

**ENGINEERING AND RELATED SERVICES
MAY 18, 2012**

**STATE PROJECT NO. H.000688.2
F.A.P. NO. H000688
US 11 NORFOLK SOUTHERN RAIL ROAD
ROUTE: US HIGHWAY 11
ST. TAMMANY 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 DOTD Form 24-102 (24-102), “Professional Engineering and Related Services”, revised November 2011, 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) will be selected for this Contract.

Project Manager – Mr. Nicholas Olivier, P.E.

All inquiries concerning this advertisement should be sent in writing to Alan.Dale@LA.gov.

PROJECT DESCRIPTION

The scope of services for this project consists of the preparation an Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA), as amended, and the Federal Highway Administration’s (FHWA) regulations and guidelines. The Louisiana Department of Transportation and Development (LADOTD) is proposing to replace the US 11 Bridge over the Norfolk Southern Railroad in St. Tammany Parish. The proposed project includes the widening of US 11 from two lanes to four lanes from US 190 north to I-12.

SCOPE OF SERVICES

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

Stage 1: Planning/Environmental

Part II: Line and Grade Study

Part III: Environmental Evaluation

(b) Environmental Assessment (EA)

Part IV: Conceptual Design

The consultant will be provided the Stage 0 Feasibility study for the US 11 Corridor as well as the Stage 0 Feasibility study for replacement of the US 11 Bridge over the Norfolk Southern Railroad.

The consultant will evaluate the social, economic, and environmental consequences of up to three (3) build alternatives, along with the no-build alternative, and present this information in an Environmental Assessment. A Public Meeting will be held to inform the public of the projects, potential impacts of the projects, and to obtain comments and input from the public on the alternatives, design features, and impacts. A Public Hearing will be held to inform the public of the results and conclusion of the Environmental Assessment and to obtain input from the public on the Environmental Assessment. The Consultant will submit to the Department a revised EA that addresses public and agency comments. The Department will review the revised EA and, if appropriate, request a Finding of No Significant Impact (FONSI) from FHWA. FHWA will either issue a Finding of No Significant Impact or determine that an Environmental Impact Statement (EIS) is necessary.

I. LINE AND GRADE STUDY, TRAFFIC STUDY, AND BRIDGE DESIGN

A Stage 0 study was previously prepared for the project and will be provided to the consultant for their use. The consultant will be responsible for undertaking the line and grade study which will include, but not be limited by, the following:

1. Establish design criteria (including but not limited to)
 - a. Design class and design speeds
 - b. Lane widths
 - c. Minimum horizontal curvature
 - d. Maximum and minimum side slopes
 - e. Horizontal and vertical clearances
 - f. Maximum roadway grade
2. Review and verification of typical roadway and bridge sections established in the Stage 0 study
3. Factors for design consideration
 - a. Alignment development in accordance with Department standards
 - b. Required lane configuration for an acceptable Level of Service
 - c. Develop horizontal geometry
 - d. Develop vertical geometry and set minimum roadway grade
 - e. Identify major drainage structure locations
 - f. Establish approximate Right-of-Way limits
 - g. Develop a list of impacted improvements
 - h. Refine and verify cost estimates for Right-of-Way, Utility relocations, and construction established in the Stage 0 study
4. Horizontal alignment
 - a. A preliminary horizontal alignment study will be prepared for each alternative. The alignment should consider major utility conflicts, major drainage structures, existing roadway/bridge

geometry, superelevation, and sight distance issues. The final refinement to the alignment will be adjusted based on a constructability review. The final alignment should consider:

- i. Existing roadway and bridge conditions
 - ii. Maintenance of traffic
 - iii. Location of utilities
 - iv. Environmentally sensitive areas
 - v. Topographical features
 - vi. Developed properties
 - vii. Urban constraints
 - viii. Railroad crossing
- b. A plan view of each horizontal alignment will be prepared on aerial photography. The following geometric data will be displayed on the plan:
- i. Curve lengths (L)
 - ii. Tangent lengths (T)
 - iii. Curve radii (R)
 - iv. Superelevation rates and transition lengths
 - v. Estimated R/W limits, existing and required
 - vi. Control of Access limits (if applicable)
 - vii. Intersection and/or schematics
 - viii. Baselines and stationing
 - ix. New edge of pavement and shoulder lines
 - x. Curb lines
 - xi. Lane and shoulder dimensions
 - xii. Bridge limits
 - xiii. Existing and relocated utilities, as known
 - xiv. Major drainage features, if any
 - xv. Railroads
 - xvii. Signalized intersections
5. Vertical Alignment
- a. A vertical alignment study will be prepared for each alternative. The vertical alignment should consider above ground and below ground utilities, major drainage or structure locations, overpass clearances, etc.
 - b. A profile view of each vertical alignment will be prepared on aerial photography. The following geometric data will be displayed on the profile
 - i. Vertical grades
 - ii. P.V.I. locations
 - iii. Length of Vertical curve (V.C.)

B. Traffic Study

1.0 Traffic Study

The Consultant shall prepare a formal traffic study for the purpose of improving mobility and easing congestion along the US 11 corridor. Standard operating procedures typically performed in these types of analyses shall be used.

The traffic study scope of work shall include the following tasks.

- Project Research
- Data Collection
- Traffic Analyses
- Traffic Study Report
- VISSIM Traffic Simulation Animation
- Comparison of Alternatives

1.1 Project Research

The Consultant shall use the 7-day twenty-four (24) hour machine traffic counts, peak period turning movement traffic counts, peak hour observations, and travel time runs from the data that (Louisiana Department of Transportation and Development) LADOTD Traffic Engineering Management has within the study area for the US 11 “Stage 0” Feasibility Study. These manual turning movement counts and machine tube counts include vehicle classification (percent passenger cars, medium trucks (2 axle, 6 tires) and heavy trucks).

LADOTD Traffic Engineering Management will also provide the Synchro file for Base Year 2012 – No Build analysis. Any historical data available within the study area shall be provided by LADOTD, St. Tammany Parish, and City of Slidell.

Existing Traffic Signal Inventory (TSI) forms shall be obtained by the Consultant from the LADOTD District 62 Traffic Section 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 LADOTD within the limits of the study area.

