inspections in coordination with levee district personnel in order to continue to introduce the process fully, as well as

to make further final adjustments to the new levee inspection template, form or procedure.

Task 4 Deliverables:

The Consultant will submit to DOTD a completed levee inspection report and documentation form for each additional segment of levee that has been inspected within one of the specified levee districts. The Consultant will also submit a list of all levee district personnel that took part in the inspection or had a part in creating the report for each inspection the Consultant has attended. Any additional revisions made to the levee inspection and evaluation process should be noted with an explanation given for each revision.

REFERENCES

All services and documents will meet the standard requirements as to format and content of the DOTD; and will be prepared in accordance with the latest applicable editions, supplements and revisions of the following:

1. AASHTO Standards, ASTM Standards or DOTD Test Procedures
2. DOTD Location and Survey Manual
3. DOTD Roadway Design Procedures and Details
4. DOTD Hydraulics Manual
5. DOTD Standard Specifications for Roads and Bridges
6. Manual of Uniform Traffic Control Devices
7. DOTD Traffic Signal Design Manual
8. National Environmental Policy Act (NEPA)
9. National Electric Safety Code
10. National Electric Code (NFPA 70)
11. DOTD Environmental Impact Procedures (Vols. I-III)
12. Policy on Geometric Design of Highways and Streets
13. Construction Contract Administration Manual
14. Materials Sampling Manual
15. DOTD Bridge Design Manual
16. Consultant Contract Services Manual
17. Geotechnical Engineering Services Document
18. Bridge Inspectors Reference Manual
19. DOTD Stage 1 Manual of Standard Practice
20. DOTD Training Series – Inspection of Embankment Dams
21. DOTD Training Series – Evaluation of Seepage Conditions
22. Louisiana Dam Safety Program – Dam Safety Rules and Regulations, March 1997
(www.dotd.la.gov/intermodal/dams/home.asp)
23. DOTD Training Series (LTRC) – Levee/Flood Control Works Inspection, Module 1 – Levee Embankments
24. DOTD Training Series (LTRC) – Levee/Flood Control Works Inspection, Module 2 – Floodwalls

25. DOTD Training Series (LTRC) – Levee/Flood Control Works Inspection, Module 3 – Drainage Structures
26. DOTD Training Series (LTRC) – Levee/Flood Control Works Inspection, Module 4 – Pump Stations
27. Code of Federal Regulations 29 CFR 1926 (OSHA)

COMPENSATION

Compensation for the required services rendered in connection with this Contract will be based upon negotiated work-hours using DOTD established billable rates for the actual time spent on the project, with a maximum limitation.

All travel related expenses will be compensated under direct expenses, and will be in accordance with Louisiana Office of State Travel regulations found at: <http://www.doa.louisiana.gov/osp/travel/travelpolicy/travelguide.pdf>. Vehicle rental rates will require prior approval from the DOTD Project Manager.

The selected Consultant/Team will be required to submit a proposal within 45 calendar days following the notification of selection. All negotiations must be completed within 90 calendar days following the notification of selection.

CONTRACT TIME

The Consultant shall proceed with the services specified herein after the execution of this Contract and upon written Notice-To-Proceed from the DOTD. The overall contract time to complete this project is estimated to be **365 calendar days**. The delivery schedule for all project deliverables shall be established by the Project Manager.

MINIMUM PERSONNEL REQUIREMENTS

The following requirements must be met by the Prime-Consultant at the time of submittal:

1. At least one Principal of the Prime-Consultant must be a Professional Engineer registered in the State of Louisiana.
2. At least one Principal or other Responsible Member of the Prime-Consultant must be a Professional Civil Engineer, registered in the State of Louisiana, with a minimum of five years experience in the analysis, design, inspection, and/or evaluation of levees and shall demonstrate experience in working in the state of Louisiana and knowledge of the Louisiana DOTD's Levee Safety Rules and Regulations. This person must also hold a current license from the Louisiana State Board of Registration for Professional Engineers and Land Surveyors.
3. In addition to the above, at least two qualified engineering technicians must be experienced in the inspection of levee systems and familiar with State of Louisiana rules and regulations governing levee safety.

Certifications of Compliance must be submitted with and made part of the Consultants Standard Form 24-102 for all Personnel Requirements listed herein.

