#### ENGINEERING AND RELATED SERVICES APRIL 04, 2014

#### CONTRACT NO. 4400004712 RETAINER CONTRACT FOR TRAFFIC SIGNAL ENGINEERING STATEWIDE

Under Authority granted by Title 48 of Louisiana Revised Statutes, the Louisiana Department of Transportation and Development (DOTD) hereby issues a Request for Qualification Statements (RFQ) on 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) (Consultant/Team) will be selected for this Contract.

#### Project Manager – Mr. Andre' Fillastre

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

#### **PROJECT DESCRIPTION**

The selected Consultant will perform Traffic Signal Engineering services such as, but not limited to, traffic signal studies and traffic signal design for statewide projects covered by a Retainer Contract under separate Task Orders. The Consultant will be required to execute a Task Order which will specify the scope of services, contract time, and compensation. Each Task Order will become a part of the Retainer Contract.

#### **SCOPE OF SERVICES**

The selected Consultant will be required to provide some or all of the following services for each Task Order (TO):

#### Task 1.0 – Project Management

**Initial Meeting** – A meeting with DOTD and the Consultant shall be held at the beginning of each Task Order. The purpose of this meeting is to establish procedures, deliverables, and schedules. The Consultant shall prepare the minutes of the meeting for review by the attendees.

**Monthly Reports** – Monthly progress reports will be prepared by the Consultant to ensure that the project task orders schedule is being kept. The report shall include a progress chart indicating percent of time elapsed and percent of work completed. The report shall include changes in project schedule or estimated construction cost. The

report may include a discussion of the previous month's progress, problems that were encountered, unresolved issues, and anticipated work for the next month.

## Task 2.0 - Data Collection

The Consultant shall be directed to conduct the following data collection:

- Seven day twenty-four (24) hour machine counts
- Forty-eight (48) hour machine counts
- Turning movement peak hour counts (AM/Noon/PM)
- Corridor Travel Time Study

Data collection will follow the requirements outlined in the Traffic Signal Design Manual, Traffic Engineering Manual or as directed.

**Deliverables** - Electronic and hard copy of all collected data.

# Task 3.0 – Warrant Analysis

The Consultant shall be directed to perform a warrant analysis for intersections, including traffic signals and all way stops. The Consultant shall be required to collect the necessary traffic data to perform the warrant analysis. All warrant analyses will follow the requirements outlined in the Traffic Signal Manual, Traffic Engineering Manual or as directed.

Deliverables – Electronic and hard copy of each Warrant Analysis.

# Task 4.0 – Intersection/Corridor Analysis

The Consultant will be directed to perform traffic analyses for designated locations throughout the State of Louisiana. Typically this analysis will be developed to determine new traffic signal timings. For comparison purposes, models will be developed depicting existing conditions and with suggested timing modifications. The latest version of Synchro will be required.

**Deliverables** – An electronic copy of analysis and a written report quantifying the results of the analysis effort will be provided by the Consultant. Reports shall include input data such as volumes, classification and signal timings and performance measures such as travel time, delay, speed variation and resulting enhancements.

# Task 5.0 – Traffic Signal Inventory (TSI) Creation

The Consultant shall be required to create a Traffic Signal Inventory (TSI) based on the Task Order. The creation of all TSI's will follow the most recent Traffic Signal Manual.

The Project Manager will direct the Consultant as to which signal timings will be used for the creation of TSI's. Each TSI may contain the following pages:

- TSI Coordination page
- TSI Coordination Supplemental page(s)
- TSI Timing page
- TSI Diagram page
- TSI Wiring Diagram page
- o TSI Counts page
- TSI Preemption page
- TSI Notes page

**Deliverables** – Both electronic and hard copies of TSI's will be provided by the Consultant.

# Task 6.0 – Traffic Signal Plan Creation

**Hardware Location** – A preliminary layout of signal poles, signal heads, overhead signs, detection (loops and/or video) and controller will be prepared prior to the field inspection. This layout will be the basis for conducting the field inspection.

**Field Inspection** – A field inspection of each intersection will be held. The Consultant will furnish the base drawing to the Department. A representative from Traffic Engineering, the District and Consultant will attend the inspection. Unless otherwise determined through correspondence, the purpose of the inspection will be to locate existing and proposed signal equipment including but not limited to poles, conduit, cabinet, controllers, detection, power supply, power disconnect and interconnect. During the inspection the Consultant will collect digital photographs of the intersection.