Provided by LADOTD:

- A. Synchro File for Existing Condition
- B. Warrant Analysis
- C. Travel Time Runs
- D. US 11 Peak Hour Observations
- E. 7-Day 24-Hour Counts for:

- US 11 at US 190 – 4 approaches
 - US 11 at Lafayette Street – 4 approaches
 - US 11 at North Boulevard – 3 approaches
 - US 11 at I-12 Eastbound Ramp – 3 approaches
 - US 11 at I-12 Westbound Ramp – 4 approaches
- F. Peak Period Turning Movement Counts for:
- US 11 at US 190
 - US 11 at Lafayette Street
 - US 11 at North Boulevard
 - US 11 at I-12 Eastbound Ramp
 - US 11 at I-12 Westbound Ramp

1.2 Data Collection

The Consultant shall collect twenty-four (24) hour machine traffic counts, speed counts, peak period turning movement traffic counts, and 15-minute counts for the study area. The manual turning movement counts and machine counts shall include FHWA Vehicle Classifications 1-14. The manual turning movement counts shall include *demand* volume. The consultant shall also collect queue observations during the peak periods. It should be noted if existing queues at the study location creates an issue for nearby intersections, or vice versa. In addition to the information already received by LADOTD Traffic Engineering Management, the data collection shall include the following:

- A. 24-Hour Machine Counts
1. US 11 at E. Hall Avenue – 4 approaches
 2. US 11 at Pennsylvania Avenue – 4 approaches
- B. Speed Counts
1. US 11 near E. Hall Avenue
 2. US 11 near Pennsylvania Avenue
 3. US 11 near Gause Boulevard
 4. US 11 near Lafayette Boulevard
 5. US 11 near North Boulevard
 6. US 11 near the I-12 Eastbound Ramp
 7. US 11 near the I-12 Westbound Ramp
- C. Peak Period Turning Movement Counts (with Demand Volume Included)
1. US 11 at E. Hall Avenue – 4 approaches
 2. US 11 at Pennsylvania Avenue – 4 approaches
- D. 15-minute Counts (AM, PM, and Noon)
1. US 11 at Powell Drive
 2. US 11 at Ben Thomas Road
 3. US 11 at Addis Boulevard

4. US 11 at Indiana Avenue
5. US 11 at Florida Avenue
6. US 11 at Michigan Avenue

Approval of traffic counts by the LADOTD Traffic Engineering Management Section is required before proceeding to the next step.

Deliverables: Data collected by the Consultant. It should be in an organized and easily read format.

1.3 Speed Study

Seven spaced speed studies shall be conducted according to LADOTD's EDSM VI.1.1.1 at the locations described in 2.2B.

Deliverables:

- Data Sheet
- Chart showing the 95th, 85th, and 50th percentile speeds

1.4 Traffic Analyses

Intersection and Segment Roadway Traffic analysis shall be performed for the AM, Noon, and PM peak hours for the following scenarios.

- A. Base Year (2012) - No Build (files shall be provided by LADOTD Traffic Engineering Management)
- B. Base Year (2012) - Build
- C. Design Year - No Build
- D. Design Year - Build

All intersection analyses will be performed using LADOTD approved Synchro 8. All alternatives must be approved by LADOTD Traffic Engineering Management Section before proceeding to the next step of analyzing the alternatives. Intersections warranting traffic signals shall have at least three alternatives. Intersection alternatives may include but are not limited to:

- Restricted median openings
- Signalized and unsignalized intersections
- Median U-turns at existing signal locations such as an RCUT using 2-phase signals

Modified or created median openings shall be designed in accordance with EDSM VI.2.1.4.

All roadway segment analyses will be performed using LADOTD Synchro 8. The suggested intersection improvements shall be included in each analysis, so that the roadway can be analyzed as a whole. The proposed improvements to the US 11 roadway shall have at least three alternatives. Alternatives may include but are not limited to:

- Control of access with frontage roads in undeveloped areas
- Four-lane divided roadway with limited access from side streets and directional U-turns

Deliverables:

- Comparison chart with AM, Noon, and PM delays for each approach of each signalized and unsignalized intersection of each alternative. If U-turns are considered, then the U-turns associated with the intersection shall be included with the delay and queue lengths.
- Synchro Files
- Comparison chart with AM, Noon, and PM travel times for segments in each alternative. If U-turns are considered, then the U-turns shall be included in the chart with the respective delay and queue lengths.

1.5 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 five (5) 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.

Deliverables:

- Draft Traffic Study
- Five (5) copies of the final Traffic Study report signed and sealed by a licensed professional engineer

1.6 VISSIM Traffic Simulation Animation

The Consultant shall use VISSIM to develop animations of the proposed alternatives for high and low volume situations. (No calibration is required.)

Deliverables: Windows Media Player videos of proposed alternatives

1.7 Comparison of Alternatives

The Consultant shall develop a preliminary cost estimate for each proposed project concept. The project costs will include comparisons of cost of control of access, construction, maintenance, and mobility (to be measured in travel time).

Deliverables: Comparison chart for each alternative with intersection delays, maintenance cost, construction cost, right-of-way cost, and travel time northbound and southbound on the proposed improvements to US 11.

C. Bridge Design

The following bridge tasks shall be performed under this contract:

Task 1:

Review Stage 0 documents and update design criteria in accordance with the latest versions of the following documents:

- AASHTO LRFD Bridge Design Specifications
- LADOTD Bridge Design Manuals
- LADOTD Bridge Design Technical Memoranda
- LADOTD Minimum Design Guidelines
- AASHTO Geometric Design of Highways and Streets
- Norfolk Southern Railroad Design Standards
- AREMA
- EDSM'S

Task 2:

Review as-built plans, geotechnical data, existing R/W, traffic/accident data, parish maps, scaled aerial photos of the site, DOTD roadway classification, the latest DOTD bridge inspection reports and existing load rating reports for the bridge if applicable. Conduct a field visit to the bridge site, assess the site conditions, and have a reasonable understanding of the existing structure's health and its serviceability.

Task 3:

Refine the bridge geometry by applying all geometric and environmental constraints in conjunction with the current design criteria. Provide the Line and Grade study (or Plan and Profile sheet) showing the beginning and end of bridge, required vertical and horizontal clearances, and the proposed superstructure and substructure types.

Task 4:

Review Stage 0 cost estimate and provide refined construction cost estimate for each portion of the structure. Provide engineering cost estimate.

Information provided by DOTD

Stage 0 reports

Access to DOTD information

Available Bridge as-built plans

Consultant Submittals

The following information shall be included as part of the project submittal:

- Design Criteria
- Updates to Stage 0 analysis results
- Line and Grade Study (or Plan and Profile sheets) showing the beginning and end of bridge, required vertical and horizontal clearances, and proposed superstructure and substructure type
- Construction cost estimate for each structure
- Engineering cost estimate

II. ITEMS TO BE ADDRESSED IN THE ENVIRONMENTAL ASSESSMENT

A. Summary of Mitigation and Commitments

A summary of all mitigations and commitments will be placed at the beginning of the Environmental Assessment. All potential permits and their requirements to implement the project shall be identified. Any mitigation measure or enhancement shall be included in this summary.

