

**ENGINEERING AND RELATED SERVICES  
MAY 02, 2014**

**CONTRACT NO. 4400004829  
RETAINER CONTRACT FOR  
DISTRICT 02 TRAFFIC SIGNAL INVENTORY  
TERREBONNE, LAFOURCHE, ST. CHARLES, JEFFERSON,  
PLAQUEMINES, ST. BERNARD AND ORLEANS PARISHES**

**DBE/WBE GOAL = 4%**

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. Ryan Hoyt**

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

**PROJECT DESCRIPTION**

The selected Consultant will verify Traffic Signal Inventory and complete Traffic Signal Timings for District 02 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):

The Consultant will perform a traffic signal study for signal upgrades and removals as well as review and update traffic signal inventories (TSI) for District 02 at approximately 423 intersections. The Consultant will perform the following tasks to complete the traffic signal upgrades and removals as well as the inventories.

### **Task 1: Kick Off Meeting**

The initial meeting will establish the foundation for continued coordination, to develop a mutual understanding of the deliverables, to present a schedule, and agree on the procedures to follow. This meeting is to be scheduled at the beginning of the project. It is the Consultant's responsibility to take minutes for this meeting and distribute copies to all attendees. At the completion of each task please submit the deliverables for review to DOTD.

### **Task 2: Data Collection**

The Consultant will perform peak hour observations during the A.M., noon and/or P.M. peaks. These observations are to be performed by an engineer. Each peak hour shall be observed to note queue lengths, congestion (if any), existing operational issues, sight distances, etc. In addition, travel time runs will be performed along each corridor during the A.M., noon and/or P.M. peak hours. The Consultant shall determine which peaks shall be observed by coordinating with DOTD.

Deliverables:

- 1.) Peak period observations
- 2.) Sight distance studies
- 3.) Travel time studies

### **Task 3: Intersection Inventories**

The Consultant will perform a field inspection at each intersection. The Consultant will verify and change, if needed, the inventory forms (provided by DOTD) and intersection sketches for each intersection. The inventory forms and intersection sketches will document the following information (see table below). The Consultant will verify all StreetWise files provided by DOTD and download any that are missing.

Inventory Forms	Intersection Sketches
a. TSI #	a. TSI #
b. GPS coordinates (latitude and longitude) (4 decimal places)	b. street names (state route #'s/name)
c. signal type	c. north arrow
d. pedestrian crossing information	d. signal layout (poles, cabinet, heads)
e. interconnect type	e. signal head numbers (based on TSI)
f. communication type	f. lane assignments (left/through/right/etc.)
g. cabinet mount type	g. lane widths
h. cabinet type	h. turn lane storage lengths
i. controller type	i. median widths
j. conflict monitor type	j. shoulder widths
k. pole configuration	k. pavement markings
l. pole types	
m. detection information	
n. signal head information	
o. police hand cord	
p. emergency vehicle preemption	
q. backup power quick connect	
r. GPS	
s. No. of blank out signs	

Deliverables:

- 1.) Hard and electronic copies of the completed signal inventory forms including intersection drawings and TSI forms.
- 2.) Hard and electronic copies of converted field intersection sketches to Microstation intersection drawings for each intersection inventoried.
- 3.) SteetWise information for each Naztec controller electronically.

#### **Task 4: Collection of Signal Timing Parameters**

The Consultant will manually retrieve signal timing parameters from each cabinet at each intersection inventoried. These timing parameters will consist of clearance intervals (yellow and red times), actuated parameters (min green, MAX I/MAX II, passage time, min gap, etc.), and coordinated parameters (splits, offsets, cycles, time of operation, etc.) if applicable.

Deliverables:

- 1.) Provide the timing parameters to DOTD in TSI format.

#### **Task 5: Warrant Analysis**

The Consultant will perform a Warrant Analysis on all Manual of Uniform Traffic Control Devices (MUTCD) warrants. After performing the Warrant Analysis, a meeting will be held with the District 02 DTOE (District Traffic Operations Engineer) over signal

removals. All signals that are removable after the meeting will require a report. All traffic counts to be used in the Warrants Analysis will be provided to DOTD.

