

## **ENGINEERING AND RELATED SERVICES**

**May 2, 2008**

**STATE PROJECT NO. 700-55-0122**

**LA 664 (ST. CHARLES STREET) TO SAVANNE ROAD**

**ROUTE LA 311**

**TERREBONE PARISH**

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. Mike LaFleur may be reached at (225) 242-4512.

### **PROJECT DESCRIPTION**

The selected Consultant will prepare an Environmental Assessment (EA), a Line and Grade Study and other related documents for the widening of LA 311 from LA 664 (St. Charles Street) to Savanne Road in Terrebonne Parish, in accordance with the National Environmental Policy Act (NEPA), as amended, and the Federal Highway Administration's regulations and guidelines. The Consultant will meet with the Environmental Coordinator/Project Manager within ten days after receiving the notice to proceed.

### **SCOPE OF SERVICES**

The services to be rendered for this Project will consist of the following Stages and Parts:

Stage 1: Planning/Environmental

Part II: Line and Grade Study

Part III: Environmental Evaluation

(b) Environmental Assessment

**Stage 1: Planning/Environmental**

**Part II: Line and Grade Study**

The selected Consultant will conduct all engineering and related services required to inspect and investigate the project area, assemble data, and develop a proposed desirable alignment and grade, preliminary typical sections, preliminary limits of construction, proposed right-of-way required, and preliminary geometric details. Throughout the

course of this study, the Consultant will be required to confer with local officials in the area affected and will maintain close liaison with the Project Manager.

The Consultant will supply aerial photography at a scale of 1":1,000' for the working maps of the project area and a scale of 1":400' for the public hearing map of the project area.

The line and grade study will include but not be limited to:

1. Establishment of design criteria, which will include but not be limited to the following:
  - a. Design Class and Design Speeds.
  - b. Lane Widths
  - c. Minimum Horizontal Curvature
  - d. Maximum Side Slopes
  - e. Horizontal and Vertical Clearances
  - f. Maximum Roadway Grade
2. Traffic Analysis/Study
  - a. Capacity Analyses of Major Intersections
  - b. Required Lane Configurations Based on Level of Service
  - c. Accident Analysis
3. Develop Typical Roadway and Bridge Sections
4. Develop Horizontal Geometry
5. Develop Vertical Geometry and Set Minimum Roadway Grade
6. Identification of Major Drainage Structures (Discuss Drainage History)
7. Establish Approximate Required Right-of-Way Limits
  - a. Develop a List of Impacted Improvements
8. Identification of Existing Utilities
9. Cost Estimates

### **Design Criteria**

The Consultant will establish the design criteria which will include design class and design speed, lane widths, minimum horizontal curvature, maximum side slopes, horizontal and vertical clearances, and maximum roadway guide. The Consultant will prepare a Table of Design Criteria to be included in the EA to document the design criteria that will be used in developing the horizontal and vertical alignments. The design criteria will be based on LADOTD Design Standards, American Association of State Highway and Transportation Officials (AASHTO) guidelines for design speed and functional classification, and on recommendations from DOTD staff.

## **Traffic Analysis**

### Traffic Study

The Consultant will prepare and coordinate a formal traffic study for the purpose of obtaining both existing and projected future traffic variables in accordance with standard operating procedures typically performed in these types of analyses.

The traffic study will include the following tasks.

- Data Acquisition
- Trip Generation, Traffic Assignments and Forecasting
- Traffic Analysis
- Traffic Study Report
- Attendance of Meetings

These tasks are further detailed as follows:

### Data Acquisition

The Consultant will collect current 24-hour traffic counts and peak period turning movement traffic counts within the study area. The manual turning movement counts and machine tube counts will include vehicle classification (percent passenger cars, medium trucks (2 axle/6 tires) and heavy trucks). It is anticipated that the following traffic counts will be collected.

#### A. Turning Movement Counts (AM and PM Peaks)

1. LA 311 @ St. Charles St. (LA 664) Intersection
2. LA 311 @ Mystic Blvd. Intersection
3. LA 311 @ S. Hollywood Rd. Intersection
4. LA 311 @ Savanne Rd. Intersection

#### B. 24-Hour Machine Counts

1. LA 311 between St. Charles St. and Mystic Blvd.
2. LA 311 between Mystic Blvd. and S. Hollywood Rd.
3. LA 311 between S. Hollywood Rd. and Savanne Rd.

Any historical traffic data available within the study area will be provided by the DOTD, the Houma-Thibodaux Metropolitan Planning Organization (HTMPO), and Terrebonne Parish.