B. Solicitation of Views and Logical Termini

The consultant will solicit the views of resource agencies and local officials. The consultant will prepare and submit a project description and vicinity map. Upon approval the consultant will be given the mailing list for the solicitation. The consultant will follow-up on responses and requests made by the agencies and officials. The consultant will prepare a Logical Termini request that includes a map of the project with both northern limits and southern limits identified on the map. It is anticipated that the termini will be I-12 to the north and US 190 to the south. This request will have to be approved by DOTD's environmental section prior to submission to FHWA.

C. Purpose and Need for Actions

The purpose and need for the proposed action will be discussed in the Environmental Assessment. Traffic needs (including existing and future needs), traffic patterns, and traffic movements will be provided in the Master Plan and Stage 0 by LADOTD.

The purpose and need will be clearly described in accordance with FHWA guidance, coordination during the Master Plan study, and collaboration among LADOTD, FHWA, and the project team. The following issues and other relevant supporting information may be included in this discussion of project purpose and need to the extent applicable:

project status; vehicle capacity needs; system linkage needs; transportation demand; social demands and economic development; model interrelationships; and roadway deficiencies.

The Consultant will coordinate with local, regional, state, and federal agencies to obtain available supporting information concerning the preliminary purpose and need for this project.

The Consultant will coordinate on the identified purpose and need for this project. Input will be sought and obtained from LADOTD, FHWA, any cooperating or participating agencies identified for the EA, and other federal and state agencies as appropriate.

D. Alternatives

The two alternatives recommended by the feasibility study, and if necessary, a NEPA derived alternative will be discussed in the EA (up to four total alternatives including the No-Build Alternative). Only alternatives that meet the project's purpose and need are considered reasonable. If any alternative is dismissed at an early stage, the reasons for the dismissal shall be discussed in the EA. The alternatives shall address the purpose and need of the project. These alternatives, including the No-Build, will be described and analyzed in the environmental document. The consultant will develop between three (3) and eight (8) typical sections and estimate the required right-of-way for each of the different alternatives. The estimated right-of-way takings will be used in analyzing the various impacts of the alternatives and for estimating costs.

E. Impacts

Analysis of each alternative, including the No Build, will be made and discussed in the Environmental Assessment. Items to consider include, but are not limited to, traffic patterns, permits, land use, community/social, economic, historic, cultural, recreational, archaeological, noise, air, hazardous waste sites, 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 Environmental Assessment. Potential mitigation measures designed to reduce or alleviate impacts will be discussed in the document.

1. Wetlands

A Wetlands Findings Report delineating impacts to wetlands and Other Waters of the United States will be prepared for comparison during the EA process.

Potential wetlands within the study area will be initially identified via desktop investigations using aerial and infrared photography, U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory maps, U.S. Geological Survey quadrangle maps, Natural Resources Conservation Service (NRCS) soil maps, and other available resources.

A field survey will be conducted on all alternatives, within the required ROW and/or limits of construction, whichever is greater. Wetlands will be delineated in accordance with the *1987 United States Army Corps of Engineers (USACE) Wetland Delineation Manual* and the *2010 USACE Atlantic and Gulf Coastal Plain Regional Supplement*. Field-delineated wetland boundaries will be documented with sub-meter capable GPS units, then mapped using current USACE GIS/wetland mapping guidelines. Field-determined characteristics and delineation data for wetlands occurring within the study area of the alternatives will be recorded on currently accepted USACE Wetland Determination Data Forms by the Consultant and provided within the Wetlands Finding Report. Ecological values and potential impact quantities for all wetlands and Other Waters of the United States identified within the study areas will be calculated in acres in the report and provided to the LADOTD for use in the subsequent permit application process, which is not included in this scope.

The Wetlands Finding Report, using the latest FHWA criteria, will be submitted to the LADOTD for review and comment. It will include reproducible maps and photographs of each soil sample taken during wetland delineation activities. Soil sample photographs will include appropriate Munsell soil chart pages for each sample. Quadrangle and layout maps provided in the report will depict locations of delineated wetland areas and respective project station numbers. If wetland impacts are minor and the Wetlands Findings Report small, the report may be placed in an appendix of the EA document as needed. Five (5) copies of the draft report and two (2) copies of each revision will be submitted to LADOTD for approval. Once approved, (5) five copies of the final report will be submitted to LADOTD as well as an electronic copy in PDF format on a labeled CD. Associated GIS files/data used in preparation of the documents will also be provided to LADOTD.

2. Wetland Reserve Program

The Consultant will coordinate with the NRCS to determine the locations of any Wetland Reserve Program (WRP) parcels within the study area. All WRPs will be mapped in GIS and used as a constraint to avoid when evaluating alternatives. If WRPs are affected by any alternative, the Consultant will notify LADOTD immediately.

3. Endangered and Threatened Species

The Consultant will confirm all federally and state-listed species within the project area prior to beginning field surveys via desktop investigations of accessible and peer-reviewed natural resource databases, queries of the Louisiana Natural Heritage database, and through coordination with the United States Fish and Wildlife Service (USFWS) and the Louisiana Department of Wildlife and Fisheries (LDWF).

The Consultant will continue coordination with USFWS and LDWF, regarding specific listed species and/or habitats which may be encountered during desktop and field surveys in order to determine potential impacts by relevant project alternatives. Coordination with these agencies will be made through the LADOTD Environmental Section or with the expressed approval of LADOTD. Preliminary field surveys will be conducted to determine the presence or absence of potentially suitable habitat of listed species.

A Biological Survey Report identifying field survey study parameters and findings concerning threatened and endangered species of the project area will be prepared and submitted to LADOTD for review and comment. Once approved, the final report will be submitted to LADOTD. Materials provided will document desktop and field survey methodologies, agency coordination and comments, as well as provide conclusions and recommendations. Maps disclosing locations of protected/listed species populations, concern areas, and/or suspected habitats which may be included in communications or documents provided to the LADOTD and regulatory agencies will not be distributed to the public, nor will these maps or report/memo wording disclosing the location of known or suspected listed species populations be included in the EA. Attempts will be made to avoid impacts to protected species or their habitats when planning the alternatives. If the presence of any state-listed species and/or habitat is confirmed by the Biological Survey Report, the Consultant will coordinate with the LDWF regarding habitat protection and potential mitigation measures. Five (5) copies of the draft Biological Survey report and two (2) copies of each revision will be submitted to LADOTD for approval. Once approved, (5) five copies of the final report will be submitted to LADOTD as well as an electronic copy in PDF format on a labeled CD.

