

ENGINEERING AND RELATED SERVICES
February 1, 2008

STATE PROJECT NO. 700-99-0441
F.A.P. NO. STP-9907(530)
RETAINER CONTRACT FOR
UNDERWATER BRIDGE INSPECTION
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/Sub-Consultant(s) (Consultant/Team) will be selected for this Contract.

Project Manager – Mr. Steven Sibley may be reached at (225) 379-1820 or stevensibley@dotd.la.gov.

PROJECT DESCRIPTION

The selected Consultant will perform engineering and related services for statewide projects covered by a Retainer Contract under separate Task Orders. The Consultant will be required to execute a Task Order which will specify the scope of services, contract time, and compensation. Each Task Order will become a part of the Retainer Contract.

SCOPE OF SERVICES

This is a retainer contract and task orders for individual districts will be issued. Each District Bridge Inspection and Maintenance Supervisor will determine which bridges the divers will inspect. Multiple task orders may be issued simultaneously.

Qualification statements will include unit prices for inspecting and reporting on a bent or abutment at Level I and a separate price at Level II. All bents and abutments will be at a Level I inspection except Steel units. Steel units will be at a Level II inspection. DOTD will apply the unit prices to the mix of substructures of candidate structures to determine the proposed total cost. The price quoted is to be all-inclusive for a routine inspection (personnel, equipment, and travel) with paper and electronic reports as described below. The project manager will negotiate separate prices for additional work with the selected Consultant/Team. Items to be negotiated are considered to be relatively minor compared to the total scope of the project, but significant and essential. These items include; additional per unit cost for Level II inspection of a Level I substructure unit, additional cost for a Level III inspection of a Level I or a Level II substructure unit, and the cost to remove debris that interferes with an inspection.

The inspections will be element based (PONTIS) and the condition states shall be those defined for submerged elements defined in the LADOTD PONTIS Inspection Manual (2007 version). The selected Consultant /Team will be capable of conducting inspection simultaneously in at least three Districts. Surface supplied divers are the standard for this type of work. Any other type effort the Consultant/Team proposes will include thorough justification. Each DOTD District will provide at least one bridge inspector who will monitor and may direct the inspections and will provide quality assurance for DOTD. The District will evaluate findings that appear to have a significant structural impact on the bridge, following normal DOTD bridge inspection procedures. Specifically, the Consultant/Team is to perform the following activities for each bridge indicated by the project manager.

Concrete Elements: Conduct a Level I inspection for all components that are in more than four feet of water. Only minimal cleaning to remove marine growth is to be done. The inspection is to rely on visual and tactile examination of the exterior of the underwater structure. Attention should be concentrated at the mud line, mean low water areas, and any areas of damage. Any accumulated debris should be noted. The inspection is intended to detect obvious, structurally significant damage. Particular attention should be paid to cracks in prestressed concrete piles. Elements generally expected to fall into this category are:

- 226 *“Pile-Submerged/Below Grade - Prestressed Concrete”*
- 227 *“Pile-Submerged/Below Grade - Reinforced Concrete”*
- 215 *“Abutment - Concrete”*
- 220 *“Cap/Footings-Submerged/Below Grade - Concrete”*
- 204 *“Pile Extension/Column – Prestressed Concrete”*
- 205 *“Pile Extension/Column – Reinforced Concrete”*

Any problems that may be identified may be further evaluated with a Level II inspection upon successful negotiations.

Timber Elements: Conduct a Level I inspection of all components that are in more than four feet of water. Only minimal cleaning to remove marine growth is to be done. The inspection is to rely on visual and tactile examination of the exterior of the underwater structure. Attention should be concentrated at the mud line, mean low water areas, and any areas of damage. Any accumulated debris should be noted. The inspection is intended to detect obvious, structurally significant damage. Elements generally expected to fall into this category are:

- 228 *“Pile-Submerged/Below Grade - Timber”*
- 216 *“Abutment – Timber”*

Any problems that may be identified may be further evaluated with a Level II inspection upon successful negotiations.

Steel Elements: Conduct a Level II inspection of all components that are in more than four feet of water. Marine growth is to be cleaned from the structure to enable close inspection. Cleaning is expensive and is to be restricted to sample areas, those being ten inch wide bands at the splash zone and mud line and at five foot intervals between, if the unit is in sufficiently deep water. Simple instruments, such as calipers and rulers are to be used, although ultrasonic thickness gauges may be used. Elements generally expected to fall into this category are:

- 225 *“Pile-Submerged/Below Grade - Steel”*

Any problems that may be identified may be evaluated with a Level III inspection upon successful negotiations.