Existing Traffic Signal Inventory (TSI) forms will be obtained by the Consultant from the DOTD District 02 Traffic Operations Group to provide existing operational parameters of existing traffic signals within the study area. Any plans, or access to such plans, for upgrades to the subject traffic signals will also be provided to the Consultant. In

addition, the Consultant will be allowed access to all as-built highway plans and aerial photography by the DOTD within the limits of the study area.

### Trip Generation, Traffic Assignments and Forecasting

The Consultant will utilize the HTMPO regional travel demand model to assist in trip generations, traffic assignments, and forecasting future traffic volume demands for the following scenarios.

- A. Base Year 2008
- B. Implementation Year (about 2011) - No Build
- C. Implementation Year (about 2011) - Build
- D. Design Year (about 2031) - No Build
- E. Design Year (about 2031) - Build

The implementation year is the year the project construction is anticipated to be completed. The design year is 20 years after the implementation year. The No Build scenarios assume no highway improvements. The Build scenarios assume an improvement on LA 311 from a 2-lane highway to a 4-lane divided highway.

It is assumed the HTMPO travel demand model will be available to assist in this task. All files necessary to create a street and highway computer network in the travel demand format will be acquired from HTMPO. This will involve becoming familiar with the geographic line layer within the travel demand GIS and the methods to edit the geographic line layer.

All files necessary to run the Trip Generation module in the travel demand model will be obtained from HTMPO. These files will include the Traffic Analysis Zone layer with attached demographic data, trip production rate databases and trip attraction model files. The files will be obtained for both the base year and forecast years. The Consultant will be familiar with the procedures to create a production and attraction table for input into trip distribution.

The Consultant will obtain and become familiar with all files necessary to run the Trip Distribution module for areas included in the travel demand model. These will include friction factors and external / external trip tables for the base year and forecast years. The Consultant will verify that all model components run successfully.

Models for each of the five scenarios will be run to produce Average Daily Traffic Volumes (ADTs). The Consultant will utilize the model output to develop AM and PM turning movement counts at the subject intersections and also roadway volumes. These will represent the implementation year and design year peak hour volumes. The Consultant will prepare figures to graphically represent these numbers.

If an HTMPO travel demand model is not available, the Consultant will obtain historical traffic counts and growth rates on LA 311 from the LA DOTD Transportation Planning

Section to determine appropriate projected implementation year and design year peak hour volumes.

### Traffic Analysis

A traffic analysis will be performed for both the AM and PM peak hours for the following scenarios.

- A. Base Year 2008
- B. Implementation Year (about 2011) - No Build
- C. Implementation Year (about 2011) - Build
- D. Design Year (about 2031) - No Build
- E. Design Year (about 2031) - Build

The following analyses will be performed for each of the scenarios listed above. All analyses will be performed using DOTD approved highway capacity software, preferably Highway Capacity Software Version 5.21 (HCS+).

#### A. Intersection Capacity Analyses

- 1. LA 311 @ St. Charles St. (LA 664) Intersection
- 2. LA 311 @ Mystic Blvd. Intersection
- 3. LA 311 @ S. Hollywood Rd. Intersection
- 4. LA 311 @ Savanne Rd. Intersection

#### B. Roadway Capacity Analyses

- 1. LA 311 between St. Charles St. and Mystic Blvd.
- 2. LA 311 between Mystic Blvd. and S. Hollywood Rd.
- 3. LA 311 between S. Hollywood Rd. and Savanne Rd.

The traffic analyses will be used to produce summary tables displaying levels of service (LOS). This LOS measure of highway performance will then be used for comparison of the five scenarios.

### Traffic Study Report

Upon completion of all tasks described above, a draft Traffic Study report, including summary tables and figures, will be provided to document all findings and recommendations of the study. Findings of the traffic study will be incorporated into the Stage 1 Environmental Assessment Report.

The Consultant will provide the draft Traffic Study for review. Upon review and approval, the Consultant will provide ten copies of the final Traffic Study report signed and sealed by a licensed professional engineer. Appropriate portions of this report will also be included in the final Environmental Assessment Report. Electronic versions of the reports will also be provided.

## Attendance of Meetings

The Consultant will attend the following meetings as required by the project.

- A. Project initiation meeting (1 meeting)
- B. Several progress meetings with DOTD during this study to give status and updates to be held at LA DOTD in Baton Rouge (about 4 meetings)
- C. Public Meetings as required by the LA DOTD Environmental Section (about 2 meetings).