If, through coordination with the appropriate agencies and survey results, it is determined that a Biological Assessment will be needed to quantify any project impacts to any endangered species, the Consultant will develop a Biological Assessment. The Biological Assessment, which will include maps showing the areas of concern to threatened and endangered species and their habitats, shall document field survey methods, agency coordination, conclusions, and recommendations. Five (5) copies of the draft Biological Assessment report and two (2) copies of each revision will be submitted to LADOTD for approval. Once approved, (5) five copies of the final report will be submitted to LADOTD as well as an electronic copy in PDF format on a labeled CD. This report will not appear in the EA.

5. Other Permits

All potential permits and their requirements to implement the project will be identified. All items necessary to obtain the permits (with the concurrence of the Department) will be provided by the consultant. Those permits to be identified include, but are not limited to, the following:

- Corps of Engineers (Section 404 permit and/or Section 10 permit)
- Water Quality Certification
- Storm Water Permits

6. Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment will be performed for this project in accordance with the ASTM Standards E 1527-05. The Phase I Environmental Site Assessment has four components: Records Review, Site Reconnaissance, Interviews, and Report. The consultant will meet with the Environmental Section's Project Coordinator if Recognized Environmental Conditions (RECs) are discovered. Results of site evaluations, findings, conclusions, and opinions concerning the site's impact will be provided in the Environmental Assessment.

7. Noise Quality

A highway traffic noise analysis will be performed for all Build Alternatives and the No Build Alternative in accordance with the following:

- Louisiana Department of Transportation and Development, Highway Traffic Noise Policy, date July 2011
- Chapter 23, Part 772, Code of Federal Regulations: Procedures for Abatement of Highway Traffic Noise and Construction Noise
- FHWA-PD96-046, Measurement of Highway Noise
- FHWA Traffic Noise Model Technical Manual and User's Guide (TNM Version 2.5)
- Highway Traffic Noise: Analysis and Abatement Guidance, dated June 2010 (Revised January 2011).

The Consultant will make one (1) trip for field review and noise measurements. The Consultant will locate receivers where noise samples will be taken and locate traffic count locations, and obtain DOTD's concurrence before the beginning of fieldwork.

Four (4) copies of the Draft Noise Study shall be submitted to the DOTD's Environmental Section. Upon review, comment and approval, five (5) copies of the Final Noise Study and one (1) PDF version, shall be submitted to the DOTD's Environmental Section for distribution.

This work will include the following sub-tasks:

- 1) Identification of Noise Sensitive Areas: Existing permitted or programmed uses or activities which may be affected by highway noise will be identified within the project corridor.
 - i) Map
 - ii) Brief narrative
- 2) Determination of Existing Noise Levels

- i) Field Measurements: Field measurements will be taken throughout the corridor in each major segment (between major intersections). Measurements will be taken on both sides of the corridor at receiver locations approved by DOTD. Traffic counts / vehicle classification counts will be conducted simultaneously with the noise measurements. The purpose of the field noise measurements will be to determine the existing noise environment and provide a general method of corroborating noise model results.
 - ii) Establish field noise measurement program:
 - a. Through a review of plans, maps and aerial photos and discussion with DOTD, determine preliminary locations where noise samples will be taken.
 - b. Locate traffic count locations
 - c. Prepare noise field monitoring memorandum documenting the foregoing information
 - d. Review with DOTD project staff
 - e. Revise as per DOTD comments
 - f. Finalize plan during field review, discuss with DOTD.
 - iii) Conduct field noise measurements and traffic counts and speed estimation.
 - iv) Summarize findings for inclusion in the noise report.
- 3) Estimate Highway Noise for No Build Alternative
- i) Estimate existing roadway noise levels using the TNM noise model
 - a. Input current horizontal and vertical roadway and receiver geometry
 - b. Input traffic volume, classification and speed information (provided by DOTD) for build and design years
 - c. Run and check TNM model
 - d. Review results with DOTD staff
 - e. Revise as per DOTD comments
 - ii) Summarize findings for inclusion in the EA
- 4) Prediction of Traffic Noise Levels for all Build Alternatives:
- i) Estimate existing roadway noise levels using the TNM noise models:
 - a. Input project horizontal and vertical roadway geometry
 - b. Locate future uses not currently built, but those which are permitted.
 - c. Input traffic volume, classification and speed information (provided by DOTD)

- d. Run and check TNM model
- e. Review results with DOTD staff
- f. Revise as per DOTD comments

5) Summarize findings for inclusion in the Noise Report:

- i) Evaluation of Traffic Noise Impacts:
 - a. Compare existing and future noise levels with the DOTD Noise Abatement Criteria
 - b. Summarize finding for inclusion in the Noise Report

6) Evaluation of Alternate Noise Abatement Measures to Mitigate Impacts

- i) Traffic management measures
- ii) Alteration of horizontal and vertical alignments
- iii) Construction of noise barriers:
 - a. Determine acoustical feasibility of constructing noise barriers in the various impacted sections of the project roadway
 - b. Determine the appropriate barrier length, height and location to achieve needed abatement.
 - c. Determine construction costs for noise barrier alternates using DOTD-provided unit cost(s).
 - d. Determine the reasonableness of constructing noise barriers
- iv) Insulation of Activity Category D land uses facilities listed in the DOTD noise policy.
- v) Acquisition of property rights to serve as a buffer zone to preempt development which would be adversely impacted by traffic noise.

7) The noise impact report will be submitted either as a technical appendix to the EA or as a separate report, at the discretion of the DOTD, for review and comment by DOTD. The report will include standard DOTD construction noise impact and control language and will include all of the TNM input values and output tables. A summary of the text will be included in the appropriate section of the EA.

8. Air Quality

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). Discussions concerning conformity (transportation and general) will be included in the air analysis. A project-level air analysis will be prepared by comparing the project to a previously modeled project under similar conditions.

9. Cultural Resources – Archaeology/Historic Properties (106 & 4(f))

A Phase I cultural resource survey will include an archaeological and standing structure survey of all build alternatives.

Phase II National Register of Historic Places (NRHP), if necessary, will be covered under this agreement. Any additional testing or Phase III data recovery may be conducted under a supplement to this agreement. All coordination with the SHPO's office will be through the Environmental Section or with the express approval of the Environmental Section.

Determine Area of Potential Effects (APE)

The Consultant will work with FHWA and LADOTD to develop the Area of Potential Effects (APE) (direct and indirect) for each build alternative. SHPO will have an opportunity to comment on the APE prior to the initiation of fieldwork. No Phase I cultural resources survey fieldwork survey will be conducted prior to the delineation of the direct and indirect APE. No archaeological fieldwork will be conducted outside of the identified direct APE.