**Signal Sheets** - The Consultant shall be required to create plans for inclusion in roadway projects or a standalone traffic signal project. Each signal will be required to have all required sheets as stated in the most recent Traffic Signal Manual. Standalone traffic signal projects will also require a title sheet and a summary of estimated quantities sheet which will be developed in accordance with the most recent Department's Roadway Design Manual.

**Cost Estimate** – The Consultant shall provide cost estimates of the project at the completion of preliminary plans and again at the completion of final plans.

**Specifications/Details** – The Consultant shall be directed to develop special provisions and/or details under this task.

#### 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 Design Guidelines
- 5. DOTD Hydraulics Manual
- 6. DOTD Standard Specifications for Roads and Bridges
- 7. Manual of Uniform Traffic Control Devices
- 8. DOTD Traffic Signal Manual
- 9. National Environmental Policy Act (NEPA)
- 10. National Electric Safety Code (NESC)
- 11. National Electric Code (NFPA 70)
- 12. DOTD Environmental Impact Procedures (Vols. I-III)
- 13. A Policy on Geometric Design of Highways and Streets (AASHTO)
- 14. DOTD Construction Contract Administration Manual
- 15. DOTD Materials Sampling Manual
- 16. DOTD Bridge Design Manual
- 17. Consultant Contract Services Manual
- 18. Geotechnical Engineering Services Document
- 19. Bridge Inspectors Reference Manual/90
- 20. DOTD Stage 1 Planning/Environmental Manual of Standard Practice
- 21. Code of Federal Regulations 29 CFR 1926 (OSHA)

Follow link below for the individual reference links:

http://webmail.dotd.louisiana.gov/ContWEB.nsf/b88769326453bef886256fe00047183a/1 8fc2860512aba5886257a62006133b8?OpenDocument

#### **COMPENSATION**

Compensation to the consultant for services rendered in connection with each Task Order shall be based on unit cost or negotiated work hours using DOTD established billable rates for the actual work performed on the Task Order.

Count Types	\$ per	Cost	
24-Hour Volume Counts	(\$/approach)	\$	100.00
24-Hour Classification Counts	(\$/approach)	\$	125.00
48-Hour Volume Counts	(\$/approach)	\$	125.00
48-Hour Classification Counts	(\$/approach)	\$	150.00
Turning Movement Counts (Peak Hours ) (1 Technician)	(\$/intersection)	\$	400.00
Turning Movement Counts (Peak Hours) (2 Technician)	(\$/intersection)	\$	550.00
Turning Movement Counts (Non-Peak Hours ) (1 Technician)	(\$/intersection)	\$	300.00
Turning Movement Counts (Non-Peak Hours) (2 Technician)	(\$/intersection)	\$	400.00
15 Minute Counts (Peak/Non Peak Hours)	(\$/intersection)	\$	100.00
Speed Studies	(\$/location)	\$	200.00
Warrant Analysis	(\$/intersection)	\$	200.00
7-Day, 24-Hour Volume Counts (Non-Interstate)	(\$/approach)	\$	250.00
7-Day, 24-Hour Classification Counts (Non-Interstate)	(\$/approach)	\$	300.00

The amount payable under this Retainer Contract for services to be performed under the various TO's shall be **\$3,000,000**. Each TO shall be payable under the respective TO project number which shall be obtained by the Project Manager.

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

## DIRECT EXPENSES

All direct expense items which are not paid for in the firm's overhead which are needed and will be consumed during the life of the contract must be identified by the consultant during contract development. Standard equipment to be used in the provision of services rendered for this contract will not be considered for payment under direct expenses. Failure to provide the above information will deem items as non-qualifying for direct expenses.

The consultant shall provide a minimum of three rate quotes for any specialty vehicle or equipment. Any and all items for which said quotes are not submitted shall be deemed as non-qualifying for payment as direct expenses.

The Consultant may request to have the initial billable rates updated on a yearly basis. However, any adjustment to the Contract billable rates shall not be cause for an increase in the maximum compensation limitation imposed herein.

## CONTRACT TIME AND NOTICE TO PROCEED

This Retainer Contract shall be in effect for the duration of **3 years**. The services to be performed for each Task Order (TO) will be determined prior to the execution of the TO. The Consultant will proceed with the services required in the TO upon issuance of the Notice to Proceed from the DOTD. <u>The contract time for each TO</u>, will be specified in the executed TO. Any TO in effect, prior to the expiration date of the Retainer Contract shall be completed.