## **Typical Sections**

The Consultant will prepare typical roadway and bridge sections, based upon the Stage 0 report and the functional requirements identified in Section 2, Traffic Analysis. The typical sections may vary by location along the proposed route due to traffic volumes, level of service, design criteria selected, existing development, access control, median and shoulder treatments, and intersection treatments. The Consultant will submit the typical cross section to the DOTD's Project Manager for approval.

## **Horizontal Alignment**

A preliminary horizontal alignment study will be prepared for all alternates. The alignment should consider major utility conflicts, environmentally sensitive areas, existing development, urban constraints, major drainage structures, existing roadway/bridge geometry, super-elevation, and sight distance.

The final refinement to the alignment will be the performance of a constructability review. These reviews will assess if the proposed alignment can be constructed in accordance with the Department's standards (considering maintenance of traffic, etc.). The location of the final alignment(s) will consider:

- Existing Roadway Conditions
- Maintenance of Existing Traffic
- Location of Utilities
- Environmentally Sensitive Areas
- Topographic Features
- Developed Properties
- Urban Constraints

A plan view of the preferred horizontal alignment will be prepared. The following geometric data will be displayed on the plan:

- Curve Lengths (L)
- Tangent Lengths (T)
- Curve Radii (R)
- Super-elevation Rates and Transition Lengths

- Estimated Required Right-of-Way
- Control of Access Limits

In addition, intersection and interchange schematics will be shown on the plans.

### **Vertical Alignment**

The Consultant will determine the minimum required roadway grade. A profile view of the vertical alignments will be prepared. The following geometric data will be displayed on the profile:

- Roadway Grade
- Required Bridge Structure
- P.V.I. Location
- Length of Vertical Curve (V.C.)
- Headlight or Stopping Sight Distance (H.L.S.D. or S.S.D.) and corresponding 'K' Values

The DOTD will review and approve the conceptual geometry prior to publication of the conceptual alignment in the Public Meeting. Subsequent DOTD requested changes in the conceptual geometry will constitute a basis for the Consultant to request compensation for additional services.

### **Identification of Major Drainage Structures (Discussion of Drainage History)**

The Consultant will identify all major drainage structures and provide a discussion of the drainage history of each.

### **Right-of-Way**

The Consultant will estimate the required right-of-way for use in analyzing the various impacts of the alternative and to determine the estimated cost. The Consultant will also develop a list of all impacted improvements.

### **Utilities**

Utility companies will be contacted within the project limits to inform them of the status of the current study. The Consultant will work with the companies to identify all utilities and planned utility improvements that may be affected by the Preferred Alternative. Major utilities will be shown on the plans. Required utility relocations and their costs will be calculated based upon the concept level plans and profiles.

Major underground privately-owned pipelines will be identified and mapped.

## **Cost Estimates**

The Consultant will prepare cost estimates for design, Right-of-Way acquisition and displacements/relocations, utility relocation, all aspects of construction. Roadway costs will be based on current market unit costs.

## **Reports and Submission Packages**

The Consultant will prepare an engineering report with the findings from this engineering line and grade study which will eventually be included in the Environmental Assessment. Information to be included in the report will be, but not be limited to, a table of Design Criteria, recommended typical sections for the proposed improvements, a drainage evaluation of the alignment, a drainage cost estimate, cost estimates for right-of-way, utility relocation and construction, plan and profile displays as noted in sections 4 and 5. Five Copies of the report will be submitted to the DOTD for review and comment. The Consultant will address comments and submit 20 copies of the final report. A pdf file of the report will also be provided.

## **Part III: Environmental Evaluation**

### **(b) Environmental Assessment**

The EA will be prepared in accordance with the Federal Highway Administration's (FHWA) Technical Advisory (TA) 6640.8A, applicable rules, laws, guidance, and regulations. It will also comply with the DOTD's policies. In addition to the format contained in the TA, the EA will contain an environmental determination checklist and summary of mitigation and permits. The EA approved for public distribution and the EA with the Finding of No Significant Impact (FONSI), will be submitted in electronic format in both Microsoft Word and "pdf" formats in addition to the paper copies required.

The Consultant will prepare justification for logical termini of the project for submission to the FHWA for approval.

Public and agency participation will be required through the use of Public Meeting(s), Public Hearing, newsletters, public notices, attendance at local business meetings, etc.

### **SUMMARY OF COMMITMENTS, MITIGATION AND PERMITS**

A summary of mitigation and permits will be placed at the beginning of the EA. All potential permits and their requirements to implement the project will be identified. Any mitigation measure or enhancement committed to by the Village will also be listed in this summary. All commitments regarding implementation of the project will be summarized.