Identify Known Historic Properties and Archaeological sites

The Consultant will review previous cultural resource survey reports and compile information on previously recorded archaeological sites, structures, and NRHP listed properties, on file at the Louisiana Division of Archaeology and the Louisiana Division of Historic Preservation that are within a one-mile radius of US 84, between LA 1288 and LA 34. Historical and archival research on alternatives to be surveyed will also be conducted at this time.

Phase I Cultural Resources Survey

A Phase I cultural resources survey will be performed on all build alternatives (see APE above) to determine the presence of archaeological sites, standing structures approaching 50 years old/older, and other places or objects eligible for listing on the NRHP. The Consultant will coordinate with LADOTD prior to the initiation of the survey. Any preservation affiliated groups expressing interest in the project should be contacted for additional information prior to survey.

Property Owner Contact and Permission

The Consultant will do the research necessary to obtain the names/addresses of property owners from whom additional right-of-way is anticipated to be required. The Consultant will contact and request permission from the property owners prior to accessing their property. The property owners will be informed of the need to do analysis on any artifacts recovered during survey or testing. All artifacts will be curated unless the property owner requests return of artifacts recovered from their property. If property owners do not grant access to their property, the

consultant will prepare legal notification letters that will be sent out on behalf LADOTD. These letters will be sent registered mail return receipt requested. In addition, a copy will be sent to the appropriate Sheriff's Office and District Attorney.

Part of the project area is located within Kisatchie National Forest. An Archaeological Resources Protection Act (ARPA) Permit, if required will be obtained by the consultant prior to the initiation of archaeological survey.

Standing Structure Survey

A standing structure survey will be conducted for the direct and indirect APEs for all build alternatives. Any structures that will meet the 50-year requirement within five years of the notice to proceed will be recorded on Louisiana standing structure inventory forms. Recordation of all structures will meet the current standards of the Louisiana Division of Historic Preservation. All standing structures identified must be evaluated for National Register eligibility. It is anticipated that some previously identified standing structures will require an updated standing structure form. The standing structure survey will meet the current standards for the Louisiana Division of Historic Preservations for standing structure survey and

<http://www.crt.state.la.us/hp/historicstandingstructureessurvey.aspx>

Phase I Archaeological Survey and Phase II Archaeological National Register Testing

Archaeological Fieldwork Phase I survey and Phase II National Register Testing

All fieldwork for Phase I survey and Phase II testing will meet current Louisiana Division of Archaeology standards. All archaeological sites will be recorded on official Louisiana archaeological site forms. All known sites within the APE will be revisited and site update forms completed as required by the Division of Archaeology (DOA). Cultural materials (artifacts) recovered from archaeological sites will be processed and analyzed using accepted archaeological typologies and methods. According to DOA curation standards, artifacts will be catalogued and prepared for permanent curation with the DOA, or with any other repository designated by DOA. Fieldwork must determine NRHP eligibility of the site without exhausting its research potential.

DOA fieldwork standards can be found on their website:

<http://www.crt.state.la.us/archaeology/review/IntroField.aspx>

Processing and Analysis of Artifact

Once the fieldwork is completed, the artifacts will be returned to laboratory for washing and cataloging according to the requirements of the

Louisiana Division of Archaeology. The artifacts and other data recovered during the fieldwork will then be analyzed using currently acceptable scientific methods. Radiocarbon samples collected from undisturbed cultural deposits will be submitted for dating. All artifacts will be curated using the to the current Louisiana Division of Archaeology curation standards. A receipt of acceptance from the State Curation Facility will be required.

Report Preparation

The report will meet current Louisiana Division of Archaeology report standards for Phase I survey and Phase II testing. One report will be prepared that will present the finding and recommendation from all research, survey (standing structure and archaeology), and archaeological National Register testing.

The draft Cultural Resources Survey report will be submitted to LADOTD for review; LADOTD will transmit copies of the report to FHWA, SHPO, and applicable federally recognized tribes for review. Two unbound typed site forms or site update forms (for previously recorded archaeological sites) and two 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 LADOTD's Environmental Section along with the draft Cultural Resources Survey. All site forms and site update forms should be finalized prior to submittal of the final report.

Following LADOTD, FHWA, SHPO, and applicable federally recognized tribe review, the Consultant will prepare a final Cultural Resources Report. The final Cultural Resources Survey will be submitted to LADOTD; LADOTD will transmit the finals to FHWA, SHPO, and applicable federally recognized tribes.

DOA reporting standards can be found on their website:

<http://www.crt.state.la.us/archaeology/review/IntroReport.aspx>

Assess Adverse Effects

The Consultant will consult with FHWA, LADOTD, and the SHPO concerning the potential effect of the project on any historic properties identified in the project APE. If there is agreement that one or more properties will be adversely affected, then the Consultant will prepare Section 106 Adverse Effect Documentation. Adverse effect determination is not expected to exceed five (5) eligible properties. If more than five properties require documentation, the additional work may be conducted under a supplement to this agreement.

Memorandum of Agreement (MOA) for Resolution of Adverse Effects

If Historic Properties will be adversely affected, the Consultant will consult with FHWA, LADOTD, the SHPO, and other interested parties, such as local historical groups, to attempt to resolve the adverse effects through avoidance or some form of mitigation. If any of the historic properties are archaeological sites, the appropriate federally recognized tribes will be consulted as well. If the adverse effects cannot be avoided, the Consultant will prepare an MOA that discusses the mitigation measures agreed upon, identifies who is responsible for carrying them out, and provides documentary evidence that the agency is following the requirements of Section 106. It is anticipated that one MOA, that may include up to five historic properties, will be prepared for the project.

Section 4(f) Statement

A draft Section 4(f) Statement will be required for external review purposes for all identified Historic Properties that will be adversely effected by any of the build alternatives. 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 LADOTD.

10. Socio-economic

The Consultant will discuss the social and economic impacts, including any adverse effects of the proposed actions, on the local community. The Consultant will collect compiled summary demographics on the project area. Discussion will include anticipated permanent and temporary impacts of the proposed project on the established business districts, land uses, community services/facilities, and residents in the project vicinity, as well as impacts to planned developments known by public officials at the time of data collection. Projects in the study area will be researched by the Consultant through contact with local planning officials and organizations in an effort to determine other long-range plans, upcoming projects, or planned developments. Consistency with these plans will be assessed and documented.