All Units: An electronic report is to be prepared that will include the following data:

- a. Identification of bridge.
- b. Very brief summary describing the findings of the inspection with particular emphasis on needed work (if any), urgency of such work, and the need for any further inspections.
- c. Points substructure unit ratings, as applicable. Ratings are design to be associated with quantities of elements in each condition state. For substructure units, the unit of measure is “each”, intended to be each pile, for example.
- d. Photographs that depict any significant deviations from as-built conditions.

Element definitions and condition states for elements listed above are included in the Appendix as an example of LADOTD’s Element Inspection format. Further detail and example photos are included in the PONTIS Inspection Manual 2007 Edition.

All Units With An Increased Level Of Inspection: A paper report is to be prepared that will include the following data:

- a. Same data as in the electronic file.
- b. Sketches that depict any significant deviations from as-built conditions.

PONTIS Elements For Underwater Inspections: There are PONTIS substructure elements that may require reporting. Elements are to be coded only if the element currently is and usually is in at least four feet of water.

The report will contain PONTIS element numbers and associated ratings for each element inspected. The Louisiana PONTIS reference manual can be requested via email from Project Manager.

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

COMPENSATION

Compensation for this contract will be based on Task Orders issued using the Consultant's proposed unit prices, with maximum limitation of **\$2,200,000**.

The Consultant's proposed total price for this project will be calculated based on the approximate number of elements to be inspected using the proposed unit price for each item. Unit Price includes indirect/direct costs including profit. A tally of the estimated elements is included in the Appendix. The tally is also based on an estimated 1200 bridge locations to be inspected distributed among the 9 DOTD Districts. This number may increase or decrease slightly based on site conditions and District coordination.

CONTRACT TIME AND NOTICE TO PROCEED

This Retainer Contract shall be in effect for the duration of **540 calendar days**. The services to be performed for each Task Order (TO) will be determined prior to the execution of the TO. The Consultant will proceed with the services required in the TO upon issuance of the Notice to Proceed from the DOTD. The contract time for each TO, will be specified in the executed TO. Any TO in effect, prior to the expiration date of the Retainer Contract shall be completed.

QUALITY CONTROL/QUALITY ASSURANCE

The DOTD requires the Consultant to develop a Quality Control/Quality Assurance program or adopt DOTD's program; in order to provide a mechanism by which all construction plans can be subject to a systematic and consistent review. Consultant's 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. The Consultant's plans shall meet or exceed DOTD's Construction Plans Quality Control / Quality Assurance Manual and EDSM No. Volume I. 1.1.24 on Plan Quality. The Consultant shall transmit plans with a DOTD Quality Control/Quality Assurance Checklist, Documentation Manual for Project Delivery, and a certification that the plans meet the DOTD's quality standards.

MINIMUM PERSONNEL REQUIREMENTS

The following requirements must be met at the time of submittal:

1. The Prime Consultant must employ on a full-time basis, one Underwater Bridge Inspection Project Manager who must have at least five years experience in managing underwater bridge inspection projects.
2. In addition to the above requirement, the Prime Consultant must also employ on a full-time basis, or through the use of a Sub-Consultant(s):
 - a. Four complete dive teams capable of being deployed at different locations simultaneously. Dive teams must meet or exceed the Association of Diving Contractors (ADC) Consensus Standards for Commercial Diving Operations, and consist of two divers and a tender, one of the divers being the job site diver supervisor. All divers and tenders will be ADC certified as demonstrated through appropriate ADC Certification Cards.
 - b. Equipment suitable to deploy the dive teams at four different locations simultaneously.
 - c. Equipment suitable to accommodate at least one DOTD bridge inspector at each bridge being inspected at all times.
 - d. Office staff capable of preparing electronic and paper reports as specified herein.
 - e. The Consultant/Team will provide communication equipment suitable for prompt voice contact between the point of contact and the DOTD inspector on the site. The Consultant/Team will designate a point of contact for each task order.

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, weighting factor of 5;
6. Location where the work will be performed, weighting factor of 4. *
7. Consultant's proposed unit costs, weighting factor of 5;

*All respondents will receive a 4 for this category.