### **ITEMS TO BE ADDRESSED IN ENVIRONMENTAL ASSESSMENT**



### Purpose and Need for Action

The Purpose and Need for the proposed action will be discussed in the EA. The Feasibility Study provides the Purpose and Need for the project and will be used when preparing the Purpose and Need section. The purpose and need will be well written with meaningful and supporting information.

### Alternatives

All alternatives examined in the Feasibility Study will be discussed in the EA. Those alternatives eliminated from further study will be identified and reasons for their elimination will be discussed in the EA. The alternatives will address the Purpose and Need of the project. These alternatives, including the no build alternative, will be described and analyzed in the EA.

The Consultant will develop a typical section and estimate the required right-of-way. The estimated right-of-way will be used in analyzing the various impacts of the proposed alternatives and estimating cost. Exhibits depicting the proposed alternatives and estimated right-of-way takings will be prepared for the document and for the Public Meeting and Hearing. Aerial photography is preferred as a base for the exhibits. Local landmarks and major features will be labeled to assist in interpreting the exhibits.

### Solicitation of Views

A Solicitation of Views (SOV) was conducted on November 27, 2007 by the DOTD. Responses to the SOV will be available for inspection by the Consultant. The Consultant will address any issues or concerns in the EA. All communications and coordination with other federal, state and local agencies will be closely coordinated with the DOTD and approved by the DOTD prior to the contract.

### Impacts

Analysis of each alternative, including the no build, will be made and discussed in the EA. Items to consider include, but are not limited to, traffic patterns, permits, land use, community/social, economic, historic, cultural, recreational, archaeological, noise, air, wetlands, floodplains, farmland, and endangered or threatened species and/or their habitat. Some of these items may require the production of a separate document in addition to the analysis in the EA. Potential mitigation measures designed to reduce or alleviate impacts will be discussed in the document.

### Threatened and Endangered Species

The Consultant will define and describe the protected species associated with the subject project. Species occurrence records will be obtained from the Louisiana National Heritage Program (LNHP), maintained by the Louisiana Department of Wildlife and Fisheries (LDWF), prior to the initiation of field surveys. Field surveys will be conducted

to determine the presence (relative abundance) or absence of protected species and/or their habitat, if applicable. A biological report documenting field survey methods, conclusions, and recommendations will be written. Coordination with knowledgeable staff representing the U.S. Fish and Wildlife Service (USFWS) and LDWF will be conducted in order to determine impacts by the project. Coordination with these agencies will be made through the DOTD Environmental Section or with the express approval of DOTD. Maps showing the areas of concern to threatened and endangered species and their habitats will be included in the biological report. However, the biological report will not be distributed to the public nor will the maps or the report be included as an appendix of the EA. Attempts will be made to avoid impacts to any protected species or their habitats when planning the alternatives. Two (2) copies of the draft report and two (2) copies of each revision will be submitted to DOTD for approval. Once approved, (5) five copies of the final report will be submitted to DOTD as well as an electronic copy in PDF format on a labeled CD.

### Wetlands

Wetlands in the project area will be identified and delineated utilizing the latest appropriate U.S. Army Corps of Engineers guidelines. A Wetlands Finding, using latest FHWA criteria will be written. Information referenced may include infrared photography, National Wetlands Inventory (NWI) maps, quadrangle maps, soil maps, etc. Referenced information will not substitute for an on-site field determination, which will be made. Acreage of wetlands impacted and their value will be calculated and exhibits suitable for reproduction indicating the limits of wetlands in the area affected by the project and the areas to be impacted will be made. All paperwork necessary for the permit application will be prepared by the consultant for the City's use in obtaining the necessary permits. Photographs of each soil sample with the appropriate Munsell soil chart in the same photograph will be included in the report. Each wetland area will be located on a quadrangle sheet as well as a layout map with the station numbers noted. Two (2) copies of the draft report and two (2) copies of each revision will be submitted to DOTD for approval. Once approved, (5) five copies of the final report will be submitted to DOTD as well as an electronic copy in PDF format on a labeled CD.

### Wetland Reserve Program (WRP)

The Consultant will coordinate with the National Resources Conservation Service to determine the location of any WRPs in the project area. If the project impacts a WRP property, the Consultant will notify the DOTD immediately. Attempts will be made to avoid these areas. All WRPs in the area will be mapped in the EA.