11. Environmental Justice

Available U.S. Bureau of the Census population data will be used as a basis to identify low-income, minority populations in the entire study area. This data will be augmented with “windshield” surveys and contacts with local officials and community leaders in the study area to determine if such communities are present in the study area. No household or resident interviews/surveys (i.e., face-to-face or telephone calls) are included in this scope of services. The Consultant will identify likely minority and/or low-income communities within the study area and assess whether the project will have any disproportionate adverse impacts to these populations in accordance with Executive Order 12898 and the Department of

Transportation Order on Environmental Justice 5610.2. Any instances where Title VI populations bear the bulk of project-related impacts will be reported to the LADOTD Environmental Section, and the Consultant will evaluate possible mitigation or enhancement measures to reduce or lessen adverse impacts, if any, on the community.

12. Conceptual Stage Relocation

The Contractor will prepare a Conceptual Stage Relocation Plan in accordance with the requirements of the Louisiana Department of Transportation and Development's Office of Right of Way Operations Manual and 49CFR Part 24 § 24.205a. The results of the plan will be summarized in the EA. The scope of the plan will include:

- a. An estimate of the number of households to be displaced including information such as owner/tenant status, estimated value and rental rates of properties to be acquired, family characteristics, and special consideration of the impacts on minorities, the elderly, large families, and persons with disabilities when applicable. Environmental Justice considerations will also be reviewed.
- b. The type of dwelling (mobile home, frame, brick) to be acquired or adversely impacted.
- c. The location and quantity of available comparable 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. Should comparable replacement housing not be available, other methods in addition to new construction, will be evaluated as part of a possible Housing of Last Resort program as provided for under Section 206A of the Uniform Act.
- d. The location and types of businesses, farms and non-profit organizations 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.
- e. An estimate of the availability of replacement business sites. When an adequate supply of replacement business sites is not expected to be available, the impacts of displacing the businesses will be considered and addressed. An analysis of business moving problems for those displaced businesses which are reasonably expected to involve complex or lengthy moving processes, or small businesses with limited financial resources and/or few alternative relocation sites will be included.

f. The functional replacement of a publicly-owned facility, if applicable, and the existence of publicly-owned recreation lands.

g. The estimated cost of relocation assistance.

h. Consideration of any special relocation advisory services that may be necessary from the displacing Agency and other cooperating Agencies.

The data collected for the plan will be from secondary sources and field observations. Interviews will not be conducted with those families and businesses potentially affected by the various alternatives.

13. Cost Estimate

The Consultant shall develop a preliminary cost estimate for each proposed project concept. The project costs will include estimates for all engineering design, right-of-way acquisition, construction, utility relocation, and mitigation costs. Estimates for right-of-way will include all land and improvements situated within the proposed right-of-way (all alternates considered). Additionally, the right-of-way cost estimate should include the estimated cost for land, as well as improvements not in the required right-of-way, but possibly impacted by the proposed project. The right-of-way cost estimate should take into consideration damages, etc. that may accrue due to the proposed project (all alternates considered). Refer to the Real Estate Needs Checklist for Stage 1 Cost Estimates and the Stage 1 Cost Estimate Appraiser Checklist).

14. Section 4(f) of the Department of Transportation Act

Research, analysis, and documentation of compliance with Section 4(f) of the Department of Transportation (DOT) Act will be done for any publicly owned recreational and park land, wildlife and waterfowl refuges, and/or historic sites affected by all the build alternatives. The Consultant will coordinate with agencies and entities with jurisdiction, and mitigation will be developed. The Consultant will draft any agreements necessary for LADOTD and FHWA review and approval, and develop Section 4(f) documentation for all Section 4(f) properties, according to FHWA rules, regulations, and guidelines. The approved Section 4(f) Statement will be included in an appendix of the EA with FONSI. No more than two (2) meetings with federal, state, and local officials will be required for coordination regarding Section 4(f).

15. Section 6(f) of the Land and Water Conservation Fund

Resources built using the Land and Water Conservation funds, including the Winnfield Mini Park, will be identified by the consultant. The Consultant will prepare all documentation for coordination with the appropriate agencies

regarding Section 6(f) of the DOT Act. No more than three (3) meetings with state and local officials will be required for coordination regarding Section 6(f).

15. Other

Other items that will be evaluated and coordinated with the appropriate agencies include, but are not limited to, prime farmland, sole source aquifers, 100-year floodplain, and water wells. Some of these items utilize standard forms; other coordination is by letter or permit application. Items of special or local interest should also be noted and evaluated within the context of the project.

F. Public Meeting

One (1) Public Meeting will be required for this project. All arrangements for the Public Meeting, including location, time, preparation and mailing of the public notice, preparation of appropriate exhibits, and preparation of the power point presentation and handouts will be made by the consultant, subject to the Environmental Section's approval. The Public Meeting will be an open-house format. The consultant will advertise the notice of the Public Meeting (upon the Department's approval of the notice) in the official state and local newspapers, as well as with other media (radio, television, etc.) agreed upon by the Department. The notice for the Public Meeting will be published both two (2) weeks and one (1) week before the date of the Public Meeting. The text of the notice will be provided to the Environmental Section's Project Coordinator for review at least one (1) month prior to the anticipated Public Meeting dates. Exhibits, handouts, and power point presentations for the Public Meeting will be supplied to the Environmental Section's Project Coordinator for approval prior to the Public Meeting date.

Actual conduct of the Public Meeting will be by the consultant. The consultant will have knowledgeable informed staff present at the Public Meeting to address the queries of the public concerning environmental, engineering, and other project related issues. As the purpose of the Public Meeting is to assist the public in understanding how the project fits into and impacts their community, exhibits aiding in the visualization of the project at the Public Meeting will be the responsibility of the consultant. Such visualization methods shall be submitted to the Environmental Section's Project Coordinator one (1) month prior to the Public Meeting. The consultant will tape, prepare, and distribute a verbatim transcript for each Public Meeting.

III. REVIEW OF DRAFT ENVIRONMENTAL ASSESSMENT

The Environmental Assessment shall be written in accordance with FHWA's guidelines. Ten (10) copies of the review document will be provided to the LADOTD Environmental Section for their review, comment, 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 requesting approval from FHWA for public distribution. Distribution of the Draft Environmental Assessment will be the responsibility of the

consultant. The Environmental Section's Project Coordinator will provide the consultant with the generic mailing list to be used by the consultant for distribution of the Draft Environmental Assessment. It will be the responsibility of the Consultant to produce a more detailed mailing list of project-specific names and entities.

IV. ENVIRONMENTAL ASSESSMENT

The document will be typed, single-spaced, on 8.5 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 8.5 x 11 inch format are preferred. The consultant's name and logo shall 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.