**All respondents will receive a 6 for this category.

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. Then the rating will be multiplied by the corresponding weighting factor. The firm's ratings 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 presenting 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. 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 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 will submit semi-annual labor rate information, when requested by DOTD.

The selected Consultant 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 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.

Any Sub-Consultants to be used, including Disadvantaged Business Enterprises (DBE), in performance of this Contract, must also submit a SF 24-102, which is completely filled out and contains all information pertinent to the work to be performed.

The Sub-Consultant's SF 24-102 must be firmly bound to the Consultant's SF 24-102. In Section 9, the Consultant's SF 24-102 must describe the **work elements** to be performed by the Sub-Consultant(s), and state the approximate **percentage** of each work element to be subcontracted to each Sub-Consultant.

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. **700-99-0441**, and will be submitted **prior to 3:00 p.m. CST on Monday, February 25, 2008**, by hand delivery or mail, addressed to:

Department of Transportation and Development
Attn.: Mr. Edward Wedge, III, 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.

Appendix

Table of Estimated Element Quantities

Elem #	Element	Unit	02	03	04	05	07	08	58	61	62	Total
223 & 224	Submerged Column Conc		294	74	182	13	38	30	18	162	47	808
210	Pier wall - Concrete	LF										
211	Pier wall - Other	LF										
215	Abutment - Concrete	LF	82					60			318	460
216	Abutment - Timber	LF	89	415			8		37		56	605
217	Abutment - Other	LF	139								34	173
220	Submerged Cap/Footing - Conc.	EA	38	6	172	12	16		2	2	29	277
225	Submerged Pile Steel	EA	107	42	85	62	63	181	1	36	81	658
226	Submerged Pile Conc - Prestr	EA	3462	2131	370	657	1112	833	94	764	1713	11116
227	Submerged Pile Conc - Reinf	EA	494	28	130	59	141	206	132	218	51	1453
228	Submerged Pile Timber	EA	2079	1784	284	351	821	632	138	310	350	6749

*Note: Pier walls will not be included as part of S.P. 700-99-0441

*Note: All Abutment elements should be lumped in to one unit price as an "Abutment Inspection" and start w/ Level I

*Note: All concrete and timber pile elements should be lumped in to one unit price as an "Conc. / Timb Pile Inspection" and start w/ Level I

*Note: All steel pile elements should be set at one unit price as a "Steel Pile Inspection" and start w/ Level II

*Note: All Level III inspections will be handled by contract supplement at a negotiated price.

*Note: All submerged Cap/Footing elements should be set at one unit price as a "Cap / Footing Inspection" and start w/ Level I

*Note: A unit cost should also be established for upgrading a Level I inspection to a Level II for each unit of measure

*Note: There was no distinction between Elements 223 & 224 during the previous contract. Distinction shall be made this time.

Element Number	Description
223	Column-Submerged/Below Grade-Concrete-Prestressed (EA) This element defines only those submerged or below grade prestressed concrete columns that are visible for inspection. The exposure may be intentional or caused by scour.
224	Column-Submerged/Below Grade-Concrete-Reinforced (EA) This element defines only those submerged or below grade reinforced concrete columns that are visible for inspection. The exposure may be intentional or caused by scour.
226	Pile-Submerged/Below Grade-Concrete-Prestressed (EA) This element defines only those submerged or below grade prestressed concrete piles that are visible for inspection. The exposure may be intentional or caused by scour.
227	Pile-Submerged/Below Grade-Concrete-Reinforced (EA) This element defines only those submerged or below grade reinforced concrete piles that are visible for inspection. The exposure may be intentional or caused by scour.