### Scenic Streams

A Class B Scenic Stream permit application, if required, will be prepared for each scenic stream in the project area, by the Consultant. Seven (7) copies (all with original photos or color laser print copies) will be provided by the DOTD's Environmental Section.

## Permits

The Consultant will include a section pertaining to applicable state and federal permits and certifications likely to be required for the subject project. All items necessary to obtain the permits, with approval by DOTD, will be provided by the Consultant. The permits to be identified include but are not limited to:

- Corps of Engineers (Wetland permits & Section 10 permits);
- Wetland Permit (USACE);
- Storm Water Permits;
- Scenic Stream Class B Permits;
- Coast Guard (Bridges);
- Coastal Zone Management (CZM); and
- Water Quality Certification.

In the case of waterway crossings, information concerning navigability will be submitted to the DOTD so that a Section 144(h) determination can be made by FHWA and sent to the U.S. Coast Guard for their review and approval.

The Consultant will prepare the documentation necessary to obtain access approval from the Federal Highway Administration. This documentation will be prepared simultaneously with the environmental document.

## Environmental Site Assessment

A Phase I Environmental Site Assessment will be performed in accordance with the ASTM Standard E 1527-00. The Phase I ESA will have four components: Records Review, Site Reconnaissance, Interviews, and the Report. The Consultant will meet with the project team if Recognized Environmental Conditions (RECs) are discovered. Results of site evaluations, findings, conclusions, and opinions concerning the project's impact will be provided in the ESA report. One (1) copy of the draft report and one (1) copy of each revision will be submitted to DOTD for approval. Once approved, ten (10) copies of the final report will be submitted to DOTD as well as an electronic copy in PDF format on a labeled CD.

Testing for contamination is not anticipated. However, if contamination is suspected and limited testing is required to determine impacts to the project area, the contract may be supplemented to cover the additional costs of these activities.

## Noise and Air Quality

A noise study is required for alternatives where the horizontal or vertical alignment of the roadway alignment is substantially changed or where capacity is added. Noise samples will be measured and the current FHWA approved noise model (TNM 2.5) will be used. The DOTD Highway Traffic Noise Policy dated March 2004 applies. The Consultant will submit a noise protocol for approval prior to initiating field measurements and modeling. The Consultant will conduct a reconnaissance of the project area to confirm locations of potentially impacted residents, businesses, and other receptors; perform a document search to ascertain the existence of planned, designed and programmed activities; acquire field measurements of noise levels; model the noise for each alternative requiring modeling for existing, build, and design years; determine highway traffic noise levels for each alternative for the peak-hour; determine noise impacts at sensitive receptors including a comparison of impacts for the existing condition, build year, and design year; and determine the reasonableness and feasibility of noise abatement measures in accordance with DOTD policy.

A separate noise report is required. The report will outline the methodology used and include a description of the model used. The analysis will include documentation of the input data assumptions; identification of other noise sources in the corridor; discussion of modeled noise levels for each alternative, including exhibits showing receptor sites and noise contours; discussion (with a table) of traffic noise impacts resulting from existing condition, build year, and design year; and abatement measures considered and whether they were reasonable and feasible. The report will contain a completed copy of the Department's worksheet as well as an Appendix with model inputs and outputs for each run.

For review purposes, three (3) reports will be submitted. For each revision, three (3) copies will be required. Once the report is approved, five (5) copies of the final will be required as well as an electronic copy in PDF format on a labeled CD. The text part of the final version will be included in the Appendix of the EA.

Past modeling of Carbon Monoxide (CO) emissions have shown that CO emissions from vehicles are decreasing due to improved technology and emission controls. Louisiana is in attainment statewide for CO. CO "hot-spot" analyses, assuming worst-case scenarios, have been performed for many years on similar projects with no violations of the National Ambient Air Quality Standards (NAAQS). For CO the NAAQS is 35 parts per million for the 1-hour average and 9 parts per million for the 8-hour average. It was determined that this project will not violate the NAAQS for CO, as similar projects modeled previously have not demonstrated a violation.

Impacts of the proposed action to air quality in the region will be considered. Information on existing air quality conditions will be obtained from the Louisiana Department of Environmental Quality (LDEQ). Air quality modeling for carbon monoxide (CO) will not be required; however, the EA will contain a discussion concerning general and transportation conformity with respect to the air analysis.