V. PUBLIC HEARING

After approval by the Department's Environmental Section and FHWA, the Draft Environmental Assessment will be made available to the public and a Public Hearing will be scheduled. The Public Hearing will be an open-house format. All arrangements for the Public Hearing, including location, time, preparation and distribution of the 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 notice of the Public Hearing (upon the Department's approval of the notice) in the official state and local newspapers, as well as with other media (radio, television, etc.) agreed upon by the Department. The notice for the Public Hearing will be published twice: the first shall be made thirty to forty (30 – 40) days before the date of the hearing, the second five to twelve (5 – 12) days before. The text of the notice, including the project map, will be provided to the Environmental Section's Project Coordinator for review at least three (3) months prior to the anticipated Public Hearing date. Public Hearing exhibits and the Public Hearing power point presentations will be supplied to the LADOTD Environmental Section's Project Coordinator for approval prior to issuing approval of the Public Hearing dates and authorizing the advertisement. The scale ratio 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. Preparation of a handout for distribution to the interested stakeholders present at the meeting will be the responsibility of the consultant. This handout will be submitted to the Environmental Section's Project Coordinator one (1) month prior to the scheduled Public Hearing. The consultant will have knowledgeable informed staff present at the Public Hearing to address the queries of the public, with regard to environmental, engineering, and other project related issues. The consultant will tape, prepare, and distribute a verbatim transcript for the Public Hearing.

VI. PUBLIC HEARING & ENVIRONMENTAL ASSESSMENT COMMENTS

All comments received during the commenting period on the Environmental Assessment, including those received at the Public Hearing, will be addressed in the Final Environmental Assessment by the consultant. After approval by the Department's Environmental Section of the final documents and issuance by FHWA of the FONSI, the Environmental Assessment FONSI will be distributed by the consultant. The Environmental Section's Project Coordinator will provide the mailing list to be used for distribution of the FONSI.

VII. MISCELLANEOUS

Early coordination will include the Consultant arranging, conducting, and summarizing a kick-off meeting with the project team within 10 days of receiving the notice to proceed. The Consultant shall prepare and submit a progress schedule and coordination plan at the kick-off meeting reviewed by internal team members. Agenda items for this meeting shall include the review points and durations, time-frame assumptions built into the project schedules, invoicing procedures, progress reporting, and plans for early coordination of public involvement.

No more than three (3) agency meetings will be required for this project.

No more than six (6) meetings with the DOTD project team will be required.

No more than three (3) public official meetings will be required.

The consultant shall 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. The Consultant will invoice the Department on a monthly basis.

The consultant shall notify the Environmental Section when fieldwork begins and ends. The Consultant shall obtain and compile a list of names and addresses of property owners of those properties for which access is required. The consultant will also update the Environmental Section 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 "H" number, Federal aid project number, project name, route number, and parish.

VIII. DELIVERABLES

Technical reports submitted for review will not be identified as “DRAFT” and will be considered “FINAL” if no revisions are required. The month and year of the submittal will be identified on the report cover and on the transmittal document for all versions. The only deliverables that will be identified as “DRAFT” or “FINAL” are the Draft and Final EA documents. The Consultant will prepare a draft and a revised version(s) of each deliverable that addresses one consolidated list of comments on the deliverable, which has been compiled and/or approved by the Client for incorporation by the Consultant. Up to the noted number of copies of the following deliverables will be provided during the contract performance period.

Description	Draft Copies	Revised Copies	Final Copies	PDF on Labeled CD
Solicitation of Views	1		Up to 100	
Logical Termini Request	1		3	
Work Plan & Schedule			3	
Design Criteria	1		1	
Bridge and Roadway Typical Sections	3		5	
Conceptual Alternatives’ Geometric Layouts	1			
Alternatives Analysis Memorandum	3	1	10	
Engineering Report	5		20	
Wetlands Finding Report	5	2	5	1
Biological Field Survey Report	5	2	5	1
Biological Assessment	5	2	5	1
Phase I ESA Report	2	1	5	1
Traffic Noise Analysis Protocol	1			
Noise Study	3	3	5	1
Cultural Resources Phase I Report	5		5	1
Cultural Resources Site Form			2	1
Cultural Resources Standing Structure Form			2	1
Conceptual Stage Relocation Plan	2		3	1
4(f) Statement	20			
Draft EA Document	15	15	up to 70	5
Final EA/FONSI Document	15	15	up to 70	5

Visual Renderings	2	2	2	1
Public Meeting Summary/Transcript	4		50	1
Public Hearing Summary/Transcript	4		50	1

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.

ITEMS TO BE PROVIDED BY DOTD

- a. US 11 Corridor Improvements Stage 0-Feasibility Study, February 2008, Prepared for Regional Planning Commission; State Project No. 700-52-0188
- b. Checklist for Stage 0, Preliminary Scope and Budget Worksheet, Log mile 0.00 to 1.76 (Bridge Exception 0.44-0.80), 12/21/2011
- c. Checklist for Stage 0, Preliminary Scope and Budget Worksheet, Log mile 0.44 to 0.80, 12/21/2011
- d. Checklist for Stage 0, Environmental Checklist, Log mile 0.00 to 1.76 (Bridge Exception 0.44-0.80), 12/21/2011
- e. Checklist for Stage 0, Environmental Checklist, Log mile 0.44 to 0.80, 12/21/2011

CONTRACT TIME

The Consultant shall proceed with the services specified herein after the execution of this Contract and upon written Notice-to-Proceed (NTP) from the DOTD and shall be completed within **365 calendar days**, which includes review time. The delivery schedule for all project deliverables shall be established by the Project Manager.

COMPENSATION

Compensation to the Consultant for services rendered in connection with this Contract will be actual cost plus a non-negotiated fixed fee of **\$87,725** with a maximum compensation limitation of **\$685,357**.

The fee breaks down as 76% EN, 16% PL and 8% TR.