# ELECTRONIC DELIVERABLES

The Consultant hereby agrees to produce electronic deliverables in conformance with the DOTD Software and Deliverable Standards for Electronic Plans document. The Consultant is also responsible for ensuring that Sub-Consultants submit their electronic deliverables in conformance with the same standards. The DOTD Software and Deliverable Standards for Electronic Plans document and DOTD CAD Standards Downloads are available via links on the DOTD web site.

The Consultant shall apply patches to CAD Standard Resources and install incremental updates of software as needed or required. The Consultant hereby agrees to install major updates to software versions and CAD Standard Resources in a timely manner. Major updates of CAD standards and software versions shall be applied per directive or approval of the DOTD Design Automation Manager. Such updates will not have a significant impact on the plan development time or project delivery date, nor will they require the Consultant to purchase additional software. Prior to proceeding with plan development, the Consultant shall contact the Project Manager for any special instructions regarding project-specific requirements.

In the event that any electronic standard conflicts with written documentation, including DOTD plan-development Manuals, the electronic standard typically governs. The Consultant is responsible for contacting the Project Manager should questions arise.

The Consultant shall upload (or check in) electronic deliverables directly into the DOTD ProjectWise repository at each plan delivery milestone. Consultants are responsible for performing certain operations at each milestone including, but not limited to, the following:

- Upload (or check in) CAD plan deliverables to the discipline "Plans" folder
- Apply and maintain indexing attributes to CAD plans (and other deliverables as needed)
- Publish PDF format plan submittals in ProjectWise using automated publishing tools

• Digitally sign PDF format plan submittals in ProjectWise according to DOTD standards and procedures (Final Plans, Revisions and Change Orders). Signatures shall be applied in signature blocks provided with electronic seals and Title Sheets.

Additionally, after reviewing deliverables for each submittal milestone, the Project Manager shall notify the Consultant regarding the availability of two automatically-generated informational reports in ProjectWise. These reports document the completion status and other information regarding indexing attributes and CAD standards. Consultants shall take these reports into account and make any necessary adjustments to plans before the next submittal milestone; or sooner, if directed by the Project Manager.

## 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

DOTD may provide copies of or access to TSI's, maps, surveys, plans, right-of-way information and/or any other pertinent information if available. It shall be the responsibility of the Consultant to review these documents and collect any required information at the applicable DOTD office.

## MINIMUM PERSONNEL REQUIREMENTS

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

- 1. At least one Principal of the Prime-Consultant must be a Professional Engineer registered in the State of Louisiana.
- 2. At least one Principal or a responsible member of the Prime-Consultant must be a Professional Traffic Operations Engineer (PTOE), registered in the State of Louisiana.
- 3. The Prime-Consultant must also employ on a full time basis, a minimum of two Professional Civil Engineers, PTOEs, registered in the State of Louisiana, with a minimum of five years of traffic analysis experience with signal warrants and, signal timing and a corresponding support staff.
- 4. The Prime-Consultant must also employ on a full-time basis or through the use of a Sub-Consultant, an individual with a minimum of five years of experience in traffic counting.
- 4. The Prime-Consultant must also employ on a full-time basis a minimum of two Professional Civil Engineers registered in the State of Louisiana who have attended

Trafficware Controller Course on Naztec TS1 and TS2 controllers and Streetwise software.

**5.** The Prime-Consultant must also employ a Professional Engineer registered in the State of Louisiana with a minimum of five years of experience with Traffic Signal Construction Plan design.

# 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, weighting factor of 5;
- 6. Location where the work will be performed, weighting factor of 4. \*

\*Location will be based from Marksville, Louisiana.

**\*\***The Traffic Analysis (TR), Traffic Engineering- Development (TD) and Traffic Engineering- Management (TM) performance rating will be used for this project.

## **Complexity level – simple**

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

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. Andre' Fillastre Project Manager
- 3. Ryan Hoyt
- 4. Gary Leblanc
- 5. Jennifer Bonnette
- 6. Tanya Bankston

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 by 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. Neither the Consultant, nor any other party on behalf of the Consultant, shall 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. This insurance will be written on a "claims-made" basis. Prior to executing the contract, the Consultant will provide a Certificate of Insurance to DOTD showing evidence of such professional liability insurance.

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

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

Any Consultant currently under contract with the DOTD and who failed to meet all the audit requirements documented in the manual and/or notices posted on the DOTD Consultant Contract Services Website (<u>www.dotd.louisiana.gov</u>), 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 **Contract No. 4400004712**, and will be submitted **prior to 3:00 p.m. CST** on **Tuesday**, **April 22**, **2014**, by hand delivery or mail, addressed to:

Department of Transportation and Development Attn.: Mr. Alan Dale, P.E. Consultant Contracts 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.