(Cultural Resources) - Archaeology/Historic Properties (Sections 106 & 4(f))

The Consultant will review previous cultural resource survey reports within a 2-mile radius of the logical termini on file at the Louisiana Division of Archaeology and the Louisiana Division of Historic Preservation and coordinate with DOTD as to the need for additional survey work before initiating a Cultural Resources Survey. After initial coordination with the Department and the State Historic Preservation Office (SHPO), a survey will be performed to determine the presence of National Register of Historic Places eligible archaeological sites, both historic and prehistoric, as well as any standing structures or other places or objects, including bridges, eligible for listing on the National Register of Historic Places. The survey will meet the current standards of the Louisiana Division of Archaeology. All research and documentation necessary to comply with Section 106 of the National Historic Preservation Act and Section 4(f) of the Department of Transportation Act will be prepared by the Consultant (i.e. Preliminary Case Reports, Documentation for a Determination of No Adverse or Adverse Effect, Section 4(f) Statements). All coordination with the SHPO's office will be through the Environmental Section or with the express approval of the Environmental Section.

Five (5) copies of the draft Cultural Resources Survey will be submitted to DOTD for review; DOTD will transmit copies of the report to the SHPO for review. Upon approval of the draft, three (3) paper copies and one electronic copy in PDF format on a labeled CD of the final Cultural Resources Survey will be submitted to DOTD; DOTD will transmit the finals to the SHPO.

Two (2) copies of an unbound typed site form or site update form (for previously recorded archaeological sites) and two (2) copies of unbound typed Louisiana Historic Resource Inventory Forms (with original black and white photographs affixed to the forms) for each recorded standing structure will be submitted to DOTD's Environmental Section along with the draft Cultural Resources Survey.

Up to five (5) copies of the draft Section 4(f) Statement will be required for external review purposes. The Section 4(f) Statement will be included in the Appendix of the EA and distributed to requisite agencies as such. An electronic copy in PDF format on a labeled CD will also be submitted to DOTD.

Socio-economic  
Environmental Justice

The Consultant will be responsible for identifying any potential Title VI or Environmental justice issues in the proposed project area. Any instances where Title VI populations bear the bulk of project-related impacts will be reported to the DOTD's Environmental Section, so that appropriate measures may be undertaken to prevent or mitigate for such occurrences.

Impacts to land uses and community services along each alternative will be addressed in the EA along with the social and economic impacts of the proposed action to the community. Anticipated impact to community services during construction will also be discussed. The Consultant will discuss impacts to any planned development for the area.

Relocation impacts will be confirmed via field surveys. A detailed Conceptual Stage Relocation Plan (the Plan) will be prepared and submitted to the DOTD. The Plan will include the estimated number of persons and families to be displaced, by race, the number of persons in each family, and the approximate income level; the type of dwelling (mobile home, frame, brick) and the estimated value; the location and quantity of available replacement housing; if none is available, the estimated cost to build new housing; or whether any displacements have sufficient remainder on which to move or build; the location and types of businesses to be displaced, the race of the owner, estimated number of employees, by race, bypassed businesses if applicable, and a listing of available commercial buildings and sites; the functional replacement of a publicly-owned facility, if applicable and the existence of publicly-owned recreation lands; and the estimated costs of required right-of-way and relocation assistance. Three copies of the final Conceptual Stage Relocation Plan will be submitted. Cost estimates for relocations, displacements, and right-of-way will be included in the document.

#### Conceptual Stage Relocation

Impacts to land uses and community services along each alternative will be addressed in the EA along with the social and economic impacts of the proposed project to the community. Anticipated impacts to community services during construction will also be discussed. The Consultant will evaluate whether the project has a disproportionate adverse impact on minority or low-income groups. The Consultant will evaluate possible mitigation or enhancement measures to reduce or lessen adverse impacts, if any, on the community. To assist in the analyses, the Consultant will contact and coordinate with local officials and community leaders. An electronic copy in PDF format will be submitted on a labeled CD to DOTD.

##### a. Relocations

Relocation impacts will be confirmed via field surveys as well. A Conceptual Stage Relocation Plan will be prepared by the Consultant and submitted to DOTD. Cost estimates for relocations, displacements, right-of-way, construction costs, etc. will be included in the document.

Cost estimates for relocations, displacements, and ROW will be included in the EA. Three (3) copies of the final Conceptual State Relocation Plan will be submitted to DOTD.

### Cost Estimate

Cost estimates for design, ROW (acquisition and relocations), all aspects of construction, utility relocation, and mitigation will be included in the EA. The information will also be used by the DOTD when preparing the Scope and Budget report for the project.