QUALITY CONTROL/QUALITY ASSURANCE

The DOTD requires the Consultant to develop a Quality Control/Quality Assurance program; in order to provide a mechanism by which all contracted services can be subject to a systematic and consistent review. Consultants must ensure quality and adhere to established design policies, procedures, standards, and guidelines in the preparation and review of all design products. The DOTD shall provide limited input and technical assistance to the Consultant.

EVALUATION CRITERIA

The general criteria to be used by DOTD (when applicable) in evaluating responses for the selection of a Consultant to perform these services are:

1. Consultant's firm experience on similar projects, weighting factor of 3;
2. Consultant's personnel experience on similar projects, weighting factor of 4;
3. Consultant's firm size as related to the estimated project cost, weighting factor of 3;
4. Consultant's past performance on similar DOTD projects, weighting factor of 6; *
5. Consultant's current work load with DOTD, weighting factor of 5;
6. Location where the work will be performed, weighting factor of 4; **

* The Other (OT) performance rating will be used for this project.

** All respondents will receive a 4 in this category

The complexity level for this project is **complex**.

Consultants will be evaluated as indicated in Items 1- 6. The evaluation will be by means of a point-based rating system. Each of the above criteria will receive a rating on a scale of 0-4. The rating will then be multiplied by the corresponding weighting factor. The firm's rating in each category will then be added to arrive at the Consultant's final rating.

DOTD's Consultant Evaluation Committee will be responsible for performing the above described evaluation, and will present a short list of the three (if three are qualified) highest rated Consultants to the Secretary of the DOTD. The Secretary will make the final selection.

CONTRACT REQUIREMENTS

The selected Consultant will be required to execute the contract within 10 days after receipt of the contract.

INSURANCE - During the term of this contract, the Consultant will carry professional liability insurance in the amount of \$1,000,000. The Prime-Consultant may require the

Sub-Consultant(s) to carry professional liability insurance. This insurance will be written on a “claims-made” basis. Prior to executing the contract, the Consultant will provide a Certificate of Insurance to DOTD showing evidence of such professional liability insurance.

AUDIT - The selected Consultant/Team will allow the DOTD Audit Section to perform an annual overhead audit of their books, or provide an *independent* Certified Public Accountant (CPA) audited overhead rate. This rate must be developed using Federal Acquisition Regulations (FAR) and guidelines provided by the DOTD Audit Section. In addition, the Consultant/Team will submit semi-annual labor rate information, when requested by DOTD.

The selected Consultant/Team will maintain an approved Project Cost System, and segregate direct from indirect cost in their General Ledger. Pre-award and post audits, as well as interim audits, may be required. For audit purposes, the selected Consultant/Team will maintain accounting records for a minimum of five years after final contract payment.

Any Consultant currently under contract with the DOTD and who has not met all the audit requirements documented in the manual and/or notices posted on the DOTD Consultant Contract Services Website (www.dotd.louisiana.gov), will not be considered for this project.

SUBMITTAL REQUIREMENTS

One original (**stamped original**) and four copies of the SF 24-102 must be submitted to DOTD. All submittals must be in accordance with the requirements of this advertisement and the Consultant Contract Services Manual. Any Consultant/Team failing to submit any of the information required on the SF 24-102, or providing inaccurate information on the SF 24-102, will be considered non-responsive.

Name(s) of the Consultant/Team listed on the SF 24-102, must precisely match the name(s) filed with the Louisiana Secretary of State, Corporation Division, and the Louisiana State Board of Registration for Professional Engineers and Land Surveyors.

The SF 24-102 will be identified with State Project No. **750-99-0157**, and will be submitted **prior to 3:00 p.m. CST on Monday, April 20, 2009**, by hand delivery or mail, addressed to:

Department of Transportation and Development
Attn.: Mrs. Dawn G. Picard, P.E.
Consultant Contract Services Administrator
1201 Capitol Access Road, **Room 405-T**
Baton Rouge, LA 70802-4438 or
Post Office Box 94245

Baton Rouge, Louisiana 70804-9245
Telephone: (225) 379-1989

REVISIONS TO THE RFQ

DOTD reserves the right to revise any part of the RFQ by issuing an addendum to the RFQ at any time. Issuance of this RFQ in no way constitutes a commitment by DOTD to award a contract. DOTD reserves the right to accept or reject, in whole or part, all Qualification Statements submitted, and/or cancel this announcement if it is determined to be in DOTD's best interest. All materials submitted in response to this announcement become the property of DOTD, and selection or rejection of a submittal does not affect this right. DOTD also reserves the right, at its sole discretion, to waive administrative informalities contained in the RFQ.