Deliverables:

- 1.) Results of the Warrant Analysis will be provided in pdf. Format
- 2.) Map with distances marked of signals
- 3.) Warrant Analysis reports

### **Task 6: Timing Analysis**

The Consultant will create Synchro files for each intersection's peak hour period. The Consultant will analyze the signal system to determine timing plans for both peak, off peak periods and any preemption for nearby draw bridges. During the task, coordinated systems will be recommended by groups of intersections. The Consultant shall perform a travel time study on the corridor to calibrate the Synchro model. The timings shall be approved by the District 02 DTOE and the project manager.

Deliverables:

- 1.) Electronic Synchro Model
- 2.) Report from Synchro for each intersection

### **Task 7: Complete new TSI forms/TSI Construction Plans**

The Consultant will provide DOTD with new TSI forms using the new TSI construction format. The TSI will show the proposed layout of the new signal equipment such as poles, video detection cameras, controller cabinets and power sources. The layouts will be on intersection sketches developed by field measurements and investigations. The TSI will contain both the coordination times and free operation times as well as bridge preemption timing where applicable. In addition, estimate quantities for each intersection and the entire project will be provided on plan sheets, which includes Title Sheet, Intersection Diagram, Quantities, etc. An opinion of estimated probable construction cost will also be provided. A hard copy of the TSI and an editable digital copy will be provided to DOTD.

Deliverables:

- 1.) Electronic copies of TSI in construction format which includes a Microstation File embedded with Excel files.
- 2.) Printed copied of TSI in construction format
- 3.) DOTD signal plan set

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

Follow link below for the individual reference links:

<http://webmail.dotd.louisiana.gov/ContWEB.nsf/b88769326453bef886256fe00047183a/18fc2860512aba5886257a62006133b8?OpenDocument>

## **COMPENSATION**

Compensation to the Consultant for services rendered in connection with each TO shall be based on negotiated work-hours using DOTD established billable rates for the actual work performed on the Task Order.

The amount payable under this Retainer Contract for services to be performed under the various TO's shall not exceed a maximum of **\$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: <http://www.doa.louisiana.gov/osp/travel/travelpolicy.htm>. 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 **three 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. The contract time for each TO, will be specified in the executed TO. Any TO in effect, prior to the expiration date of the Retainer Contract shall be completed.

## **QUALITY CONTROL/QUALITY ASSURANCE**

The DOTD requires the Consultant to develop a Quality Control/Quality Assurance program; 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**

The DOTD shall provide the latest (Traffic Signal Inventory) TSI's for all intersections (electronic files), blank copy of (Traffic Signal Inventory) TSI Construction Format, Traffic Signal counts and Crash listing and summary.

## 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 employ on a full time basis, a minimum of two Professional Civil Engineers, PTOE's registered in the State of Louisiana, with at 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 and speed data collection.
- ~~5. The Prime Consultant must also employ on a full-time basis, or through the use of Sub Consultant, two Professional Engineers responsible for designing DOTD roadway plans with at least three years of experience with DOTD roadway plans.~~

**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 New Orleans, Louisiana.

\*\* The Traffic Analysis (TR) and Traffic Engineering Management (TM) performance ratings 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. Ryan Hoyt – Project Manager
3. Scott Boyle
4. Bao Le
5. Joshua Harrouch
6. Jody Colvin

#### 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.

**DBE/WBE** - The selected Consultant Team will have a DBE/WBE goal of 4% of the contract fee. DBE/WBE participation will be limited to the firms listed on the LA DOTD UCP DBE Directory which can be found at the following link: <http://www8.dotd.la.gov/UCP/UCPSearch.aspx>. The DOTD Project Manager shall review submitted invoices to determine if the DBE/WBE goals are being achieved. If the Consultant has failed to meet the goal and no good faith efforts have been made, the DOTD Project Manager shall notify the Compliance Section, and at that time the DBE/WBE portion of the Contract fee will be withheld from the Prime Consultant.

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 ([www.dotd.louisiana.gov](http://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.

Contract employees may be allowed for a period of time for a particular element or task on a project. Contract employees should be shown in **Section 9a. Project Staffing Plan** with resumes included in **Section 10**.

**Use of contract employees requires prior approval by the Consultant Contract Services Section for each element or task on a project. The approval request shall be made prior to the submittal of the 24-102 form.**

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. 4400004829**, and will be submitted **prior to 3:00 p.m. CST on Tuesday, May 20, 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.