### Recreational sources (4(f) and 6(f))

All public recreational and park land will be identified and delineated within the logical termini. Research, analysis and documentation of compliance with Section 4(f) of the DOT Act will be done for any Section 4(f) property affected. Use of Land and Water Conservation Funds will be identified by the Consultant.

### **Additional Coordination**

The Consultant will coordinate impacts to prime farmland with the Natural Resources Conservation Service and contact the local floodplain administration concerning impacts to the floodplain.

Coordination (via meetings, e-mail, phone conversations and letters) with local officials and resource agencies is required to determine the presence of outstanding issues. The Environmental Section will be kept apprised of all coordination efforts prior to the Consultant making the contacts. All efforts must be documented for the file. Items of special or local interest should be noted and evaluated within the context of the project.

### Other

Other items that will need to be discussed in the analyses are traffic impacts (cars and trucks), and other proposed projects in the area that may have an impact on the proposed action or that may be impacted by the proposed action. Existing traffic data can be obtained from DOTD.

A discussion of secondary and cumulative impacts is required. The Consultant will research other projects in the area and contact local officials and planning organizations in the area about their long range plans, upcoming projects or planned developments.

The Consultant will maintain a list of all persons expressing an interest in the project.

### Public Meeting

At least one Public Meeting will be required for this project. If additional Public Meetings are required, these will be added at the discretion of the DOTD and FHWA. All arrangements for the Public Meeting(s), including location, time, preparation of notice, preparation of appropriate exhibits, preparation of the technical presentation, and handouts will be made by the Consultant, subject to the DOTD's Environmental Section

approval. The Public Meeting(s) will be an open-house format. The Consultant will advertise the notice of the Public meeting(s) upon the DOTD's approval of the notice) in the newspaper(s), as well as other media agreed upon by the DOTD. The text of the notice will be provided to the DOTD Environmental Section's Project Manager for review at least one (1) month prior to the anticipated Public Meeting(s) date. Public Meeting exhibits, handouts, and technical presentations will be supplied to the DOTD Environmental Section's Project Manager for approval prior to the Public Meeting(s) date.

The Consultant will also be responsible for providing visualization for the Public Meeting. The visualization will depict the important aspects that are pertinent to the project. Visualization in the past has included, but not been limited to, handouts, power-point presentations, and various large scale exhibits. The Consultant will prepare the exhibits and submit them to DOTD's Environmental Coordinator for approval prior to the Public Meeting date.

Actual conduct of the Public Meeting will be by staff from the Consultant. The Consultant will have knowledgeable informed staff present at the Public Meeting to address the queries of the public, in regard to environmental, engineering and other project related issues. The Consultant will tape and prepare a verbatim transcript of the Public Meeting. The Consultant will be responsible for the distribution of the transcript. It is anticipated that sixty (60) copies of the transcript will be required for distribution. A paper copy of the transcript will be submitted to DOTD as well as a copy in electronic (pdf) format on a labeled CD.

#### Review of Draft Environmental Document

The EA will be written in accordance with FHWA's guidelines. Ten (10) copies of the draft EA will be provided to DOTD's Environmental Section for their review, comments and distribution. For each revision, an additional ten (10) documents will be required. All comments will be addressed by the Consultant prior to the Environmental Section issuing approval to print the draft EA for public distribution. Distribution of the Draft Environmental Assessment will be the responsibility of the Consultant. The DOTD Environmental Section's Project Manager will provide the Consultant with the mailing list to be used for distribution of the Draft Environmental Assessment.

#### Environmental Assessment

The draft EA will be typed, single spaced, on 8 ½ x 11 inch paper with inside margins of not less than 1 inch wide. All pages will be numbered. Photographs, plans, maps, drawings and text must be clear and clean with typed or mechanically lettered captions. Exhibits utilizing the 8 ½ x 11 inch format are preferred. Sixty (60) copies of the approved Draft Environmental Assessment will be distributed by the Consultant. The Consultant's name and logo will not appear on the cover of the document. They can appear, however, on the inside cover sheet in a size not to



exceed the Department's name and logo. A paper copy and electronic copy in pdf format on a labeled CD will be provided to DOTD.

### Public Hearing

After approval by the Department's Environmental Section and FHWA, the Draft EA will be made available to the public and a Public Hearing will be scheduled. All arrangements for the Public Hearing, including location, time, preparation of legal notice, preparation of appropriate exhibits, preparation of the technical presentation, and handouts will be made by the Consultant, subject to the Environmental Section's approval. The Consultant will advertise the legal notice of the Public Hearing in the local newspaper and inform local officials and community leaders. The text of the legal notice, including the project map, will be provided to DOTD's Environmental Coordinator for review at least two (2) months prior to the anticipated Public Hearing date. Public Hearing exhibits and the Public Hearing technical presentation will be supplied to DOTD's Environmental Coordinator for approval prior to the Public Hearing date and authorization of the legal advertisement. The scale of the exhibits for the Public Hearing must be approved by the Environmental Section.