Condition	Description	Feasible Action
1	No deterioration. Possible discoloration, efflorescence, or superficial cracking but doesn't affect strength or serviceability.	0. Do nothing
2	Minor cracks and spalls and exposed reinforcing possible but no evidence of corrosion. No exposure of prestress system.	0. Do nothing
3	Some delaminations and/or spalls possible. Possible exposure of prestress system but no deterioration. Corrosion of non-prestressed reinforcement possible but section loss is incidental and doesn't significantly affect strength or serviceability.	0. Do nothing 1. Clean steel and patch and/or seal
4	Delaminations, spalls and corrosion of non-prestressed reinforcement are prevalent. Possible exposure and deterioration of prestress system (manifested by loss of bond, broken strands or wire, failed anchorages). Sufficient concern to warrant an analysis to ascertain the impact on the strength and/or serviceability of either the element or the bridge.	0. Do nothing 1. Rehab member 2. Replace member

Element Number	Description
215	Abutment-Concrete (LF) This element defines only those abutments constructed of reinforced concrete. This includes wing walls.
220	Cap/Footing-Submerged/Below Grade-Concrete (EA) This element defines only those submerged or below grade reinforced concrete pile (bent and column) caps and/or footings that are visible for inspection. The exposure may be intentional or caused by scour.

Condition	Description	Feasible Action
1	No deterioration. Possible discoloration, efflorescence, or superficial cracking but doesn't affect strength or serviceability.	0. Do nothing
2	Minor cracks and spalls may be present but there is no exposed reinforcing or surface evidence of rebar corrosion.	0. Do nothing
3	Some delaminations and/or spalls may be present and some reinforcing may be exposed. Possible rebar corrosion but section loss is incidental and doesn't significantly affect strength or serviceability.	0. Do nothing 1. Clean steel and patch and/or seal
4	Advanced deterioration. Corrosion of reinforcement and/or loss of concrete section is sufficient to warrant analysis to ascertain the impact on the strength and/or serviceability of either the element or the bridge.	0. Do nothing 1. Rehab member 2. Replace member

Element Number	Description
225	Pile-Submerged/Below Grade-Steel (EA) This element defines only those submerged or below grade steel piles that are visible for inspection. The exposure may be intentional or caused by scour.

Condition	Description	Feasible Action
1	Little or no corrosion of the unpainted steel. The weathering steel is coated uniformly and remains in excellent condition.	0. Do nothing
2	Surface rust, surface pitting, has formed or is forming on the unpainted steel. Weathering steel has not corroded beyond design limits.	0. Do nothing 1. Clean and paint
3	Measurable section loss due to corrosion but doesn't warrant structural analysis.	0. Do nothing 1. Clean and paint 2. Rehab member
4	Advanced corrosion. Section loss sufficient to warrant structural analysis to ascertain impact on ultimate strength and/or serviceability.	0. Do nothing 1. Rehab member 2. Replace member

Element Number	Description
216	Abutment-Timber (LF) This element defines only those abutments constructed of timber. This includes wingwalls.
228	Pile-Submerged/Below Grade-Timber (EA) This element defines only those submerged or below grade timber piles that are visible for inspection. The exposure may be intentional or caused by scour.

Condition	Description	Feasible Action
1	Investigation indicates no decay. Possible superficial cracks, splits, and checks, but doesn't affect strength or serviceability.	0. Do nothing
2	Decay insect/marine borer infestation. Abrasion, splitting, cracking, checking, or crushing may exist but doesn't affect strength or serviceability. (Back wall beginning to bulge or rotate. – Abutment Only)	0. Do nothing 1. Rehab and/or protect member
3	Decay, insect/marine borer infestation, abrasion, splitting, cracking, or crushing has produced loss of strength or deflection of the element but not of sufficient magnitude to affect serviceability of the bridge. (Back wall bulged and cap rotated but not affecting the serviceability of the structure. –Abutment Only)	0. Do nothing 1. Rehab member 2. Replace member
4	Deterioration is advanced. Decay, insect/marine borer infestation, abrasion, splits, cracks, or crushing affects strengths and serviceability of the bridge. (Back wall bulged, cap rotated and/or piles moving. – Abutment Only)	0. Do nothing 1. Rehab member 2. Replace member

Element Number	Description
217	Abutment-Other (LF) This element defines abutments made of masonry or any other material except concrete or timber. This includes steel sheet pile walls.

Condition	Description	Feasible Action
1	Little or no deterioration. Surface defects only are in evidence.	0. Do nothing
2	There may be minor deterioration, pile splitting or cracking and weathering. Mortar in joints may show minor deterioration.	0. Do nothing 1. Rehab member
3	Moderate to major deterioration, pile splitting and cracking. Major deterioration of joints.	0. Do nothing 1. Rehab member
4	Major deterioration, pile splitting or cracking of materials may be affecting the structural capacity of the element.	0. Do nothing 1. Rehab member 2. Replace member