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.htm> Vehicle rental rates will require prior approval from the DOTD 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 LRFD Bridge Design Specifications
2. AASHTO/ASTM Standards and/or DOTD Test Procedures
3. DOTD Standard Specifications for Roads and Bridges
4. DOTD Roadway Design Procedures and Details
5. Manual on Uniform Traffic Control Devices (Millennium Edition)
6. DOTD Traffic Signal Design Manual
7. National Environmental Policy Act (NEPA)
8. National Electric Code
9. DOTD Environmental Impact Procedures (Vols I-III)
10. Policy on Geometric Design of Highways and Streets
11. Construction Contract Administration Manual
12. Materials Sampling Manual
13. DOTD Bridge Design Manual
14. Consultant Contract Services Manual
15. Geotechnical Engineering Services Document
16. AASHTO Manual for Condition Evaluation of Bridges
17. Manual for Maintenance Inspection for Bridges
18. Bridge Inspectors Reference Manual
19. AASHTO Manual for Condition Evaluation and Load and Resistance Factor Rating (LRFR) of Highway Bridges
20. DOTD LRFD Bridge Design Manual (Including Technical Memoranda)
21. Subsurface Investigations Manual, Publication No. FHWA HI-97-021, Nov. 1997;
22. Manual On Subsurface Investigations, Published by AASHTO, 1988;
23. AASHTO Standard Specifications for Transportation Materials and Methods of Sampling and Testing, PART I – SPECIFICATIONS and PART II – TESTS, current edition;
24. ASTM Procedures and Regulations, current edition;
25. Earth Retaining Structures, Participants Manual, FHWA-NHI-99-025, 1999;
26. Earth Retaining Systems, Geotechnical Engineering Circular No. 2, Publication No. FHWA-SA-96-038, February 1996;
27. Design of MSE Walls and Reinforced Slopes, FHWA NHI-10-024 Vol. I and NHI-10-025 Vol. II, 2009;
28. Geotechnical Instrumentation Manual, Publication No. FHWA HI-98-034, October 1998;

29. Drilled Shafts: Construction Procedures and LRFD Design Methods, Publication No. FHWA-NHI-10-016, May 2010;
30. Soils and Foundations Workshop Manual, Publication No. FHWA NHI-00-045, August 2000;
31. Geosynthetic Design and Construction Guidelines Manual, Publication No. FHWA HI-95-038, April 1998;
32. Ground Improvement Technical Summaries, DP 116, Publication No. FHWA-SA-98-086;
33. Design and Construction of Driven Pile Foundations Reference Manual, Volumes 1 & 2, Publications No. FHWA-NHI-05-042 and FHWA-NHI-05-043, 2006;
34. Soil Nail Walls, Geotechnical Engineering Circular No. 7, Publication No. FHWA-IF-03-017, March 2003;
35. Soil Nailing Field Inspectors Manual, (DP 103), Publication No. FHWA-SA-93-068, April 1994.

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 shall be a registered professional engineer in the state of Louisiana. ~~The Prime Consultant must also employ on a full time basis, or through the use of Sub-Consultant(s):~~
 - a. At least one Principal of the Prime-Consultant must be professionally competent in the preparation of NEPA documents.
 - b. At least one Principal or other Responsible Member of the Prime-Consultant must have completed the “NHI course No. 142005, National Environmental Policy Act (NEPA) and Transportation Decision Making,” or an equivalent course and must have a minimum of five years experience in the preparation of NEPA documents (including Environmental Assessments) in accordance with the National Environmental Policy Act (NEPA) for the FHWA.

<http://webmail.dotd.louisiana.gov/ContWeb.nsf/74710f57e6617ac68625717f00447565/9bb3dd84bc696214862579d600627880?OpenDocument>

~~The Prime Consultant must also employ on a full-time basis, or through the use of Sub-Consultant(s):~~

- c. One Environmental Professional with a minimum of three years of experience with highway traffic noise analysis.
- d. One professional with a minimum of five years experience in performing Wetland Delineations (or Findings), possess a degree in Natural Science or a related field, and have completed a Wetlands Delineation Training Course that meets the criteria of the Corps of Engineers.

- e. Responsible member of the consultant firm handling cultural resources must have taken a course on Section 106 of the National Historic Preservation Act offered by the Advisory Council on Historic Preservation or its equivalent training.
- f. One Environmental Professional with a minimum of three years experience with Phase I Environmental Site Assessments.
- g. One Real Estate Professional responsible for the preparation of Conceptual Stage Relocation plans.
- h. Two (2) Registered Professional Civil Engineers in the State of Louisiana, one with at least five (5) years experience in Roadway Design and one with at least five (5) years experience in Bridge Design with corresponding support staff.
- i. A minimum of one PTOE registered in the State of Louisiana, with at least five years of traffic analysis experience with signal warrants and signal timing, and a corresponding support staff.
- j. A responsible member with a minimum of five years experiences in traffic counting and speed data collection.

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

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) 76%, Planning and Feasibility Study (PL) 16% and Traffic Analysis and Design (TR) 8% performance ratings will be used for this project.

Complexity Level (moderate)

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 the Prime Consultant must perform a minimum of 51% of the work for the overall project. 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.

Communication Protocol

DOTD's Project Evaluation Team 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. **Below are the proposed Team members. DOTD may substitute for any reason provided the members meet the requirements of R.S. 48:291.**

1. Alan Dale – Ex officio
2. Nicholas Olivier – Project Manager
3. Robert Lott
4. Brent Waguespack
5. Matthew Hebert
6. Kurt Brauner

Rules of Contact (Title 48 Engineering and Related Services)

These rules are designed to promote a fair, unbiased, legally defensible selection process. The LA DOTD is the single source of information regarding the Contract selection. The following rules of contact will apply during the Contract selection process and will commence on the date of advertisement and cease at the contract execution of the selected firm. Contact includes face-to-face, telephone, facsimile, Electronic-mail (E-mail), or formal written communications. Any contact determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of the submittal (24-102):

- A. The Consultant shall correspond with the LA DOTD regarding this advertisement only through the LA DOTD Consultant Contracts Services Administrator;
- B. The Consultant, nor any other party on behalf of the Consultant, shall not contact any LA DOTD employees, including but not limited to, department heads; members of the evaluation teams; and any official who may participate in the decision to award the contract resulting from this advertisement except through the process identified above. Contact between Consultant organizations and LA DOTD employees is allowed during LA DOTD sponsored one-on-one meetings;
- C. Any communication determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of submittal, at the sole discretion of the LA DOTD;
- D. Any official information regarding the project will be disseminated from the LA DOTD'S designated representative on the LA DOTD website. Any official correspondence will be in writing;

- E. The LA DOTD will not be responsible for any verbal exchange or any other information or exchange that occurs outside the official process specified herein.

By submission of a response to this RFQ, the Consultant agrees to the communication protocol herein.

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 **five** copies of the DOTD Form 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 24-102, or providing inaccurate information on the 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 24-102, which is completely filled out and contains all information pertinent to the work to be performed.

The Sub-Consultant's 24-102 must be firmly bound to the Consultant's 24-102. In Section 8, the Consultant's 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 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 DOTD Form 24-102 will be identified with **State Project No. H.000688.2**, and will be submitted **prior to 3:00 p.m. CST on Monday, June 11, 2012**, by hand delivery or mail, addressed to:

Department of Transportation and Development
Attn.: Mr. Alan Dale, P.E.
Consultant Contract Services Administrator
1201 Capitol Access Road, **Room 405-T**
Baton Rouge, LA 70802-4438 or
Telephone: (225) 379-1401

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.