Actual conduct of the Public Hearing will be by the Consultant. The Consultant will make a presentation and have knowledgeable informed staff present at the Public Hearing to address the queries of the public, in regard to environmental, engineering and other project related issues, before the Hearing, at the recess, and after the Hearing. The Consultant will tape and prepare a verbatim transcript of the Public Hearing. Sixty (60) copies of the transcript will be distributed by the Consultant. A copy of the transcript will be provided to DOTD's Environmental Coordinator for approval before distribution. A paper copy and an electronic PDF format copy on a labeled CD of the transcript will be provided to the Environmental Section.

### Public Hearing & Environmental Assessment Comments

All comments received during the commenting period on the draft EA, including those received at the Public Hearing, will be addressed in the Final EA by the Consultant. Ten (10) copies of the Final EA addressing comments are required. After approval by the DOTD's Environmental Section of the Final EA and issuance by FHWA of the FONSI, sixty (60) copies of the EA with FONSI will be distributed by the Consultant. A paper copy and an electronic (pdf) copy on a labeled CD will be provided to DOTD.

### **Miscellaneous**

The distribution lists for the SOV, Draft EA, transcripts, and FONSI must be approved by the Environmental Coordinator prior to the distribution of any of these documents.

The consultant will notify the Environmental Section when fieldwork begins and ends. The consultant will also update the Environmental Section (via e-mail) weekly as to their progress in the field.

All reference material utilized will be noted and an accurate and complete bibliography supplied to the Department with the draft and final documents. Accessibility and location of all reference material utilized will be noted (i.e., library location, etc.). Utilization of unpublished material or otherwise not easily accessible material will be specifically coordinated with the Environmental Section prior to its use in the document.

On all correspondence with the Department's Environmental Section the consultant will use all applicable state project numbers (i.e., engineering and construction), along with the project name, route number, parish, and federal aid project number.

The consultant will provide the Environmental Section with a monthly progress report. The report will include the estimated and actual date of completion of each task to be performed. The consultant will use the Department's standard form for invoicing.

## **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 to the Consultant for services rendered in connection with this Contract will be an actual cost plus a negotiated fixed fee, with a maximum compensation 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 will 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 360 calendar days. The delivery schedule for all project deliverables will 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 professionally competent in the preparation of NEPA documents.
2. At least one Principal or other Responsible Member of the Prime-Consultant must have a minimum of five years experience in the preparation of NEPA documents in accordance with the National Environmental Policy Act (NEPA) for the FHWA, including Environmental Assessments and who has completed the “NHI course No. 142005, National Environmental Policy Act (NEPA) and Transportation Decision Making”, or an equivalent course.
3. In addition to the above requirements, the Prime Consultant must also employ on a full-time basis, or through the use of a Sub-Consultant(s):
  - a. One Environmental Professional with a minimum of three years of experience with highway traffic noise analysis.
  - b. One Wetlands Biologist with a degree in biology, or a related field, and a minimum of three years experience in wetlands delineation.
  - c. One Principal Investigator who meets the Archaeologist Qualifications as published in the Louisiana Register dated April 20, 1994, must have completed the course on Section 106 of the National Historic Preservation Act offered by the Advisory Council, or its equivalent training.

- d. Ecological, Archaeological, and other environmental professionals are required for the performance of a significant portion of the work.
- e. One Professional Civil Engineer registered in the State of Louisiana, with at least five years experience in roadway design and a corresponding support staff.
- f. One Professional Civil Engineer registered in the State of Louisiana with at least five years experience in traffic engineering and a corresponding support staff.

### **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 will provide limited input and technical assistance to the Consultant. The Consultant's plans will 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 will 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.

### **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 NEPA Studies (EN) performance rating will be used for this project.

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.

If Sub-Consultants are used, each member of the Consultant/Team will be evaluated on their part of the contract, proportional to the amount of their work. The individual team member ratings will then be added to arrive at the Consultant/Team 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](http://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. 700-55-0122, and will be submitted **prior to 3:00 p.m. CST on Tuesday, May 27, 2008**, by hand delivery or mail, addressed to:

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